Hendrix Wai Engineering, Inc.

Water Resources, Water Rights and GIS/Computer Modeling

P.O. Box 4487
Parker, CO 80134

Telephone: (720) 930-4360
E-Mail: Randy@Hendrix-Wai.com

COLORADO WATER CONSERVATION BOARD FEASIBILITY STUDY FOR ACQUISTION OF THE WEST FARM GRAVEL PIT

PREPARED FOR: LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION

PREPARED BY: RANDY HENDRIX, P.E.

FEBRUARY 1, 2019

FEASIBILITY STUDY APPROVAL
Pursuant to Colorado Revised Statutes 37-60-121 &122, and In accordance with policies adopted by the Board, the CWCB staff has determined this Feasibility Study meets all applicable requirements for approval.

Signed 6/28/2019 Date

Hendrix Wai Engineering, Inc.

Water Resources, Water Rights and GIS/Computer Modeling

P.O. Box 4487
Parker, CO 80134

Telephone: (720) 930-4360
E-Mail: Randy@Hendrix-Wai.com

COLORADO WATER CONSERVATION BOARD FEASIBILITY STUDY FOR ACQUISTION OF THE WEST FARM GRAVEL PIT

PREPARED FOR: LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION

The technical material in this report were prepared by the undersigned, whose seal as a Professional Engineer is affixed below:

Randall L. Hendrix

February 1, 2019

Hendrix Wai Engineering, Inc.
Water Resources, Water Rights and GIS/Computer Modeling

P.O. Box 4487
Parker, CO 80134

Telephone: (720) 930-4360
E-Mail: Randy@Hendrix-Wai.com

Table of Contents

I. Background, Purpose, and Need 1
Overview of Need 1
Opportunities and Problems Addressed 2
Overview of Study Area 2
II. Project Sponsor 3
History 4
Membership and Stock 4
Summary of Members' Existing Uses 4
Revenue Sources 5
Dues 5
Assessments 5
Existing Water Supply Facilities 5
III. Water Rights and Water Supply Demands 6
Water Rights and Other Water Sources 6
Water Supply Demands 7
Mainstem Irrigation – Rule 14 Plan 7
Mainstem Irrigation Wells – Rule 14 Plan 7
Mainstem Municipal and Commercial Wells – Rule 14 Plan 8
Tributary Area Pumping – Rule 14 Plan 8
Alluvial Aquifer Wells – Augmentation Plan 9
Bedrock Aquifer Wells – Augmentation Plan 9
Gravel Pits and Wildlife Ponds – Augmentation Plan 9
Other Structures – Augmentation Plan 9
Stream Depletions – Rule 14 Plan and Augmentation Plan 10
Water Supply Deficit 10
IV. Project Description – West Farm Gravel Pit 10
Proposed Use of the West Farm Gravel Pit 10
Analysis of Alternatives 10
Evaluation factors and methods 11
Benefits of LAWMA's Acquisition of the West Farm Gravel Pit 12

Impacts to the Natural and Man-Made Environment 14
Selected Alternative 14
Cost Estimate 14
Implementation Schedule 14
Impacts 14
Institutional Feasibility 14
V. Financial Feasibility Analysis 15
Loan Amount 15
Financing Sources and Collateral 15
Outstanding CWCB Loans 16
LAWMA's Income, Operating Expenses and CWCB Loan Service 17
Financial Impacts on LAWMA Shareholders 18
Sponsor Creditworthiness 18
VI. Conclusions and Recommendation 18

FIGURE

Figure 1 – General Location Map of the Lower Arkansas Water Management Association Direct Flow Replacement Supplies

TABLES

Table 1.1 – Summary of LAWMA's Replacement Operations without the West Farm Gravel Pit
Table 1.2 – Available Consumable Water for Replacement Purposes without the West Farm Gravel Pit
Table 2.1 – Mainstem Irrigation Well Rule 14 Pumping
Table 2.2 – Mainstem Municipal & Commercial Well Rule 14 Pumping
Table 2.3 – Tributary Well Rule 14 Pumping
Table 2.4 – Alluvial Aquifer Well Augmentation Plan Pumping
Table 2.5 – Bedrock Aquifer Well Augmentation Plan Pumping
Table 2.6 – Ponds and Gravel Pit Augmentation Plan Diversions
Table 2.7 – Other Structures Augmentation Plan Pumping
Table 3.1 – Summary of LAWMA's Replacement Operations with the West Farm Gravel Pit
Table 3.2 – Available Consumable Water For Replacement Purposes with the West Farm Gravel Pit

APPENDICES

Appendix A – West Farm Gravel Pit liner approval letter
Appendix B – Map of LAWMA's general service area and shareholder structures
Appendix C – Articles of Incorporation
Appendix D – Bylaws
Appendix E – List of BOD
Appendix F – 2017 Audited Financials
Appendix G – 2016 Audited Financials
Appendix H – 2015 Audited Financials

Appendix I – Map of the West Farm Gravel Pit and related facilities
Appendix J – 90-day Performance Test Results
Appendix K – Projected Revenues and Expenses

Lower Arkansas Water Management Association (LAWMA)

Board of Directors:

William J. Grasmick, President

Robert Wilger, Vice President

Donald F. Higbee, Secretary

William O. Broyles

Greg Spitzer

Ronald Peterson

Donald Seufer

Attorney for LAWMA

Richard J. Mehren, Esq.

Moses, Wittemyer, Harrison and Woodruff, P.C.

2595 Canyon Boulevard, Suite 300

Boulder, Colorado 80302

Phone: (303) 443-8782

rmehren@mwhw.com

Engineer for LAWMA

Randy Hendrix, P.E.

Hendrix Wai Engineering, Inc.

P.O. Box 4487

Parker, Colorado 80134

Phone: (720) 930-4360

randy@hendrix-wai.com

I. Background, Purpose, and Need

This report presents the results of our loan feasibility study for the Lower Arkansas Water Management Association (LAWMA), which is seeking a loan from the Colorado Water Conservation Board (CWCB) for the purpose of acquiring an existing water storage structure known as the West Farm Gravel Pit (WFGP). LAWMA plans to purchase approximately 1,564 acre-feet of open water storage and usable bank storage capacity in the WFGP to store fully consumable water for use in LAWMA's decreed plan for augmentation, its annual Arkansas River Use Rules replacement plan (Rule 14 Plan), LAWMA-operated Compact Compliance Plans under Rule 10 of the Compact Rules Governing Improvements to Surface Water Irrigation Systems in the Arkansas River Basin in Colorado (Rule 10 Plan), and substitute water supply plans that include LAWMA shares as a source of replacement supply. The cost of the project is $4,595,000, and LAWMA is seeking a CWCB loan to cover the entire cost of the project. Along with its loan application, LAWMA is filing a Water Plan Grant Application to fund a portion of this project with grant money available for water storage projects. LAWMA would use any grant funds awarded to reduce the amount borrowed under the requested loan.

Overview of Need. LAWMA needs storage in the WFGP to increase and firm the amount of water that LAWMA allocates to its common shares, and therefore to increase and firm the amount of water that LAWMA's shareholders may use for irrigation, municipal, and other purposes. Each spring, working in conjunction with the Office of the Division Engineer as part of LAWMA's annual Rule 14 Plan submittal, the LAWMA Board of Directors (Board) determines the amount of fully consumable water that will be allocated to each common share. The allocation is based on the projected yield to LAWMA's portfolio of direct-flow water rights in that water year; that projected yield varies with climatic conditions. An allocation of 100% means one acre-foot of fully consumable water for each LAWMA common share, an allocation of 70% means 0.7 acre-foot of fully consumable water for each common share, and so on. Based on that annual allocation, the number of common shares that a LAWMA shareholder dedicates to a particular "LAWMA structure," and the presumptive depletion factor (PDF) associated with the shareholder's use of water (e.g., 85% PDF for sprinkler irrigation under LAWMA's augmentation plan), the LAWMA Board then sets the amount of pumping or other diversions that can be made at that structure. The higher the allocation to a LAWMA share, the more pumping or other diversions can be made by LAWMA's shareholders.

At present, when LAWMA has excess consumptive use (CU) credits attributable to its direct-flow water rights (i.e., CU credits that are not needed for immediate replacement of stream

depletions), LAWMA is able to store those excess credits only in certain Arkansas River Compact-limited accounts in John Martin Reservoir. As a result, LAWMA is not able to capture and re-time the use of all of the excess CU credits available to its direct-flow water rights, and therefore is not able to maximize the efficient use of those credits for its shareholders. Storage will allow LAWMA to achieve significantly more efficient beneficial use of its direct-flow water rights, and as a direct result to increase the average annual allocation to a LAWMA common share from 72% to 85%. Storage also will significantly reduce the likelihood of a "minimum allocation year," in which the allocation to a LAWMA common share is only 40%, from the historical average of 34% of water years to only 12% of water years.

Opportunities and Problems Addressed. The WFGP offers a rare opportunity for an augmentation association such as LAWMA to acquire storage in the lower Arkansas River Basin. The purpose of this feasibility study was to evaluate that opportunity—i.e., to evaluate the suitability of the WFGP for meeting LAWMA's water supply needs, including especially the need to re-capture excess CU credits when they are available in the river, and impound that water for later use when the yield to LAWMA's direct-flow water rights is low or unavailable.

The WFGP is a fully constructed and operational gravel pit storage reservoir located downstream of the City of Lamar on the Arkansas River. In February 2015, the Assistant Division Engineer approved the WFGP's lining based on its performance in the 90-day Performance Test. In the 90-day Performance Test, the WFGP met the design standard referenced in the August, 1999 State Engineer Guideline for Lining Criteria for Gravel Pits. A copy of the liner approval letter is attached as **Appendix A**.

Overview of Study Area. LAWMA's primary service area is the Arkansas River mainstem below the Fort Lyon Canal river headgate, although LAWMA also has members on various tributaries that drain into the Arkansas River below the Fort Lyon Canal river headgate. LAWMA membership also includes several municipal and rural domestic water suppliers that rely on Dakota and Cheyenne aquifer wells, which are considered non-tributary and are not subject to the Arkansas River Use Rules; and the City of Colorado Springs (Colorado Springs Utilities, or CS-U), which will take direct delivery of water available to its LAWMA common shares under a water-sharing agreement / alternative transfer mechanism between LAWMA and CS-U. LAWMA currently augments member structures in Baca, Bent, Cheyenne, Elbert, Kiowa, Lincoln, Otero, and Prowers counties. According to the U.S. Census Bureau, in 2017, the combined estimated population for these counties was 74,305. Between 2013 and 2017, the median household income of LAWMA's service area was $40,495, according to U.S. Census Bureau statistics. As

described in more detail below, a significant majority of LAWMA's shareholders make their living or are otherwise involved in agriculture.

Under the CS-U water-sharing agreement / alternative transfer mechanism, LAWMA shares would be delivered to CS-U's service area in El Paso County and used for municipal purposes. U.S. Census Bureau statistics from 2017 estimate the population of El Paso County as 699,232 and give the median household income between 2013 and 2017 as $62,535.

The maps included in **Appendix B** show the locations of active LAWMA structures, the points of diversion for LAWMA's direct-flow water rights, John Martin Reservoir, the WFGP, the Arkansas River mainstem, and the major tributaries on which LAWMA operates.

The remainder of this feasibility study provides more detailed information about LAWMA's general service area, LAWMA's shareholders, their ground water pumping and other diversions, and their use of water and the resulting stream depletions that need to be replaced under Colorado law and the Arkansas River Compact. The study then documents LAWMA's need to purchase the WFGP and the projected effect of this new storage on the average and firm yield of LAWMA's water rights portfolio. Finally, the study addresses the status of LAWMA's existing CWCB loans and LAWMA's financial ability to repay those loans while also repaying the requested new loan in the amount of $4,640,950 for the acquisition of the WFGP.

II. Project Sponsor

LAWMA is a non-profit corporation organized under the Colorado Non-Profit Corporation Act, as amended, and the Mutual Ditch and Reservoir Company Act, as amended. LAWMA was formed in 1973 and re-organized, by vote of the membership, as a share-based corporation in 1998. Copies of LAWMA's Restated and Amended Articles of Incorporation and LAWMA's Bylaws are attached as **Appendices C** and **D**, respectively. LAWMA was formed for the primary purpose of replacing depletions from its members' well pumping and other water uses requiring augmentation within the lower portion of the Arkansas River Basin, generally below John Martin Reservoir, in order to comply with Colorado law and the Arkansas River Compact.

The control and management of the business and affairs of LAWMA are vested in its Board, which consists of seven shareholders. A list of LAWMA's current Board of Directors is attached as **Appendix E**. The duties and responsibilities of the Board are set forth in LAWMA's Restated and Amended Articles of Incorporation and LAWMA's Bylaws.

History. LAWMA developed its first replacement plan soon after the State Engineer published, in 1995, the rules and regulations for Arkansas River well-pumping that, as amended, remain in effect today. These rules, known as the "Arkansas River Use Rules," required a comprehensive replacement plan under which LAWMA would replace its members' depletions to the Arkansas River. Accordingly, LAWMA embarked on a search for water rights to use within such a plan, and soon after made its first large augmentation water purchase: the XY Ranch property and associated water rights. Since then, LAWMA has spent over $8,000,000 for water rights to use for augmentation and replacement purposes. In 2007, LAWMA obtained a decree in Case No. 02CW181, which approved a change in use of LAWMA's initial portfolio of water rights and established the plan for augmentation under which LAWMA continues to operate today. LAWMA continues to acquire new water rights to bolster its portfolio, and also continues to add new member structures to the Augmentation Plan and the Rule 14 Plan.

Membership and Stock. LAWMA members may be either shareholders or non-shareholders. LAWMA has 205 shareholder members and 12 non-shareholder members. For non-shareholder members, rights and obligations relating to augmentation of pumping or other diversions is established by written contract between the member and LAWMA.

There are two classes of LAWMA stock, common and preferred. As of the date of this study, 1 share of LAWMA preferred stock may be issued in exchange for 2.5 shares of LAWMA common stock. Unlike the annual allocation to common stock, which varies according to the projected yield of LAWMA's water rights and which can be adjusted during a water year if conditions change, the annual allocation to preferred stock is intended to be guaranteed and, therefore, not adjusted during a water year. As of the date of this study, the annual allocation to preferred share is set at 1 acre-foot of fully consumable replacement water per share. Because preferred shares are "funded" before common shares, LAWMA requires members to dedicate preferred shares for augmentation of any non-curtailable depletions.

There are 27,300 shares of LAWMA common stock outstanding and 1,109.4 shares of LAWMA preferred stock issued and outstanding. At the ratio of 2.5 common shares to 1 preferred share, the 1,109.4 preferred shares equate to 2,773.5 common shares, for a total of 30,073.5 common share and common-share equivalents outstanding.

Summary of Members' Existing Uses. Of the 27,300 LAWMA common shares outstanding, 24,800 are used by means of augmentation: 24,522 of those shares are used for

agricultural/irrigation purposes; 67 are used for municipal purposes; and 211 are used for commercial purposes. Upon implementation of the LAWMA/CS-U alternative transfer mechanism, 2,500 common shares will be delivered directly for CS-U's municipal purposes. Of the 1,109.4 LAWMA preferred shares outstanding, all of which are used by means of augmentation, 294.5 shares are used for agricultural/irrigation purposes, and 814.9 are used for non-curtailable structures such as gravel pits.

LAWMA's 2018 Rule 14 Plan included 499 wells, of which 418 are located in the Arkansas River's mainstem area and 81 are located in tributary areas. Of those 499 wells, 457 are irrigation wells, 31 are municipal wells, and 11 are commercial wells. LAWMA's plan for augmentation decreed in Case No. 02CW181 (Augmentation Plan) currently includes 204 wells, 11 gravel pits, 8 wildlife ponds, and 18 other types of structures.

Revenue Sources. LAWMA has two main sources of annual revenue, membership dues and assessments on shares of LAWMA stock. The dues rate is set each year by the Board, and the assessment rate is set by the LAWMA shareholders based on recommendation of the Board.

Copies of LAWMA's three most recent financial statements are attached as **Appendices E, F** and **G**.

Dues. For 2019, dues were set at $375 per well or other structure for Type B members, and at $275 per well or other structure for all other members. This dues schedule generates approximately $202,550 of annual income to LAWMA.

Assessments. For 2019, assessments were set at $39.50 per common share and $98.75 per preferred share. As stated above, LAWMA currently has 27,300 common shares and 1,109.4 preferred shares outstanding. 2019 revenues from assessments therefore totaled $1,187,903. To fund the acquisition of the WFGP and ensure that LAWMA maintains sufficient funds to cover its operational expenses and liabilities, the Board is proposing share assessment increases from the current rate of $39.50 up to $44.14 by 2024, and then reducing assessments over time to $26.37 as existing debt is retired.

Existing Water Supply Facilities. The facilities associated with LAWMA's existing water supply are summarized in the table in Section III below. The locations of those facilities are shown on the maps included in **Appendix B.**

III. Water Rights and Water Supply Demands

Water Rights and Other Water Sources. The following table summarizes LAWMA's water rights and other sources of water that LAWMA currently uses to augment the stream depletions caused by LAWMA members' well pumping or other diversions:

Source	Amount	Case No.	Plan(s) in which the source can be used as of January 2019
Fully consumable water leased from PBWW or CS-U	Varies – spot market contract		All plans
Fryingpan-Arkansas Project Water return flows	Varies - annual contract		All plans subject to use within SECWCD boundaries
Highland Irrigation Company	3,402 of 3,800 shares	02CW181	All plans
Highland Irrigation Company	169 of 3,800 shares	10CW085	All plans
Highland Irrigation Company Unconsumed transit loss on deliveries to John Martin Reservoir	Varies		All Plans
Fort Lyon Canal Company	6,080 of 93,989.4166 shares	Change case to be filed in 2019	Rule 14 Plan
Keesee Ditch	14.25 cfs of 28.5 cfs	02CW181	All plans
Keesee Ditch	14.25 cfs of 28.5 cfs	05CW052	All plans
Keesee Ditch Article II Account	Half of Account	02CW181	All plans
Keesee Ditch Article II Account	Half of Account	05CW052	All plans
Fort Bent Ditch Company	1,104 of 11,651.2 shares	02CW181	All plans
Fort Bent Ditch Company	144 of 11,651.2 shares	10CW085	All plans
Fort Bent Ditch Company	162.5 of 11,651.2 shares	17CW3068 (pending)	Rule 14 Plan
Lamar Canal Company	50 of 26,127 shares	02CW181	All plans
Lamar Canal Company (Colorado Parks and Wildlife)	15% of 4,720 shares	02CW181	All plans
Lamar Canal Company (Colorado Beef)	Unused portion of 2,297 shares	02CW181	All plans
Lamar Canal Company	897 of 26,127 shares	15CW3067 (pending)	Rule 14 Plan (all plans after decree entered in Case No. 15CW3067)
Granada Irrigation Company	750.5 of 3,030 shares	15CW3067 (pending)	Rule 14 Plan (all plans after decree entered in Case No. 15CW3067)
Manvel Canal	54 cfs	02CW181	All plans
Manvel Canal Article II Account	Entire Account	02CW181	All plans
X-Y Irrigating Ditch	67 cfs of 69 cfs	02CW181	All plans
X-Y Irrigating Ditch	2 cfs of 69 cfs	15CW3067 (pending)	Rule 14 Plan (all plans after decree entered in Case No. 15CW3067)
X-Y/Graham Article II Account	Entire Account	02CW181	All plans
Stubbs Ditch	7.2 cfs	02CW181	All plans
Stubbs Ditch Article II Account	Entire Account	02CW181	All plans
Sisson Ditch	18 cfs	10CW085	All plans
Sisson Ditch Article II Account	Entire Account	10CW085	All plans
John Martin Reservoir Offset Account Transit Loss	Varies		All plans
10-Year Credit Deliveries to the State Line (State Line Credit)	Varies		All plans

As shown in column 21 of attached **Table 1.1**, these sources are estimated to yield approximately 21,673 acre-feet of replacement water on an average annual basis and 7,372 acre-feet of replacement water on a firm annual basis (i.e., in a dry year).

Water Supply Demands.

LAWMA's water supply demands, which under current operations are LAWMA's replacement water requirements, are annually determined in the Rule 14 Plan and the Augmentation Plan.

In the Rule 14 Plan, depletions are calculated using the Ground Water Accounting Model, or "GWAM," which was derived from the Hydrologic Institutional Model (H-I Model) developed by the State Engineer's office. GWAM divides the Arkansas River into 19 segments between Pueblo Dam and the State line. Well-pumping and other diversions by LAWMA members affect the lower 12 segments: the area from the Arkansas River at the La Junta river gage above John Martin Reservoir to the Colorado Kansas state line (State Line). **Figure 1** is a schematic drawing of the Arkansas River from La Junta to the State Line.

In the Augmentation Plan, depletions are calculated using the lagging requirements in the various decrees for structures within LAWMA's augmentation plan. All of the structures within the Augmentation Plan have been assigned to one of the 12 river segments described above.

Mainstem Irrigation – Rule 14 Plan. Under the State Engineer's Arkansas River Use Rules, a PDF is assigned to each irrigation well included in LAWMA's Rule 14 Plan based on whether the well supplements ditch deliveries of surface water (supplemental well) or provides a full supply of water for the owner's fields (sole-source well). In the 2018 Rule 14 Plan, supplemental wells were assigned a 36% depletion factor; sole-source wells were assigned a 50% or 75% depletion factor for flood irrigation methods and sprinklers, respectively. Wells that are pumped for more than one irrigation method carry a PDF that is weighted by the number of acres irrigated by each method.

Currently, LAWMA structures being pumped in the mainstem area within the Rule 14 Plan include 400 wells: 171 supplemental flood irrigation wells, 49 sole-source flood irrigation wells, 110 sole-source wells supplying a sprinkler irrigation system, and 70 wells used as part of a compound or complex system (combination of flood, sprinkler, and or drip irrigation).

Mainstem Irrigation Wells – Rule 14 Plan. LAWMA members' mainstem well pumping for irrigation purposes under the Rule 14 Plan from 1997 through 2017 is summarized in attached **Table 2.1**. These values were compiled by the Division Engineer from power and

flow meter records for the wells. For this period, mainstem irrigation pumping averaged 40,939 acre-feet annually and ranged from 12,347 acre-feet in 2004 to 75,569 acre-feet in 1997. Over the loan period, mainstem irrigation pumping within the Rule 14 plan should average about 45,236 acre-feet annually and should total about 28,933 acre-feet in a dry year. The average and dry-year planning pumping totals were derived from the allocation to LAWMA's irrigation wells using a 72% allocation during an average year and 40% during a dry year.

Mainstem Municipal and Commercial Wells – Rule 14 Plan. Lamar Light & Power has 16 wells that were historically used to cool the generation equipment at the Lamar Powerplant. Although depletions are not charged against the Lamar Light and Power wells, because the cooling system is fully contained and the heated water is discharged to the Lamar Canal and charged against the Lamar Canal decrees, the pumping from the wells is included in LAWMA's Rule 14 Plan submittals and operations.

There are two commercial wells used by the Beef City feedlot that are included in LAWMA's Rule 14 Plan.

The mainstem municipal and commercial well pumping for LAWMA members is summarized in attached **Table 2.2** for 1997 through 2017. These values were compiled by the Division Engineer from power and flow meter records. For this period, mainstem pumping for municipal and commercial purposes averaged 4,564 acre-feet annually and ranged from 21 acre-feet in 2017 to 11,677 acre-feet in 1999. The large drop in municipal and commercial mainstem pumping is due to the reduced operations at the Lamar Powerplant. Over the loan period, municipal and commercial mainstem pumping within the Rule 14 plan should average about 8,591 acre-feet annually and should total about 8,551 acre-feet in a dry year. 8,500 acre-feet in the average and dry year is attributed to the Lamar Power Plant. The average and dry-year pumping totals were derived from the allocation to LAWMA's irrigation wells using 72% allocation during an average year and 40% during a dry year.

Tributary Area Pumping – Rule 14 Plan. LAWMA augments pumping of 57 irrigation wells and 24 municipal wells and commercial wells in the tributary areas, primarily the Big Sandy Basin. The confluence of Big Sandy Creek and the Arkansas River is located about 8.5 miles upstream from the Buffalo Canal diversion. Big Sandy Creek flows only intermittently except during major precipitation events, and depletions to the Arkansas River from LAWMA members' well pumping in these areas are calculated as only 4% of annual wellhead depletions.[1] The depletions are replaced to the Arkansas River.

[1] As documented in LAWMA's Rule 14 Plan submittals from 1997 to 2018.

Total pumping in the tributary areas from 1997 to 2017 is summarized in attached **Table 2.3**. For this period, pumping averaged 3,529 acre-feet annually and ranged from 1,582 acre-feet in 2013 to 5,948 acre-feet in 2002. The 3,529 acre-feet of pumping is a good estimate of future average pumping in the tributary areas by LAWMA's present membership in the Rule 14 plan.

Alluvial Aquifer Wells – Augmentation Plan. Since 2007, LAWMA's Augmentation Plan has covered 155 alluvial aquifer wells that are used for commercial, irrigation and municipal purposes. Pumping of the alluvial aquifer wells is summarized in attached **Table 2.4** for 2007 through 2017. That pumping has averaged 5,040 acre-feet per year, with a maximum of 9,015 acre-feet in 2016 and a minimum of 2,091 in 2013. Over the loan period, pumping of alluvial aquifer wells within the Augmentation Plan should average about 9,243 acre-feet annually, and should total about 6,407 acre-feet in a dry year.

Bedrock Aquifer Wells – Augmentation Plan. Since 2007, LAWMA's Augmentation Plan has covered 49 bedrock aquifer wells that are used for commercial, irrigation and municipal purposes. Pumping of the bedrock aquifer wells is summarized in attached **Table 2.5** for 2007 through 2017. That pumping has averaged 573 acre-feet per year, with a maximum of 670 acre-feet in 2017 and a minimum of 376 acre-feet in 2007. Over the loan period, pumping of bedrock aquifer wells within the Augmentation Plan should average about 695 acre-feet annually, and should total about 690 acre-feet in a dry year. This amount hardly varies because bedrock wells are considered non-curtailable structures and most LAWMA members with bedrock aquifer wells used preferred shares to augment those depletions.

Gravel Pits and Wildlife Ponds – Augmentation Plan. LAWMA's Augmentation Plan covers 11 gravel pits and 8 wildlife ponds. Diversions from the gravel pits and wildlife ponds are primarily attributable to evaporation and are summarized in attached **Table 2.6** for 2007 through 2017. Diversions from the wildlife ponds averaged 173 acre-feet per year, with a maximum of 309 acre-feet in 2016 and a minimum of 110 acre-feet in 2008 and 2009. Diversions from gravel pits averaged 822 acre-feet per year, with a maximum of 1,336 acre-feet in 2017 and a minimum of 490 acre-feet in 2007. Over the loan period, diversions from wildlife ponds and gravel pits within the Augmentation Plan should average about 1,073 acre-feet annually and should total about 1,073 acre-feet in a dry year. Since evaporation is the primary depletion for both the gravel pits and ponds, depletions do not change significantly between an average and dry year.

Other Structures – Augmentation Plan. LAWMA's plan for augmentation covers 18 other structures (i.e., structures that are not alluvial wells, bedrock wells, gravel pits or wildlife ponds). These structures include surface water diversion points, structures with a return flow obligation requirement, and diversion points on drains. Diversions from these structures are

summarized in attached **Table 2.7** for 2007 through 2017. Such diversions averaged 333 acre-feet annually, with a maximum of 429 acre-feet in 2014 and a minimum of 86 acre-feet in 2013. Over the loan period, diversions from other structures within the Augmentation Plan should average 63 acre-feet annually and should total about 63 acre-feet in a dry year.

Stream Depletions – Rule 14 Plan and Augmentation Plan. We modeled historical depletions for each GWAM river segment using the accounting model and the above-described pumping levels. We reduced depletions to allow for (1) wells operating as alternate points of diversion for senior surface water rights, (2) pre-Arkansas River Compact (Compact) wells, and (3) usability factors applied to depletions at the State Line from pre-1986 wells. Those modeled depletions, which currently make up LAWMA's water supply demands, are summarized columns 3-5 in attached **Table 1.1**.

Water Supply Deficit. **Table 1.1** summarizes the modeled long-term operation of LAWMA's existing water supplies, as described above, without the inclusion of the WFGP. As shown in column 21 of **Table 1.1**, and as described above, LAWMA's existing supplies are estimated to yield approximately 21,673 acre-feet of water on an average annual basis and 7,372 acre-feet of replacement water on a firm annual basis (i.e., in a dry year). As shown in column 5 of **Table 1.1**, LAWMA's minimum annual replacement requirement under the Rule 14 Plan and the Augmentation Plan is 11,106 acre-feet. Therefore, because LAWMA's firm-yield supply of water in a dry year is 7,372 acre-feet, LAWMA faces a significant dry-year deficit, and needs to substantially increase the firm yield of its water rights portfolio. As explained in Section IV below, the incorporation of the WFGP into LAWMA's water rights operations will enable LAWMA to do exactly that.

IV. Project Description – West Farm Gravel Pit

Proposed Use of the West Farm Gravel Pit. The purpose of acquiring storage in the WFGP is for LAWMA to capture excess CU credits delivered to the Arkansas River that are not needed for immediate replacement of stream depletions, and to store those credits for later delivery to the river when they are needed and when water may not be available to LAWMA's direct-flow water rights and other water supply sources. More specifically, LAWMA proposes to store excess CU credits available to LAWMA's Lamar Canal shares in the WFGP; and, following LAWMA's successful prosecution of a change of water rights case for its Fort Lyon Canal shares, to also store excess CU credits available to those shares in the WFGP. All return flow components will continue to be delivered to the river to maintain the historical return flow patterns.

Analysis of Alternatives. There is not another source of storage capacity available for LAWMA's purchase on the Arkansas River below John Martin Reservoir and above the river

reaches to which LAWMA must deliver water. In the absence of an alternative reservoir, LAWMA compared acquiring the WFGP to a no-action alternative. As documented below and in the attached tables, the selected alternative is acquisition of the WFGP.

Evaluation factors and methods. In order to evaluate the potential benefit to LAWMA of acquiring the WFGP, we updated the LAWMA Operational Yield Study (Yield Study) to include the ability to store excess Lamar Canal CU credits in the WFGP and release the CU credits when they are needed downstream of the pit. A comparison of the Yield Study output prior to the inclusion of the WFGP with the Yield Study including the WFGP documents the overall benefits to LAWMA of acquiring the WFGP.

The Yield Study is an iterative model that utilizes multiple runs incorporating varying annual allocation percentages to determine the monthly and annual stream depletions by H-I Model reach that can be fully replaced by LAWMA's augmentation water supplies. The output of the Yield Study is finalized when the model shows no shortfalls in replacement of depletions. The Yield Study incorporates LAWMA's water supply sources described above and includes the terms and conditions of each of the decrees for LAWMA's changed direct-flow water rights, as well as the following conditions and assumptions:

- Modeled pro rata diversions of LAWMA's direct-flow water rights from 1950 to 2017.
- Monthly CU factors.
- Monthly maximum, annual, and long-term volumetric limits.
- Other sources of water, such as inflow to conservation storage in John Martin Reservoir accounts that LAWMA owns, Fryingpan-Arkansas River Project return flows made available to LAWMA by Southeastern Water Conservation District (SECWCD) annually, and credits from unconsumed transit loss of deliveries from the Highland Canal to John Martin Reservoir.
- Operation of newly developed recharge facilities under the Fort Lyon Canal.
- Stream depletion replacement requirement based on the 2018 LAWMA share distribution between the Rule 14 Plan, Augmentation Plan, and Substitute Water Supply Plans.
- User Groups associated with the H-I Model.
- H-I Model river reaches for modeling stream depletions and locations to which replacement supplies must be delivered.
- Maximum usable storage of the WFGP as 1,564 acre-feet; maximum rate of inflow to and outflow from the WFGP as 20 cfs.

- Evaporation from the WFGP as 5.02 acre-feet per acre, as defined in LAWMA's Exhibit R, Paragraph B. of Case No. 02CW181, for the Lamar weather station.
- Since the WFGP is a lined reservoir, monthly seepage amount as zero.
- Water delivered from the WFGP to H-I Model Reach 14 of the H-I Model (actual location where deliveries will take place in the future) at a point just northeast of Lamar, Colorado below the Arkansas River at Lamar, Colorado river gage and above the X-Y and Buffalo Canal river headgates.

Table 1.1 represents the Yield Study run from 1950 to 2017 (Study Period) without incorporating the WFGP into LAWMA's operations. This table therefore represents the no-action alternative.

Table 1.2 represents LAWMA's currently available supplies, modeled without inclusion of the WFGP. This table, which also represents the no-action alternative, is divided into direct-flow CU credits, consumable water in storage in John Martin Reservoir, and other available CU credits.

Table 3.1 represents the LAWMA Yield Study updated to include modeled operation of the WFGP during the Study Period. This table therefore represents the selected alternative, which is acquisition of the WFGP. Columns 10 and 16 of **Table 3.1** (highlighted in orange) show, respectively, the modeled annual inflow to and outflow from the WFGP. On average, LAWMA would be able to store 933 acre-feet of CU credits in the WFGP, with a modeled maximum of 2,225 acre-feet in 1958 and a modeled minimum of 125 acre-feet in 1977. The modeled maximum inflow is larger than the maximum capacity of the WFGP; that is because in 1958 1,966 acre-feet was also modeled as released from the pit. This type of operation also occurred in 1950, 1951, 1954, 1955, 1957, 1959, 1960, 1987, and 2013. The model never had more than 1,242 acre-feet of water stored at any one time. The updated Yield Study determined that to maximize the beneficial use of its water supplies and the efficient operation of the Rule 14 Plan and Augmentation Plan, on average, LAWMA would need to release 761 acre-feet from the WFGP annually, with a modeled maximum of 2,658 acre-feet in 1959 and a modeled minimum of zero in 1976 and 1982.

Table 3.2 represents **Table 1.2** updated to include excess CU credits stored in the WFGP; therefore, **Table 3.2** also represents the selected alternative, acquisition of the WFGP.

Benefits of LAWMA's Acquisition of the West Farm Gravel Pit.

A comparison of Columns 2 of **Table 1.1** and **Table 3.1** shows the significant and tangible benefit to LAWMA members of storing excess CU credits in the WFGP. In **Table 1.1** (no-action alternative), the average annual allocation to a LAWMA common share was 72% (Column 2).

This is consistent with LAWMA's past studies without the WFGP showing the historical average allocation being between 72% and 75%. For purposes of past planning, LAWMA therefore has used a 75% allocation as the projected long-term average. By contrast, Column 2 of **Table 3.1** (operations with the WFGP, the selected alternative) shows an increase in the long-term average allocation from 72% to 85%.

This is a substantial increase in allocation to LAWMA's shareholders. An allocation of 72% in 2018 for LAWMA's shareholders would have represented a total amount of pumping under the Rule 14 Plan of 54,608 acre-feet and 11,074 acre-feet of pumping under the Augmentation Plan. This combines for total shareholder pumping under both plans of 65,682 acre-feet (54,608 + 11,074). If the allocation was increased by addition of the WFGP to 85%, then the total amount of pumping would increase to 61,353 acre-feet under the Rule 14 Plan and 12,229 acre-feet under the Augmentation Plan. This results in a total amount of pumping for both plans of 73,582 acre-feet (61,353 + 12,229). The difference between the two totals is 7,900 acre-feet of pumping or a 12% increase (7,900 / 65,682) in overall pumping.

Furthermore, incorporation of the WFGP into LAWMA's operations also would significantly reduce the likelihood of "minimum allocation years," which we have modeled as years in which there is an allocation of only 40%. **Table 1.1** shows that without LAWMA's having the ability to store excess CU credits in the WFGP, there were 23 years out of the 68-year Study Period—34% of the Study Period—in which LAWMA would have had a minimum allocation year. By contrast, **Table 3.1** shows that with the WFGP incorporated into LAWMA's modeled operations, minimum allocation years occurred only 8 times, which is only 12% of the Study Period.

A comparison of **Tables 1.1** and **3.1** therefore demonstrates that the ability to store excess CU credits in the WFGP will increase the efficiency of LAWMA's operations and as a result provide a significant and tangible benefit to LAWMA members in the form of an increase in the annual allocation to LAWMA common shares—and a corresponding increase in authorized pumping or other diversions. The WFGP will primarily benefit the farming communities in Bent and Prowers Counties, but will also be beneficial to the State of Colorado in maintaining Arkansas River Compact compliance by allowing LAWMA to deliver CU credits to the Arkansas River during times of need. LAWMA's proposed use of the WFGP also is consistent with the goals of the Colorado Water Plan for more storage in the Arkansas River Basin. Finally, the addition of WFGP storage to LAWMA's operations will make LAWMA's use of its water supply portfolio more flexible and more precise, enabling LAWMA to deliver replacement water below the Lamar Canal river headgate—both to downstream calling water rights and to the State Line if needed for Compact compliance—at specified times and in specified amounts, including for replacement of historical return flows associated with LAWMA's changed direct-flow water rights.

Impacts to the Natural and Man-Made Environment. Because the WFGP is an existing, constructed gravel pit reservoir, there will be no additional impacts to the environment caused by LAWMA's purchase of the WFGP. The original impacts of the gravel pit mine and subsequent reclamation into storage reservoirs were addressed in the West Farm Gravel Pit Mine mining Permit No. M-2008-078.

Selected Alternative. For the reasons explained above, acquisition of the WGFP is LAWMA's selected alternative.

A narrative description of project components and operation is included above.

A map of the WFGP and its related facilities is included in **Appendix I**.

A copy of the 90-day Performance Test summary of results is attached as **Appendix J**.

At the closing for the WFGP, LAWMA will acquire an access easement to the WFGP and easements for carrying water in the inlet and outlet structures for the WFGP.

Cost Estimate. The price for the WFGP to be acquired by LAWMA is $4,595,000.

Implementation Schedule. LAWMA and the owner of the WFGP, GP Aggregates LLC, intend to close on the purchase and sale before the end of 2019.

Impacts. As explained above, there will be no impacts to the natural or man-made environment from LAWMA's storage of water in the existing WFGP. Because the stored water will be used within LAWMA's existing Rule 14 Plan and existing Augmentation Plan, there also will be no impacts to local or regional plans for water resource development, land use, recreation, or water quality management. The increase in allocation to LAWMA common shares may spur economic development in the lower Arkansas River Basin. There will be no other social or environmental effects from LAWMA's storage of water in the WFGP.

Institutional Feasibility. Actions or proceedings that must be undertaken for LAWMA to implement the project are as follows:

- LAWMA must obtain a decree in pending Case No. 15CW3067 to allow WFGP storage of CU credits available to LAWMA's Lamar Canal shares being changed in that case.
- LAWMA must obtain a decree in a water court case that it will file this year to change the use of its shares in the Fort Lyon Canal Company, including to allow WFGP storage of CU credits available to those shares. In the interim, LAWMA may obtain an approved substitute water supply plan for this purpose.

V. Financial Feasibility Analysis

Based on 2017 audited financial statements, LAWMA has total income of $1,315,678 and total expenses of $1,156,353, with an ending cash equivalent balance of $273,574. The 2017 statement of financial position lists $19,116,804 in total assets, $8,048,346 in total liabilities, and $11,068,458 of total equity.

Loan Amount.

The purchase price for the WFGP that LAWMA will acquire is $4,595,000. LAWMA is requesting a loan of **$4,640,950** to cover the purchase price and CWCB's 1% loan origination fee.

LAWMA is requesting an interest rate of 2.2%. We calculated the requested interest rate based on the weighted average of the interest rate categories on the CWCB's website and the number of shares held by LAWMA's members qualifying under each category. Those interest rate categories were as follows: agricultural at 1.85%, low income municipal at 2.55%, high income municipal at 3.30% and commercial at 6.0%. We converted preferred shares to common shares for the purpose of weighting the interest rates. LAWMA has 25,635.38 common shares serving agricultural structures, 303 common shares serving small municipalities, 2,500 common shares serving a large municipality, and 1,635.125 common shares serving non-agricultural commercial structures.

LAWMA is requesting a term of 30 years on the $4,640,950 loan. As described below, if LAWMA receives an approximately $1,750,000 payment from CS-U at some point in the next five years, LAWMA would like to use that payment to pay down the outstanding principal on the loan. At that point, to reduce the financial burden on its shareholders, LAWMA would like to restructure the loan over a new 30-year term using the same interest rate (2.2%) on the remaining principal balance.

Financing Sources and Collateral.

LAWMA will use a mix of share assessment increases (from the current rate of $39.50 up to $44.14 per share by 2024) and payments from CS-U to finance acquisition of the WFGP. Under the LAWMA/CS-U Water-Sharing Agreement dated July 16, 2018, if LAWMA is able to obtain a water court decree authorizing CS-U's use of its 2,500 LAWMA common shares in the CS-U municipal system, CS-U will purchase 500 acre-feet of storage capacity in the WFGP for LAWMA at a total cost of $1,750,000. Until such a decree is entered, and provided that the Water-Sharing Agreement remains in effect, CS-U will reimburse LAWMA $125,000 per year for LAWMA's costs to lease the 500 acre-feet of storage capacity in the WFGP. Each year, a portion of the lease

payments reduces the $1,750,000 purchase price based on schedules attached to the LAWMA/CS-U Water-Sharing Agreement. Once LAWMA receives the adjusted $1,750,000 payment from CS-U for 500 acre-feet of storage in the West Farm Gravel Pit, LAWMA will apply that payment to the principal of the requested loan and will seek to restructure the loan agreement to reduce the annual loan payments being financed by LAWMA's shareholders as described above.

LAWMA's annual payment on the proposed new CWCB loan in the amount of $4,640,950 would be approximately $212,960 under the requested terms. In our analysis, we estimated that LAWMA would obtain a final decree in the water court case authorizing CS-U's use of LAWMA shares in its municipal system in 2023. The adjusted purchase price for the 500 acre-feet of storage at that point is approximately $1,557,093. LAWMA plans on applying the $1,557,093 payment from CS-U to LAWMA's annual payment to CWCB for 2023 (i.e., for the amount in excess of the annual payment, to pay down the outstanding principal of the loan). If LAWMA is able to restructure the loan with the remaining principal balance of $2,838,532 at a 2.2% interest rate for a new 30-year period, we calculate annual payments of $130,297 from 2024 through 2053.

LAWMA plans to use share assessment revenue as collateral for the new CWCB loan.

Outstanding CWCB Loans.

LAWMA has four outstanding loans with the CWCB, as summarized below:

Loan No.	Date of Contract	Principal	Terms	Current Balance	Annual Payment
C153715	5/1/1997	$3,688,567	3% - 40 yrs	$2,739,480	$199,184
C153768	5/28/1997	$2,300,000	3% - 40 yrs	$1,596,343	$89,297
C150150	1/1/2004	$2,272,500	2.5% - 30 yrs	$1,417,443	$108,575
C150258	1/29/2008	$2,493,722	2.3% - 30 yrs	$1,842818	$115,990

The table below shows LAWMA's CWCB loan payment schedule from 2007 through 2038, when all of LAWMA's existing CWCB loans are scheduled to be paid off.

Loan No.	2019 – 2034 Annual Payment	2035 – 2037 Annual Payment	2038 Annual Payment

C153715	$199,184	$199,184	$ 0
C153768	$89,297	$89,297	$ 0
C150150	$108,575	$ 0	$ 0
C150258	$115,990	$115,990	$115,990
TOTALS	$513,046	$404,471	$115,990

Adding $212,960 in annual payments for the requested loan would make LAWMA's annual CWCB loan payments increase as shown in the table below:

Loan No.	2019 – 2023 Annual Payment	2024 – 2034 Annual Payment	2035 – 2037 Annual Payment	2038 Annual Payment	2039-2053 Annual Payment
C153715	$199,184	$199,184	$199,184	$ 0	$ 0
C153768	$89,297	$89,297	$89,297	$ 0	$ 0
C150150	$108,575	$108,575	$ 0	$ 0	$ 0
C150258	$115,990	$115,990	$115,990	$115,990	$ 0
New Loan - WFGP	$212,960	$130,298	$130,298	$130,298	$130,298
TOTALS	$726,006	$643,344	$534,769	$246,288	$130,298

LAWMA's Income, Operating Expenses and CWCB Loan Service

The summary table below projects LAWMA's income, operating expenses, CWCB loan debt service obligations, and necessary share assessments from 2018 to 2053 based on receiving $1,557,093 (the adjusted purchase price based on the LAWMA/CS-U Water-Sharing Agreement) from CS-U in 2023 and restructuring the loan under the terms described above. The table factors in the CWCB's requirement that LAWMA retain 10% of its annual loan payment in a reserve account for the first 10 years of the loan term.

	2019	2020-2022	2023	2024-2029	2030-2034	2035-2038	2039-2053
Total Revenue	1,390,453	1,612,591	3,044,684	1,529,994	1,508,642	1,400,077	995,588
Total Expenses	1,365,183	1,612,384	2,956,517	1,529,722	1,508,426	1,399,851	995,380
Net Income	25,270	207	88,167	272	216	226	208
Share Assessment	$ 39.50	$ 42.73	$ 42.73	$ 44.14	$ 43.43	$ 39.82	$ 26.37

A detailed table of LAWMA's projected revenues and expenses is attached at **Appendix K**. As shown in the table above, LAWMA will adjust share assessments to meet its loan service

obligations and maintain financial stability. Once existing CWCB loans are retired, LAWMA will be able to cut share assessments drastically and reduce the overall financial burden on its shareholders.

Financial Impacts on LAWMA Shareholders. LAWMA's shareholders will be impacted by the proposed assessment increase of up to $5.00 per share. The increase in the share assessment will be offset by the substantial benefit to shareholders from the increase in the annual allocation per share. LAWMA's members have given preliminary approval to an increase in share assessments levels as necessary to ensure repayment of the requested loan.

Sponsor Creditworthiness. LAWMA's current schedule of annual dues and assessments is included in Section II above.

Copies of LAWMA's three most recent audited financial statements are attached as **Appendices F, G,** and **H**.

LAWMA will make a current credit report available to CWCB upon request.

VI. Conclusions and Recommendation

A. The addition of the West Farm Gravel Pit to LAWMA's replacement operations will increase the average annual allocation of a LAWMA share from 72% to 85%, which represents a significant and tangible benefit to LAWMA's shareholders.

B. LAWMA's acquisition of the West Farm Gravel Pit also will significantly decrease the likelihood of a minimum allocation to a LAWMA common share, from 34% of the Study Period without the proposed storage to 12% of the Study Period with the proposed storage.

C. With its existing revenues, a potential increase in share assessments, and CS-U repayments, LAWMA will be able to finance the requested loan for the duration of the loan term.

D. The benefits of the project will be felt by the LAWMA shareholders in the near future and into the distant future. As an existing and operational gravel pit storage reservoir, the West Farm Gravel Pit can be incorporated into LAWMA's replacement operations as soon as closing has occurred.

Based on this study, we have concluded that both the overall project and LAWMA's repayment of the requested loan are feasible.

Adobe Creek Reservoir
Pueblo Reservoir
Fort Lyon Storage Canal
Horse Creek Reservoir
Fort Lyon Canal
Thurston Reservoir
West Farm Gravel Pit
Arkansas River
John Martin Reservoir
Arkansas River
Keesee Ditch
Fort Bent Ditch
Manvel Canal
Lamar Canal
X-Y Irrigating Ditch
Sisson & Stubbs Ditches
Highland Canal
Purgatoire River

LINCOLN
KIOWA
BLACK DRAW
Haswell
Eads
Sheridan Lake
Nee Noshe Reservoir
Arlington
KIOWA
BENT
PROWERS
COON VALLEY
MAY VALLEY
Sugar City
Ordway
Lake Meredith
Olney Springs
CROWLEY
Manzanola
Cheraw
Hasty
McClave
Wiley
Lamar
Granada
Las Animas
Rocky Ford
Swink
La Junta
La Junta Municipal Airport
PICKETWIRE VALLEY
HEINAN FLATS
OTERO
BENT
Santa Fe Trl
50
96
71
10
287
385

Legend

- Thurston Reservoir Inlet
- Adobe Creek Reservoir Outlet
- Horse Creek Reservoir Outlet
- Horse Creek Reservoir Inlet
- X-Y Irrigating Ditch
- Sisson & Stubbs Ditches
- Manvel Canal
- Lamar Canal
- Keesee Ditch
- Fort Bent Canal
- Fort Lyon Storage Canal
- Fort Lyon Canal
- Adobe Creek
- Highland Canal
- West Farm Gravel Pit
- Thurston Reservoir
- John Martin Reservoir
- Horse Creek Reservoir
- Adobe Creek Reservoir

0 3 6 12
Miles

N W E S

Hendrix Wai Engineering, Inc.

Job No. L101
File: FLCC OGM of LAWMA WRs.mxd
Date: 1/22/19
Prepared For: LAWMA

Figure 1

General Location Map of the Lower Arkansas Water Management Association Direct Flow Replacement Supplies

Table 1.1

Summary of LAWMA's Replacement Operations without the West Farm Gravel Pit

LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION

Operations with LAWMA's current water rights portfolio

(values in ac-ft)

	Replacement Requirement					Direct and Other Sources		LAWMA Storage Accounts Inflow					LAWMA Storage Accounts Outflow							
Year (Apr - Mar)	Percent Allocated	Augmented Structures Rule 14	Augmented Structures 02CW181	Total	Shortage in Meeting Replacement Reqt	Direct Flow Credit	Other CU Credit	Article II Storage Inflow	Ft Lyon Direct Flow to Offset	Keesee I Direct Flow to Offset	Highland Direct Flow to Offset	Total Inflow	Offset Account Storage Charge	Release for Replacement	Offset Account Release	Spill	Evap	Total Outflow	End of Mar Storage	Total of LAWMA Water Sources
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
1950	100%	21,220	7,837	29,057	0	11,689	2,663	4,815	786	613	1,818	8,032	500	6,810	3,761	0	2,380	13,452	8,274	22,384
1951	100%	21,238	7,838	29,076	0	11,880	2,879	5,388	754	896	2,726	9,765	500	8,248	3,551	0	1,249	13,548	3,920	24,524
1952	72%	17,931	6,618	24,549	0	11,694	3,856	1,640	826	1,529	2,224	6,219	500	1,586	4,590	0	404	7,080	2,539	21,770
1953	40%	12,654	4,919	17,572	0	9,587	3,115	3,125	632	1,046	2,486	7,289	500	1,288	3,137	0	486	5,411	3,890	19,991
1954	40%	10,464	4,533	14,997	0	6,671	2,114	3,095	279	1,087	1,740	6,201	500	1,726	2,991	0	595	5,811	3,801	14,986
1955	88%	15,362	6,576	21,938	0	10,164	2,412	10,236	529	283	2,145	13,193	500	3,124	2,575	0	1,448	7,647	8,934	25,769
1956	72%	15,625	6,396	22,021	0	8,155	2,406	1,375	438	1,134	2,136	5,083	500	5,889	3,379	0	1,096	10,864	2,683	15,644
1957	98%	18,473	7,412	25,886	0	9,919	4,448	12,329	1,064	0	4,511	17,904	500	4,657	3,818	0	1,234	10,209	9,725	32,271
1958	100%	20,087	7,773	27,860	0	9,266	3,499	6,202	877	0	4,193	11,272	500	8,113	4,838	0	754	14,205	6,135	24,037
1959	110%	21,840	8,262	30,102	0	13,251	3,227	6,867	752	637	3,050	11,307	500	7,573	4,349	0	1,244	13,666	3,210	27,785
1960	40%	14,330	5,331	19,661	0	7,322	3,071	2,753	658	1,011	2,329	6,751	500	2,031	3,253	0	531	6,315	3,131	17,145
1961	44%	11,389	4,754	16,143	0	8,678	3,013	1,865	829	809	3,756	7,259	500	0	4,177	0	457	5,134	4,609	18,950
1962	86%	15,523	6,540	22,063	0	10,240	4,247	2,709	1,028	1,326	2,696	7,759	500	2,272	5,041	0	577	8,390	3,349	22,246
1963	40%	11,884	4,987	16,871	0	5,943	2,626	1,313	351	1,483	1,454	4,602	500	1,022	2,711	0	331	4,563	2,910	13,171
1964	40%	9,938	4,535	14,473	0	4,181	2,589	940	407	1,243	1,642	4,232	500	883	3,448	0	208	5,039	1,656	11,002
1965	40%	9,349	4,485	13,834	0	6,044	3,900	1,554	929	564	3,496	6,543	500	0	3,233	0	11	3,744	3,858	16,487
1966	104%	16,659	7,263	23,923	0	8,558	3,289	13,757	765	0	2,662	17,184	500	5,580	3,134	0	1,543	10,756	9,721	29,031
1967	100%	19,442	7,787	27,229	0	11,754	3,240	3,941	812	742	2,597	8,092	500	7,343	3,398	0	1,367	12,608	4,602	23,086
1968	75%	17,297	6,736	24,032	0	9,290	3,280	2,441	726	1,209	2,912	7,288	500	2,097	4,655	0	512	7,764	3,505	19,858
1969	46%	12,940	5,208	18,148	0	7,855	3,421	4,648	862	0	1,032	6,542	500	1,867	2,948	0	759	6,074	3,685	17,818
1970	49%	11,542	4,992	16,533	0	10,090	4,119	2,245	1,075	0	202	3,523	500	392	1,277	0	900	3,069	3,979	17,732
1971	49%	11,118	4,983	16,101	0	8,637	3,874	1,861	839	0	1,432	4,133	500	1,448	1,483	0	855	4,285	3,560	16,644
1972	40%	9,825	4,588	14,412	0	7,198	3,329	1,770	700	0	948	3,417	500	2,761	1,731	0	485	5,476	1,290	13,945
1973	40%	9,220	4,488	13,708	0	9,085	3,962	3,275	1,011	0	2,156	6,442	500	915	2,435	0	567	4,417	2,977	19,490
1974	40%	8,989	4,476	13,465	0	4,766	3,253	1,299	490	0	342	2,131	500	2,477	1,685	0	303	4,966	10	10,150
1975	40%	8,867	4,474	13,341	0	5,181	3,281	610	671	0	1,527	2,808	500	0	702	0	26	1,228	1,308	11,270
1976	40%	8,793	4,473	13,266	0	4,852	2,892	1,031	554	68	1,180	2,833	500	0	2,089	0	50	2,638	1,236	10,577
1977	40%	8,747	4,473	13,220	0	5,488	1,888	1,895	353	0	1,965	4,213	500	687	1,469	0	294	2,950	2,176	11,589
1978	40%	8,718	4,473	13,190	0	5,895	2,775	1,791	527	0	2,269	4,587	500	741	2,534	0	317	4,093	2,296	13,258
1979	40%	8,701	4,472	13,173	0	6,972	3,692	1,521	921	0	3,068	5,509	500	105	3,081	0	352	4,038	3,299	16,173
1980	86%	14,144	6,476	20,620	0	10,531	3,835	8,262	1,040	0	3,602	12,905	500	1,666	3,620	0	1,498	7,284	8,344	27,271
1981	92%	17,300	7,240	24,540	0	9,540	2,995	3,575	766	235	2,732	7,309	500	6,819	3,707	0	712	11,738	3,416	19,844
1982	68%	15,576	6,319	21,896	0	10,228	4,015	3,716	1,154	369	3,536	8,775	500	1,413	3,489	0	581	5,983	5,597	23,017
1983	110%	19,769	7,903	27,672	0	12,483	5,237	11,141	1,561	68	3,671	16,440	500	3,702	4,619	0	1,693	10,514	10,824	34,160
1984	110%	21,850	8,336	30,186	0	12,081	6,143	11,405	1,655	536	3,005	16,600	500	4,494	4,444	0	2,532	11,970	14,758	34,824
1985	120%	23,723	8,821	32,544	0	13,041	6,097	14,082	1,641	0	4,197	19,919	500	6,486	4,942	10,719	1,638	24,284	9,652	39,058
1986	110%	23,408	8,504	31,911	0	13,378	5,034	6,323	833	841	2,166	10,162	500	7,725	3,964	0	1,364	13,552	5,660	28,574
1987	110%	23,240	8,409	31,650	0	13,312	4,586	17,610	1,223	0	3,926	22,759	500	9,297	4,035	0	1,635	15,468	12,319	40,657
1988	110%	23,263	8,400	31,662	0	14,805	4,110	3,744	1,128	1,257	3,372	9,500	500	7,090	5,142	0	1,808	14,540	6,564	28,415
1989	87%	20,570	7,397	27,967	0	11,235	3,767	1,532	799	1,155	356	3,843	500	4,515	3,584	0	437	9,035	1,022	18,845
1990	40%	13,797	5,099	18,896	0	11,220	3,490	2,186	914	218	602	3,921	500	762	1,768	0	174	3,204	1,545	18,631
1991	40%	10,906	4,555	15,462	0	10,240	3,520	2,169	794	177	1,600	4,740	500	485	1,525	0	341	2,851	3,129	18,500
1992	44%	10,376	4,664	15,040	0	10,680	3,251	2,465	881	117	1,387	4,850	500	371	2,514	0	569	3,954	3,746	18,781
1993	82%	14,599	6,351	20,950	0	13,614	4,318	3,145	1,071	45	2,499	6,759	500	838	2,692	0	872	4,901	5,214	24,692
1994	100%	18,551	7,553	26,104	0	13,899	3,783	3,617	1,070	49	427	5,163	500	5,340	2,335	0	768	8,942	1,220	22,845
1995	91%	18,979	7,406	26,385	0	12,602	5,395	15,358	1,422	0	1,836	18,616	500	2,503	1,157	0	1,438	5,598	13,833	36,612
1996	100%	20,119	7,731	27,850	0	8,645	4,875	7,158	1,202	0	1,060	9,420	500	5,798	3,132	0	2,710	12,140	10,756	22,939
1997	110%	21,901	8,259	30,160	0	9,985	5,235	8,387	1,283	10	1,772	11,451	500	6,419	2,105	0	2,236	11,260	10,565	26,671
1998	110%	22,669	8,379	31,049	0	9,427	4,772	13,415	1,238	0	2,514	17,167	500	9,968	3,250	0	2,409	16,128	11,140	31,367
1999	110%	22,971	8,394	31,365	0	9,117	4,757	16,635	1,396	0	470	18,500	500	11,293	2,149	0	1,737	15,679	13,673	32,374
2000	100%	21,946	7,962	29,908	0	12,203	4,406	5,621	1,141	17	2,482	9,262	500	6,243	2,944	0	2,864	12,551	9,976	25,871
2001	87%	19,966	7,287	27,253	0	9,313	3,806	2,646	883	255	1,869	5,653	500	8,249	2,684	0	966	12,400	2,853	18,772
2002	40%	13,582	5,086	18,668	0	6,218	2,694	1,181	301	390	805	2,677	500	1,944	2,016	0	179	4,639	684	11,589
2003	40%	10,799	4,553	15,352	0	6,107	2,641	909	550	68	1,677	3,203	500	467	2,466	0	56	3,489	226	11,952
2004	40%	9,839	4,490	14,329	0	10,035	2,616	1,899	677	515	3,459	6,550	500	0	2,231	0	129	2,861	3,441	19,201
2005	53%	10,909	5,045	15,953	0	9,182	3,386	2,625	873	21	3,422	6,940	500	1,561	4,397	0	499	6,958	2,899	19,508

Table 1.1

Summary of LAWMA's Replacement Operations without the West Farm Gravel Pit

LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION

Operations with LAWMA's current water rights portfolio

(values in ac-ft)

	Replacement Requirement					Direct and Other Sources		LAWMA Storage Accounts Inflow					LAWMA Storage Accounts Outflow							
Year (Apr - Mar)	Percent Allocated	Augmented Structures Rule 14	Augmented Structures 02CW181	Total	Shortage in Meeting Replacement Reqt	Direct Flow Credit	Other CU Credit	Article II Storage Inflow	Ft Lyon Direct Flow to Offset	Keesee I Direct Flow to Offset	Highland Direct Flow to Offset	Total Inflow	Offset Account Storage Charge	Release for Replacement	Offset Account Release	Spill	Evap	Total Outflow	End of Mar Storage	Total of LAWMA Water Sources
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)
2006	40%	9,797	4,618	14,415	0	8,857	3,271	1,427	711	715	3,115	5,968	500	0	3,066	0	382	3,948	4,365	18,095
2007	100%	16,289	7,104	23,393	0	15,158	3,300	2,835	1,232	76	3,628	7,771	500	1,219	4,473	0	649	6,841	4,665	26,228
2008	100%	19,271	7,746	27,017	0	14,050	3,774	2,434	1,014	1,164	2,928	7,539	500	1,673	4,725	0	562	7,460	4,135	25,363
2009	93%	19,381	7,515	26,896	0	15,448	3,732	1,941	972	1,052	2,376	6,341	500	1,608	3,917	0	425	6,450	3,484	25,521
2010	64%	16,012	6,188	22,200	0	11,774	3,467	2,728	987	288	2,529	6,532	500	1,442	3,641	0	586	6,168	3,349	21,773
2011	40%	11,738	4,820	16,558	0	8,423	3,215	1,442	797	91	1,018	3,348	500	1,340	2,263	0	335	4,437	1,952	14,986
2012	40%	10,033	4,520	14,553	0	3,023	2,592	1,097	329	76	254	1,757	500	1,615	1,547	0	147	3,809	0	7,372
2013	40%	9,422	4,483	13,905	0	9,424	2,510	1,468	575	114	983	3,139	500	0	435	0	58	993	1,771	15,073
2014	40%	9,120	4,476	13,596	0	12,495	3,031	1,933	918	114	2,888	5,854	500	0	2,781	0	296	3,577	3,614	21,379
2015	110%	17,251	7,523	24,773	0	14,357	3,180	12,358	888	114	2,607	15,966	500	3,812	3,106	0	1,643	9,061	10,031	33,504
2016	89%	18,391	7,373	25,765	0	10,885	3,486	2,236	1,125	34	1,587	4,982	500	5,397	2,795	0	1,457	10,149	4,473	19,353
2017	110%	7,749	3,357	11,106	0	13,592	2,170	8,379	4,241	16	2,954	15,590	500	0	2,403	0	1,795	4,698	14,772	31,352
Average	**72%**	**15,255**	**6,206**	**21,462**	**0**	**9,866**	**3,571**	**4,697**	**923**	**381**	**2,235**	**8,235**	**500**	**3,165**	**3,052**	**158**	**905**	**7,779**	**5,087**	**21,673**
Max	**120%**	**23,723**	**8,821**	**32,544**	**0**	**15,448**	**6,143**	**17,610**	**4,241**	**1,529**	**4,511**	**22,759**	**500**	**11,293**	**5,142**	**10,719**	**2,864**	**24,284**	**14,772**	**40,657**
Min	**40%**	**7,749**	**3,357**	**11,106**	**0**	**3,023**	**1,888**	**610**	**279**	**0**	**202**	**1,757**	**500**	**0**	**435**	**0**	**11**	**993**	**0**	**7,372**

Column Explanation:

1	Plan Year (April to March)
2	The amount of pumping allocated as a percentage where a full allocation to a Common share is an allocation of 100%.
3	Replacement requirement for pumping allocated to LAWMA Preferred and Common shares in a Rule 14 Plan using the **G**round **W**ater **A**ccounting **M**odel developed by DeWayne Schroeder.
4	Replacement requirements for structures identifed in LAWMA's 02CW181 decree augmented by LAWMA Preferred and Common shares.
5	Column 3 + Column 4
6	Summary of shortages to the Lamar and Buffalo Canals utilizing the one month carry forward of a credit or deficit if necessary.
7	Column 15 of Table 1.2.
8	Column 27 of Table 1.2.
9	Sum of Columns 17 through 20 of Table 1.2.
10	Column 21 of Table 1.2.
11	Column 22 of Table 1.2.
12	Column 23 of Table 1.2.
13	Sum of Columns 9 through 12.
14	The amount of water delivered to establish the Offset account (500 acre-feet annually).
15	Releases from storage for replacement requirements.
16	The amount of water released from the Offset Account for delivery to the Stateline.
17	Storage account spills.
18	Evaporation on storage accounts calculated as a monthly percentage of storage content. Monthly percentages derived from relationship of total monthly evaporation and monthly content for the period of 1980 through 2006.
19	Sum of Column 14 through Column 18
20	Storage content at the end of March each year. March was selected due to Operational Plan year is April through March. [Beginning storage was 11,239 acre-feet calculated as 350,000 maximum John Martin Reservoir x 0.60 Colorado Ownership x 0.051 X-Y Graham Ownership x 0.609 Consumptive Use Factor + 350,000 maximum John Martin Reservoir x 0.60 Colorado Ownership x 0.0034 Stubbs Ownership x 0.641 Consumptive Use Factor + 350,000 maximum John Martin Reservoir x 0.60 Colorado Ownership x 0.0230 Keesee Ownership x 0.642 Consumptive Use Factor + 350,000 maximum John Martin Reservoir x 0.60 Colorado Ownership x 0.0086 Sisson Ownership x 0.641 Consumptive Use Factor]
21	Sum of Column 7, Column 8 and Column 13.

Table 1.2
AVAILABLE CONSUMABLE WATER FOR REPLACEMENT PURPOSES
LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION
Operations with LAWMA's current water rights portfolio
(values in ac-ft)

	DIRECT FLOW CU CREDITS															LAWMA STORAGE CU INFLOWS								OTHER CU CREDITS				
Year (Apr - Mar)	Highland Direct Flow (02CW181)	Highland Direct Flow (10CW85)	Ft Lyon (Pending)	Keesee II Direct Flow (05CW52)	Ft Bent Ditch (02CW181)	Ft Bent Ditch (10CW85)	Ft Bent Ditch (17CW3068)	Lamar Canal (02CW181)	Lamar Canal (15CW3067)	Manvel Direct Flow (02CW181)	XY Direct Flow (02CW181)	XY Direct Flow (15CW3067)	Stubbs Ditch Direct Flow (02CW181)	Sisson Ditch Direct Flow (10CW85)	Total Direct Flow CU	Keesee	XY / Graham	Sisson	Stubbs	Ft Lyon CU (Pending)	Keesee I Direct Flow CU (02CW181)	Highland Direct Flow CU (02CW181)	Total	Fry-Ark Return Flows	Highland Transit Loss	Ft Lyon Recharge	Total Other CU	Total CU Credits
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
1950	573	126	1,311	730	530	144	209	2,733	868	437	3,300	111	308	308	11,689	1,325	2,799	484	207	4,815	613	1,818	12,060	1,233	459	971	2,663	26,412
1951	373	142	1,257	730	460	126	177	2,644	827	0	4,385	144	308	308	11,880	1,484	3,132	543	230	5,388	896	2,726	14,399	1,422	14	1,443	2,879	29,159
1952	394	146	1,377	730	440	126	178	2,757	884	0	3,915	132	308	308	11,694	449	957	155	79	1,640	1,529	2,224	7,033	2,018	45	1,794	3,856	22,583
1953	161	181	1,053	699	330	97	136	2,161	697	321	3,030	107	308	308	9,587	860	1,818	312	136	3,125	1,046	2,486	9,783	1,303	146	1,665	3,115	22,484
1954	320	136	465	730	217	63	88	1,623	454	297	1,605	56	308	308	6,671	852	1,799	312	132	3,095	1,087	1,740	9,017	779	153	1,182	2,114	17,802
1955	233	21	881	601	434	120	173	3,077	856	437	2,625	90	308	308	10,164	2,822	5,943	1,047	423	10,236	283	2,145	22,900	1,077	101	1,235	2,412	35,476
1956	306	172	730	730	276	82	113	2,196	629	437	1,805	62	308	308	8,155	378	800	136	61	1,375	1,134	2,136	6,020	1,169	0	1,237	2,406	16,581
1957	0	0	1,773	653	421	118	168	2,761	873	0	2,455	82	308	308	9,919	3,394	7,167	1,239	530	12,329	0	4,511	29,169	2,479	0	1,970	4,448	43,537
1958	0	0	1,462	559	483	129	191	2,638	817	0	2,295	76	308	308	9,266	1,708	3,605	625	265	6,202	0	4,193	16,597	1,462	0	2,037	3,499	29,362
1959	319	77	1,253	678	516	37	213	3,565	1,144	0	4,670	163	308	308	13,251	1,892	3,990	696	290	6,867	637	3,050	17,422	1,199	0	2,028	3,227	33,901
1960	459	139	1,097	572	223	65	92	1,792	514	0	1,693	60	308	308	7,322	757	1,602	272	122	2,753	1,011	2,329	8,846	1,258	0	1,813	3,071	19,239
1961	44	258	1,382	662	313	70	124	2,217	689	0	2,229	74	308	308	8,678	511	1,089	176	90	1,865	809	3,756	8,296	1,027	0	1,986	3,013	19,986
1962	41	181	1,714	730	355	69	143	2,539	822	0	2,929	100	308	308	10,240	744	1,577	266	122	2,709	1,326	2,696	9,439	1,851	46	2,349	4,247	23,926
1963	137	135	586	730	251	71	99	1,616	452	0	1,208	41	308	308	5,943	361	765	129	59	1,313	1,483	1,454	5,564	903	108	1,616	2,626	14,133
1964	53	83	678	659	115	35	48	1,195	341	0	345	12	308	308	4,181	258	548	91	44	940	1,243	1,642	4,765	1,155	91	1,342	2,589	11,535
1965	0	66	1,549	615	243	69	98	1,864	518	0	391	14	308	308	6,044	417	920	112	105	1,554	564	3,496	7,169	1,904	143	1,852	3,900	17,112
1966	0	0	1,275	511	376	108	153	2,604	832	0	2,014	69	308	308	8,558	3,794	7,988	1,408	568	13,757	0	2,662	30,176	1,103	249	1,937	3,289	42,024
1967	724	305	1,353	556	427	122	170	3,280	1,035	0	3,061	104	308	308	11,754	1,084	2,292	394	171	3,941	742	2,597	11,220	1,222	25	1,994	3,240	26,214
1968	312	219	1,209	730	308	71	122	2,579	819	0	2,228	76	308	308	9,290	671	1,420	242	108	2,441	1,209	2,912	9,003	1,328	0	1,952	3,280	21,574
1969	244	321	1,437	0	273	36	113	2,288	729	0	1,737	60	308	308	7,855	1,279	2,703	465	202	4,648	0	1,032	10,328	1,342	0	2,080	3,421	21,604
1970	113	204	1,792	0	348	101	143	3,320	1,051	0	2,323	80	308	308	10,090	616	1,309	217	104	2,245	0	202	4,693	1,696	0	2,424	4,119	18,902
1971	215	201	1,398	0	373	107	149	2,786	881	0	1,846	64	308	308	8,637	511	1,084	181	85	1,861	0	1,432	5,155	1,599	0	2,275	3,874	17,666
1972	92	143	1,167	0	369	106	149	2,293	731	0	1,481	52	308	308	7,198	486	1,031	172	81	1,770	0	948	4,487	1,301	0	2,029	3,329	15,015
1973	80	200	1,685	0	331	96	137	2,531	805	0	2,516	87	308	308	9,085	901	1,905	325	144	3,275	0	2,156	8,706	1,654	0	2,308	3,962	21,754
1974	156	45	816	0	191	58	78	1,653	475	0	654	23	308	308	4,766	357	756	127	58	1,299	0	342	2,940	1,328	81	1,845	3,253	10,959
1975	15	82	1,118	0	242	73	102	1,697	484	18	710	25	308	308	5,181	166	357	54	32	610	0	1,527	2,747	1,451	61	1,768	3,281	11,209
1976	171	67	923	0	235	66	93	1,583	437	91	551	19	308	308	4,852	279	607	85	61	1,031	68	1,180	3,310	1,139	153	1,600	2,892	11,055
1977	366	122	588	0	192	57	78	1,605	456	296	1,076	38	308	308	5,488	521	1,102	189	82	1,895	0	1,965	5,755	573	17	1,299	1,888	13,132
1978	208	160	879	0	236	69	98	1,718	490	266	1,114	39	308	308	5,895	492	1,043	175	81	1,791	0	2,269	5,850	1,370	80	1,325	2,775	14,521
1979	85	253	1,535	0	285	82	117	2,152	610	289	916	32	308	308	6,972	414	891	135	81	1,521	0	3,068	6,109	1,754	77	1,861	3,692	16,773
1980	382	153	1,734	0	370	105	151	2,543	710	235	3,418	115	308	308	10,531	2,280	4,795	851	336	8,262	0	3,602	20,126	1,595	0	2,240	3,835	34,492
1981	852	299	1,277	0	297	82	116	3,067	851	350	1,676	55	308	308	9,540	981	2,083	347	164	3,575	235	2,732	10,118	878	0	2,117	2,995	22,653
1982	227	274	1,923	0	338	96	136	2,595	808	175	2,941	99	308	308	10,228	1,017	2,168	352	178	3,716	369	3,536	11,336	1,518	0	2,497	4,015	25,578
1983	243	260	2,602	0	436	122	175	3,386	1,137	87	3,307	112	308	308	12,483	3,060	6,487	1,093	502	11,141	68	3,671	26,020	1,951	0	3,285	5,237	43,740
1984	204	207	2,758	26	491	141	203	2,991	1,018	175	3,144	108	308	308	12,081	3,136	6,635	1,132	502	11,405	536	3,005	26,351	2,474	0	3,668	6,143	44,574
1985	0	0	2,734	322	540	147	223	3,028	1,450	0	3,849	132	308	308	13,041	3,877	8,185	1,417	603	14,082	0	4,197	32,360	2,084	0	4,013	6,097	51,499
1986	722	281	1,388	503	474	138	192	2,883	1,081	191	4,734	176	308	308	13,378	1,733	3,687	605	298	6,323	841	2,166	15,652	2,017	0	3,017	5,034	34,064
1987	0	0	2,039	490	410	120	171	3,165	1,369	175	4,600	156	308	308	13,312	4,849	10,234	1,777	750	17,610	0	3,926	39,146	1,487	38	3,061	4,586	57,043
1988	571	324	1,880	716	455	132	187	2,980	1,204	0	5,549	192	308	308	14,805	1,025	2,185	353	181	3,744	1,257	3,372	12,115	1,016	92	3,001	4,110	31,030
1989	494	118	1,332	81	345	98	137	2,620	824	0	4,421	149	308	308	11,235	421	893	149	70	1,532	1,155	356	4,575	981	216	2,570	3,767	19,578
1990	135	213	1,523	0	335	96	136	2,822	886	0	4,312	147	308	308	11,220	595	1,281	192	118	2,186	218	602	5,193	858	225	2,408	3,490	19,903
1991	69	244	1,324	0	391	112	159	2,851	905	0	3,450	119	308	308	10,240	590	1,272	189	118	2,169	177	1,600	6,115	1,208	64	2,248	3,520	19,875
1992	151	318	1,469	0	388	111	156	2,978	1,056	0	3,323	113	308	308	10,680	671	1,444	217	132	2,465	117	1,387	6,434	956	0	2,295	3,251	20,365
1993	328	260	1,785	0	398	112	160	2,991	1,115	0	5,658	191	308	308	13,614	859	1,839	288	159	3,145	45	2,499	8,833	1,816	0	2,502	4,318	26,766
1994	543	46	1,783	0	433	123	175	2,956	1,174	0	5,806	244	308	308	13,899	990	2,110	342	174	3,617	49	427	7,710	1,127	0	2,656	3,783	25,392
1995	13	79	2,369	0	482	134	192	2,953	1,296	0	4,230	238	308	308	12,602	4,226	8,930	1,538	664	15,358	0	1,836	32,552	2,322	0	3,073	5,395	50,549
1996	357	32	2,003	0	452	131	182	3,001	1,203	0	551	116	308	308	8,645	1,964	4,171	693	330	7,158	0	1,060	15,376	1,727	0	3,148	4,875	28,895
1997	526	128	2,138	0	501	126	206	2,989	1,511	0	1,076	167	308	308	9,985	2,314	4,867	864	342	8,387	10	1,772	18,556	1,992	0	3,243	5,235	33,775
1998	72	0	2,063	0	464	71	187	3,132	1,560	0	1,114	147	308	308	9,427	3,688	7,806	1,328	593	13,415	0	2,514	29,345	1,620	0	3,152	4,772	43,544
1999	0	0	2,326	0	428	87	175	3,095	1,501	0	860	30	308	308	9,117	4,589	9,656	1,710	681	16,635	0	470	33,740	1,427	48	3,282	4,757	47,613
2000	501	231	1,902	0	513	112	220	3,033	1,366	0	3,474	237	308	308	12,203	1,542	3,276	544	260	5,621	17	2,482	13,742	1,154	10	3,241	4,406	30,351
2001	778	161	1,472	0	287	81	114	2,958	939	0	1,676	231	308	308	9,313	722	1,547	242	134	2,646	255	1,869	7,416	995	102	2,710	3,806	20,536
2002	586	69	502	0	169	49	68	1,645	459	0	1,989	67	308	308	6,218	322	691	107	61	1,181	390	805	3,557	662	251	1,782	2,694	12,469
2003	477	167	916	0	123	37	52	1,335	433	0	1,885	67	308	308	6,107	247	534	78	51	909	68	1,677	3,563	1,000	30	1,610	2,641	12,311
2004	320	425	1,128	26	229	65	91	2,398	771	0	3,829	137	308	308	10,035	516	1,115	163	106	1,899	515	3,459	7,772	927	24	1,666	2,616	20,423
2005	391	219	1,455	223	230	66	93	2,670	854	0	2,284	80	308	308	9,182	719	1,531	251	124	2,625	21	3,422	8,692	1,382	0	2,004	3,386	21,260
2006	95	188	1,185	503	229	64	92	2,902	904	23	1,990	65	308	308	8,857	387	838	120	82	1,427	715	3,115	6,683	1,391	0	1,880	3,271	18,810
2007	258	267	2,053	449	315	88	126	3,683	1,174	295	5,638	195	308	308	15,158	775	1,656	264	140	2,835	76	3,628	9,374	783	0	2,517	3,300	27,831
2008	585	228	1,690	716	318	91	129	3,522	1,119	155	4,722	159	308	308	14,050	664	1,424	222	125	2,434	1,164	2,928	8,960	1,180	0	2,594	3,774	26,783
2009	813	232	1,620	82	312	89	126	4,266	1,350	177	5,577	189	308	308	15,448	528	1,138	170	105	1,941	1,052	2,376	7,311	1,228	0	2,505	3,732	26,490
2010	231	170	1,645	0	327	92	131	3,908	1,258	120	3,146	129	308	308	11,774	747	1,591	260	130	2,728	288	2,529	8,273	891	22	2,554	3,467	23,514
2011	196	67	1,328	84	255	74	104	2,565	819	39	2,200	75	308	308	8,423	393	844	128	76	1,442	91	1,018	3,993	950	3	2,262	3,215	15,631
2012	198	46	549	55	81	24	33	1,070	304	0	45	2	308	308	3,023	300	641	101	55	1,097	76	254	2,525	950	64	1,577	2,592	8,140
2013	225	103	958	0	248	69	100	2,456	755	121	3,653	119	308	308	9,424	399	861	127	81	1,468	114	983	4,032	950	39	1,521	2,510	15,966
2014	164	214	1,531	0	225	64	91	3,230	1,016	262	4,914	168	308	308	12,495	526	1,133	169	105	1,933	114	2,888	6,868	950	138	1,942	3,031	22,394
2015	244	111	1,480	0	322	89	127	4,329	1,369	437	5,049	183	308	308	14,357	3,406	7,178	1,258	516	12,358	114	2,607	27,436	950	145	2,086	3,180	44,974
2016	438	206	1,875	0	456	130	182	2,291	727	437	3,414	114	308	308	10,885	610	1,308	204	114	2,236	34	1,587	6,093	950	26	2,510	3,486	20,464
2017	0	334	2,342	0	409	115	163	2,792	886	437	5,317	180	308	308	13,592	2,307	4,871	842	360	8,379	16	2,954	19,729	950	0	1,220	2,170	35,491
Average	**273**	**160**	**1,468**	**248**	**342**	**92**	**139**	**2,640**	**888**	**100**	**2,793**	**107**	**308**	**308**	**9,866**	**1,290**	**2,734**	**463**	**210**	**4,697**	**381**	**2,235**	**12,009**	**1,329**	**53**	**2,189**	**3,571**	**25,447**
Maximum	**852**	**425**	**2,758**	**730**	**540**	**147**	**223**	**4,329**	**1,560**	**437**	**5,806**	**244**	**308**	**308**	**15,448**	**4,849**	**10,234**	**1,777**	**750**	**17,610**	**1,529**	**4,511**	**39,146**	**2,479**	**459**	**4,013**	**6,143**	**57,043**
Minimum	**0**	**0**	**465**	**0**	**81**	**24**	**33**	**1,070**	**304**	**0**	**45**	**2**	**308**	**308**	**3,023**	**166**	**357**	**54**	**32**	**610**	**0**	**202**	**2,525**	**573**	**0**	**971**	**1,888**	**8,140**

Table 1.2
AVAILABLE CONSUMABLE WATER FOR REPLACEMENT PURPOSES
LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION
Operations with LAWMA's current water rights portfolio
(values in ac-ft)

	DIRECT FLOW CU CREDITS																LAWMA STORAGE CU INFLOWS								OTHER CU CREDITS				
Year (Apr - Mar)	Highland Direct Flow (02CW181)	Highland Direct Flow (10CW85)	Ft Lyon (Pending)	Keesee II Direct Flow (05CW52)	Ft Bent Ditch (02CW181)	Ft Bent Ditch (10CW85)	Ft Bent Ditch (17CW3068)	Lamar Canal (02CW181)	Lamar Canal (15CW3067)	Manvel Direct Flow (02CW181)	XY Direct Flow (02CW181)	XY Direct Flow (15CW3067)	Stubbs Ditch Direct Flow (02CW181)	Sisson Ditch Direct Flow (10CW85)	Total Direct Flow CU	Keesee	XY / Graham	Sisson	Stubbs	Ft Lyon CU (Pending)	Keesee I Direct Flow CU (02CW181)	Highland Direct Flow CU (02CW181)	Total	Fry-Ark Return Flows	Highland Transit Loss	Ft Lyon Recharge	Total Other CU	Total CU Credits
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)

Column Explanation:

1	Plan Year (April to March)
2	Consumptive use water delivered to the Arkansas River. [{Calculated as monthly diversions x 02CW181 monthly consumptive factors x (3,402 shares / 3,800 shares)} - 17% transit loss].
3	Consumptive use water delivered to the Arkansas River. [{Calculated as monthly diversions x 10CW85 monthly consumptive use factors x (167 shares / 3,800 shares)} - 17% transit loss].
4	Consumptive use water delivered to the Arkansas River in Reach 9 from the Fort Lyon Canal.
5	Consumptive use water delivered to the Arkanas River. [Calculated as estimated monthly diversion of the Keesee II (05CW52) water rights x monthly consumptive use factor x percent of direct flow diversion taken].
6	Shares delivered through an augmentation station. [Calculated as volumetric limited farm headgate diversions x (462 shares / 11,651.2 shares) x 0.662 Consumptive Use Factor + volumetric limited farm headgate diversions x (408 shares / 11,651.2 shares) x 0.662 Consumptive Use Factor x 0.15 water management fee.
7	Shares delivered through an augmentation station. [Calculated as volumetric limited farm headgate diversions x (144 shares / 11,651.2 shares) x 10CW85 monthly consumptive use factors].
8	Shares delivered through an augmentation station. [Calculated as volumetric limited farm headgate diversions x (162.5 shares / 11,651.2 shares) x Proposed 17CW3068 monthly consumptive use factors].
9	Lamar Canal shares delivered through the West & Center Farm augmentation stations. When canal is in rotation [Calculated as volumetric limited farm headgate diversions x (4,720 shares / 26,127 shares) x 0.583 consumptive use factor x 0.15 water management fee + volumetric limited farm headgate diversions x ({50 + 3,477} shares / 26,127 shares x 0.583 consumptive use factor]. When canal is not in rotation [Calculated as volumetric limited farm headgate diversions x (4,180 shares / 26,127 shares) x 0.583 consumptive use factor x 0.15 water management fee + volumetric limited farm headgate diversions x ({50 + 3,078} shares / 26,127 shares x 0.583 consumptive use factor]]. Farm headgate deliveries were reduced in wet years to maximum available water in the dry years.
10	Lamar Canal shares delivered through the West Farm, Granada East and Granada West augmentation stations. [Calculated as volumetric limited farm headgate diversions x (897 shares / 26,127 shares) x Proposed 15CW3067 monthly consumptive use factors + volumetric limited farm headgate diversions x (2,625.512 equivalent Lamar shares / 26,127 shares) x Proposed 15CW3067 monthly consumptive use factors.
11	Manvel direct flow credit as measured using the Granada streamflow gages on the Arkansas River.
12	X-Y direct flow credit (02CW181) as measured using the Granada streamflow gages on the Arkansas River. [Calculated as volumetric limited river headgate diversions x percent monthly diversion attributed to direct flow x 0.629 Consumptive use factor]. Actual river headgate diversions claimed in Rule 14 accounting used for 1996 through last year.
13	X-Y direct flow credit (15CW3067) as measured using the Granada streamflow gages on the Arkansas River. [Calculated as volumetric limited river headgate diversions x percent monthly diversion attributed to direct flow x Proposed monthly 15CW3067 consumptive use factor]. Actual river headgate diversions claimed in Rule 14 accounting used for 1996 through last year.
14	Stubbs direct flow credit. [Estimated as 1/2 of direct flow credit of 616 acre-feet for the Sisson-Stubbs in the H-I Model distributed during the irrigation season of April to October.]
15	Sisson direct flow credit. [Estimated as 1/2 of direct flow credit of 616 acre-feet for the Sisson-Stubbs in the H-I Model distributed during the irrigation season of April to October.]
16	Sum of Columns 2 through 15.
17	Consumptive use water delivered to the Keesee Article II storage account. [Calculated as water allocated from conservation storage x 0.60 Colorado ownership x 0.024 Keesee ownership x N/A Consumptive Use factor.]
18	Consumptive use water delivered to the X -Y Article II storage account. [Calculated as water allocated from conservation storage x 0.60 Colorado ownership x X - Y ownership x Consumptive Use factor.]
19	Consumptive use water delivered to the Sisson Article II storage account. [Calculated as water allocated from conservation storage x 0.60 Colorado ownership x 0.0034 Sisson ownership x 0.641 Consumptive Use factor.]
20	Consumptive use water delivered to the Stubbs Article II storage account. [Calculated as water allocated from conservation storage x 0.60 Colorado ownership x 0.0086 Stubbs ownership x 0.641 Consumptive Use factor.]
21	Consumptive use water delivered to Offset account from the Fort Lyon Canal releases to the Arkansas River above JMR.
22	Consumptive use water exchanged into John Martin Reservoir. [Calculated as estimated monthly diversion of the Keesee I (02CW181) water rights x monthly consumptive use factor x percent of direct flow diversion taken x (1 - % of month in Conservation Storage).]
23	Consumptive use water delivered into John Martin Reservoir that is not delivered to the Arkansas River for in-state replacement. [{Calculated as monthly diversions x 02CW181 monthly consumptive factors x (3,402 shares / 3,800 shares) + monthly diversions x 10CW85 monthly consumptive use factors x (167 shares / 3,800 shares)} - 17% transit loss].
24	Sum of Columns 17 to 23.
25	Projected Fryingpan-Arkansas Project return flows. [Calculated as 69,000 average Project water delivery x 0.49 assigned to agriculture x 0.40 Return Flow x 0.103 2004 SECWCD allocation distribution to LAWMA. Annual variability calculated as percentage of average annual flow of the Roaring Fork River at Glenwood Springs.]
26	Consumptive use of the transit losses of Highland Canal water delivered into John Martin Reservoir. [Calculated as monthly diversions x monthly consumptive use factors x (3,569 shares / 3,800 shares) x 0.90 x 0.17 Transit Loss factor.]
27	Consumptive use credits lagged back to the Arkansas River from five recharge ponds under the Fort Lyon Canal.
28	Sum of Column 25 through 27.
29	Sum of Column 16 + Column 24 + Column 28.

Table 2.1
Mainstem Irrigation Well
Rule 14 Pumping

Year	Amount (ac-ft)
1997	75,569
1998	46,965
1999	42,363
2000	65,295
2001	72,465
2002	63,453
2003	12,755
2004	12,347
2005	39,996
2006	26,263
2007	27,560
2008	44,183
2009	32,092
2010	46,696
2011	44,425
2012	41,867
2013	19,857
2014	38,035
2015	36,880
2016	36,767
2017	33,880

Table 2.2
Mainstem Municipal & Commercial Well
Rule 14 Pumping

Year	Amount (ac-ft)
1997	11,617
1998	11,048
1999	11,677
2000	8,037
2001	11,668
2002	11,381
2003	3,975
2004	3,135
2005	3,528
2006	3,204
2007	461
2008	459
2009	4,552
2010	4,345
2011	2,159
2012	868
2013	604
2014	1,496
2015	1,495
2016	111
2017	21

Table 2.3
Tributary Well Pumping
Rule 14 Pumping

Year	Irrigation Amount (ac-ft)	Municipal & Commercial Amount (ac-ft)	Total Amount (ac-ft)
1997	3,998	1,152	5,150
1998	4,008	1,145	5,153
1999	3,442	1,048	4,490
2000	4,192	924	5,116
2001	4,014	987	5,001
2002	5,123	825	5,948
2003	2,834	795	3,629
2004	1,486	634	2,120
2005	2,899	618	3,516
2006	2,223	651	2,874
2007	1,953	570	2,523
2008	2,429	596	3,025
2009	1,941	479	2,419
2010	2,176	567	2,744
2011	2,506	521	3,027
2012	2,994	639	3,633
2013	1,040	542	1,582
2014	2,558	595	3,153
2015	1,952	606	2,559
2016	2,482	513	2,994
2017	2,953	500	3,452

Table 2.4
Alluvial Aquifer Well
Augmentation Plan Pumping

Year	Amount (ac-ft)
2007	5,706
2008	3,479
2009	3,460
2010	4,327
2011	3,615
2012	3,561
2013	2,091
2014	5,066
2015	7,702
2016	9,015
2017	7,416

Table 2.5
Bedrock Aquifer Wells
Augmentation Plan Pumping

Year	Amount (ac-ft)
2007	376
2008	556
2009	529
2010	556
2011	635
2012	648
2013	527
2014	589
2015	603
2016	617
2017	670

Table 2.6
Ponds and Gravel Pits
Augmentation Plan Diversions

Year	Ponds (ac-ft)	Gravel Pits (ac-ft)
2007	111	490
2008	110	494
2009	110	528
2010	116	705
2011	147	822
2012	141	839
2013	134	837
2014	184	891
2015	237	922
2016	309	1,181
2017	306	1,336

Table 2.7
Other Structures
Augmentation Plan Pumping

Year	Amount (ac-ft)
2007	395
2008	419
2009	280
2010	275
2011	344
2012	314
2013	86
2014	429
2015	387
2016	417
2017	321

Table 3.1

Summary of LAWMA's Replacement Operations with the West Farm Gravel Pit

LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION

Operations with LAWMA's current water rights portfolio

(values in ac-ft)

	Replacement Requirement					Direct and Other Sources		LAWMA Storage Accounts Inflow						LAWMA Storage Accounts Outflow								
Year (Apr - Mar)	Percent Allocated	Augmented Structures Rule 14	Augmented Structures 02CW181	Total	Shortage in Meeting Replacement Reqt	Direct Flow Credit	Other CU Credit	Article II Storage Inflow	West Farm Gravel Pit Inflow	Ft Lyon Direct to Flow to Offset	Keesee I Direct Flow to Offset	Highland Direct Flow to Offset	Total Inflow	Offset Account Storage Charge	West Farm Gravel Pit Outflow	Release for Replacement	Offset Account Release	Spill	Evap	Total Outflow	End of Mar Storage	Total of LAWMA Water Sources
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
1950	100%	21,220	7,837	29,057	0	8,963	3,984	4,815	1,945	786	984	2,534	11,064	500	908	5,246	3,761	0	2,541	12,955	11,505	24,011
1951	100%	21,228	7,830	29,058	0	9,152	3,544	5,388	1,777	754	1,097	3,992	13,008	500	1,554	7,711	4,552	0	1,563	15,879	7,662	25,703
1952	91%	20,015	7,382	27,397	0	8,949	4,217	1,640	1,059	826	1,767	2,735	8,028	500	995	2,991	6,120	0	595	11,202	3,689	21,194
1953	56%	15,025	5,699	20,724	0	7,795	3,323	3,125	974	632	1,046	3,774	9,551	500	1,174	559	3,350	0	533	6,115	6,238	20,669
1954	71%	15,376	6,149	21,525	0	5,807	2,242	3,095	1,573	279	1,087	2,516	8,550	500	1,704	2,440	4,006	0	652	9,302	4,709	16,599
1955	96%	18,669	7,365	26,034	0	7,619	2,495	10,236	1,860	529	283	2,599	15,506	500	1,418	5,706	3,219	0	1,199	12,042	7,554	25,621
1956	70%	16,285	6,384	22,669	0	6,079	2,462	1,375	1,189	438	1,134	3,500	7,635	500	1,293	3,326	3,798	0	687	9,604	4,748	16,176
1957	110%	20,790	8,077	28,867	0	7,252	4,486	12,329	1,700	1,064	0	9,021	24,114	500	1,314	5,148	6,486	0	1,324	14,772	12,735	35,852
1958	110%	22,255	8,345	30,600	0	7,188	3,526	6,202	2,225	877	0	8,160	17,465	500	1,965	5,778	8,603	0	1,073	17,919	10,943	28,179
1959	100%	21,411	7,878	29,289	0	8,214	3,247	6,867	2,118	752	682	3,716	14,135	500	2,659	8,464	6,817	0	1,486	19,926	4,275	25,597
1960	55%	15,284	5,717	21,001	0	6,124	3,086	2,753	1,599	658	1,027	2,703	8,741	500	1,295	2,536	3,331	0	600	8,263	4,055	17,951
1961	56%	13,480	5,450	18,930	0	6,089	3,023	1,865	1,378	829	809	5,162	10,043	500	94	406	5,025	0	472	6,497	6,630	19,155
1962	92%	17,523	7,063	24,586	0	7,914	4,254	2,709	259	1,028	1,455	3,645	9,096	500	843	1,483	5,974	0	623	9,422	5,341	21,265
1963	64%	15,027	6,006	21,033	0	5,652	2,632	1,313	1,173	351	1,510	2,829	7,177	500	949	1,215	3,373	0	433	6,471	5,216	15,461
1964	45%	11,825	4,988	16,813	0	4,406	2,593	940	403	407	1,285	1,671	4,706	500	1,029	984	4,593	0	262	7,368	1,912	11,705
1965	40%	10,047	4,613	14,660	0	5,535	3,902	1,554	1,034	929	655	5,373	9,546	500	51	0	3,566	0	19	4,136	6,350	18,983
1966	110%	18,602	7,795	26,397	0	6,370	3,290	13,757	1,168	765	0	4,766	20,457	500	1,223	7,322	4,491	0	1,393	14,930	10,783	30,117
1967	100%	19,983	7,827	27,810	0	8,192	3,241	3,941	1,193	812	808	5,839	12,593	500	501	4,441	6,056	0	1,319	12,817	9,322	24,026
1968	84%	18,413	7,089	25,502	0	6,897	3,281	2,441	555	726	1,239	4,380	9,341	500	819	2,543	7,024	0	838	11,725	5,880	19,518
1969	100%	20,122	7,709	27,832	0	7,022	3,422	4,648	1,020	862	663	5,519	12,712	500	898	1,925	5,973	0	818	10,115	7,451	23,155
1970	92%	19,661	7,433	27,094	0	7,923	4,119	2,245	892	1,075	1,372	3,833	9,417	500	416	2,437	5,729	0	758	9,839	6,056	21,459
1971	82%	18,213	6,911	25,125	0	6,957	3,874	1,861	735	839	886	3,792	8,113	500	629	1,347	4,581	0	537	7,593	5,644	18,944
1972	70%	16,184	6,273	22,457	0	6,478	3,329	1,770	858	700	1,312	1,702	6,342	500	783	1,557	4,090	0	398	7,328	3,951	16,149
1973	70%	15,488	6,157	21,645	0	7,681	3,962	3,275	1,059	1,011	1,280	4,484	11,109	500	405	950	5,169	0	626	7,650	6,473	22,753
1974	51%	12,698	5,250	17,948	0	4,875	3,253	1,299	125	490	986	755	3,655	500	1,246	2,480	4,039	0	382	8,646	987	11,783
1975	40%	10,286	4,594	14,880	0	5,346	3,281	610	1,510	671	1,746	1,764	6,301	500	467	0	2,023	0	77	3,067	3,588	14,928
1976	40%	9,423	4,493	13,915	0	5,198	2,892	1,031	560	554	1,753	1,298	5,195	500	0	0	3,750	0	92	4,342	3,781	13,285
1977	40%	9,065	4,495	13,560	0	4,986	1,888	1,895	127	353	1,596	2,576	6,547	500	561	108	3,043	0	393	4,605	4,972	13,421
1978	60%	11,525	5,439	16,964	0	5,448	2,775	1,791	910	527	1,479	3,273	7,980	500	857	539	4,652	0	462	7,010	5,097	16,204
1979	79%	14,817	6,497	21,314	0	6,349	3,692	1,521	803	921	1,668	5,177	10,090	500	570	831	5,591	0	408	7,901	6,197	20,131
1980	110%	19,975	8,089	28,064	0	9,092	3,835	8,262	845	1,040	729	4,560	15,437	500	516	3,535	6,269	0	1,389	12,209	8,430	28,365
1981	97%	20,028	7,739	27,767	0	7,236	2,995	3,575	869	766	1,435	5,711	12,356	500	518	3,533	5,345	0	798	10,694	8,908	22,588
1982	100%	20,586	7,826	28,411	0	8,304	4,015	3,716	397	1,154	1,558	5,635	12,461	500	0	1,666	7,054	0	845	10,064	9,995	24,779
1983	110%	22,195	8,307	30,502	0	9,447	5,237	11,141	591	1,561	543	8,482	22,318	500	427	1,714	8,169	0	2,095	12,905	17,851	37,001
1984	110%	22,794	8,393	31,187	0	9,342	6,143	11,405	658	1,655	536	5,981	20,233	500	938	4,189	8,559	0	2,981	17,168	19,580	35,718
1985	120%	24,362	8,860	33,222	0	9,675	6,097	14,082	588	1,641	0	6,544	22,854	500	824	6,804	7,581	15,033	1,254	31,995	9,245	38,627
1986	110%	23,625	8,480	32,105	0	10,355	5,034	6,323	1,072	833	1,214	5,177	14,618	500	318	4,882	6,388	0	1,196	13,284	9,436	30,007
1987	120%	24,747	8,873	33,620	0	9,065	4,586	17,610	1,922	1,223	0	7,764	28,519	500	2,325	8,520	7,311	3,221	1,443	23,320	13,417	42,170
1988	110%	23,800	8,452	32,251	0	10,996	4,110	3,744	1,191	1,128	1,306	7,118	14,486	500	858	5,421	8,186	0	1,753	16,718	9,816	29,591
1989	83%	19,941	7,117	27,058	0	8,682	3,767	1,532	1,275	799	1,400	1,844	6,850	500	1,022	3,567	5,934	0	778	11,800	4,059	19,299
1990	68%	16,731	6,229	22,959	0	8,918	3,490	2,186	953	914	1,395	4,026	9,474	500	563	78	3,729	0	451	5,320	7,233	21,882
1991	90%	18,528	7,121	25,649	0	7,959	3,520	2,169	442	794	1,565	4,398	9,368	500	422	1,111	5,688	0	560	8,281	7,222	20,847
1992	100%	20,340	7,739	28,079	0	8,401	3,251	2,465	833	881	1,631	5,800	11,609	500	717	1,332	6,934	0	579	10,061	7,531	23,262
1993	110%	22,193	8,288	30,480	0	10,976	4,318	3,145	761	1,071	1,523	6,683	13,184	500	306	972	8,068	0	760	10,606	8,824	28,478
1994	100%	21,511	7,918	29,429	0	11,448	3,783	3,617	292	1,070	1,492	3,748	10,219	500	247	2,953	6,968	0	888	11,557	6,498	25,450
1995	110%	22,642	8,312	30,954	0	10,973	5,395	15,358	801	1,422	286	1,916	19,782	500	453	3,936	4,147	0	1,652	10,687	14,922	36,150
1996	100%	21,721	7,914	29,635	0	8,234	4,875	7,158	219	1,202	978	1,464	11,021	500	144	5,549	3,437	0	2,795	12,425	12,955	24,129
1997	100%	21,452	7,857	29,309	0	8,761	5,235	8,387	287	1,283	781	2,423	13,161	500	228	3,513	3,667	0	2,523	10,431	15,026	27,157
1998	110%	22,702	8,322	31,024	0	8,695	4,772	13,415	467	1,238	414	3,526	19,059	500	136	7,350	3,853	0	3,310	15,150	18,161	32,526
1999	120%	24,402	8,844	33,246	0	8,903	4,757	16,635	584	1,396	0	470	19,084	500	852	9,333	2,905	5,256	1,685	20,531	16,223	32,744
2000	100%	22,330	7,990	30,319	0	10,083	4,406	5,621	645	1,141	1,557	4,048	13,012	500	487	5,020	4,044	0	3,263	13,314	15,042	27,501
2001	91%	20,474	7,408	27,882	0	8,663	3,806	2,646	894	883	1,550	2,685	8,659	500	697	7,123	4,623	0	1,819	14,762	8,047	21,128
2002	61%	15,892	5,910	21,802	0	6,091	2,694	1,181	1,050	301	1,789	1,124	5,445	500	1,340	3,990	4,113	0	465	10,408	2,481	14,230
2003	40%	11,576	4,697	16,273	0	6,295	2,641	909	959	550	1,717	2,414	6,548	500	1,122	541	4,282	0	116	6,561	1,892	15,484
2004	40%	10,109	4,551	14,660	0	7,466	2,616	1,899	1,420	677	1,506	7,187	12,689	500	136	0	4,906	0	172	5,715	7,623	22,771
2005	89%	15,916	6,788	22,705	0	7,427	3,386	2,625	290	873	1,452	4,722	9,962	500	707	1,078	8,415	0	557	11,257	5,264	20,775

Table 3.1

Summary of LAWMA's Replacement Operations with the West Farm Gravel Pit

LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION

Operations with LAWMA's current water rights portfolio

(values in ac-ft)

	Replacement Requirement					Direct and Other Sources		LAWMA Storage Accounts Inflow						LAWMA Storage Accounts Outflow								
Year (Apr - Mar)	Percent Allocated	Augmented Structures Rule 14	Augmented Structures 02CW181	Total	Shortage in Meeting Replacement Reqt	Direct Flow Credit	Other CU Credit	Article II Storage Inflow	West Farm Gravel Pit Inflow	Ft Lyon Direct to Flow to Offset	Keesee I Direct Flow to Offset	Highland Direct Flow to Offset	Total Inflow	Offset Account Storage Charge	West Farm Gravel Pit Outflow	Release for Replacement	Offset Account Release	Spill	Evap	Total Outflow	End of Mar Storage	Total of LAWMA Water Sources
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)
2006	71%	15,350	6,335	21,685	0	6,528	3,271	1,427	980	711	1,416	3,086	7,620	500	254	1,127	4,128	0	374	6,384	5,668	17,419
2007	100%	18,996	7,597	26,593	0	11,617	3,300	2,835	350	1,232	1,108	5,507	11,031	500	423	509	6,193	0	604	8,230	7,385	25,948
2008	100%	20,232	7,803	28,035	0	9,907	3,774	2,434	902	1,014	1,298	3,844	9,492	500	802	1,610	6,330	0	598	9,840	6,078	23,173
2009	100%	20,689	7,823	28,512	0	10,509	3,732	1,941	1,103	972	1,415	3,605	9,036	500	887	1,393	5,479	0	511	8,770	5,488	23,277
2010	91%	19,705	7,387	27,092	0	8,019	3,467	2,728	494	987	1,361	4,012	9,581	500	746	1,229	5,496	0	635	8,606	5,553	21,067
2011	65%	15,984	6,090	22,074	0	6,320	3,215	1,442	932	797	1,221	1,233	5,625	500	622	1,438	3,682	0	429	6,670	3,865	15,160
2012	40%	11,486	4,725	16,211	0	4,058	2,592	1,097	199	329	1,203	691	3,520	500	1,038	1,590	2,833	0	220	6,181	833	10,170
2013	40%	10,011	4,554	14,565	0	8,040	2,510	1,468	1,635	575	1,598	2,158	7,433	500	37	0	1,700	0	119	2,355	5,278	17,983
2014	90%	16,018	6,868	22,886	0	9,855	3,031	1,933	507	918	1,658	3,902	8,919	500	645	0	5,276	0	346	6,766	6,461	21,804
2015	110%	20,481	8,145	28,626	0	10,255	3,180	12,358	741	888	140	6,223	20,350	500	695	4,892	6,761	0	1,613	14,461	11,300	33,785
2016	86%	18,829	7,245	26,074	0	8,230	3,504	2,236	879	1,125	336	3,588	8,164	500	719	5,060	5,769	0	1,327	13,376	5,335	19,898
2017	110%	21,457	8,118	29,575	0	10,640	3,968	8,379	609	4,241	591	8,260	22,079	500	232	276	5,707	0	1,673	8,388	17,737	36,688
Average	**85%**	**18,085**	**6,992**	**25,077**	**0**	**7,911**	**3,642**	**4,697**	**933**	**923**	**1,078**	**4,039**	**11,669**	**500**	**765**	**2,902**	**5,187**	**346**	**987**	**10,687**	**7,800**	**23,221**
Max	**120%**	**24,747**	**8,873**	**33,620**	**0**	**11,617**	**6,143**	**17,610**	**2,225**	**4,241**	**1,789**	**9,021**	**28,519**	**500**	**2,659**	**9,333**	**8,603**	**15,033**	**3,310**	**31,995**	**19,580**	**42,170**
Min	**40%**	**9,065**	**4,493**	**13,560**	**0**	**4,058**	**1,888**	**610**	**125**	**279**	**0**	**470**	**3,520**	**500**	**0**	**0**	**1,700**	**0**	**19**	**2,355**	**833**	**10,170**

Column Explanation:

1	Plan Year (April to March)
2	The amount of pumping allocated as a percentage where a full allocation to a Common share is an allocation of 100%.
3	Replacement requirement for pumping allocated to LAWMA Preferred and Common shares in a Rule 14 Plan using the **G**round **W**ater **A**ccounting **M**odel developed by DeWayne Schroeder.
4	Replacement requirements for structures identifed in LAWMA's 02CW181 decree augmented by LAWMA Preferred and Common shares.
5	Column 3 + Column 4
6	Summary of shortages to the Lamar and Buffalo Canals utilizing the one month carry forward of a credit or deficit if necessary.
7	Column 15 of Table 3.2.
8	Column 27 of Table 3.2.
9	Sum of Columns 17 through 20 of Table 3.2.
10	Excess Fort Lyon consumable use credits delivered to West Farm Gravel Pit Storage.
11	Column 21 of Table 3.2
12	Column 22 of Table 3.2
13	Column 23 of Table 3.2
14	Sum of Column 9 through Column 13.
15	The amount of water delivered to establish the Offset account (500 acre-feet annually).
16	Releases from West Farm Gravel Pit storage for replacement requirements.
17	Releases from storage for replacement requirements.
18	The amount of water released from the Offset Account for delivery to the Stateline.
19	Storage account spills.
20	Evaporation on storage accounts calculated as a monthly percentage of storage content. Monthly percentages derived from relationship of total monthly evaporation and monthly content for the period of 1980 through 2006.
21	Sum of Column 15 through Column 21
22	Storage content at the end of March each year. March was selected due to Operational Plan year is April through March. [Beginning storage was 11,239 acre-feet calculated as 350,000 maximum John Martin Reservoir x 0.60 Colorado Ownership x 0.051 X-Y Graham Ownership x 0.609 Consumptive Use Factor + 350,000 maximum John Martin Reservoir x 0.60 Colorado Ownership x 0.0034 Stubbs Ownership x 0.641 Consumptive Use Factor + 350,000 maximum John Martin Reservoir x 0.60 Colorado Ownership x 0.0230 Keesee Ownership x 0.642 Consumptive Use Factor + 350,000 maximum John Martin Reservoir x 0.60 Colorado Ownership x 0.0086 Sisson Ownership x 0.641 Consumptive Use Factor]
23	Sum of Column 7, Column 8 and Column 14.

Table 3.2
AVAILABLE CONSUMABLE WATER FOR REPLACEMENT PURPOSES
LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION
Operations with LAWMA's current water rights portfolio
(values in ac-ft)

	DIRECT FLOW CU CREDITS															LAWMA STORAGE CU INFLOWS								OTHER CU CREDITS				
Year (Apr - Mar)	Highland Direct Flow (02CW181)	Highland Direct Flow (10CW85)	Ft Lyon (Pending)	Keesee II Direct Flow (05CW52)	Ft Bent Ditch (02CW181)	Ft Bent Ditch (10CW85)	Fort Bent Ditch (17CW3068)	Lamar Canal (02CW181)	Lamar Canal (15CW3067)	Manvel Direct Flow (02CW181)	XY Direct Flow (02CW181)	XY Direct Flow (15CW3067)	Stubbs Ditch Direct Flow (02CW181)	Sisson Ditch Direct Flow (10CW85)	Total Direct Flow CU	Keesee	XY / Graham	Sisson	Stubbs	Ft Lyon CU (Pending)	Keesee I Direct Flow CU (02CW181)	Highland Direct Flow CU (02CW181)	Total	Fry-Ark Return Flows	Highland Transit Loss	Ft Lyon Recharge	Total Other CU	Total CU Credits
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)
1950	339	139	1,311	1,346	530	144	209	308	172	437	3,300	111	308	308	8,963	1,325	2,799	484	207	4,815	984	2,534	13,147	1,233	459	2,292	3,984	26,094
1951	191	159	1,257	1,340	460	126	177	254	43	0	4,385	144	308	308	9,152	1,484	3,132	543	230	5,388	1,097	3,992	15,865	1,422	14	2,108	3,544	28,560
1952	191	146	1,377	1,572	440	126	178	128	128	0	3,915	132	308	308	8,949	449	957	155	79	1,640	1,767	2,735	7,782	2,018	45	2,154	4,217	20,948
1953	191	198	1,053	1,240	330	97	136	417	61	321	3,030	107	308	308	7,795	860	1,818	312	136	3,125	1,046	3,774	11,071	1,303	146	1,874	3,323	22,189
1954	388	145	465	1,186	217	63	88	535	145	297	1,605	56	308	308	5,807	852	1,799	312	132	3,095	1,087	2,516	9,793	779	153	1,310	2,242	17,843
1955	251	15	881	1,154	434	120	173	681	141	437	2,625	90	308	308	7,619	2,822	5,943	1,047	423	10,236	283	2,599	23,354	1,077	101	1,318	2,495	33,468
1956	235	186	730	1,048	276	82	113	368	121	437	1,805	62	308	308	6,079	378	800	136	61	1,375	1,134	3,500	7,384	1,169	0	1,293	2,462	15,924
1957	0	0	1,773	945	421	118	168	393	282	0	2,455	82	308	308	7,252	3,394	7,167	1,239	530	12,329	0	9,021	33,680	2,479	0	2,007	4,486	45,418
1958	0	0	1,462	1,066	483	129	191	595	275	0	2,295	76	308	308	7,188	1,708	3,605	625	265	6,202	0	8,160	20,565	1,462	0	2,064	3,526	31,279
1959	402	86	1,253	0	516	37	213	226	31	0	4,670	163	308	308	8,214	1,892	3,990	696	290	6,867	682	3,716	18,133	1,199	0	2,048	3,247	29,594
1960	443	138	1,097	866	223	65	92	732	100	0	1,693	60	308	308	6,124	757	1,602	272	122	2,753	1,027	2,703	9,236	1,258	0	1,828	3,086	18,446
1961	88	262	1,382	733	313	70	124	128	69	0	2,229	74	308	308	6,089	511	1,089	176	90	1,865	809	5,162	9,701	1,027	0	1,997	3,023	18,813
1962	0	181	1,714	1,393	355	69	143	281	132	0	2,929	100	308	308	7,914	744	1,577	266	122	2,709	1,455	3,645	10,517	1,851	46	2,357	4,254	22,686
1963	141	149	586	1,363	251	71	99	818	310	0	1,208	41	308	308	5,652	361	765	129	59	1,313	1,510	2,829	6,966	903	108	1,621	2,632	15,250
1964	23	84	678	1,106	115	35	48	1,052	292	0	345	12	308	308	4,406	258	548	91	44	940	1,285	1,671	4,837	1,155	91	1,346	2,593	11,836
1965	0	64	1,549	1,050	243	69	98	1,048	392	0	391	14	308	308	5,535	417	920	112	105	1,554	655	5,373	9,137	1,904	143	1,855	3,902	18,574
1966	0	0	1,275	704	376	108	153	696	358	0	2,014	69	308	308	6,370	3,794	7,988	1,408	568	13,757	0	4,766	32,281	1,103	249	1,938	3,290	41,941
1967	562	319	1,353	933	427	122	170	297	227	0	3,061	104	308	308	8,192	1,084	2,292	394	171	3,941	808	5,839	14,529	1,222	25	1,995	3,241	25,962
1968	197	228	1,209	1,210	308	71	122	445	185	0	2,228	76	308	308	6,897	671	1,420	242	108	2,441	1,239	4,380	10,501	1,328	0	1,953	3,281	20,678
1969	912	302	1,437	569	273	36	113	750	218	0	1,737	60	308	308	7,022	1,279	2,703	465	202	4,648	663	5,519	15,478	1,342	0	2,080	3,422	25,921
1970	228	193	1,792	1,088	348	101	143	610	402	0	2,323	80	308	308	7,923	616	1,309	217	104	2,245	1,372	3,833	9,695	1,696	0	2,424	4,119	21,738
1971	397	199	1,398	694	373	107	149	805	308	0	1,846	64	308	308	6,957	511	1,084	181	85	1,861	886	3,792	8,401	1,599	0	2,275	3,874	19,231
1972	211	88	1,167	1,023	369	106	149	901	314	0	1,481	52	308	308	6,478	486	1,031	172	81	1,770	1,312	1,702	6,553	1,301	0	2,029	3,329	16,360
1973	105	205	1,685	1,157	331	96	137	580	165	0	2,516	87	308	308	7,681	901	1,905	325	144	3,275	1,280	4,484	12,314	1,654	0	2,308	3,962	23,958
1974	111	43	816	805	191	58	78	1,116	364	0	654	23	308	308	4,875	357	756	127	58	1,299	986	755	4,339	1,328	81	1,845	3,253	12,467
1975	0	88	1,118	1,448	242	73	102	679	228	18	710	25	308	308	5,346	166	357	54	32	610	1,746	1,764	4,730	1,451	61	1,768	3,281	13,357
1976	52	68	923	1,439	235	66	93	713	332	91	551	19	308	308	5,198	279	607	85	61	1,031	1,753	1,298	5,113	1,139	153	1,600	2,892	13,203
1977	19	129	588	1,372	192	57	78	420	106	296	1,076	38	308	308	4,986	521	1,102	189	82	1,895	1,596	2,576	7,963	573	17	1,299	1,888	14,837
1978	128	169	879	1,068	236	69	98	630	133	266	1,114	39	308	308	5,448	492	1,043	175	81	1,791	1,479	3,273	8,334	1,370	80	1,325	2,775	16,557
1979	202	268	1,535	1,092	285	82	117	709	205	289	916	32	308	308	6,349	414	891	135	81	1,521	1,668	5,177	9,887	1,754	77	1,861	3,692	19,928
1980	541	146	1,734	1,155	370	105	151	413	92	235	3,418	115	308	308	9,092	2,280	4,795	851	336	8,262	729	4,560	21,814	1,595	0	2,240	3,835	34,741
1981	401	307	1,277	1,100	297	82	116	570	390	350	1,676	55	308	308	7,236	981	2,083	347	164	3,575	1,435	5,711	14,296	878	0	2,117	2,995	24,528
1982	31	284	1,923	1,448	338	96	136	142	76	175	2,941	99	308	308	8,304	1,017	2,168	352	178	3,716	1,558	5,635	14,625	1,518	0	2,497	4,015	26,944
1983	162	247	2,602	1,178	436	122	175	275	127	87	3,307	112	308	308	9,447	3,060	6,487	1,093	502	11,141	543	8,482	31,307	1,951	0	3,285	5,237	45,990
1984	133	219	2,758	858	491	141	203	428	69	175	3,144	108	308	308	9,342	3,136	6,635	1,132	502	11,405	536	5,981	29,326	2,474	0	3,668	6,143	44,810
1985	0	0	2,734	917	540	147	223	330	188	0	3,849	132	308	308	9,675	3,877	8,185	1,417	603	14,082	0	6,544	34,707	2,084	0	4,013	6,097	50,480
1986	633	290	1,388	1,054	474	138	192	277	191	191	4,734	176	308	308	10,355	1,733	3,687	605	298	6,323	1,214	5,177	19,036	2,017	0	3,017	5,034	34,425
1987	0	0	2,039	778	410	120	171	0	0	175	4,600	156	308	308	9,065	4,849	10,234	1,777	750	17,610	0	7,764	42,983	1,487	38	3,061	4,586	56,634
1988	456	332	1,880	1,196	455	132	187	0	0	0	5,549	192	308	308	10,996	1,025	2,185	353	181	3,744	1,306	7,118	15,911	1,016	92	3,001	4,110	31,017
1989	552	120	1,332	912	345	98	137	0	0	0	4,421	149	308	308	8,682	421	893	149	70	1,532	1,400	1,844	6,309	981	216	2,570	3,767	18,757
1990	278	215	1,523	1,090	335	96	136	90	81	0	4,312	147	308	308	8,918	595	1,281	192	118	2,186	1,395	4,026	9,792	858	225	2,408	3,490	22,201
1991	250	230	1,324	759	391	112	159	377	171	0	3,450	119	308	308	7,959	590	1,272	189	118	2,169	1,565	4,398	10,301	1,208	64	2,248	3,520	21,779
1992	581	309	1,469	1,052	388	111	156	171	111	0	3,323	113	308	308	8,401	671	1,444	217	132	2,465	1,631	5,800	12,360	956	0	2,295	3,251	24,012
1993	574	359	1,785	1,123	398	112	160	0	0	0	5,658	191	308	308	10,976	859	1,839	288	159	3,145	1,523	6,683	14,496	1,816	0	2,502	4,318	29,790
1994	294	0	1,783	885	433	123	175	862	228	0	5,806	244	308	308	11,448	990	2,110	342	174	3,617	1,492	3,748	12,474	1,127	0	2,656	3,783	27,705
1995	0	68	2,369	1,421	482	134	192	869	355	0	4,230	238	308	308	10,973	4,226	8,930	1,538	664	15,358	286	1,916	32,918	2,322	0	3,073	5,395	49,285
1996	0	0	2,003	1,219	452	131	182	2,002	962	0	551	116	308	308	8,234	1,964	4,171	693	330	7,158	978	1,464	16,758	1,727	0	3,148	4,875	29,866
1997	3	0	2,138	1,471	501	126	206	1,603	854	0	1,076	167	308	308	8,761	2,314	4,867	864	342	8,387	781	2,423	19,978	1,992	0	3,243	5,235	33,974
1998	0	50	2,063	1,189	464	71	187	1,836	957	0	1,114	147	308	308	8,695	3,688	7,806	1,328	593	13,415	414	3,526	30,770	1,620	0	3,152	4,772	44,237
1999	0	0	2,326	1,030	428	87	175	2,046	1,305	0	860	30	308	308	8,903	4,589	9,656	1,710	681	16,635	0	470	33,740	1,427	48	3,282	4,757	47,399
2000	281	201	1,902	1,047	513	112	220	1,169	313	0	3,474	237	308	308	10,083	1,542	3,276	544	260	5,621	1,557	4,048	16,846	1,154	10	3,241	4,406	31,335
2001	376	161	1,472	1,143	287	81	114	1,757	749	0	1,676	231	308	308	8,663	722	1,547	242	134	2,646	1,550	2,685	9,528	995	102	2,710	3,806	21,997
2002	280	70	502	1,406	169	49	68	693	181	0	1,989	67	308	308	6,091	322	691	107	61	1,181	1,789	1,124	5,274	662	251	1,782	2,694	14,059
2003	125	126	916	1,267	123	37	52	851	231	0	1,885	67	308	308	6,295	247	534	78	51	909	1,717	2,414	5,949	1,000	30	1,610	2,641	14,885
2004	121	352	1,128	898	229	65	91	0	0	0	3,829	137	308	308	7,466	516	1,115	163	106	1,899	1,506	7,187	12,491	927	24	1,666	2,616	22,574
2005	467	218	1,455	779	230	66	93	849	291	0	2,284	80	308	308	7,427	719	1,531	251	124	2,625	1,452	4,722	11,424	1,382	0	2,004	3,386	22,237
2006	556	183	1,185	721	229	64	92	539	264	23	1,990	65	308	308	6,528	387	838	120	82	1,427	1,416	3,086	7,356	1,391	0	1,880	3,271	17,155
2007	192	264	2,053	813	315	88	126	691	331	295	5,638	195	308	308	11,617	775	1,656	264	140	2,835	1,108	5,507	12,284	783	0	2,517	3,300	27,201
2008	576	222	1,690	1,000	318	91	129	115	115	155	4,722	159	308	308	9,907	664	1,424	222	125	2,434	1,298	3,844	10,010	1,180	0	2,594	3,774	23,691
2009	739	218	1,620	846	312	89	126	0	0	177	5,577	189	308	308	10,509	528	1,138	170	105	1,941	1,415	3,605	8,902	1,228	0	2,505	3,732	23,143
2010	131	177	1,645	990	327	92	131	386	130	120	3,146	129	308	308	8,019	747	1,591	260	130	2,728	1,361	4,012	10,829	891	22	2,554	3,467	22,315
2011	180	70	1,328	843	255	74	104	333	202	39	2,200	75	308	308	6,320	393	844	128	76	1,442	1,221	1,233	5,337	950	3	2,262	3,215	14,873
2012	149	42	549	981	81	24	33	1,233	304	0	45	2	308	308	4,058	300	641	101	55	1,097	1,203	691	4,089	950	64	1,577	2,592	10,739
2013	2	109	958	1,374	248	69	100	520	150	121	3,653	119	308	308	8,040	399	861	127	81	1,468	1,598	2,158	6,691	950	39	1,521	2,510	17,241
2014	362	214	1,531	1,079	225	64	91	234	94	262	4,914	168	308	308	9,855	526	1,133	169	105	1,933	1,658	3,902	9,426	950	138	1,942	3,031	22,312
2015	196	93	1,480	340	322	89	127	846	477	437	5,049	183	308	308	10,255	3,406	7,178	1,258	516	12,358	140	6,223	31,078	950	145	2,086	3,180	44,514
2016	450	202	1,875	355	456	130	182	0	0	437	3,414	114	308	308	8,230	610	1,308	204	114	2,236	336	3,588	8,396	950	26	2,528	3,504	20,130
2017	121	304	2,342	636	409	115	163	0	0	437	5,317	180	308	308	10,640	2,307	4,871	842	360	8,379	591	8,260	25,609	950	0	3,018	3,968	40,218
Average	**238**	**157**	**1,468**	**1,035**	**342**	**92**	**139**	**586**	**239**	**100**	**2,793**	**107**	**308**	**308**	**7,911**	**1,290**	**2,734**	**463**	**210**	**4,697**	**1,078**	**4,039**	**14,510**	**1,329**	**53**	**2,259**	**3,642**	**26,063**
Maximum	**912**	**359**	**2,758**	**1,572**	**540**	**147**	**223**	**2,046**	**1,305**	**437**	**5,806**	**244**	**308**	**308**	**11,617**	**4,849**	**10,234**	**1,777**	**750**	**17,610**	**1,789**	**9,021**	**42,983**	**2,479**	**459**	**4,013**	**6,143**	**56,634**
Minimum	**0**	**0**	**465**	**0**	**81**	**24**	**33**	**0**	**0**	**0**	**45**	**2**	**308**	**308**	**4,058**	**166**	**357**	**54**	**32**	**610**	**0**	**470**	**4,089**	**573**	**0**	**1,293**	**1,888**	**10,739**

Table 3.2
AVAILABLE CONSUMABLE WATER FOR REPLACEMENT PURPOSES
LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION
Operations with LAWMA's current water rights portfolio
(values in ac-ft)

	DIRECT FLOW CU CREDITS																LAWMA STORAGE CU INFLOWS								OTHER CU CREDITS				
Year (Apr - Mar)	Highland Direct Flow (02CW181)	Highland Direct Flow (10CW85)	Ft Lyon (Pending)	Keesee II Direct Flow (05CW52)	Ft Bent Ditch (02CW181)	Ft Bent Ditch (10CW85)	Fort Bent Ditch (17CW3068)	Lamar Canal (02CW181)	Lamar Canal (15CW3067)	Manvel Direct Flow (02CW181)	XY Direct Flow (02CW181)	XY Direct Flow (15CW3067)	Stubbs Ditch Direct Flow (02CW181)	Sisson Ditch Direct Flow (10CW85)	Total Direct Flow CU	Keesee	XY / Graham	Sisson	Stubbs	Ft Lyon CU (Pending)	Keesee I Direct Flow CU (02CW181)	Highland Direct Flow CU (02CW181)	Total	Fry-Ark Return Flows	Highland Transit Loss	Ft Lyon Recharge	Total Other CU	Total CU Credits
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)	(29)

Column Explanation:

1	Plan Year (April to March)
2	Consumptive use water delivered to the Arkansas River. [{Calculated as monthly diversions x 02CW181 monthly consumptive factors x (3,402 shares / 3,800 shares)} - 17% transit loss].
3	Consumptive use water delivered to the Arkansas River. [{Calculated as monthly diversions x 10CW85 monthly consumptive use factors x (167 shares / 3,800 shares)} - 17% transit loss].
4	Consumptive use water delivered to the Arkansas River in Reach 9 from the Fort Lyon Canal.
5	Consumptive use water delivered to the Arkanas River. [Calculated as estimated monthly diversion of the Keesee II (05CW52) water rights x monthly consumptive use factor x percent of direct flow diversion taken].
6	Shares delivered through an augmentation station. [Calculated as volumetric limited farm headgate diversions x (462 shares / 11,651.2 shares) x 0.662 Consumptive Use Factor + volumetric limited farm headgate diversions x (408 shares / 11,651.2 shares) x 0.662 Consumptive Use Factor x 0.15 water management fee.
7	Shares delivered through an augmentation station. [Calculated as volumetric limited farm headgate diversions x (144 shares / 11,651.2 shares) x 10CW85 monthly consumptive use factors].
8	Shares delivered through an augmentation station. [Calculated as volumetric limited farm headgate diversions x (162.5 shares / 11,651.2 shares) x Proposed 17CW3068 monthly consumptive use factors].
9	Lamar Canal shares delivered through the West & Center Farm augmentation station. When canal is in rotation [Calculated as volumetric limited farm headgate diversions x (4,720 shares / 26,127 shares) x 0.583 Consumptive Use Factor x 0.15 water management fee + volumetric limited farm headgate diversions x ({50 + 3,477} shares / 26,127 shares x 0.583 Consumptive Use Factor]. When canal is not in rotation [Calculated as volumetric limited farm headgate diversions x (4,180 shares / 26,127 shares) x 0.583 Consumptive Use Factor x 0.15 water management fee + volumetric limited farm headgate diversions x ({50 + 3,078} shares / 26,127 shares x 0.583 Consumptive Use Factor]]. Farm headgate deliveries were reduced in wet years to maximum available water in the dry years.
10	Excess Fort Lyon consumable use credits delivered to West Farm Gravel Pit Storage.
11	Manvel direct flow credit as measured using the Granada streamflow gages on the Arkansas River.
12	X-Y direct flow credit (02CW181) as measured using the Granada streamflow gages on the Arkansas River. [Calculated as volumetric limited river headgate diversions x percent monthly diversion attributed to direct flow x 0.629 Consumptive use factor]. Actual river headgate diversions claimed in Rule 14 accounting used for 1996 through last year.
13	X-Y direct flow credit (15CW3067) as measured using the Granada streamflow gages on the Arkansas River. [Calculated as volumetric limited river headgate diversions x percent monthly diversion attributed to direct flow x Proposed monthly consumptive use factors]. Actual river headgate diversions claimed in Rule 14 accounting used for 1996 through last year.
14	Stubbs direct flow credit. [Estimated as 1/2 of direct flow credit of 616 acre-feet for the Sisson-Stubbs in the H-I Model distributed during the irrigation season of April to October.]
15	Sisson direct flow credit. [Estimated as 1/2 of direct flow credit of 616 acre-feet for the Sisson-Stubbs in the H-I Model distributed during the irrigation season of April to October.]
16	Sum of Columns 2 through 15.
17	Consumptive use water delivered to the Keesee Article II storage account. [Calculated as water allocated from conservation storage x 0.60 Colorado ownership x 0.024 Keesee ownership x N/A Consumptive Use factor.]
18	Consumptive use water delivered to the X -Y Article II storage account. [Calculated as water allocated from conservation storage x 0.60 Colorado ownership x X - Y ownership x Consumptive Use factor.]
19	Consumptive use water delivered to the Sisson Article II storage account. [Calculated as water allocated from conservation storage x 0.60 Colorado ownership x 0.0034 Sisson ownership x 0.641 Consumptive Use factor.]
20	Consumptive use water delivered to the Stubbs Article II storage account. [Calculated as water allocated from conservation storage x 0.60 Colorado ownership x 0.0086 Stubbs ownership x 0.641 Consumptive Use factor.]
21	Consumptive use water delivered to Offset account from the Fort Lyon Canal releases to the Arkansas River above JMR.
22	Consumptive use water exchanged into John Martin Reservoir. [Calculated as estimated monthly diversion of the Keesee I (02CW181) water rights x monthly consumptive use factor x percent of direct flow diversion taken x (1 - % of month in Conservation Storage).]
23	Consumptive use water delivered into John Martin Reservoir that is not delivered to the Arkansas River for in-state replacement. [{Calculated as monthly diversions x 02CW181 monthly consumptive factors x (3,402 shares / 3,800 shares) + monthly diversions x 10CW85 monthly consumptive use factors x (167 shares / 3,800 shares)} - 17% transit loss].
24	Sum of Columns 17 to 23.
25	Projected Fryingpan-Arkansas Project return flows. [Calculated as 69,000 average Project water delivery x 0.49 assigned to agriculture x 0.40 Return Flow x 0.103 2004 SECWCD allocation distribution to LAWMA. Annual variability calculated as percentage of average annual flow of the Roaring Fork River at Glenwood Springs.]
26	Consumptive use of the transit losses of Highland Canal water delivered into John Martin Reservoir. [Calculated as monthly diversions x monthly consumptive use factors x (3,569 shares / 3,800 shares) x 0.90 x 0.17 Transit Loss factor.]
27	Consumptive use credits lagged back to the Arkansas River from five recharge ponds under the Fort Lyon Canal.
28	Sum of Column 25 through 27.
29	Sum of Column 16 + Column 24 + Column 28.

Appendix A

West Farm Gravel Pit liner approval letter

COLORADO
Division of Water Resources
Department of Natural Resources

Water Division 2 – Main Office
310 E. Abriendo Ave, Suite B
Pueblo, CO 81004

February 16, 2015

J.C. York, P.E., Principal
J & T Consulting, Inc
305 Denver Avenue, Suite D
Fort Lupton, CO 80621

Re: West Farm Gravel Pit Slurry Wall
Slurry Wall 90-Day Performance Test Final Report
Sections 33 & 28, T22S, R46W, 6th PM
M-08-078
Water Division 2, Water District 67

Dear Mr. York:

The purpose of this letter is to approve the lining of the above referenced site based on your February 12, 2015 submittal of the Performance Test report and documentation. The measured outflow due to pumping indicate that this site **has been lined to the design standard** referenced in the August, 1999 State Engineer Guidelines for Lining Criteria for Gravel Pits. **Meeting the design standard requires that all water inflows and outflows for this site must be accounted for on at least a monthly basis**. I understand from your letter report that GP Aggregates, LLC will be responsible for providing the monthly water accounting. Please provide the specific contact information of the person who will be responsible for this reporting at your earliest convenience, but no later than February 27, 2015.

Please call me if you have any questions.

Sincerely,

Bill W. Tyner

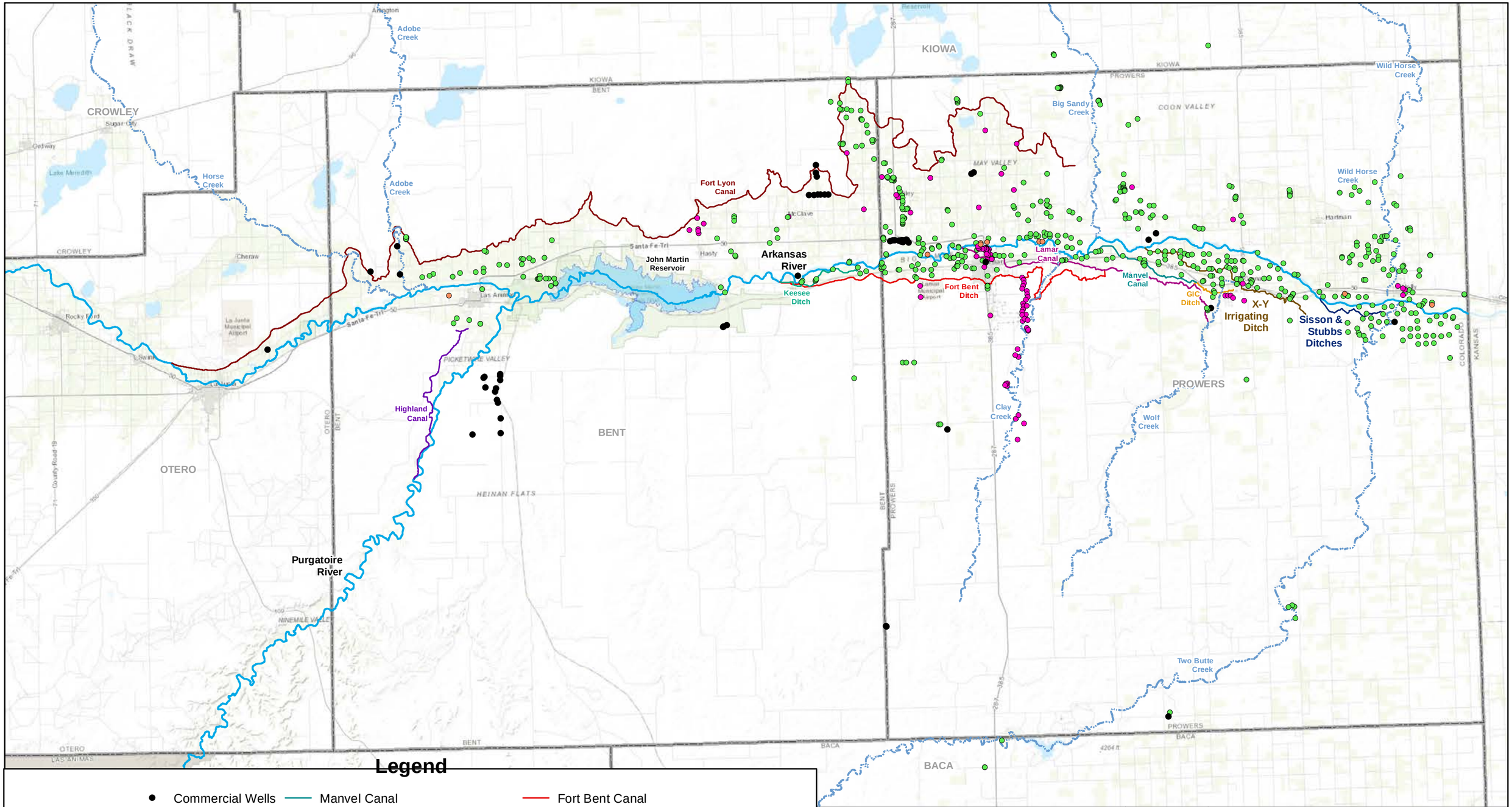
Bill W. Tyner, P.E.
Assistant Division Engineer

Enclosure

CC: Rebecca Nichols, Water Commissioner, Water District 67
Lonnie Spady, Water Commissioner, Water Districts 17/67
Charlie DiDomenico, Augmentation Coordinator
Melissa Peterson, Denver SEO Team 237
Michelle L. Hatcher, Clear Water Solutions
Rachel Zancanella, Engineering Support
Dan DiRezza, Ground Water Commissioner
Don Higbee, LAWMA

Appendix B

Map of LAWMA's general Service Area and Shareholder Structures



Hendrix Wai Engineering, Inc.

Job No. L7510

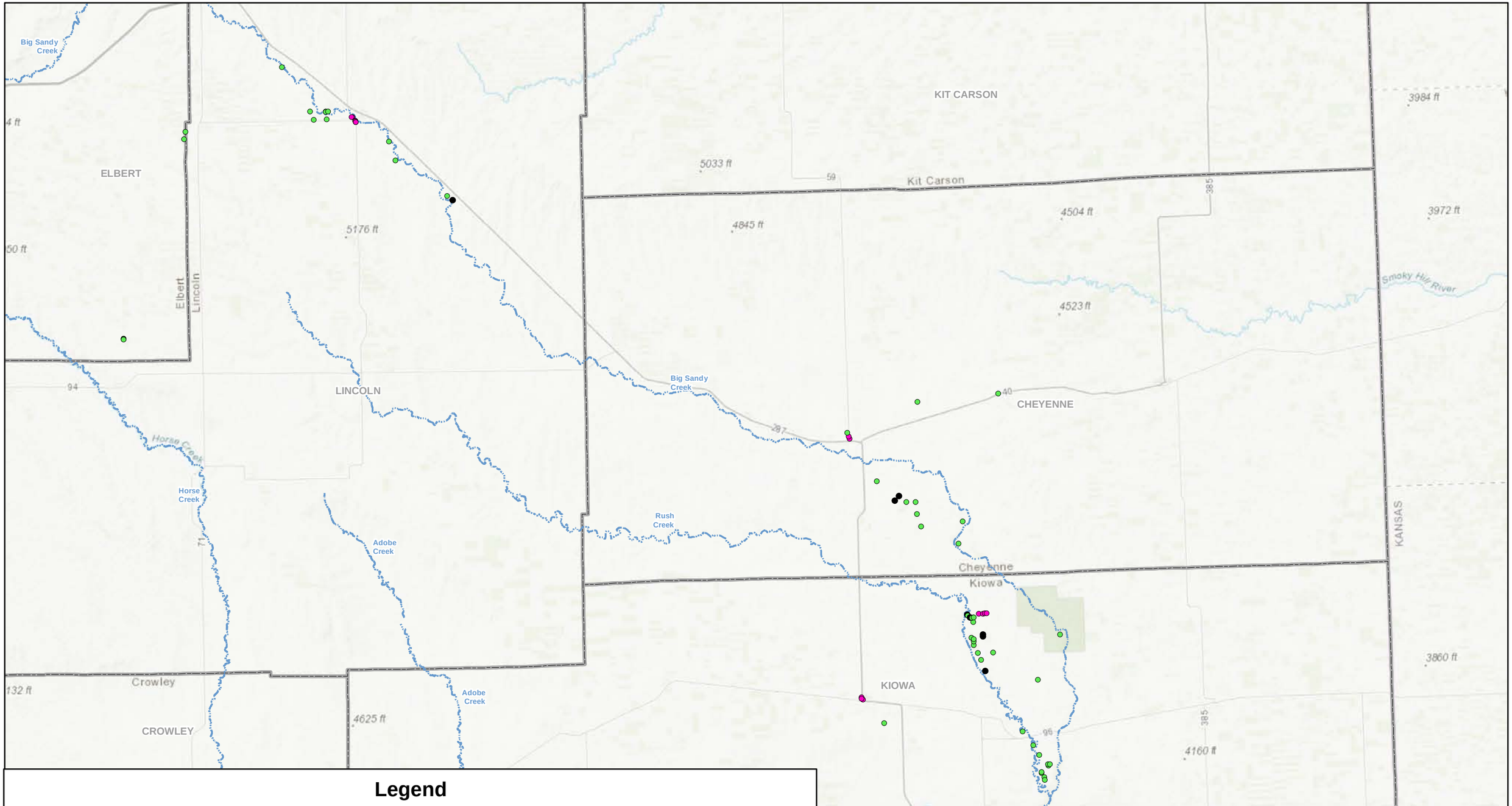
File: GLM Active LAWMA Structures.mxd

Date: 1/30/2019

Prepared For: LAWMA

Appendrix B - 1

General Location Map of LAWMA's Active Structures along the Mainstem Arkansas River



Legend

- Commercial Wells
- Gravel Pit Wells
- Irrigation Wells
- Municipal Wells
- Creeks

0 3.5 7 14

Scale in Miles

N W E S

Hendrix Wai Engineering, Inc.

Job No.	L7510
File:	GLM Active LAWMA Structures.mxd
Date:	1/30/2019
Prepared For:	LAWMA

Appendrix B - 2

General Location Map of LAWMA's Active Structures along the Northern Tributaries

Appendix C

Articles of Incorporation

SECOND AMENDED AND RESTATED ARTICLES OF INCORPORATION

OF

LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION

Pursuant to the provisions of the Colorado Nonprofit Corporation Act, as amended, the Lower Arkansas Water Management Association hereby adopts the following Second Amended and Restated Articles of Incorporation. Upon their effective date, these Second Amended and Restated Articles of Incorporation shall supersede and replace the Articles of Incorporation adopted on September 29, 1998.

ARTICLE I
Name

The name of the corporation is LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION.

ARTICLE II

The corporation is formed in recognition of the need of its members to organize in order to meet the requirements of ground water use administration in the State of Colorado and, in particular, in the Arkansas Valley. The corporation is the continuation of the organization incorporated on February 20, 1973, on May 30, 1990 and on September 29, 1998 for the purpose of providing augmentation service to its members.

After the State of Colorado was sued by the State of Kansas and the Colorado State Engineer adopted stricter rules and regulations governing well pumping, the importance of continuing and strengthening this organization has increased. Increased augmentation demands have led members with pre-1986 wells to come together to jointly borrow money on a long-term basis to buy additional water rights and for all members to band together to implement a practical plan for augmentation and to accommodate its administration for the benefit of all members. It is recognized that the adoption of a structure that enables the issuance of stock to members with pre-1986 wells will strengthen the organization.

These articles of incorporation are adopted in recognition of these matters.

ARTICLE III
Office and Agents

The address of the registered office of the corporation is 310 South 6th Street, P.O. Box 1161, Lamar, Prowers County, Colorado 81052. The name of its registered agent at this time at such address is Donald F. Higbee.

ARTICLE IV
Purposes and Powers

A. Purposes. This corporation is formed pursuant to the Colorado Nonprofit Corporation Act, as amended, and pursuant to Title 7, Article 42, Colorado Revised Statutes, as amended, for the purpose of engaging in any lawful business or activity including, but not limited to, the acquisition and management of corporate assets, including but not limited to water, water rights, ditches, wells, reservoirs and reservoir accounts, to replace depletions caused by the pumping of its members' wells as required by law, and any related water resources management activity in accordance with the corporations' bylaws and policies of its board of directors.

B. Powers. The corporation shall have and may exercise all of the rights, powers and privileges now or hereafter conferred upon corporations operating pursuant to the Colorado Nonprofit Corporation Act, as amended, and the provisions of Title 7, Article 42, as amended. These powers include, but shall not be limited to, the power to:

(1) acquire, develop and administer water supplies for the benefit of its members;

(2) establish classes of membership and determine the entitlements and conditions upon each such class of membership;

(3) issue shares of stock in the corporation;

(4) establish classes of stock and determine the entitlements and conditions upon each class of stock;

(5) purchase, lease, or otherwise acquire and to own, hold, mortgage, pledge and sell real and personal property of all kinds;

(6) borrow money for the use of the corporation and to issue securities thereof and to pledge, mortgage, hypothecate, and otherwise dispose of the real, personal and intangible property of the corporation as security thereof;

(7) determine the place, time and manner of delivery and establish schedules of rates for the delivery of water for the benefit of its members;

(8) levy and collect assessments against its members to meet the costs of

management of the corporation and of administration of its assets, pay debts of the corporation, make any necessary repairs and for any other purpose consistent with any purpose, object or statutory power of the corporation;

(9) enforce collection of delinquent water assessment payments in the manner provided in the corporation's bylaws;

(10) employ personnel, agents, attorneys, engineers, representatives and independent contractors as may be necessary or convenient to the carrying out of any purpose, object or statutory power of the corporation;

(11) take any other such actions as the Board of Directors may consider proper or necessary to carry the objects and purposes of the corporation into effect; and

(12) exercise any and all powers permitted by law with respect to nonprofit corporations pursuant to the Colorado Nonprofit Corporation Act and Title 7, Article 42, Colorado Revised Statutes, as amended.

ARTICLE V
Membership

A. Admission. All members as of the effective date of these Amended Articles of Incorporation may continue to be members of the corporation. New members may be admitted upon approval of the Board of Directors in accordance with criteria and procedures defined by the Board of Directors. Each member shall be entitled to one membership for each well owned by that member for which dues are paid and which is included in the LAWMA augmentation plan.

B. Classes of Membership. Unless otherwise provided in the corporation's bylaws, there shall be one class of member. Additional classes may be defined in the future by bylaw. The rights and obligations of each class of members shall be defined by the bylaws and may differ between membership classes.

C. Transfer of Membership. Memberships may be transferred subject to the approval of the Board of Directors in accordance with the bylaws of the corporation and with any rules which may be adopted from time to time by the Board of Directors.

D. Suspension and Termination of Membership. Memberships may be suspended or terminated as provided in the bylaws of the corporation. The bylaws shall provide for a procedure for termination that includes notice and an opportunity to be heard. The bylaws may also provide for reinstatement upon terms to be determined by the Board of Directors.

ARTICLE VI
Shares of Stock

A. Issuance of Shares. The corporation shall issue shares of stock in the manner and subject to the rights and limitations more specifically set forth in these Amended Articles of Incorporation and in the bylaws of the corporation.

B. Authority. The aggregate number of shares of capital stock which the corporation shall have authority to issue is 30,000 shares, consisting of shares of Common Stock, no par value per share, and shares of Preferred Stock, no par value per share. The voting powers, designations, preferences, privileges and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions of each class or series of capital stock of the corporation, shall be as provided in these Articles of Incorporation and in the bylaws of the corporation.

C. Allocation of Water to Preferred Stock. The Board of Directors intends to annually allocate one (1) acre-foot of replacement water to each share of Preferred Stock. Preferred Stock will receive the first allocation of any replacement water owned or controlled by LAWMA that LAWMA is permitted to allocate to its shareholder members by the Colorado State Engineer, Colorado Water Court or other authority exercising jurisdiction over such matters.

D. Equitable Interest in Water Rights. Shares of stock shall represent an entitlement to an equitable interest in the water rights of the corporation as specifically defined in the bylaws, and shall be assessable in order to assure repayment of the corporation's debt on such water rights. Only the shareholders (and not the members), by virtue of such shares of stock, shall be entitled to such equitable interest in the water rights; non-shareholder members shall not be so entitled.

E. Dissolution. Upon dissolution of the company, the water rights of the company shall be distributed on the basis of stock ownership. Stock ownership shall not represent any specific equitable ownership in any assets other than the water rights and any storage accounts specifically associated with these water rights, such as Article II storage accounts in John Martin Reservoir under the 1980 operating agreement. All other assets, including facilities, equipment, ditch capacity or reservoir capacity, or accounts associated generally with the plan for augmentation and not with specific water rights (such as the offset account in John Martin Reservoir), shall be distributed upon dissolution in accordance with a plan of distribution adopted in accordance with the Colorado Nonprofit Corporation Act or bylaws.

F. Preemptive Rights. No shareholder of the corporation shall have preemptive or other rights to subscribe for any additional unissued or treasury shares of stock of for other securities of any class, or for rights, warrants or options to purchase stock, or for script, or for securities of any kind convertible into stock purchase warrants or privileges.

G. Transfer of Shares. The transfer of shares shall be allowed, but only upon approval of the Board of Directors in accordance with the bylaws of the corporation and such rules, if any, as the Board of Directors may determine from time to time.

H. Authority. The corporation is authorized to issue shares of stock. Such issuance is consistent with the Colorado Nonprofit Corporation Act, pursuant to Title 7, Article 42 of the Colorado Revised Statutes.

ARTICLE VII
Voting Rights of Members and Shareholders

A. Voting. The corporation shall have voting members and voting shareholders. The voting rights of the members and shareholders may differ depending on their class and shall be defined in these Articles of Incorporation and the bylaws of the corporation. Voting by proxy shall be permitted as provided in the bylaws of the corporation. Cumulative voting shall be prohibited.

B. Meetings.

(1) Annual and other meetings of the members and shareholders shall be held at such time and place and upon such notice as shall be prescribed by the bylaws of the corporation, which are not inconsistent with the Colorado Nonprofit Corporation Act, as amended.

(2) The bylaws of the corporation may fix or provide the manner of filing a date as the record date for determining the members and shareholders entitled to notice of a meeting, the members and shareholders entitled to vote at a meeting, and the members and shareholders entitled to exercise any rights in respect of any other lawful action. If the bylaws do not fix or provide the manner of fixing the record date for any of said actions, the Board of Directors may fix a future date as such record date. If neither the bylaws nor the Board of Directors fixes the record date for any of said actions, the record date shall be as provided in the Colorado Nonprofit Corporation Act, as amended. If a record date is fixed under the bylaws or by the Board of Directors on a case by case basis, said record date shall not be more than seventy days before the meeting or action requiring a determination of members and shareholders occurs.

(3) The bylaws of the corporation may provide for the preparation of an alphabetical list of the names of all its members and shareholders entitled to notice of, and to vote at, a meeting or to take such action by written ballot. If such list is prepared, it shall be available for inspection to the extent and in the manner provided in the Colorado Nonprofit Corporation Act, as amended.

(4) Actions requiring member and/or shareholder approval may be taken without a meeting, or by written ballot as provided under the bylaws of the corporation, and, if no such provision is made by the bylaws, under the Colorado Nonprofit Corporation Act, as amended.

C. Quorum. Members and shareholders may take action on a matter at a meeting only if a quorum of members and/or shareholders entitled to vote on that matter is present at the meeting in person or by proxy. Fifteen percent (15%) of the votes entitled to be cast on the matter by the voting group constitutes a quorum of the voting group entitled to vote for action on that matter.

ARTICLE VIII
Directors and Officers

A. Board of Directors. The control and management of the business and affairs of the corporation shall be vested in the Board of Directors. The number of directors to sit on the Board, the term to be served, the process for filling vacancies before the end of a term, and the Board's meeting, voting and notice procedures shall be specified in the bylaws of the corporation. The Board of Directors shall have sole control over the administration and management of the water and water rights, augmentation plan and all related resources of the corporation.

B. Meetings of the Board of Directors. The Board of Directors may hold regular or special meetings in the manner and upon the notice requirements set forth in the bylaws or, if no such requirements are set forth in the bylaws, as provided in the Colorado Nonprofit Corporation Act, as amended.

C. Officers. The officers shall be a President, a Vice-President, a Secretary, a Treasurer, and such other officers as may be designated by the Board of Directors, each of whom shall be qualified and elected in such a manner and for such a term as provided in the bylaws of the corporation. The duties of each officer shall be specified in the bylaws of the corporation.

D. Standards of Conduct. The standards of conduct of officers and directors of the corporation shall be as provided in the Colorado Nonprofit Corporation Act, as amended.

E. Indemnification. To the extent consistent with the Colorado Nonprofit Corporation Act, no director of the corporation shall be liable to the corporation or to its members for monetary damages for breach of fiduciary duty as a director. The corporation shall indemnify any person made a party to any proceeding because the person is or was a director against liability incurred in the proceeding in the manner and to the extent authorized under the Colorado Nonprofit Corporation Act, as amended.

ARTICLE IX
Use of Water

A. Management. The Board of Directors shall have the exclusive authority to set policies and procedures and the exclusive authority to make decisions regarding the use of water, water rights, augmentation plan and related resources controlled by the corporation for the benefit of the membership including, but not limited to, the authority to determine the amount of replacement water available each year, the timing and location of releases to replace depletions caused by its members' wells and the specific water and water rights to be used to replace said depletions. Such policy and procedures may be set out in the bylaws and in rules, if any, as the Board may determine from time to time. The water and water rights controlled by the corporation shall be managed to assist its members in complying with the rules and regulations of the Colorado State Engineer and other such applicable law governing the pumping of the members' wells.

B. Members Responsibility. Members are solely responsible for their compliance with any and all laws governing the pumping of their wells, including compliance with orders issued and rules and regulations promulgated by the Colorado State Engineer and with any other laws applicable to the pumping of their wells. Membership in the corporation does not guarantee compliance with said rules and regulations, orders, or other laws and neither the corporation nor the Board of Directors shall be responsible or liable for members' noncompliance.

ARTICLE X
Amendment

Amendment of Articles of Incorporation. Except as otherwise provided in this Article X, these articles may be amended by a vote of a majority of the total membership and shareholders of the corporation at any regular or special meeting for which prior notice was duly given as to the general nature of the amendment. Notwithstanding the foregoing, Article VI, Section C. of these articles shall not be altered or changed without the affirmative vote or written consent of the holders of at least two-thirds of a quorum of the Preferred Stock, voting together as a single class, and at least two-thirds of a quorum of the Common Stock, voting together as a single class. To the extent of any inconsistency, the provisions of the Colorado Nonprofit Corporation Act, as amended, shall prevail.

ARTICLE XI
Adoption and Effective Date

A. Statement of Adoption. These amended articles of incorporation were adopted at a meeting of all members and shareholders of the corporation duly called and held in Lamar, Colorado, on December 8, 2008. A quorum of members and shareholders was present at such meeting in person or by proxy. These amended articles of incorporation received at least a majority of the total membership and shareholders present at the meeting or represented by proxy. These amended articles of incorporation also received at least two-thirds of a quorum of the Preferred Stock present or by proxy voting together as a single class and at least two-thirds of a quorum of the Common Stock present or by proxy voting together as a single class. These amended articles of incorporation supersede and replace the articles of incorporation adopted on May 30, 1990 and the restated and amended articles of incorporation adopted on September 29, 1998, as amended December 13, 2007.

B. Effective Date. The effective date of these articles of incorporation is December 8, 2008.

Dated: December 9, 2008.

LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION

By: _____
William J. Grasmick, President

ATTEST:

_____
Donald F. Higbee, Secretary

3994020_1.DOC

E-Filed

Colorado Secretary of State
Date and Time: 02/04/2009 09:47 AM
ID Number: 19901061002
Document number: 20091075795
Amount Paid: $25.00

Document processing fee
If document is filed on paper $125.00
If document is filed electronically **$ 25.00**
Fees & forms/cover sheets are subject to change.
To file electronically, access instructions for this form/cover sheet and other information or print copies of filed documents, visit www.sos.state.co.us and select Business Center.
Paper documents must be typewritten or machine printed.

ABOVE SPACE FOR OFFICE USE ONLY

Amended and Restated Articles of Incorporation

filed pursuant to §7-90-301, et seq. and §7-130-106 and §7-90-304.5 of the Colorado Revised Statutes (C.R.S.)

ID number: 19901061002

1. Entity name: LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION
(If changing the name of the corporation, indicate name BEFORE the name change)

2. New Entity name:
(if applicable) _____

3. Use of Restricted Words *(if any of these terms are contained in an entity name, true name of an entity, trade name or trademark stated in this document, mark the applicable box)*:
☐ "bank" or "trust" or any derivative thereof
☐ "credit union" ☐ "savings and loan"
☐ "insurance", "casualty", "mutual", or "surety"

4. If the corporation's period of duration as amended is less than perpetual, state the date on which the period of duration expires: _____
(mm/dd/yyyy)

OR

If the corporation's period of duration as amended is perpetual, mark this box: ☑

5. The amended and restated constituent filed document is attached.

6. The amendment to the articles of incorporation was in the manner indicated below:
(make the applicable selection)

☐ The amendment and restatement was adopted by the board of directors or incorporators without member action and member action was not required.

☑ The amendment and restatement was adopted by the members AND the number of votes cast for the amendment by each voting group entitled to vote separately on the amendment was sufficient for approval by that voting group.

(If the amended and restated articles of incorporation include amendments adopted on a different date or in a different manner, mark this box ☐ and include an attachment stating the date and manner of adoption.)

7. *(Optional)* Delayed effective date: _____
(mm/dd/yyyy)

Notice:

Causing this document to be delivered to the secretary of state for filing shall constitute the affirmation or acknowledgment of each individual causing such delivery, under penalties of perjury, that the document is the individual's act and deed, or that the individual in good faith believes the document is the act and deed of the person on whose behalf the individual is causing the document to be delivered for filing, taken in conformity with the requirements of part 3 of article 90 of title 7, C.R.S., the constituent documents, and the organic statutes, and that the individual in good faith believes the facts stated in the document are true and the document complies with the requirements of that Part, the constituent documents, and the organic statutes.

This perjury notice applies to each individual who causes this document to be delivered to the secretary of state, whether or not such individual is named in the document as one who has caused it to be delivered.

8. Name(s) and address(es) of the individual(s) causing the document to be delivered for filing:

Mehren (Last) | Richard (First) | John (Middle) | (Suffix)

P.O. Box 1440
(Street name and number or Post Office Box number)

1002 Walnut Street, Suite 300

Boulder (City) | CO (State) | 80302 (Postal/Zip Code)

(Province – if applicable) | United States (Country – if not US)

(The document need not state the true name and address of more than one individual. However, if you wish to state the name and address of any additional individuals causing the document to be delivered for filing, mark this box ☐ *and include an attachment stating the name and address of such individuals.)*

Disclaimer:

This form, and any related instructions, are not intended to provide legal, business or tax advice, and are offered as a public service without representation or warranty. While this form is believed to satisfy minimum legal requirements as of its revision date, compliance with applicable law, as the same may be amended from time to time, remains the responsibility of the user of this form. Questions should be addressed to the user's attorney.

Click the following links to view attachments

Attachment 1
2nd Amended and Restated Articles of Incorporation

Appendix D

Bylaws

BYLAWS

OF

LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION

[Adopted September 10, 1998; Amended November 8, 2002; Amended October 12, 2004; Amended July 12, 2006; Amended September 8, 2006; Amended August 13, 2007; Amended February 10, 2009; Amended February 9, 2016; Amended August 8, 2017]

ARTICLE I
OFFICE AND AGENT

Section 1. The corporation shall maintain a registered office and a registered agent.

Section 2. The registered office and registered agent may be changed by the Board of Directors ("Board") by delivering to the secretary of state for filing a statement of change that sets forth the following:

A. The corporation's corporate name;

B. The street address of its current registered office;

C. If the registered office is to be changed, the street address of the new registered office;

D. The name of its current registered agent;

E. If the registered agent is to be changed, the name of the new registered agent and the new registered agent's written consent to the appointment; and

F. That after the changes are made, the street addresses of its registered office and the business office of its registered agent will be identical.

ARTICLE II
MEMBERS AND SHAREHOLDERS

Section 1. Membership Required for Allocation of Water. A LAWMA membership is required for allocation, to a "LAWMA Structure" as defined in this Article II, of a portion of the water available to the corporation's water rights or a portion of any other water controlled by the corporation. A holder of a LAWMA membership is referred to herein as a "member."

Section 2. Application for Membership. The Board may accept new memberships upon application submitted in such form as determined by the Board and upon the following conditions:

A. Applicant's well, gravel pit, surface diversion, or other structure requiring augmentation or replacement ("Augmented Structure") is located within the State of Colorado and is so situated as to be able to be served by the corporation's water court approved plan(s) for augmentation, annual replacement plan approved by the State Engineer for Water Division No. 2 pursuant to Rule 14 of the Amended Rules and Regulations Governing the Diversion and Use of Tributary Ground Water in the Arkansas River Basin, effective June 4, 1996 (including any amendments) ("Rule 14 plan"), or any LAWMA-operated Compact Compliance Plan pursuant to Rule 10 of the Compact Rules Governing Improvements to Surface Water Irrigation Systems in the Arkansas River Basin in Colorado ("Rule 10 plan") (collectively, "Augmentation Plan") without adverse impact thereon, such determination to be made by the Board in its sole discretion; or Applicant's proposed point of delivery for direct use of water available to the corporation's water rights or other water controlled by the corporation ("Direct Delivery Point") is located within the State of Colorado and is able to be served by the corporation's water rights or other water controlled by the corporation without adverse impact thereon, such determination to be made by the Board in its sole discretion; and

B. Augmented Structures and Direct Delivery Points are referred to collectively as "LAWMA Structures" herein; and

C. A member shall hold one membership for each LAWMA Structure, and shall register each such LAWMA Structure with the corporation; and

D. For each membership, the member shall pay a fee to be determined by the Board from time to time; and

E. The member shall pay the costs, including without limitation costs for engineering and legal consulting services, incurred by the corporation to add the Augmented Structure to the corporation's Augmentation Plan or to change or administer the corporation's water rights as needed for delivery of water to the Direct Delivery Point ("Reimbursable Costs").

(1) The Reimbursable Costs include, without limitation, all costs associated with the following: any Water Court proceeding or administrative proceeding necessary to amend the Augmentation Plan on a temporary or permanent basis to include the Augmented Structure; any Water Court proceeding or administrative

proceeding necessary to allow for direct delivery of water at the Direct Delivery Point; review of the member's proposed substitute water supply plan ("SWSP") in which LAWMA shares will be used; review of the member's past plan for augmentation, replacement plan, or SWSP in which the Augmented Structure was augmented with water from a source other than LAWMA shares; and the preparation, review, or amendment of any lease, contract, or other such document in connection with membership in the corporation; and

(2) At the time of the Board's approval of the application for a membership for a LAWMA Structure, the member shall enter into a reimbursement agreement with the corporation to provide for payment of the Reimbursable Costs; and

F. New members may be issued shares of stock in the corporation in accordance with Article VI, Section 9 of these bylaws. Nothing in these bylaws precludes the transfer or lease of shares of stock from a current shareholder to a new member, subject to approval of such transfer as described in Article VI, Section 2 below; and

G. The Board may adopt rules and regulations to guide the determination of whether to approve new memberships.

Section 3. Membership and Classes of Stock.

A. Members. There will be one class of members.

B. Shareholders. Those members who satisfy one of the qualifications set forth in Subsection (1) or (2) of this Article II, Section 3.B, and who are issued or hold Preferred Stock or Common Stock will be shareholders in addition to being members.

A. Upon approval of the Board and upon such terms and conditions as are necessary to prevent injury to the corporation, any person or entity may be issued stock and become a shareholder.

B. Any person or entity that acquired, through purchase, gift, foreclosure, or otherwise, shares of stock from a shareholder and whose transfer of such stock has been approved as provided in Article VI, Section 2 below, may be issued stock upon the surrender of the acquired stock, and upon such issuance will become a shareholder.

C. A person or entity will cease to be a shareholder upon the approved transfer to another of all shares of stock owned by that person or entity. Cessation of shareholder status under this section does not and will not release such person or entity from any liability or obligation incurred as a shareholder and not discharged or satisfied as of the date of cessation.

C. Non-Shareholder Members. All members who are not shareholders will nevertheless be full members, designated as "non-shareholder members," for all purposes other than distribution of benefits and burdens on stock.

A. For non-shareholder members, all rights and obligations relating to LAWMA's provision of water for augmentation of LAWMA Structures or for delivery to a Direct Delivery Point must be established by written contract between the non-shareholder member and the corporation. Solely for purposes of this provision, non-shareholder members who rent stock will be treated as shareholders upon submitting acceptable proof of the rental of such stock.

B. The Board may add or revise membership classes and the rights and obligations associated therewith from time to time by amendment of these bylaws.

Section 4. Dues and Fees. The corporation shall assess membership dues and fees. The Board shall determine the amount of proposed membership dues and fees each year and shall present said proposed dues and fees to the membership for approval at any annual meeting or special meeting called for that purpose. Membership fees and dues require the approval of a majority of a quorum of all members entitled to vote, either present at the meeting or by proxy. Dues and fees will become due thirty (30) days after the date of billing. The Secretary shall give written notice to each member of the amount of dues and fees and the time when the same will be due, which notice the Secretary shall give by delivering the notice personally to each member or mailing the notice to the address of the member as shown by the books of the corporation.

Section 5. Transfer of Membership. Any membership in this corporation may be transferred with approval of the Board in accordance with these bylaws and such rules as may be adopted from time to time by the Board.

Section 6. Suspension and Termination of Membership. Any membership in this corporation may be suspended or terminated for non-payment of dues and/or fees, or for non-compliance with the conditions of membership or any water court

decree or administrative approval that governs operation of the corporation's water rights and Augmentation Plan.

A. Suspension and renewal for non-payment. Dues and/or fees not paid by March 1 of each year will result in suspension of the membership for which such dues and/or fees were assessed, and all rights attendant to that membership will be suspended unless and until the membership is renewed. To renew a suspended membership, the member shall pay the full amount of unpaid dues and/or fees, together with a 20% penalty on such amount.

B. Termination for non-payment. Dues and/or fees not paid for one year following their due date will result in termination of the suspended membership for which such dues and/or fees were assessed, and all rights attendant to that membership will be terminated. To avoid termination of a suspended membership, the member shall pay, prior to March 1 of the year following the original non-payment, the full amount of unpaid dues and/or fees for the delinquent year, together with a 20% penalty, and the dues and/or fees assessed on the membership for the next year. If such payment has not been made prior to March 1 of the year following the delinquent year, the suspended membership will be terminated, and a new application will be required for a membership for the LAWMA Structure for which the terminated membership was held. Before termination of a membership in accordance with this Article II, Section 6, the Board shall give not less than thirty (30) days' prior written notice to the member of the impending termination and the reasons therefor, and an opportunity for the member to be heard, orally or in writing, not less than ten (10) days before the effective date of the termination.

ARTICLE III
MEETINGS AND VOTING

Section 1. Annual and Regular Meetings. A meeting of the members and the shareholders shall be held annually at a place and time to be stated in or fixed in accordance with a resolution of the Board. In addition, regular meetings of the members and shareholders may be held at a place and time to be stated in or fixed in accordance with a resolution of the Board.

Section 2. Special Meetings. Special meetings of the members and shareholders may be called at any time by the President, or by a majority of the Board. The President, or in his absence the Vice President, shall call a special meeting upon the written petition of one-third of the members of the corporation.

Section 3. Notice. Written notice of each annual, regular, and special meeting shall be given by mailing a copy of such notice, properly addressed and first class postage prepaid, to each member and each shareholder not less than ten (10) days nor more than thirty (30) days prior to the date of said meeting. The record date for determining the members and shareholders entitled to notice of a meeting and those entitled to vote at a meeting shall be determined by the Board and shall be no more than sixty (60) days and no less than ten (10) days before notice is mailed. A list of members and shareholders who are entitled to notice of, and to vote at, the meeting shall be prepared and made available for inspection in accordance with the provisions of the Colorado Revised Nonprofit Corporation Act, as amended. Notice shall be mailed to each member's and each shareholder's last known address according to the corporation's records. The notice shall state the place, date, and time of the meeting, the purpose of the meeting, and a description of any matter or matters that must be approved by the members and shareholders or for which the members' and shareholders' approval is needed.

Section 4. Quorum. Fifteen percent (15%) of the votes entitled to be cast on a matter constitutes a quorum of that voting group for action on that matter. If such a quorum is not present at a meeting at which the matter will be placed to a vote, either in person or by proxy, the meeting may be adjourned by a majority of those present, provided that such meeting may not be adjourned for a period to exceed sixty (60) days for any one adjournment.

Section 5. Voting. The voting rights of the members and shareholders of the corporation shall be as follows:

A. Shareholders. Shareholders shall have one vote for each share of Common Stock and two and five-tenths (2.5) votes for each share of Preferred Stock standing in the shareholder's name on the books of the corporation, in addition to one vote for each membership held by such shareholder, as provided below. Shareholders have two and five-tenths (2.5) votes for each share of Preferred Stock because the Board has determined, based on analysis and recommendations from the Company's consulting engineers, that a share of Preferred Stock may be issued to a shareholder upon surrender to the corporation of two and five-tenths (2.5) shares of Common Stock (see bylaw Article VI, Section 9). The differential voting rights for Common and Preferred Stock are intended to ensure that a shareholder does not suffer a reduction in voting rights when Common Stock is converted to Preferred Stock, and may be changed by the Board from time to time to maintain the relationship between Common and Preferred Stock as allowed by bylaw Article VIII.

B. Members. Each member shall have one vote for each LAWMA Structure owned and for which a membership is held.

Voting by proxy shall be permitted. Cumulative voting shall be prohibited. Unless otherwise provided in these bylaws or in the articles of incorporation of the corporation and to the extent consistent with the Colorado Nonprofit Corporation Act, as amended, any matter requiring approval of the members and shareholders shall require approval by a majority of a quorum of the members and shareholders present at a regular or special meeting or by proxy.

ARTICLE IV
DIRECTORS

Section 1. Board of Directors. The Board shall consist of seven (7) shareholders of the corporation to be elected at the members' and shareholders' annual meeting or adjourned annual meeting and shall be the seven receiving the highest number of votes cast in favor of their election.

Section 2. Term of Directors. The directors shall be elected for staggered terms of three (3) years.

Section 3. Compensation. The Board and the officers of this corporation other than the Secretary or Treasurer shall serve without compensation as such directors or officers, but any such director or officer may be reimbursed for actual expenses incurred in the performance of his duties or in the attendance at any regular or special meetings of the Board.

Section 4. Meetings. Regular meetings of the Board shall be held at such a time and place as the Board shall determine. Special meetings of the Board may be called by the President or by two (2) or more directors. The Secretary's oral notice to the directors of special meetings, at least two (2) days prior to the special meeting, shall be sufficient. A majority of the number of directors in office immediately before the meeting begins shall constitute a quorum for the conduct of business.

Section 5. Powers and Duties of the Board of Directors. The Board shall exercise the following powers:

A. To act for and in behalf of the corporation in any manner not prohibited by statute or by the articles of incorporation of the corporation.

B. To control and supervise the business affairs and management of the corporation, and to hire and employ such labor and other employees as may be necessary and advisable to carry out the purposes of the corporation.

C. To elect the officers of the corporation, and to adopt and procure a corporate seal for the corporation.

D. To authorize and approve the issuance of, and to issue, shares of Common Stock and Preferred Stock in the corporation;

E. To make rules and regulations and set policies for the transaction of the business of the corporation, and for the control, management, and distribution of water by the corporation.

F. To prescribe the form of applications for membership and to approve or reject all such applications.

G. To levy assessments on stock, dues, and fees at such times and in such amounts as to the Board shall deem necessary, and to provide for the manner of receiving and collecting such assessments, dues, and fees and to enforce the collection thereof.

H. To approve or reject any transfer of membership or the rights associated therewith, and to approve or reject any transfer of stock.

I. To provide for the maintenance of accurate records and books of account for the affairs and business of the corporation, and to cause regular audits to be made at least once each year.

J. To approve and direct all disbursements out of the funds of the corporation and to borrow money as it may be necessary upon the credit and for the benefit of the corporation, said indebtedness to be approved in the form of a resolution duly recorded in the minutes of the directors' meeting.

Section 6. Specific Powers Relating to the Administration of the Corporation's Water Rights and Augmentation Plan, and to the Allocation of Water. In recognition of the variability in water availability to the corporation's water rights in different years and under different hydrological circumstances, the Board shall have exclusive authority to determine the allocation of water to Common Stock and to Preferred Stock each year. The Board shall also have exclusive authority over all aspects of operation of facilities and water accounts of the corporation. The Board may adopt rules to provide further detailed guidance with respect to such administration and allocation.

Section 7. Vacancies. Vacancies among the directors and the officers of this corporation shall be filled for the unexpired term by majority vote of the Board.

ARTICLE V
OFFICERS

Section 1. Officers of the Corporation. The officers of this corporation shall be a President, Vice President, Secretary, and Treasurer. The Secretary and the Treasurer may be the same person. The President and Vice President shall be elected from the Board. The Secretary and Treasurer need not be members, shareholders or directors of this corporation. All officers shall serve for a term of one (1) year or until successors are duly elected and qualified; election of officers of the Board shall be held immediately after each annual meeting of the members and shareholders.

Section 2. Duties and Powers of the President. The President shall preside at all meetings of the Board and meetings of the members and shareholders; and shall sign all stock certificates, bonds, deeds, leases, encumbrances, notes, contracts, or other instruments of writing made or entered into by or on behalf of the corporation. The President shall exercise a general supervision over the business of the corporation and shall have all the power and perform all of the duties usually incident to the office of President of similar associations.

Section 3. Duties and Powers of the Vice President. The Vice President shall perform all of the functions and duties associated with the office of the President in the absence of the President, or in the case of his inability or refusal to act. The Vice President shall perform such additional duties as the Board may prescribe.

Section 4. Duties and Powers of the Secretary. The Secretary shall perform all duties usually incident to the office of Secretary of a corporation. He shall keep the minutes of all members' and shareholders' meetings and all directors' meetings, and have the custody of all minutes, records, and other papers and documents of the corporation. He shall provide notice of members' and shareholders' meetings and meetings of the Board as provided by these bylaws. He shall provide written notice of proposed membership dues and fees as described in Article II, Section 4 above, and of proposed annual assessments as described in Article VI, Section 4 below. He shall attest by his signature and affix the corporate seal to all stock certificates, contracts, and conveyances requiring the same. He shall prepare and keep an accurate stock ledger and all other proper books of record and of account of the business of the corporation, and such other books and records as the Board may prescribe. He shall make such reports to the Board of all his accounts and doings as may be required by the Board. Said accounts may also be made to the members and the shareholders if required by the Board. If required by the Board, the Secretary shall furnish a bond satisfactory to the Board for the satisfactory performance of his duties, the cost of which shall be borne by the corporation.

Section 5. Duties and Powers of the Treasurer. The Treasurer shall perform all duties usually incident to the office of Treasurer of a corporation. He shall collect assessments and other sums due to the corporation. He shall safely keep all money and funds of the corporation and disburse the same only on orders signed by the President. He shall keep such financial records and accounts as will accurately reflect the finances and assets of the corporation, and shall report the same to the shareholders at each annual meeting and to the Board upon request. If required by the Board, the Treasurer shall provide a bond in the amount determined by the Board at the cost of the corporation.

Section 6. Manager or Superintendent. In addition to the officers above named, the Board may authorize the appointment of a manager or a superintendent, who may or may not be a director, member or a shareholder of this corporation. The duties, authority, and compensation of such manager or superintendent shall be as determined by the Board.

ARTICLE VI
STOCK, CERTIFICATES AND TRANSFERS

Section 1. Classes of Stock. There shall be two classes of stock, Common Stock and Preferred Stock. Preferred Stock will be identified as such on the face of the stock certificate.

Section 2. Transfer of Stock. No transfer of stock shall be allowed without approval of the Board. The Board may adopt rules governing approval of said transfers. A shareholder proposing to transfer his stock in this corporation, whether to a shareholder, non-shareholder, member, or non-member of this corporation, or from one LAWMA Structure to another LAWMA Structure, shall make a written request to the Board for approval of the transfer. If, in the opinion of the Board, the transfer may be made without injury to the corporation, the corporation's water rights and other replacement water sources, or to other members, or to the integrity or administrability of the corporation's water rights or Augmentation Plan, the Board shall approve the transfer and any such approval shall include terms and conditions deemed necessary by the Board to prevent such injury. The proposed transferee shall pay the corporation's engineering and legal costs associated with evaluating the proposed transfer. It is the policy of the corporation to encourage the free transferability of stock as much as consistent with the foregoing principle. Therefore, a transfer of stock from one well to another well both of which divert from the Valley Fill Aquifer and surficial aquifers along the Arkansas River below John Martin Dam to the Colorado-Kansas stateline, as generally delineated on the map attached to the Amended Rules and Regulations Governing the Diversion and Use of Tributary Ground Water in the Arkansas River Basin, Colorado effective June 4, 1996, will be presumed to be without injury unless the Board determines otherwise based on the

unique facts of any particular circumstance. The corporation shall not be liable for revegetation of land or weed control on land from which shares of stock have been transferred. In the event of a transfer of shares by any person, bank, or institution which is a creditor of a shareholder, as part of a foreclosure or exercise of a security interest on a loan or financing where the person, bank, or institution does not use the services of the corporation, such transfer will be presumed to be without injury unless rebutted on the facts of any particular circumstance. The subsequent assignment and transfer of such shares of stock to a third party shall require Board approval as required by these bylaws. The decision of the Board with respect to any proposed transfer shall be final and shall be transmitted to the requesting shareholder in writing.

Section 3. Surrender of Certificate and Assignment for Transfers. No transfer of stock certificates shall be made on the books of the corporation except upon surrender of the duly endorsed original, duplicate or temporary duplicate stock certificate and the written assignment of the person to whom the same was issued, or in the case of his death, the written assignment of his personal representative.

Section 4. Assessments. The Board shall determine the assessment proposed to be levied on the stock of the corporation for the ensuing year and shall present the question of making the assessment to the members and shareholders at an annual meeting or a special meeting called for that purpose.

A. If the members and shareholders vote in favor of making such assessment, the Board shall levy same.

B. If the members and shareholders fail to hold such a meeting or fail to make or authorize any assessment within ninety (90) days after the close of the corporation's fiscal year, the Board shall have the power to make any such assessment at any regular or special meeting called for that purpose.

C. All assessments will become due thirty (30) days after the date of billing. Assessments paid later than sixty (60) days after billing will require the additional payment of a 20% penalty. The Secretary shall give written notice to each shareholder of the amount of each assessment and the time when the same will be due, which notice the Secretary shall deliver personally to each shareholder or mail to the address of the shareholder as shown by the books of the corporation. If any shareholder fails to pay such assessment, including any penalty, within ninety (90) days after the assessment is due, his stock shall be forfeited to the corporation. Forfeited stock may be sold by the corporation.

Section 5. Effects of Non-Use on Membership Suspension or Termination. Stock shall not be forfeited due to non-use, but it may be forfeited for non-payment of assessments. If a membership is terminated pursuant to Article II, Section 6 of these bylaws, stock owned by that member will not be forfeited as long as assessments continue to be paid in accordance with the requirements of this Article VI.

Section 6. Duplicate Stock Certificates. The Board may order a duplicate stock certificate to be issued in place of any stock certificate of the corporation alleged to have been lost, mislaid, or destroyed, but in every such case, the owner of the lost, mislaid, or destroyed stock certificate shall comply with the provisions of the Ditch and Reservoir Companies Act as codified at Title 7, Article 42, Colorado Revised Statutes, as amended.

Section 7. Temporary Duplicate Stock Certificates. The Board may order a temporary duplicate stock certificate to be issued in place of any stock certificate of the corporation alleged to have been lost, mislaid, or destroyed if the owner of the lost, mislaid, or destroyed stock certificate provides a bond to the corporation, with security, to be approved by the Board on such sum as the Board may determine and direct, as indemnity against any loss or claim that the corporation may incur by reason of issuance of the temporary duplicate stock certificate.

A. So long as the shareholder complies with all of the obligations and requirements of the corporation's articles of incorporation, bylaws, policies, and rules, and so long as no contrary claim of interest or ownership in the subject stock is made to the corporation, a temporary duplicate stock certificate issued by the Board in accordance with Section 7 (A) of this Article VI shall be valid until all of the requirements of the Ditch and Reservoir Companies Act for the issuance of duplicate stock certificates have been satisfied by the shareholder and a duplicate stock certificate has been issued by the corporation in accordance with the provisions of the Ditch and Reservoir Companies Act.

B. Upon compliance with the provisions of the Ditch and Reservoir Companies Act and surrender of the temporary duplicate stock certificate issued pursuant to Section 7 (A) of this Article VI, a duplicate stock certificate shall be issued by the corporation to the shareholder to replace the temporary duplicate stock certificate and original stock certificate alleged to have been lost, mislaid, or destroyed, and the bond provided to the corporation as indemnity against any loss or claim the corporation may have incurred by reason of the issuance of the temporary duplicate stock certificate shall be released.

Section 8. Possession of Stock Certificate. Possession of a stock certificate shall not be regarded as evidence of ownership of the same unless it appears on the stock book of the corporation that said stock certificate was issued or duly transferred to the holder of the same. The Board may, in its discretion, refuse to issue a stock certificate, temporary duplicate stock certificate, or duplicate stock certificate except upon the order of a court having jurisdiction in such matter.

Section 9. Issuance of Shares of LAWMA Stock. No issuance of shares of stock shall be permitted without the approval of the Board. The Board may adopt rules governing approval of the issuance of shares of stock.

A. If in the opinion of the Board the issuance of shares of stock may be made without injury to the corporation, the corporation's water rights and other replacement water sources, or other members, or to the integrity or administrability of the corporation's water rights and its Augmentation Plan, the Board may approve the issuance of shares of stock to the member, and any such approval and issuance of shares shall include terms and conditions deemed necessary by the Board to prevent such injury. Such terms and conditions shall be referenced on the face of the stock certificate.

B. A share of Preferred Stock may be issued to a shareholder upon the shareholder's surrender to the corporation of two and five-tenths (2.5) shares of Common Stock; or, upon the Board's determination, a share of Preferred Stock may be issued upon the conveyance to LAWMA of water equivalent to two and five-tenths (2.5) shares of Common Stock. This conversion ratio of shares of Common Stock to Preferred Stock is called the "Preferred Stock Conversion Ratio." The Preferred Stock Conversion Ratio may be changed from time to time upon the Board's advisement by the corporation's consulting engineer, but such change may be accomplished only by amendment of these bylaws as provided for herein.

C. The Secretary shall record, on the face of each share certificate representing Preferred Stock, the Preferred Stock Conversion Ratio in effect on the date of issuance of such certificate.

D. Shares of Common Stock may be issued to a shareholder upon the shareholder's surrender to the corporation of shares of Preferred Stock. The number of shares of Common Stock that will be issued in exchange for surrender of shares of Preferred Stock will be determined by the Preferred Stock Conversion Ratio that was in effect at the time the shares of Preferred Stock were issued to the shareholder. By way of example and not by way of limitation, if a share of Preferred Stock is issued to a shareholder under the Preferred Stock Conversion Ratio of 2.5 to 1, then

the surrender of that share of Preferred Stock in exchange for Common Stock would yield 2.5 shares of Common Stock, regardless of when the surrender of Preferred Stock is made.

E. The person or entity requesting the issuance of shares of stock shall pay all of the corporation's legal and engineering costs associated with evaluating and implementing the proposed issuance of shares of stock. The decision of the Board as to whether shares of stock will be issued shall be final and shall be transmitted in writing to the person or entity requesting the issuance of shares of stock.

ARTICLE VII
USE OF WATER

Section 1. The Board shall set policies and procedures for and make all decisions regarding use of the water rights and facilities owned or controlled by the corporation, including without limitation the timing and location of releases or deliveries of water available to the corporation's water rights, replacement of depletions, and retention of water in carryover storage, in accordance with applicable state laws and regulations and with the water court decrees and any administrative approvals governing operation of the corporation's water rights and Augmentation Plan.

Section 2. The Board shall annually allocate water to each share of stock in the corporation, with such allocation expressed as the amount of fully consumable water available per share. This allocation will include the preferred allocation to holders of Preferred Stock set forth in the corporation's articles of incorporation. Such allocation shall be made no later than April 1 of each year, and written notice of the allocation shall be provided to each shareholder. The notice shall also state the maximum amount of water that can be diverted by each LAWMA Structure to which the shareholder has dedicated shares of Common Stock or Preferred Stock ("Noticed Maximum Diversion"). A supplemental allocation or a reduction in allocation may be made at any time by the Board at its sole discretion. The amount of water allocated in each year shall be determined with due regard for current year needs and availability and for future year possible needs and availability.

Section 3. The Board may adopt rules to provide general guidance, but in recognition of the difficulty of anticipating all hydrological and water management situations, the Board shall retain the right to make exceptions or alterations to such rules in any particular year, including, without limitation, situations in which the water rights owned or controlled by the corporation are insufficient to allow for the Noticed Maximum Diversion by LAWMA Structures in a given year. Such rules may include a requirement that diversions from LAWMA Structures be curtailed, and may provide for procedures to enforce such curtailment. No member, whether

shareholder or non-shareholder, shall be entitled to divert water in excess of the Noticed Maximum Diversion for a particular LAWMA Structure, or to cause depletions in excess of the allocation to the shares dedicated to that LAWMA Structure, unless a supplemental allocation is made or that member has rented additional sources of replacement water, including rental of the allocation then remaining to stock owned by other shareholders. Such rental sources and the use thereof must be first approved by the Board.

Section 4. Provision of Replacement Water to Members with Water Uses That Are Non-Curtailable. Depletions that may not reasonably and practically be shut down by cessation of pumping or other diversion ("Non-Curtailable Depletions") must be augmented only with Preferred Stock. Depletions attributable to certain types of Augmented Structures, including without limitation gravel pits, wells that are used to provide water for industrial, commercial, municipal, or domestic uses, and bedrock wells, are presumed to be Non-Curtailable Depletions.

Section 5. Use of LAWMA Stock for Augmentation or Replacement Purposes. It is the policy of the corporation that LAWMA stock may be used for augmentation or replacement purposes only within the LAWMA Augmentation Plan as defined in Article II, Section 2.A of these bylaws. However, the Board understands that, in certain limited circumstances, the use of LAWMA stock for augmentation purposes may be needed temporarily under a substitute water supply plan approved by the State Engineer pursuant to C.R.S. § 37-90-137(11) or § 37-92-308.

A. Upon water court approval of a LAWMA augmentation plan that includes a LAWMA Structure then operating pursuant to a temporary substitute water supply plan, the member shall promptly terminate such temporary plan.

B. LAWMA stock may not be used for augmentation or replacement purposes within a decreed plan for augmentation, Rule 14 plan, or Rule 10 plan operated by any entity other than LAWMA.

Section 6. Use of LAWMA Stock for Direct Use. It is the policy of the corporation that water allocated to LAWMA stock may be delivered to a Direct Delivery Point and used directly, rather than for augmentation or replacement purposes, only upon the prior written approval of the Board, which may grant or deny such approval in its sole discretion based on consultation with the corporation's consulting engineer and legal counsel.

A. Any member requesting direct use of water allocated to LAWMA stock following delivery to a Direct Delivery Point shall, as part of such request, enter into a reimbursement agreement with the corporation requiring the

member to pay for all of the corporation's expenses associated with the Board's evaluation of the proposed direct delivery and direct use. Those expenses will include, but are not limited to, all expenses incurred by the corporation for engineering and legal review of the proposed direct delivery and direct use, as part of the corporation's determination of whether such use may be made in accordance with state law and with water court decrees and any administrative orders governing operation of the corporation's water rights and Augmentation Plan.

B. The Board shall deny any request for direct use of LAWMA stock following delivery of water to a Direct Delivery Point if, in the Board's determination made in the Board's sole discretion, such use would (i) cause injury to the corporation, the corporation's water rights and other replacement water sources, or to other members, or to the integrity or administrability of the corporation's water rights or Augmentation Plan; or (ii) violate the terms and conditions of any water court decree or administrative order governing use and administration of the corporation's water rights or Augmentation Plan; or (iii) result in an undue administrative burden on the corporation, including with respect to accounting.

C. Delivery of water to a Direct Delivery Point may be made and administered only by the corporation. Members and shareholders are prohibited from calling for water directly from ditch companies in which the corporation holds water rights.

Section 7. Use of Preferred Stock. Preferred Stock may be used directly or for augmentation of all types of water uses, including but not limited to irrigation use.

Section 8. Measurement and Reporting Obligations. LAWMA members shall make all gauge and meter readings necessary to document diversions from and depletions attributable to the LAWMA Structures. Members shall provide copies of all such records, calculations and accounting to LAWMA monthly or on a more frequent basis if requested by LAWMA or required by the water court, the State Engineer, the Division Engineer for Water Division No. 2, or the water commissioner.

ARTICLE VIII
AMENDMENT

These bylaws may be amended by a majority vote at any meeting of the Board. Except as provided in this Article VIII, these bylaws may also be amended by a majority vote of the members and shareholders at any annual meeting or at any special meeting called for that purpose. Notwithstanding the foregoing, the voting rights of shareholders set forth in Article III, Section 5.A. may only be amended by either (1) a majority vote at any meeting of the Board,

which vote is supported by a determination, after consultation with LAWMA's consulting engineers, that the voting rights of shareholders need to be modified due to a corresponding change under bylaw Article VI, Section 9, in the number of shares of Common Stock that are required to be surrendered to the corporation for the issuance of each share of Preferred Stock; or (2) a vote of at least two-thirds of a quorum of the Preferred Stock, present or by proxy, voting together as a single class and at least two-thirds of a quorum of the Common Stock, present or by proxy, voting together as a single class at any annual meeting or at any special meeting called for that purposes. If an amendment is adopted by vote of the members and shareholders, it may not thereafter be altered by a majority of the Board until after the next meeting of the members and shareholders.

I hereby certify that the foregoing are the bylaws of Lower Arkansas Water Management Association as adopted by the directors at their meeting of August 8, 2017.

ATTEST:

Secretary

Appendix E

List of BOD

Lower Arkansas Water Management Association

Board of Directors:

William J. Grasmick, President

Robert Wilger, Vice President

Donald F. Higbee, Secretary

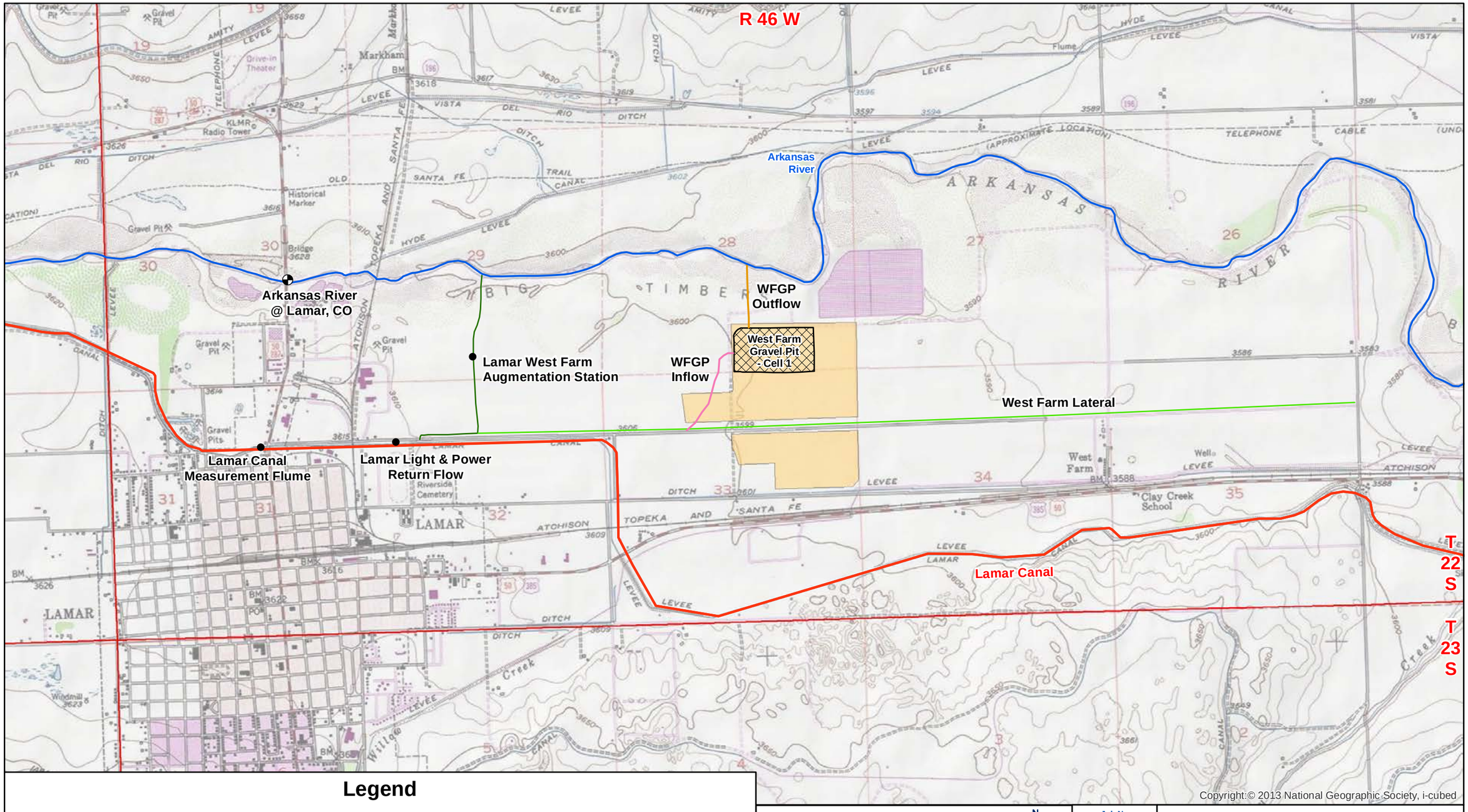
William O. Broyles

Greg Spitzer

Ronald Peterson
Donald Seufer

Appendix I

Map of West Farm Gravel Pit and related facilities



Legend

- Lamar Canal Features
- Arkansas River Gaging Stations
- Arkansas_River
- West Farm Gravel Pit Inflow
- West Farm Gravel Pit Outflow
- West Farm Lateral
- West Farm Augmentation Station
- Lamar Canal
- West Farm Gravel Pit Cell 1
- West Farm Gravel Pit

0 1,000 2,000 4,000

Scale in Feet

N W E S

Hendrix Wai Engineering, Inc.

Job No. L7510

File: WFGP GLM.mxd

Date: 01/31/2019

Prepared For: LAWMA

Appendix I

West Farm Gravel Pit Storage and related facilities

Appendix J

90-day Performance Test Results

J&T Consulting, Inc.

February 12, 2015

Colorado Division of Water Resources – Division 2
The Office of the State Engineer
Attention: Bill Tyner
310 E. Abriendo Avenue, Suite B
Pueblo, CO 81004

Subject: Slurry Wall 90-Day Performance Test Final Report
West Farm Gravel Pit Slurry Wall and Reservoir
Prowers County, Colorado

Dear Mr. Tyner:

On behalf of GP Aggregates, LLC. J&T Consulting, Inc. (JT) is submitting this performance report for the slurry wall that was constructed at the West Farm Gravel Pit in Prowers County, Colorado.

A description of the attached tables is listed below.

1. Table I – Piezometer Data & Groundwater Level Summary. This table along with the attached Monitoring Well Location Map provides the locations of the piezometers and the water level differences that were present on the site during the leak test.

2. Table II – Allowable Groundwater Flow. This table provides the input values that determined the allowable groundwater inflow (leakage rate) for the slurry wall based on the State Engineer Guidelines for Lining Criteria for Gravel Pits, August 1999.

3. Table III - Monthly Evaporation Data. Evaporative losses were determined using the National Oceanic and Atmospheric Administration's (NOAA) Technical Report NWS 33 "Evaporative Atlas for the Contiguous 48 United States" and are shown on this Table. The West Farm Gravel Pit location is subject to an annual evaporation of 60 inches per Map 3 of the report titled "Annual Free Water Surface Evaporation". A dewatering trench measuring 8 feet wide by 400 feet long was used to dewater the area inside the slurry wall and to maintain the water level inside the slurry wall throughout the duration of the test. An area of 3,200 square-feet corresponding to the exposed water surface area of the dewatering trench was used to calculate the evaporative losses during the test.

4. Table IV – Precipitation and Pumping Data. Precipitation data was taken from NOAA Weather Station GHCND: USC00054770 which is located approximately 2.5 miles west of the site. Daily climatological summaries for the test period are attached for your reference. JT estimated that 30 percent of the rain that fell upon the dry portions enclosed within the slurry wall contributed to the volume of water and 100 percent that fell on the open water portions within the slurry wall boundary contributed to the volume of water that affected the leak test. The overall area enclosed by the slurry wall is 39.4

acres. The area discussed above in the evaporation section was used for the open water area (3,200 square-feet = 0.0735 acres), with the remaining 39.32 acres of area being the dry portion of the site. Water was intermittently pumped from the dewatering trench to maintain the level of water inside the slurry wall. The pump totalizer was read at four intervals throughout the test. The pump totalizer reads in acre-feet units to the one-thousandth of an acre-foot (000.000). A pump totalizing flow meter re-verification test was done to certify the accuracy of the totalizer. A copy of the certification for the totalizer is attached for your reference.

5. Table V – Water Accounting. This table displays the amount of water on a daily interval that affected the leak test. Data from the site precipitation, evaporation, and pumping was used in the following equations to determine the leakage rate through and/or under the slurry wall and reservoir floor:

   a) Total Outflow = Evaporation + Water Pumped Out

   b) Leak Volume (Net Outflow) = Cumulative Outflow (Evaporation + Pumping) – Cumulative Inflow (Precipitation)

   c) Leakage Rate = Leak Volume converted to gallons per minute rate

A design standard leakage rate of 70.3 gallons per minute and a performance standard of 210.8 gallons per minute were calculated for this reservoir. The leak test exhibited an overall leakage rate of 53.3 gallons per minute. The starting date for the performance test was November 1, 2014 and the test was concluded on January 31, 2015, a period of 92 days. The leak test was performed over four periods with the overall leakage calculated over the start and end dates above.

The minimum 10-ft water level differential that is required during a leak test was achieved throughout the test as shown in Table I. The minimum water level differential that occurred during the test was 40.12 feet on November 1, 2014 between monitoring well I-1 and X-2.

The slurry wall appears to have passed the State regulations for the design standard during the test. Pending approval from the Office of the State Engineer, GP will now be responsible for providing monthly water accounting to the Office of the State Engineer, Colorado Division of Water Resources.

Please contact us if you have any questions or comments regarding this report.

Sincerely,

J.C. York, P.E.
Principal

Cc: GP Aggregates, LLC

Enclosures:

Monitoring Well Location Map

West Farm Pit Slurry Wall and Reservoir construction plans by J&T Consulting, Inc. dated May 30, 2013

Table I – Piezometer Data & Groundwater Level Summary

Table II – Allowable Groundwater Flow

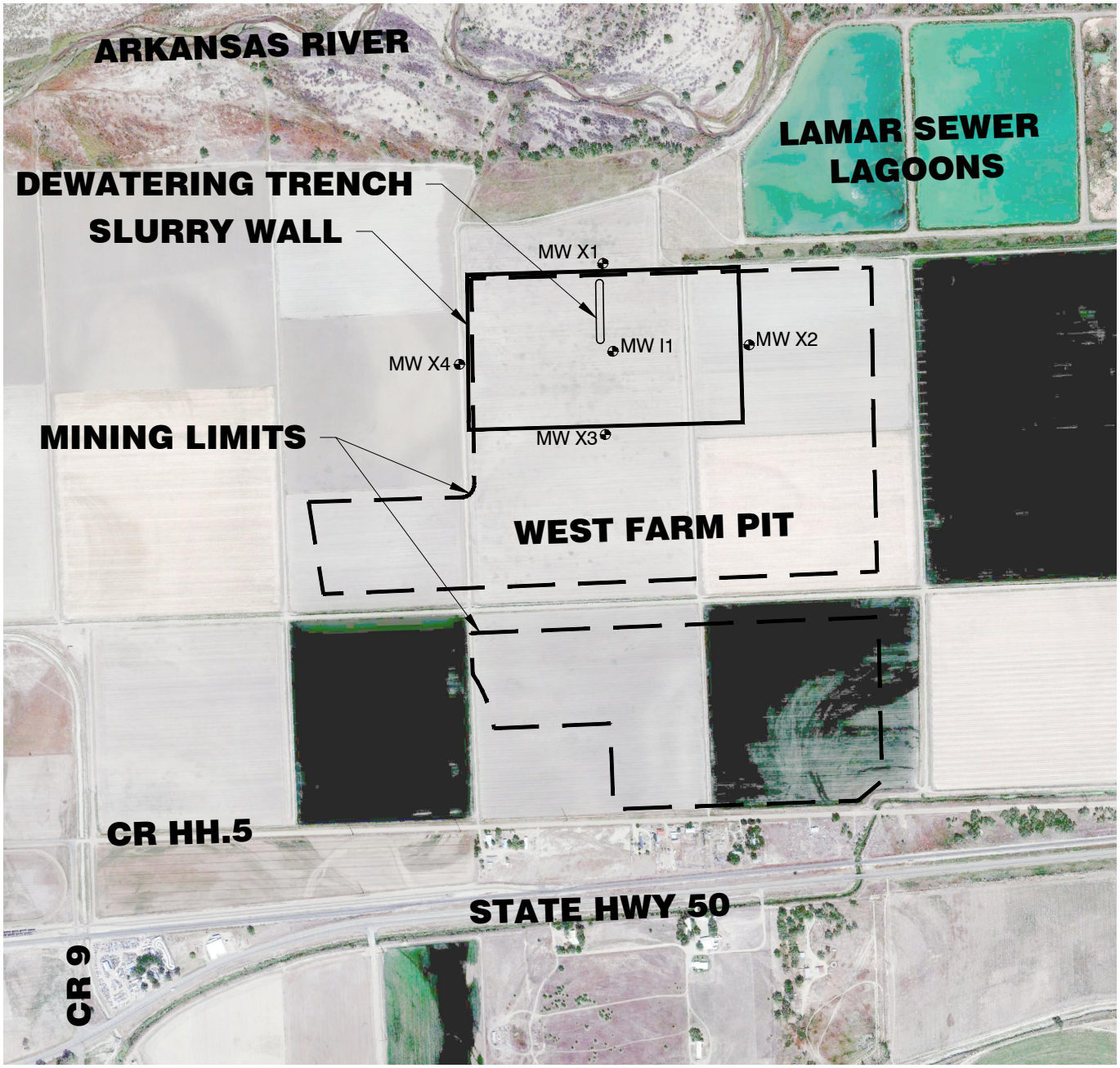
Table III – Monthly Evaporation Data

Table IV – Precipitation and Pumping Data

Table V – Water Accounting

NOAA Weather Station GHCND: USC00054770 climatological data

Pump totalizing flow meter re-verification test



LEGEND:

MW X3 ⊕ MONITORING WELL LOCATION

1000 500 0 1000

SCALE IN FEET

J&T Consulting, Inc.
305 Denver Avenue - Suite D
Fort Lupton, CO 80621
303-857-6222

GP Aggregates, LLC
West Farm Pit
Monitoring Well Location Map

Date:	2/10/15
Job No:	07115
Drawn:	WSS
Scale:	1" = 1000'
Sheet: 1	Of: 1

P:\07115 GP Ranches LLC - Lamar\Drawings\JT-GP well with aerial.dwg, Layout1, 2/12/2015 3:46:22 PM

GP RESOURCES, LLC
West Farm Pit
Slurry Wall & Reservoir Construction Plans

ISSUED FOR CONSTRUCTION

LOCATED IN
TOWNSHIP 22 SOUTH, RANGE 48 WEST, 6th P.M.
COUNTY of PROWERS, STATE of COLORADO
APRIL, 2013

GENERAL NOTES:

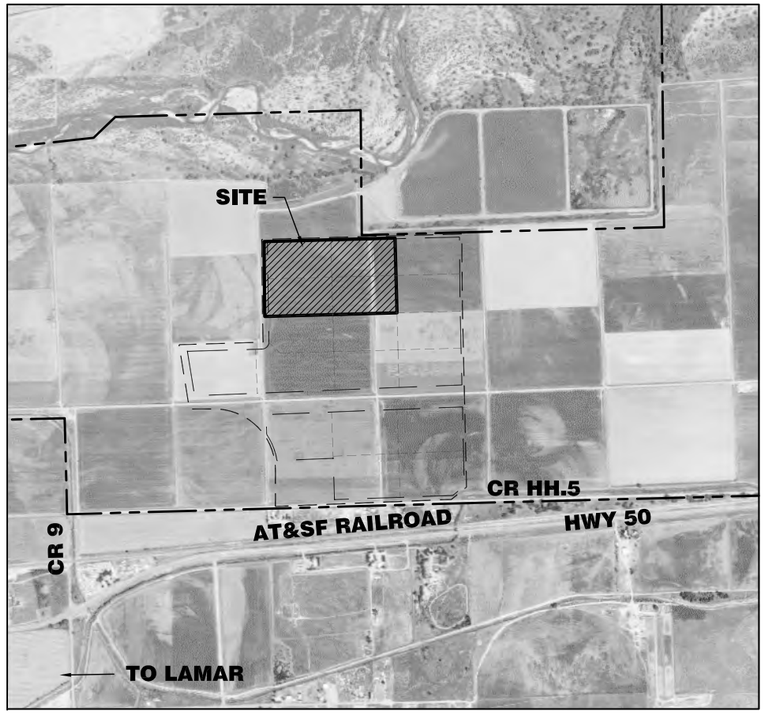
1. THESE CONSTRUCTION PLANS ARE TO BE USED IN CONJUNCTION WITH THE TECHNICAL SPECIFICATIONS PREPARED BY J&T CONSULTING, INC., AND GEOTECHNICAL INVESTIGATION AND ENGINEERING DESIGN RECOMMENDATIONS PREPARED BY CESARE, INC.
2. COMPLY WITH ALL REQUIREMENTS OF OWNER OBTAINED PROJECT PERMITS: INCLUDING, BUT NOT LIMITED TO, PERMITS FROM THE U.S. ARMY CORPS OF ENGINEERS AND COLORADO DEPARTMENT OF HEALTH AND ENVIRONMENT. CONTRACTOR SHALL OBTAIN ALL OTHER PERMITS NECESSARY FOR CONSTRUCTION OF THE WORK.
3. PROTECT ALL EXISTING WETLANDS.
4. THE CONTRACTOR IS RESPONSIBLE FOR IMPLEMENTING AND MAINTAINING EROSION AND SEDIMENT CONTROL MEASURES AT ALL TIMES DURING CONSTRUCTION.
5. ALL CONSTRUCTION ACTIVITIES MUST COMPLY WITH THE STATE OF COLORADO PERMITTING PROCESS FOR "STORM WATER DISCHARGES ASSOCIATED WITH CONSTRUCTION ACTIVITY." FOR INFORMATION, PLEASE CONTACT THE COLORADO DEPARTMENT OF HEALTH, WATER QUALITY CONTROL DIVISION, 4300 CHERRY DRIVE SOUTH, DENVER, COLORADO 80246–1530. ATTENTION: PERMITS SECTION. PHONE 303–692–3500.
6. IF DEWATERING IS REQUIRED, A STATE CONSTRUCTION DEWATERING DISCHARGE PERMIT IS REQUIRED FOR DISCHARGES TO A STORM SEWER, CHANNEL, IRRIGATION DITCH, ANY STREET THAT IS TRIBUTARY TO THE AFOREMENTIONED FACILITIES, OR ANY WATER OF THE UNITED STATES.
7. PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION, THE CONTRACTOR SHALL CONTACT ALL UTILITIES TO COORDINATE SCHEDULES.
8. THE CONTRACTOR SHALL REGULARLY PATROL THE PUBLIC LANDS ADJACENT TO THE PROJECT, REMOVE CONSTRUCTION DEBRIS AND KEEP AREAS CLEAN AND SAFE.
9. THE CONTRACTOR IS RESPONSIBLE FOR DEVELOPING AND IMPLEMENTING A SEQUENCE AND SCHEDULE FOR COMPLETION OF THE WORK IN ACCORDANCE WITH APPLICABLE PROVISIONS OF THE CONTRACT DOCUMENTS.
10. READ THOROUGHLY AND BECOME FAMILIAR WITH THE SPECIFICATIONS AND INSTALLATION DETAILS FOR THIS RELATED WORK PRIOR TO CONSTRUCTION.
11. VERIFY SITE ELEVATIONS PRIOR TO CONSTRUCTION.
12. THE CONTRACTOR SHALL PROCURE ALL PERMITS AND LICENSES, PAY ALL CHARGES AND FEES INCLUDING, BUT NOT LIMITED TO, ALL INSPECTION CHARGES OF AGENCIES HAVING APPROPRIATE JURISDICTION.
13. CONTRACTOR SHALL PROVIDE AS–BUILT DRAWINGS OF ENTIRE PROJECT, AS SPECIFIED, UPON FINAL COMPLETION OF PROJECT.

SEDIMENT AND EROSION CONTROL:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR SEDIMENT AND EROSION CONTROL AT THE SITE THROUGHOUT CONSTRUCTION.
2. BEST MANAGEMENT PRACTICES (BMP'S) SHALL BE USED AS NECESSARY TO ADDRESS SEDIMENT AND DUST FROM SITE DISTURBANCE. ADDITIONAL MEASURES MAY BE REQUIRED AT THE DIRECTION OF THE ENGINEER.
3. BMP'S MAY INCLUDE, BUT ARE NOT LIMITED TO:

   MINIMAL DISTURBANCE FOR MINIMAL TIME PERIODS
   GRAVEL CONSTRUCTION ENTRIES
   SILT FENCE, STRAW BALE OR SAND BAG BARRIERS, ROCK CHECK DAMS
   STORM SEWER INLET PROTECTION
   SEDIMENT CAPTURE PONDS
   SITE WATERING FOR DUST SUPPRESSION

4. BMP'S SHALL BE MAINTAINED AND KEPT IN GOOD REPAIR FOR THE DURATION OF THE PROJECT. THE CONTRACTOR SHALL INSPECT BMP'S WEEKLY AND AFTER SIGNIFICANT (GREATER THAN 0.1" PRECIPITATION) STORM EVENTS. THE MAINTENANCE AND REPAIR SHALL BE COMPLETED IN A TIMELY MANNER. SEDIMENT AND DEBRIS SHALL BE REMOVED WHEN THEY REACH HALF THE BMP HEIGHT OR IMPACT THE FUNCTION OF THE BMP.
5. SOIL STOCKPILES SHALL BE PROTECTED FROM SEDIMENT TRANSPORT BY SURFACE ROUGHENING, WATERING AND PERIMETER SILT FENCING. SOILS THAT WILL BE STOCKPILED FOR MORE THAN 30 DAYS SHALL BE MULCHED AND SEEDED WITH A GRASS COVER WITHIN 14 DAYS OF STOCKPILE CONSTRUCTION.
6. THE CONTRACTOR SHALL INSURE THAT ALL LOADS OF CUT AND FILL SOILS IMPORTED TO OR EXPORTED FROM THE SITE ARE PROPERLY LOADED AND COVERED TO PREVENT LOSS DURING TRANSPORT.
7. THE CONTRACTOR SHALL REMOVE ALL SEDIMENT, MUD, AND CONSTRUCTION DEBRIS RESULTING FROM THIS PROJECT FROM FLOWLINES AND PAVEMENT OF PUBLIC STREETS IN A TIMELY MANNER.
8. SOILS EXPOSED DURING LAND DISTURBING ACTIVITY SHALL BE KEPT IN A ROUGHENED CONDITION BY RIPPING OR DISCING ALONG LAND CONTOURS UNTIL MULCH, VEGETATION OR OTHER PERMANENT EROSION CONTROL IS IN PLACE. NO SOILS SHALL REMAIN EXPOSED BY LAND DISTURBING ACTIVITY FOR MORE THAN THIRTY (30) DAYS BEFORE REQUIRED TEMPORARY OR PERMANENT EROSION CONTROL IS INSTALLED UNLESS OTHERWISE APPROVED.
9. ALL TEMPORARY SEDIMENT CONTROLS WILL BE REMOVED WITHIN 30 DAYS AFTER THE FINAL STABILIZATION IS ACHIEVED OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, WHICHEVER OCCURS FIRST.
10. NATURAL VEGETATION SHALL BE RETAINED AND PROTECTED WHENEVER POSSIBLE. EXPOSURE OF SOIL TO EROSION BY REMOVAL OR DISTURBANCE OF VEGETATION SHALL BE LIMITED TO THE AREA REQUIRED FOR IMMEDIATE CONSTRUCTION OPERATIONS AND FOR THE SHORTEST PRACTICAL PERIOD OF TIME.



1000 500 0 1000
SCALE IN FEET

VICINITY MAP
SCALE 1" = 1000

SHEET INDEX

1	Cover Sheet
2	Geotechnical Information
3	Site, Reservoir Grading, & Boring Location Plan
4	Slurry Wall Horizontal & Vertical Control
5-9	Slurry Wall Plan and Profiles

LEGEND:

- PROPERTY LINE
- SECTION LINE
- FENCE LINE
- OVERHEAD ELECTRIC LINES
- UNDERGROUND TELECOM LINE
- UNDERGROUND GAS LINE
- EXISTING SANITARY FORCE MAIN
- MINING LIMIT
- DIRT ROAD
- EXISTING WATER/DITCH
- EXISTING CONTOURS
- 3590 PROPOSED CONTOURS
- FUTURE HIGHWAY REALIGNMENT PARCEL
- PERMIT BOUNDARY
- ELECTRIC RISER BOX
- GUY WIRE
- POWER POLE
- WATER PUMP
- PHASE LIMITS
- BORING LOCATION
- SLURRY WALL DELINEATION POST

OWNER
GP Resources, LLC
Karl Nyquist
7991 Shaffer Parkway, Ste. 200
Littleton, CO 80127
303–369–5100

SURVEYOR
Bear Creek Surveying, Inc.
402 Santa Fe Ave., Ste. 108
La Junta, CO 81050
303–659–1532

GEOPHYSICAL SURVEY
Zapata Incorporated
301 Commercial Rd., Ste. B
Golden, CO 80401
303–278–8700

ENGINEER
J&T Consulting, Inc.
J.C. York
305 Denver Ave., Ste. D
Fort Lupton, CO 80621
303–857–6222
Fax: 303–857–6224

GEOTECHNICAL/SOIL INVESTIGATIONS
Cesare, Inc.
7108 S Alton Way, Bldg. B
Centennial, CO 80112
303–220–0300

811 Know what's below. Call before you dig.

Engineer's Certification

I hereby certify that these plans for the construction of the West Farm Pit Slurry Wall and Reservoir were prepared by me or under my direct supervision for GP Resources, LLC.

James C. York, P.E.
Colorado Registration No. 36846

J&T Consulting, Inc.
305 Denver Avenue - Suite D
Fort Lupton, CO 80621
Ph: 303-857-6222 Fax: 303-857-6224
www.jtconsulting.com

Slurry Wall & Reservoir Construction Plans
Cover Sheet

GP Resources, LLC
West Farm Pit

REVISIONS

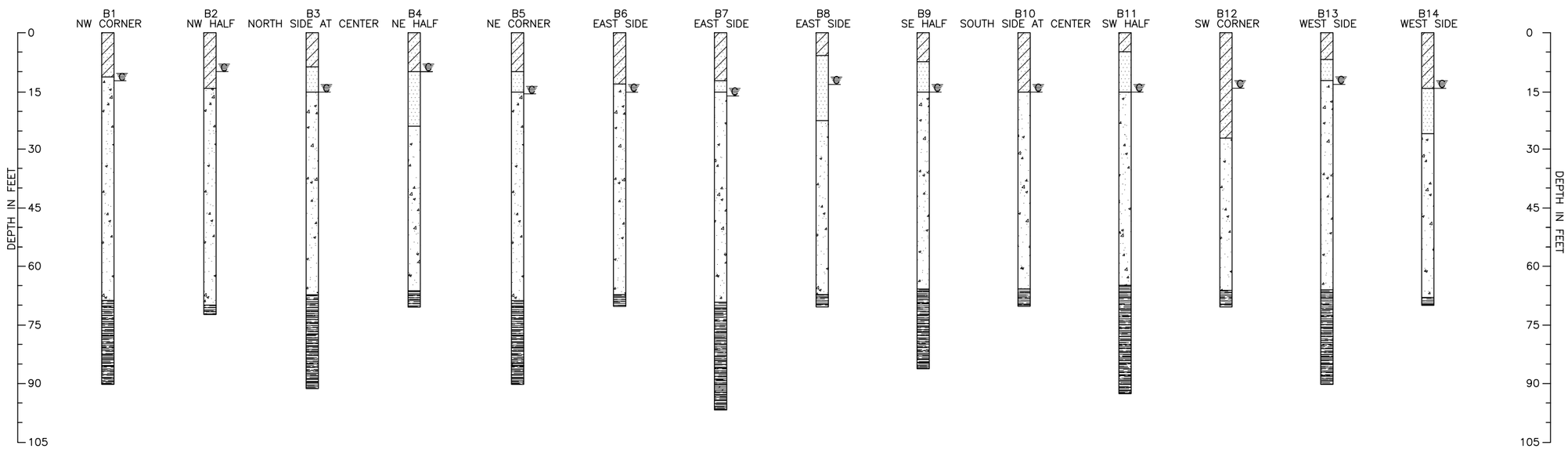
No	Description	Date	By	Chk

COLORADO REGISTERED JAMES C. YORK 36846 5.30.13 PROFESSIONAL ENGINEER

Job #	07115
Date	4/1/13
Drawn By	WSS
Designed By	TPY
Checked By	JCY
File	JT-Cover sheet
Scale	As Shown

Sheet: 1 Of: 9

ISSUED FOR CONSTRUCTION



SYMBOL DESCRIPTION

Strata symbols

CLAY, sandy to SAND, clayey, medium to high plasticity (clay, fine to medium grained (sand), moist to very moist, light brown (CL to SC)

SAND with silt and gravel, poorly graded, moist to wet, light brown (SP to SM–SP)

SAND, gravelly to GRAVEL, sandy, poorly to well graded, wet, light brown to brown (SP, SW, GP, GW)

SHALE (top 2 to 5 feet weathered), thinly bedded, with Sandstone and Limestone lenses, Bentonite seams, cemented (calcite), slightly moist to moist, light gray to gray.

Water table during drilling

C Depth to caving

NOTES;
1. EXPLORATORY BORINGS WERE DRILLED ON JULY 18, 2011.
2. BORING LOCATIONS WERE SURVEYED BY OTHERS PRIOR TO DRILLING.
3. THESE LOGS ARE SUBJECT TO LIMITATIONS, CONCLUSIONS, AND RECOMMENDATIONS IN THE GEOTECHNICAL REPORT BY J.A. CESARE AND ASSOCIATES DATED AUGUST 10, 2011.

J&T Consulting, Inc.
305 Denver Avenue - Suite D
Fort Lupton, CO 80621
Ph: 303-857-8222 Fax: 303-857-8224
www.jtconsulting.com

Slurry Wall & Reservoir Construction Plans

Geotechnical Information

GP Resources, LLC

West Farm Pit

REVISIONS

No	Date	By	Chk	Description

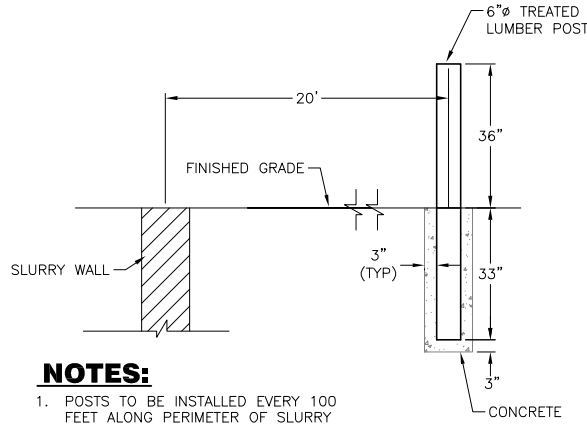
COLORADO REGISTERED JAMES C. YORK 36846 5.30.13 PROFESSIONAL ENGINEER

Job #	07115
Date	4/1/13
Drawn By	WSS
Designed By	TPY
Checked By	JCY
File	JT-Slurry Horiz
Scale	N.T.S.

Sheet: 2 Of: 9

LEGEND:

- PROPERTY LINE
- SECTION LINE
- FENCE LINE
- DIRT ROAD
- EXISTING WATER/DITCH
- EXISTING CONTOURS
- PROPOSED CONTOURS



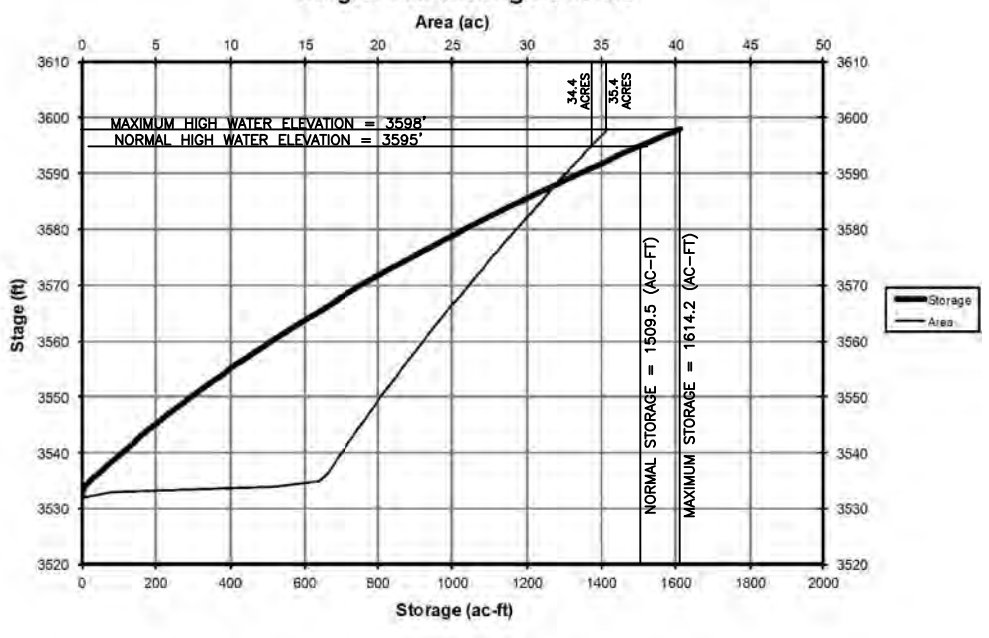
NOTES:

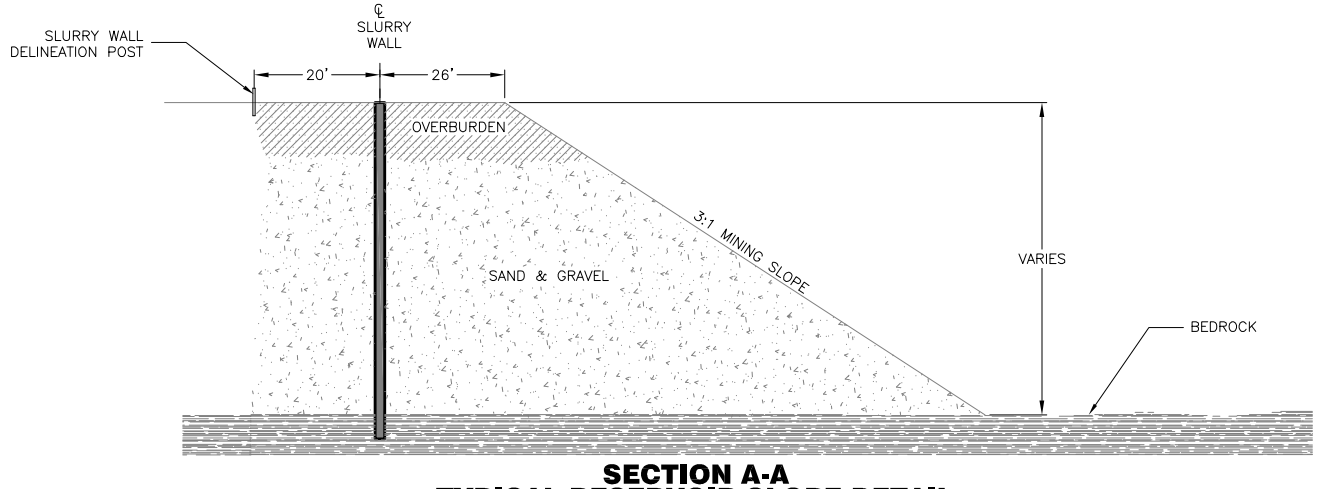
1. POSTS TO BE INSTALLED EVERY 100 FEET ALONG PERIMETER OF SLURRY WALL.
2. POSTS TO BE SET 20 FEET OUTSIDE SLURRY WALL ALIGNMENT.
3. POSTS TO BE INSTALLED AT THE 4 CORNER "GAPS."

SLURRY WALL DELINEATION POST

N.T.S

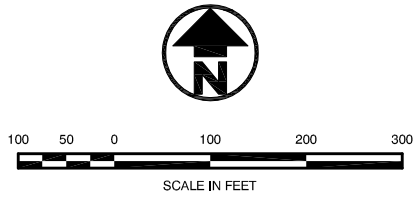
Stage-Area-Storage Curves





SECTION A-A
TYPICAL RESERVOIR SLOPE DETAIL

N.T.S



ISSUED FOR CONSTRUCTION

J&T Consulting, Inc.
305 Denver Avenue - Suite D
Fort Lupton, CO 80621
Ph: 303-857-6222 Fax: 303-857-6224
www.jtconsulting.com

Slurry Wall & Reservoir Construction Plans

Site, Reservoir Grading, & Boring Location Plan

GP Resources, LLC

West Farm Pit

REVISIONS

No	Date	By	Chk	Description

COLORADO REGISTERED JAMES C. YORK 36846 5.30.13 PROFESSIONAL ENGINEER

Job #	07115
Date	4/1/13
Drawn By	WSS
Designed By	TPY
Checked By	JCY
File	JT-Slurry Grading
Scale	1" = 300'

Sheet: 3 Of: 9

HORIZONTAL & VERTICAL CONTROL

POINT	NORTH	EAST	ELEVATION	DESCRIPTION
43	1532536.60	3841355.78	3603.08	SRB BC-1
44	1536020.82	3841335.50	3598.39	FND RBR / ERC CP 03
45	1534550.77	3838397.50	3603.44	FND ALC 1.5 12103
46	1532302.28	3838489.68	3603.95	FND ALC 1.5 30087
47	1532225.34	3835849.49	3609.79	FND ALC 3.5 1/4 COR
5000	1533830.08	3839941.53	3603.75	AWCP1
28904	1535991.32	3840169.18	3598.68	AWCP2
28905	1535857.36	3838372.08	3603.82	AMCP3

ISSUED FOR CONSTRUCTION

J&T Consulting, Inc.
305 Denver Avenue - Suite D
Fort Lupton, CO 80621
Ph: 303-857-8222 Fax: 303-857-8224
www.jtconsulting.com

Slurry Wall & Reservoir Construction Plans

Horizontal & Vertical Control

GP Resources, LLC

West Farm Pit

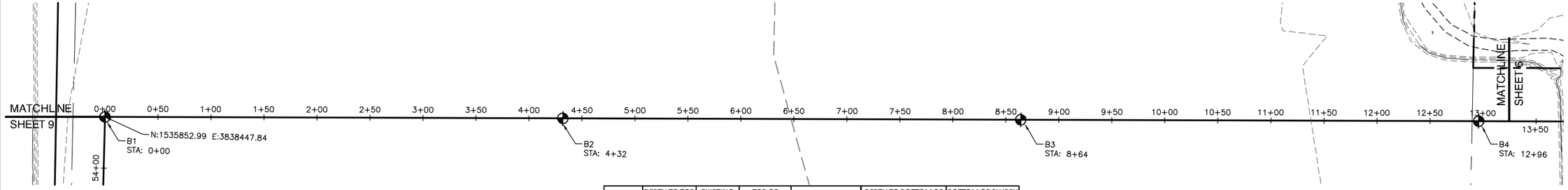
REVISIONS

No	Date	By	Chk	Description

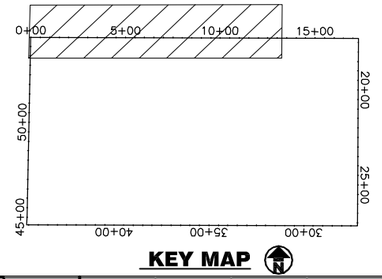
COLORADO REGISTERED JAMES C. YORK 36846 5.30.13 PROFESSIONAL ENGINEER

Job #	07115
Date	4/1/13
Drawn By	WSS
Designed By	TPY
Checked By	JCY
File	JT-Slurry Horiz
Scale	1" = 300'

Sheet: 4 Of: 9

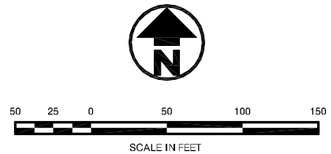


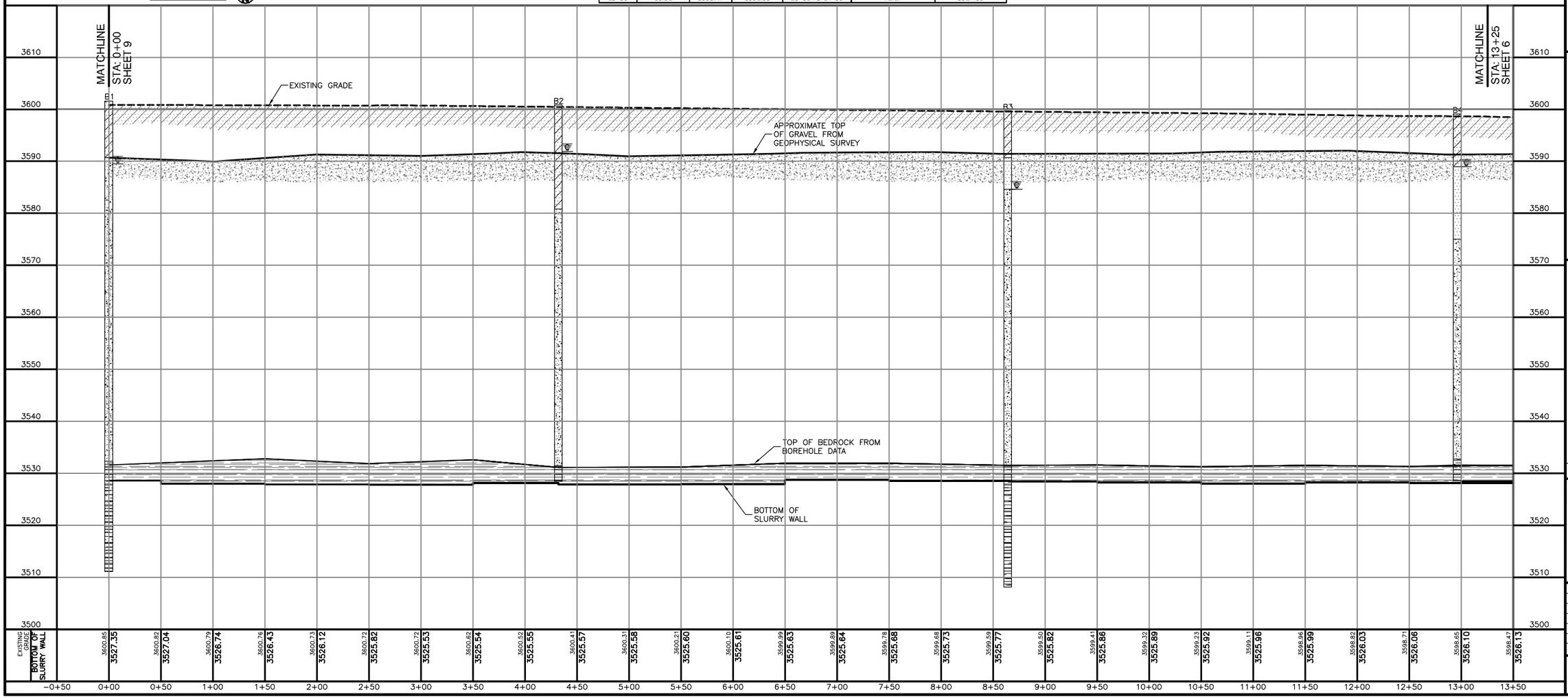
STATION	DEPTH TO TOP OF BEDROCK (FT.)	EXISTING GRADE (EL.)	TOP OF BEDROCK (EL.)	SLURRY WALL SEGMENT	DEPTH TO BOTTOM OF SLURRY WALL SEGMENT (FT.)	BOTTOM OF SLURRY WALL SEGMENT (EL.)
0+00	69.2	3600.85	3531.65	0+00 TO 0+50	72.2	3528.62
0+50	68.8	3600.82	3532.02	0+50 TO 1+50	71.80	3528.96
1+50	67.9	3600.76	3532.86	1+50 TO 2+50	71.80	3528.92
2+50	68.8	3600.72	3531.92	2+50 TO 3+50	71.80	3528.82
3+50	68.00	3600.62	3532.62	3+50 TO 4+32	71.30	3529.15
4+32	69.30	3600.45	3531.15	4+32 TO 5+50	72.30	3527.91
5+50	69.00	3600.21	3531.21	5+50 TO 6+50	72.00	3527.99
6+50	68.00	3599.99	3531.99	6+50 TO 7+50	71.00	3528.78
7+50	67.83	3599.78	3531.95	7+50 TO 8+65	71.00	3528.56
8+65	68.00	3599.56	3531.56	8+65 TO 9+50	71.00	3528.41
9+50	67.75	3599.41	3531.66	9+50 TO 10+50	70.92	3528.31
10+50	67.92	3599.23	3531.31	10+50 TO 11+50	70.92	3528.04
11+50	67.42	3598.96	3531.54	11+50 TO 12+50	70.42	3528.29
12+50	67.33	3598.71	3531.38	12+50 TO 13+00	70.33	3528.32
13+00	67.00	3598.65	3531.65	13+00 TO 13+50	70.00	3528.47
13+50	66.92	3598.47	3531.55	13+50 TO 14+50	71.17	3527.30



KEY MAP

ISSUED FOR CONSTRUCTION





J&T Consulting, Inc.
305 Denver Avenue - Suite D
Fort Lupton, CO 80621
Ph: 303-857-2222 Fax: 303-857-2224
www.jtconsulting.com

Slurry Wall & Reservoir Construction Plans
Slurry Wall Plan and Profile
Sta: 0+00 to 13+50

GP Resources, LLC
West Farm Pit

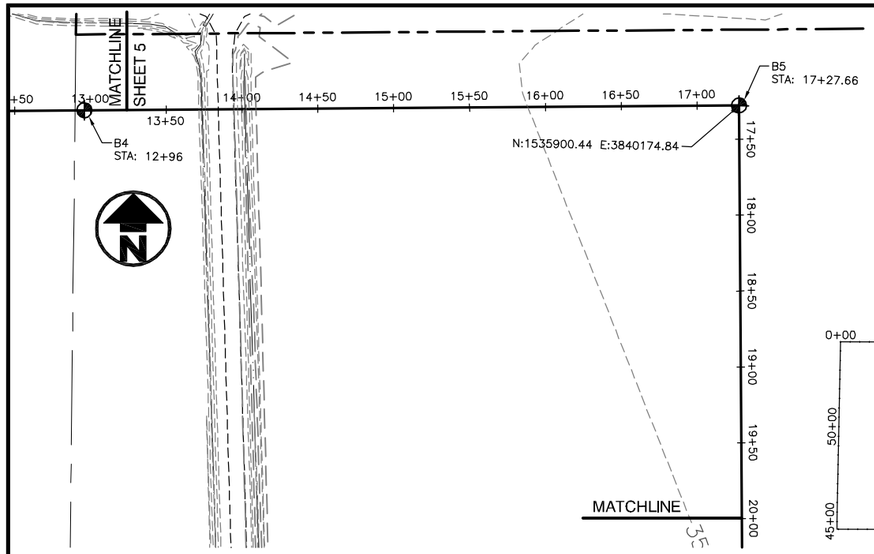
REVISIONS

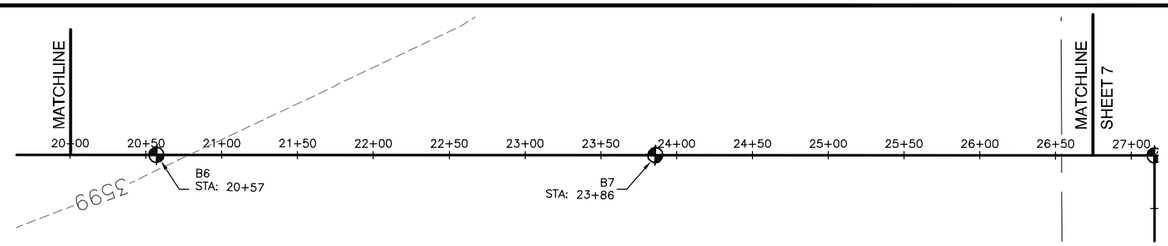
No	Date	By	Chk	Description
1	5/30/13	ALS	JCY	REVISED TOP OF BEDROCK AND BOTTOM OF SLURRY WALL

COLORADO REGISTERED
JAMES C. YORK
36846
5.30.13
PROFESSIONAL ENGINEER

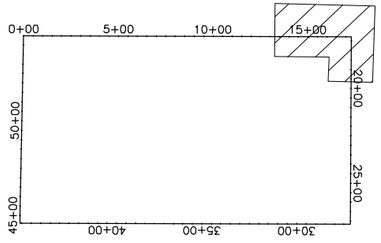
Job #	07115
Date	4/1/13
Drawn By	WSS
Designed By	TPY
Checked By	JCY
File	JT-Slurry pro/file
Scale	1" = 50ft/10ft

Sheet: 5 of 9

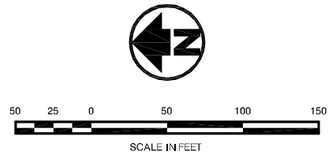


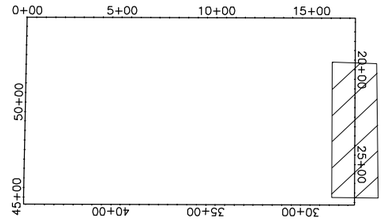


ISSUED FOR CONSTRUCTION

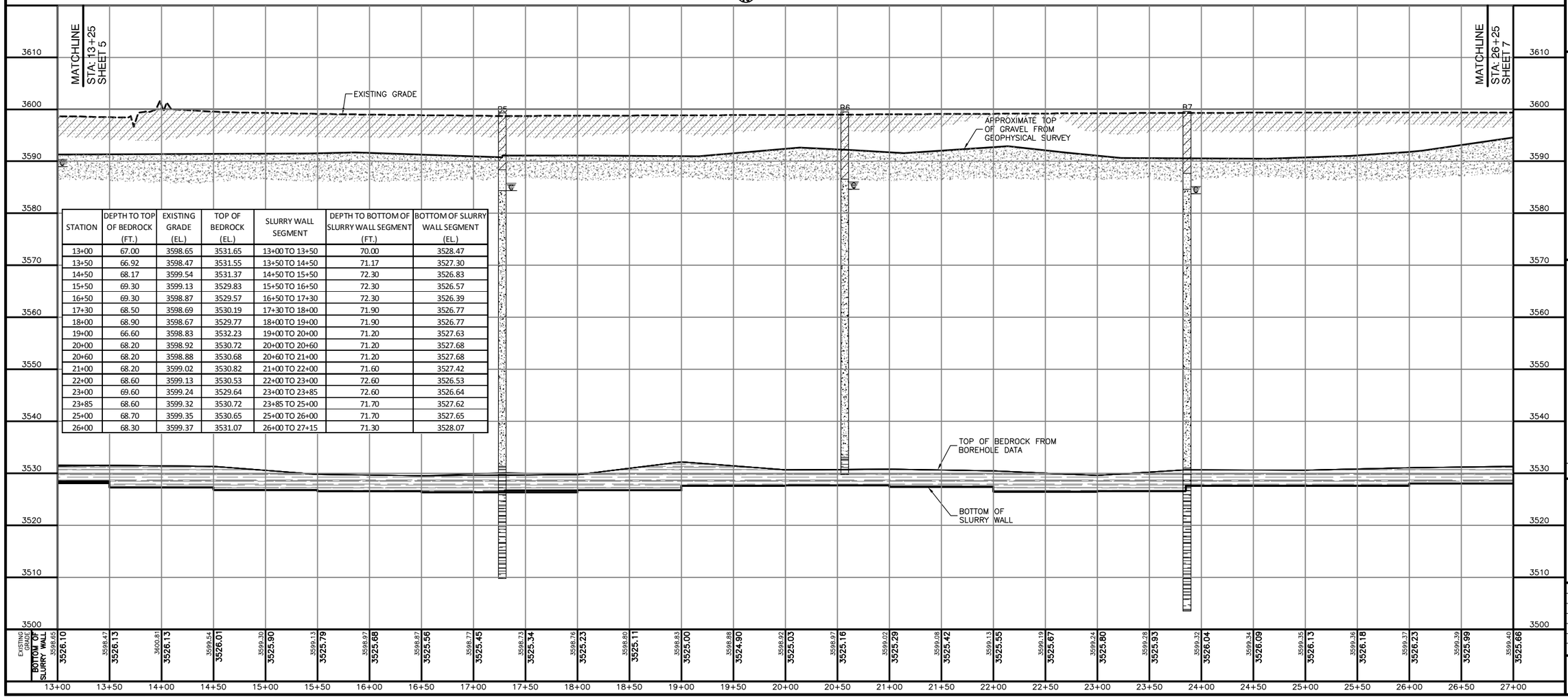


KEY MAP





KEY MAP



STATION	DEPTH TO TOP OF BEDROCK (FT.)	EXISTING GRADE (EL.)	TOP OF BEDROCK (EL.)	SLURRY WALL SEGMENT	DEPTH TO BOTTOM OF SLURRY WALL SEGMENT (FT.)	BOTTOM OF SLURRY WALL SEGMENT (EL.)
13+00	67.00	3598.65	3531.65	13+00 TO 13+50	70.00	3528.47
13+50	66.92	3598.47	3531.55	13+50 TO 14+50	71.17	3527.30
14+50	68.17	3599.54	3531.37	14+50 TO 15+50	72.30	3526.83
15+50	69.30	3599.13	3529.83	15+50 TO 16+50	72.30	3526.57
16+50	69.30	3598.87	3529.57	16+50 TO 17+30	72.30	3526.39
17+30	68.50	3598.69	3530.19	17+30 TO 18+00	71.90	3526.77
18+00	68.90	3598.67	3529.77	18+00 TO 19+00	71.90	3526.77
19+00	66.60	3598.83	3532.23	19+00 TO 20+00	71.20	3527.63
20+00	68.20	3598.92	3530.72	20+00 TO 20+60	71.20	3527.68
20+60	68.20	3598.88	3530.68	20+60 TO 21+00	71.20	3527.68
21+00	68.20	3599.02	3530.82	21+00 TO 22+00	71.60	3527.42
22+00	68.60	3599.13	3530.53	22+00 TO 23+00	72.60	3526.53
23+00	69.60	3599.24	3529.64	23+00 TO 23+85	72.60	3526.64
23+85	68.60	3599.32	3530.72	23+85 TO 25+00	71.70	3527.62
25+00	68.70	3599.35	3530.65	25+00 TO 26+00	71.70	3527.65
26+00	68.30	3599.37	3531.07	26+00 TO 27+15	71.30	3528.07

J&T Consulting, Inc.
305 Denver Avenue - Suite D
Fort Lupton, CO 80621
Ph: 303-857-2222 Fax: 303-857-2224
www.jtconsulting.com

Slurry Wall & Reservoir Construction Plans

Slurry Wall Plan and Profile

Sta: 13+50 to 27+00

GP Resources, LLC

West Farm Pit

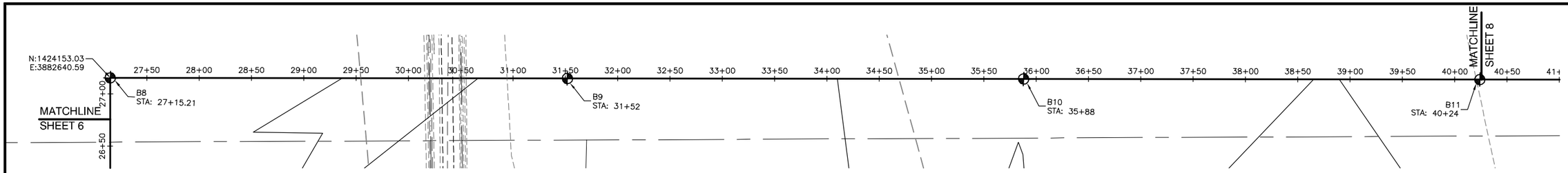
REVISIONS

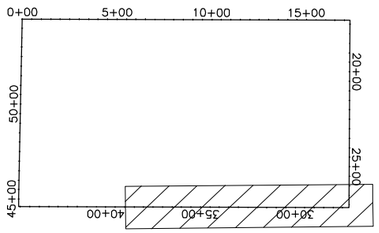
No	Description	Date	By	Chk

COLORADO REGISTERED JAMES C. YORK 36846 5.30.13 PROFESSIONAL ENGINEER

Job #	07115
Date	4/1/13
Drawn By	WSS
Designed By	TPY
Checked By	JCY
File	JT-Slurry Profile
Scale	1" = 50h/10v

Sheet: 6 of 9

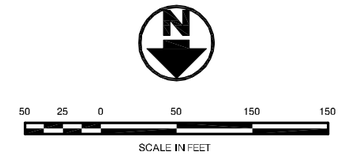


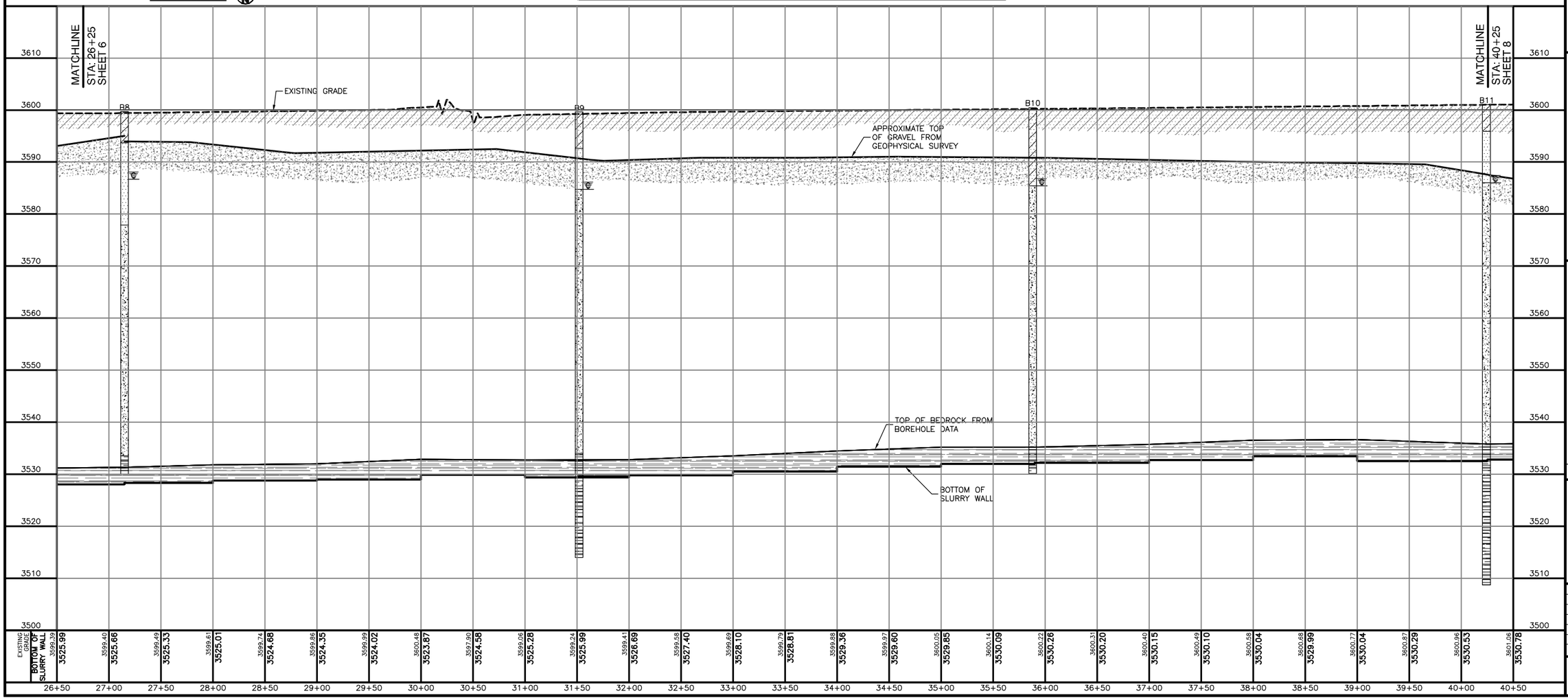


KEY MAP

STATION	DEPTH TO TOP OF BEDROCK (FT.)	EXISTING GRADE (EL.)	TOP OF BEDROCK (EL.)	SLURRY WALL SEGMENT	DEPTH TO BOTTOM OF SLURRY WALL SEGMENT (FT.)	BOTTOM OF SLURRY WALL SEGMENT (EL.)
27+15	68.00	3599.40	3531.40	27+15 TO 28+00	71.00	3528.40
28+00	67.80	3599.61	3531.81	28+00 TO 29+00	70.80	3528.81
29+00	67.80	3599.86	3532.06	29+00 TO 30+00	70.80	3529.06
30+00	67.60	3600.48	3532.88	30+00 TO 31+00	70.60	3528.46
31+00	66.30	3599.06	3532.76	31+00 TO 31+50	69.60	3529.46
31+50	66.60	3599.24	3532.64	31+50 TO 32+00	69.60	3529.64
32+00	66.60	3599.41	3532.81	32+00 TO 33+00	69.60	3529.81
33+00	66.10	3599.69	3533.59	33+00 TO 34+00	69.10	3530.59
34+00	65.40	3599.88	3534.48	34+00 TO 35+00	68.40	3531.48
35+00	64.80	3600.05	3535.25	35+00 TO 35+90	68.00	3532.05
35+90	65.00	3600.22	3535.22	35+90 TO 37+00	68.00	3532.22
37+00	64.60	3600.40	3535.80	37+00 TO 38+00	67.60	3532.80
38+00	64.00	3600.58	3536.58	38+00 TO 39+00	67.10	3533.48
39+00	64.10	3600.77	3536.67	39+00 TO 40+25	68.20	3532.57
40+25	65.20	3601.01	3535.81	40+25 TO 41+00	68.20	3532.81

ISSUED FOR CONSTRUCTION





J&T Consulting, Inc.
305 Denver Avenue - Suite D
Fort Lupton, CO 80621
Ph: 303-857-2222 Fax: 303-857-2224
www.jtconsulting.com

Slurry Wall & Reservoir Construction Plans

Slurry Wall Plan and Profile

Sta: 27+00 to 40+50

GP Resources, LLC

West Farm Pit

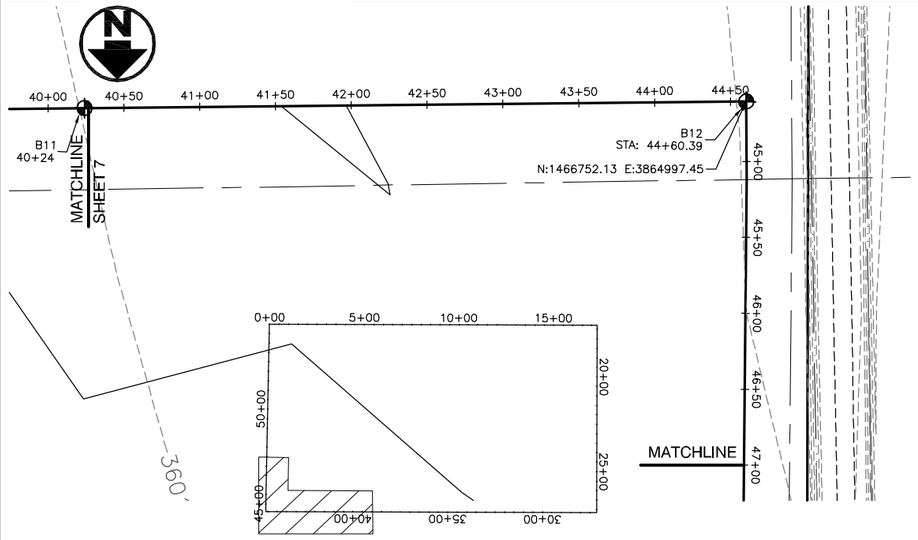
REVISIONS

No	Date	By	Chk	Description
1	5/30/13	ALS	JCY	REVISED TOP OF BEDROCK AND BOTTOM OF SLURRY WALL

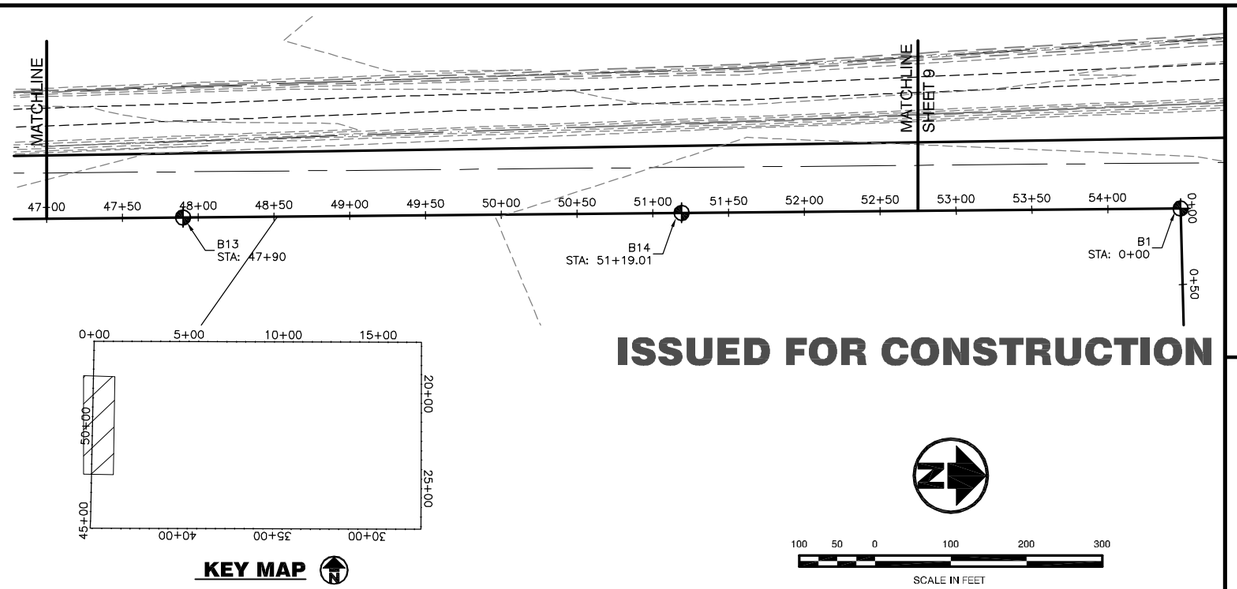
COLORADO REGISTERED
JAMES C. YORK
36846
5.30.13
PROFESSIONAL ENGINEER

Job #	07115
Date	4/1/13
Drawn By	WSS
Designed By	TPY
Checked By	JCY
File	JT-Slurry profile
Scale	1" = 50h/10v

Sheet: 7 of 9



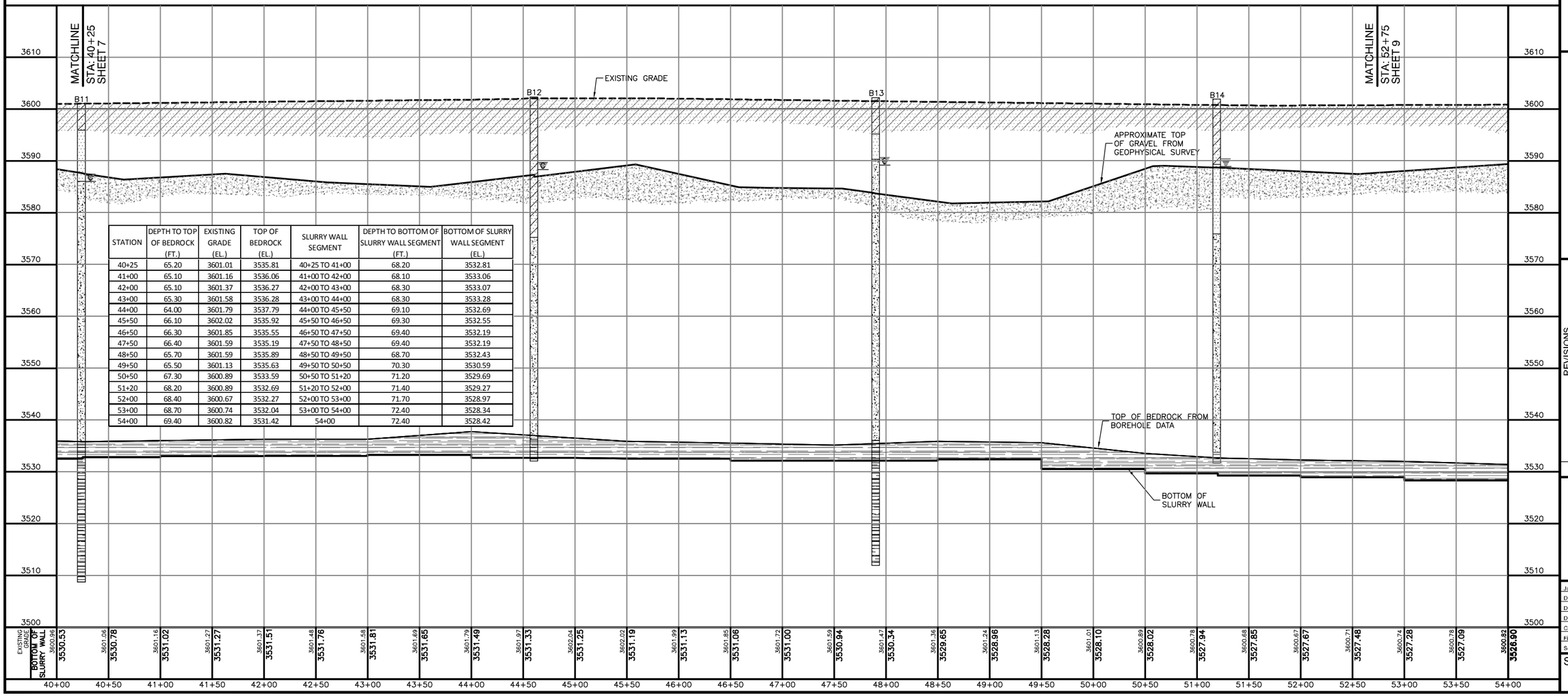
KEY MAP



KEY MAP

ISSUED FOR CONSTRUCTION

100 50 0 100 200 300
SCALE IN FEET



STATION	DEPTH TO TOP OF BEDROCK (FT.)	EXISTING GRADE (EL.)	TOP OF BEDROCK (EL.)	SLURRY WALL SEGMENT	DEPTH TO BOTTOM OF SLURRY WALL SEGMENT (FT.)	BOTTOM OF SLURRY WALL SEGMENT (EL.)
40+25	65.20	3601.01	3535.81	40+25 TO 41+00	68.20	3532.81
41+00	65.10	3601.16	3536.06	41+00 TO 42+00	68.10	3533.06
42+00	65.10	3601.37	3536.27	42+00 TO 43+00	68.30	3533.07
43+00	65.30	3601.58	3536.28	43+00 TO 44+00	68.30	3533.28
44+00	64.00	3601.79	3537.79	44+00 TO 45+50	69.10	3532.69
45+50	66.10	3602.02	3535.92	45+50 TO 46+50	69.30	3532.55
46+50	66.30	3601.85	3535.55	46+50 TO 47+50	69.40	3532.19
47+50	66.40	3601.59	3535.19	47+50 TO 48+50	69.40	3532.19
48+50	65.70	3601.59	3535.89	48+50 TO 49+50	68.70	3532.43
49+50	65.50	3601.13	3535.63	49+50 TO 50+50	70.30	3530.59
50+50	67.30	3600.89	3533.59	50+50 TO 51+20	71.20	3529.69
51+20	68.20	3600.89	3532.69	51+20 TO 52+00	71.40	3529.27
52+00	68.40	3600.67	3532.27	52+00 TO 53+00	71.70	3528.97
53+00	68.70	3600.74	3532.04	53+00 TO 54+00	72.40	3528.34
54+00	69.40	3600.82	3531.42	54+00	72.40	3528.42

J&T Consulting, Inc.
305 Denver Avenue - Suite D
Fort Lupton, CO 80621
Ph: 303-857-2222 Fax: 303-857-2224
www.jtconsulting.com

Slurry Wall & Reservoir Construction Plans
Slurry Wall Plan and Profile
Sta: 40+50 to 54+00

GP Resources, LLC
West Farm Pit

REVISIONS

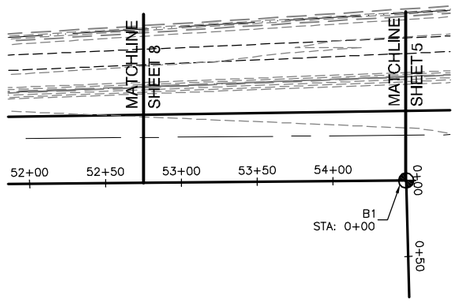
No	Date	By	Chk	Description
1	5/30/13	ALS	JCY	REVISED TOP OF BEDROCK AND BOTTOM OF SLURRY WALL

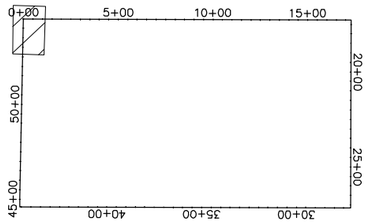
COLORADO REGISTERED JAMES C. YORK 36846 5.30.13 PROFESSIONAL ENGINEER

Job #	07115
Date	4/1/43
Drawn By	WSS
Designed By	TPY
Checked By	JCY
File	JT-Slurry pro'file
Scale	1" = 50'h'10'v

Sheet: 8 of 9

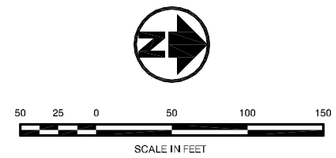
ISSUED FOR CONSTRUCTION

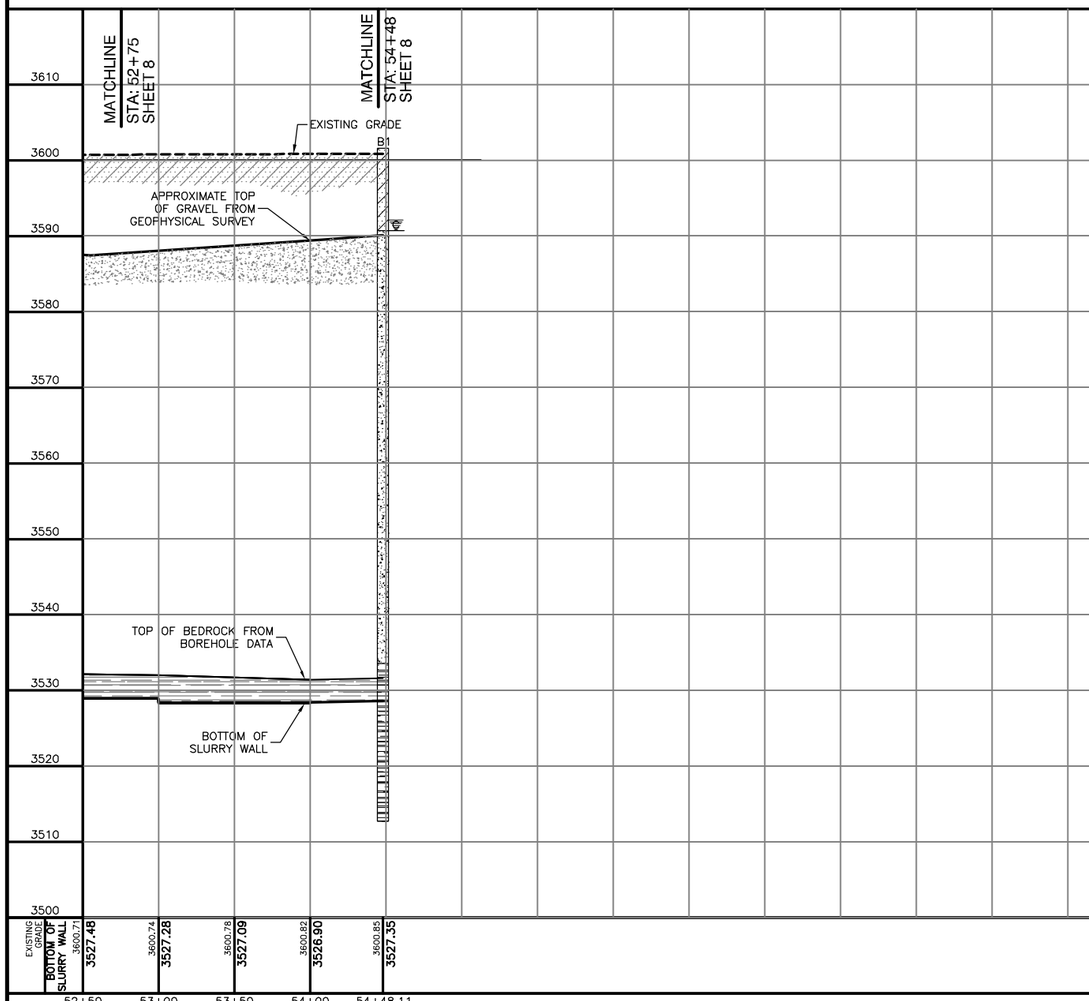




KEY MAP

STATION	DEPTH TO TOP OF BEDROCK (FT.)	EXISTING GRADE (EL.)	TOP OF BEDROCK (EL.)	SLURRY WALL SEGMENT	DEPTH TO BOTTOM OF SLURRY WALL SEGMENT (FT.)	BOTTOM OF SLURRY WALL SEGMENT (EL.)
52+00	68.40	3600.67	3532.27	52+00 TO 53+00	71.70	3528.97
53+00	68.70	3600.74	3532.04	53+00 TO 54+00	72.40	3528.34
54+00	69.40	3600.82	3531.42	54+00 TO 54+48	72.40	3528.42
54+48	69.20	3600.85	3531.65	54+48	72.20	3528.65





J&T Consulting, Inc.
305 Denver Avenue - Suite D
Fort Lupton, CO 80621
Ph: 303-857-2222 Fax: 303-857-2224
www.jtconsulting.com

Slurry Wall & Reservoir Construction Plans

Slurry Wall Plan and Profile

Sta: 53+00 to 54+48.11

GP Resources, LLC

West Farm Pit

REVISIONS

No	Date	By	Chk	Description
1	5/30/13	ALS	JCY	REVISED TOP OF BEDROCK AND BOTTOM OF SLURRY WALL

COLORADO REGISTERED
JAMES C. YORK
36846
5.30.13
PROFESSIONAL ENGINEER

Job #	07115
Date	4/1/13
Drawn By	WSS
Designed By	TPY
Checked By	JCY
File	JT-Slurry profile
Scale	1" = 50'h/10'v

Sheet: 9 of 9

J&T Consulting, Inc.

West Farm Pit - Lamar, CO

Slurry Wall Leak Test
2/12/15

Piezometer Data & Groundwater Level Summary
© 2015 J&T Consulting, Inc.

TABLE I

Well Designation	**I-1**			**X-1**				**X-2**				**X-3**				**X-4**			
Description	Interior - Center of Wall Area			Exterior - Sta 9+10 - 20' North of Wall				Exterior - Sta 22+20 - 20' East of Wall				Exterior - Sta 36+00 - 15' South of Wall				Exterior - Sta 49+50 - 30' West of Wall			
Top of Well Height (in)	40.25			40.5				38				39				40			
Top of Well Height (ft)	3.35			3.38				3.17				3.25				3.33			
Ground Elevation	3599.90			3599.47				3599.07				3600.23				3601.36			
Date	Depth to Groundwater from Top of Well (ft)	Depth to Groundwater from Ground (ft)	Elevation of Groundwater (ft)	Depth to Groundwater from Top of Well (ft)	Depth to Groundwater from Ground (ft)	Elevation of Groundwater (ft)	Change in Groundwater Level vs I-1 (ft)	Depth to Groundwater from Top of Well (ft)	Depth to Groundwater from Ground (ft)	Elevation of Groundwater (ft)	Change in Groundwater Level vs I-1 (ft)	Depth to Groundwater from Top of Well (ft)	Depth to Groundwater from Ground (ft)	Elevation of Groundwater (ft)	Change in Groundwater Level vs I-1 (ft)	Depth to Groundwater from Top of Well (ft)	Depth to Groundwater from Ground (ft)	Elevation of Groundwater (ft)	Change in Groundwater Level vs I-1 (ft)
August 30, 2014	39.10	35.75	3564.15	9.88	6.50	3592.97	28.82	9.85	6.68	3592.39	28.24	7.90	4.65	3595.58	31.43	8.84	5.51	3595.85	31.70
September 6, 2014	39.90	36.55	3563.35	10.15	6.77	3592.70	29.35	10.05	6.88	3592.19	28.84	8.02	4.77	3595.46	32.11	9.15	5.82	3595.54	32.19
September 13, 2014	42.93	39.58	3560.32	10.20	6.82	3592.65	32.33	10.27	7.10	3591.97	31.65	8.05	4.80	3595.43	35.11	9.23	5.90	3595.46	35.14
September 20, 2014	46.30	42.95	3556.95	10.38	7.00	3592.47	35.52	10.52	7.35	3591.72	34.77	8.25	5.00	3595.23	38.28	9.48	6.15	3595.21	38.26
September 27, 2014	NO READING			NO READING				NO READING				NO READING				NO READING			
October 4, 2014	47.17	43.82	3556.08	10.56	7.18	3592.29	36.21	10.65	7.48	3591.59	35.51	8.54	5.29	3594.94	38.86	9.71	6.38	3594.98	38.90
October 11, 2014	47.84	44.49	3555.41	10.52	7.14	3592.33	36.92	10.69	7.52	3591.55	36.14	8.48	5.23	3595.00	39.59	9.63	6.30	3595.06	39.65
October 18, 2014	48.75	45.40	3554.50	10.48	7.10	3592.37	37.87	11.06	7.89	3591.18	36.68	8.38	5.13	3595.10	40.60	9.64	6.31	3595.05	40.55
October 25, 2018	51.50	48.15	3551.75	10.39	7.01	3592.46	40.71	10.47	7.30	3591.77	40.02	8.40	5.15	3595.08	43.33	9.84	6.51	3594.85	43.10
November 1, 2014	51.88	48.53	3551.37	10.64	7.26	3592.21	40.84	10.75	7.58	3591.49	40.12	8.45	5.20	3595.03	43.66	9.78	6.45	3594.91	43.54
November 6, 2014	54.25	50.90	3549.00	10.45	7.07	3592.40	43.40	10.88	7.71	3591.36	42.36	8.65	5.40	3594.83	45.83	9.91	6.58	3594.78	45.78
November 15, 2014	53.63	50.28	3549.62	10.57	7.19	3592.28	42.66	10.89	7.72	3591.35	41.73	8.63	5.38	3594.85	45.23	9.95	6.62	3594.74	45.12
November 22, 2014	53.98	50.63	3549.27	10.61	7.23	3592.24	42.97	10.91	7.74	3591.33	42.06	8.70	5.45	3594.78	45.51	10.05	6.72	3594.64	45.37
November 29, 2014	54.30	50.95	3548.95	10.68	7.30	3592.17	43.22	11.12	7.95	3591.12	42.17	8.90	5.65	3594.58	45.63	10.12	6.79	3594.57	45.62
December 6, 2014	54.05	50.70	3549.20	10.73	7.35	3592.12	42.92	11.07	7.90	3591.17	41.97	8.95	5.70	3594.53	45.33	10.19	6.86	3594.50	45.30
December 13, 2014	54.20	50.85	3549.05	10.74	7.36	3592.11	43.06	11.10	7.93	3591.14	42.09	8.97	5.72	3594.51	45.46	13.28	9.95	3591.41	42.36
December 19, 2014	54.35	51.00	3548.90	10.78	7.40	3592.07	43.17	11.17	8.00	3591.07	42.17	9.04	5.79	3594.44	45.54	10.33	7.00	3594.36	45.46
December 27, 2014	54.45	51.10	3548.80	10.82	7.44	3592.03	43.23	11.26	8.09	3590.98	42.18	9.11	5.86	3594.37	45.57	10.35	7.02	3594.34	45.54
January 3, 2015	54.65	51.30	3548.60	10.88	7.50	3591.97	43.37	11.37	8.20	3590.87	42.27	9.20	5.95	3594.28	45.68	10.43	7.10	3594.26	45.66
January 10, 2015	54.65	51.30	3548.60	10.89	7.51	3591.96	43.36	11.47	8.30	3590.77	42.17	9.25	6.00	3594.23	45.63	10.43	7.10	3594.26	45.66
January 16, 2015	54.70	51.35	3548.55	10.87	7.49	3591.98	43.43	11.48	8.31	3590.76	42.21	9.35	6.10	3594.13	45.58	10.48	7.15	3594.21	45.66
January 21, 2015	54.69	51.34	3548.56	10.94	7.56	3591.91	43.35	11.56	8.39	3590.68	42.12	9.37	6.12	3594.11	45.55	10.55	7.22	3594.14	45.58
January 31, 2015	54.65	51.30	3548.60	11.03	7.65	3591.82	43.22	11.53	8.36	3590.71	42.11	9.40	6.15	3594.08	45.48	10.72	7.39	3593.97	45.37

Indicates Overall Test Period (92 days)

© 2015 J&T Consulting, Inc.

Length of the perimeter slurry wall constructed to full height.	5,448	
Average vertical depth of the perimeter slurry wall as measured from the ground surface to the top of bedrock.	67	
Area of the natural bedrock bounded by the perimeter slurry wall constructed to full height.	1,716,060	(39.40 acres)
Resulting area affected by the precipitation. 30% credit to the 39.32 dry acres and 100% to the 0.0735 acres of water.	517,058	

Groundwater Inflow through Perimeter slurry wall

Design		Performance	
q (cu.ft./day/sq.ft)=	0.03	q (cu.ft./day/sq.ft)=	0.09
Area (sq.ft.)=	365,016	Area (sq.ft.)=	365,016
Q (cu.ft./day)=	10,950	Q (cu.ft./day)=	32,851
Q (gpm)=	57	Q (gpm)=	171

q = flow rate per unit area
Area = total vertical area of slurry wall
Q = total flow rate

Groundwater Inflow through Natural Bedrock Pit Bottom

Design		Performance	
q (cu.ft./day/sq.ft)=	0.0015	q (cu.ft./day/sq.ft)=	0.0045
Area (sq.ft.)=	1,716,060	Area (sq.ft.)=	1,716,060
Q (cu.ft./day)=	2,574	Q (cu.ft./day)=	7,722
Q (gpm)=	13	Q (gpm)=	40

q = flow rate per unit area
Area = total area of pit bottom
Q = total flow rate

Total Allowable Groundwater Inflow

Design	**13,525**	cubic feet per day
Standard	**1,244,260**	cubic-feet in 92 days
	70.3	gallons per minute
	9,308,312	gallons in 92 days
Performance	**40,574**	cubic feet per day
Standard	**3,732,781**	cubic-feet in 92 days
	210.8	gallons per minute
	27,924,937	gallons in 92 days

J&T Consulting, Inc.

West Farm Pit - Lamar, CO

Slurry Wall Leak Test

2/12/2015

Monthly Evaporation Data

© 2015 J&T Consulting, Inc.

TABLE III

Month	Percent of Total Evaporation	Monthly Evaporation (CF/SF)	Daily Evaporation (CF/SF)	Daily Evaporation (CF)
January	3.0%	0.15	0.0048	15.5
February	3.5%	0.18	0.0063	20.0
March	5.5%	0.28	0.0089	28.4
April	9.0%	0.45	0.0150	48.0
May	12.0%	0.60	0.0194	61.9
June	14.5%	0.73	0.0242	77.3
July	15.0%	0.75	0.0242	77.4
August	13.5%	0.68	0.0218	69.7
September	10.0%	0.50	0.0167	53.3
October	7.0%	0.35	0.0113	36.1
November	4.0%	0.20	0.0067	21.3
December	3.0%	0.15	0.0048	15.5
	100.0%	5.00		

60	Annual Free Water Surface Evaporation (Shallow Lake) (inches)
5.00	Annual Free Water Surface Evaporation (Shallow Lake) (feet)
3,200	Water Surface exposed (8ft x 400 ft trench) with water elevation at 3549 feet (square-feet)

J&T Consulting, Inc.

West Farm Pit - Lamar, CO

Slurry Wall Leak Test
2/12/2015

Precipitation and Pumping Data
© 2015 J&T Consulting, Inc.

TABLE IV

		Precipitation Data	Pump Totalizer Data				
Date	Test Day	NOAA Weather Station GHCND:USC00054770 Rainfall (in)	Previous Period Pump Totalizer Reading (ac-ftl)(reading)	Previous Period Pump Totalizer Reading (cu-ft)(calculated)	This Period Pump Totalizer Reading (ac-ft)(reading)	This Period Pump Totalizer Reading (cu-ft)(calculated)	Total Pumped (cu-ft)
31-Oct-14	0	0.00			192.897	8,402,593	
1-Nov-14	1	0.00					
2-Nov-14	2	0.00					
3-Nov-14	3	0.02					
4-Nov-14	4	0.00					
5-Nov-14	5	0.00					
6-Nov-14	6	0.00					
7-Nov-14	7	0.00					
8-Nov-14	8	0.00					
9-Nov-14	9	0.00					
10-Nov-14	10	0.00					
11-Nov-14	11	0.10					
12-Nov-14	12	0.03					
13-Nov-14	13	0.05					
14-Nov-14	14	0.00					
15-Nov-14	15	0.00					
16-Nov-14	16	0.12					
17-Nov-14	17	0.00					
18-Nov-14	18	0.00					
19-Nov-14	19	0.00					
20-Nov-14	20	0.00					
21-Nov-14	21	0.00					
22-Nov-14	22	0.00					
23-Nov-14	23	0.00					
24-Nov-14	24	0.00					
25-Nov-14	25	0.00					
26-Nov-14	26	0.00					
27-Nov-14	27	0.00					
28-Nov-14	28	0.00					
29-Nov-14	29	0.00					
30-Nov-14	30	0.00	192.897	8,402,593	199.561	8,692,877	290,284
1-Dec-14	31	0.00					
2-Dec-14	32	0.00					
3-Dec-14	33	0.00					
4-Dec-14	34	0.00					
5-Dec-14	35	0.00					
6-Dec-14	36	0.00					
7-Dec-14	37	0.00					
8-Dec-14	38	0.00					
9-Dec-14	39	0.00					
10-Dec-14	40	0.00					
11-Dec-14	41	0.00					
12-Dec-14	42	0.00					
13-Dec-14	43	0.00					
14-Dec-14	44	0.00					
15-Dec-14	45	0.15					
16-Dec-14	46	0.00					
17-Dec-14	47	0.00					
18-Dec-14	48	0.00	199.561	8,692,877	205.033	8,931,237	238,360

J&T Consulting, Inc.

West Farm Pit - Lamar, CO

Slurry Wall Leak Test
2/12/2015

Precipitation and Pumping Data
© 2015 J&T Consulting, Inc.

TABLE IV

		Precipitation Data	Pump Totalizer Data				
Date	Test Day	NOAA Weather Station GHCND:USC00054770 Rainfall (in)	Previous Period Pump Totalizer Reading (ac-ftl)(reading)	Previous Period Pump Totalizer Reading (cu-ft)(calculated)	This Period Pump Totalizer Reading (ac-ft)(reading)	This Period Pump Totalizer Reading (cu-ft)(calculated)	Total Pumped (cu-ft)
19-Dec-14	49	0.00					
20-Dec-14	50	0.00					
21-Dec-14	51	0.00					
22-Dec-14	52	0.00					
23-Dec-14	53	0.00					
24-Dec-14	54	0.00					
25-Dec-14	55	0.00					
26-Dec-14	56	0.00					
27-Dec-14	57	0.03					
28-Dec-14	58	0.00					
29-Dec-14	59	0.00					
30-Dec-14	60	0.25					
31-Dec-14	61	0.00					
1-Jan-15	62	0.00					
2-Jan-15	63	0.00					
3-Jan-15	64	0.00					
4-Jan-15	65	0.05					
5-Jan-15	66	0.00					
6-Jan-15	67	0.00	205.033	8,931,237	210.982	9,190,376	259,138
7-Jan-15	68	0.00					
8-Jan-15	69	0.00					
9-Jan-15	70	0.00					
10-Jan-15	71	0.00					
11-Jan-15	72	0.00					
12-Jan-15	73	0.00					
13-Jan-15	74	0.00					
14-Jan-15	75	0.00					
15-Jan-15	76	0.00					
16-Jan-15	77	0.00					
17-Jan-15	78	0.00					
18-Jan-15	79	0.00					
19-Jan-15	80	0.00					
20-Jan-15	81	0.00					
21-Jan-15	82	0.00					
22-Jan-15	83	0.12					
23-Jan-15	84	0.00					
24-Jan-15	85	0.00					
25-Jan-15	86	0.00					
26-Jan-15	87	0.00					
27-Jan-15	88	0.00					
28-Jan-15	89	0.00					
29-Jan-15	90	0.00					
30-Jan-15	91	0.00					
31-Jan-15	92	0.15	210.982	9,190,376	215.160	9,372,370	181,994
Totals		**1.07**					**969,776**

Indicates Test Period 1
Indicates Test Period 2
Indicates Test Period 3
Indicates Test Period 4
Indicates Overall Test Period (92 days)

J&T Consulting, Inc.

West Farm Pit - Lamar, CO

Slurry Wall Leak Test
2/12/2015

Water Accounting
© 2015 J&T Consulting, Inc.

TABLE V

	Inflow Volumes				Outflow Volumes					Leak Volume (per pump cycle)		Leak Rate (per pump cycle)
	Precipitation				Evaporation		Pumping					
Date	(in)	(ft)	Daily Inflow (cu-ft)	Cumulative Inflow (cu-ft)	Daily (cu-ft)	Cumulative (cu-ft)	Water Pumped Out (cu-ft)	Total Outflow (cu-ft)	Cumulative Outflow (cu-ft)	Net Outflow (cu-ft)	Net Outflow (gal)	(gpm)
01-Nov-14	0.00	0.00	0	0	21.3	21.3	0	21	21			
02-Nov-14	0.00	0.00	0	0	21.3	42.7	0	43	64			
03-Nov-14	0.02	0.00	862	862	21.3	64.0	0	64	128			
04-Nov-14	0.00	0.00	0	862	21.3	85.3	0	85	213			
05-Nov-14	0.00	0.00	0	862	21.3	106.7	0	107	320			
06-Nov-14	0.00	0.00	0	862	21.3	128.0	0	128	448			
07-Nov-14	0.00	0.00	0	862	21.3	149.3	0	149	597			
08-Nov-14	0.00	0.00	0	862	21.3	170.7	0	171	768			
09-Nov-14	0.00	0.00	0	862	21.3	192.0	0	192	960			
10-Nov-14	0.00	0.00	0	862	21.3	213.3	0	213	1,173			
11-Nov-14	0.10	0.01	4,309	5,171	21.3	234.7	0	235	1,408			
12-Nov-14	0.03	0.00	1,293	6,463	21.3	256.0	0	256	1,664			
13-Nov-14	0.05	0.00	2,154	8,618	21.3	277.3	0	277	1,941			
14-Nov-14	0.00	0.00	0	8,618	21.3	298.7	0	299	2,240			
15-Nov-14	0.00	0.00	0	8,618	21.3	320.0	0	320	2,560			
16-Nov-14	0.12	0.01	5,171	13,788	21.3	341.3	0	341	2,901			
17-Nov-14	0.00	0.00	0	13,788	21.3	362.7	0	363	3,264			
18-Nov-14	0.00	0.00	0	13,788	21.3	384.0	0	384	3,648			
19-Nov-14	0.00	0.00	0	13,788	21.3	405.3	0	405	4,053			
20-Nov-14	0.00	0.00	0	13,788	21.3	426.7	0	427	4,480			
21-Nov-14	0.00	0.00	0	13,788	21.3	448.0	0	448	4,928			
22-Nov-14	0.00	0.00	0	13,788	21.3	469.3	0	469	5,397			
23-Nov-14	0.00	0.00	0	13,788	21.3	490.7	0	491	5,888			
24-Nov-14	0.00	0.00	0	13,788	21.3	512.0	0	512	6,400			
25-Nov-14	0.00	0.00	0	13,788	21.3	533.3	0	533	6,933			
26-Nov-14	0.00	0.00	0	13,788	21.3	554.7	0	555	7,488			
27-Nov-14	0.00	0.00	0	13,788	21.3	576.0	0	576	8,064			
28-Nov-14	0.00	0.00	0	13,788	21.3	597.3	0	597	8,661			
29-Nov-14	0.00	0.00	0	13,788	21.3	618.7	0	619	9,280			
30-Nov-14	0.00	0.00	0	13,788	21.3	640.0	290,284	290,924	300,204	286,416	2,142,675	49.6

J&T Consulting, Inc.

West Farm Pit - Lamar, CO

Slurry Wall Leak Test
2/12/2015

Water Accounting
© 2015 J&T Consulting, Inc.

TABLE V

	Inflow Volumes				Outflow Volumes					Leak Volume (per pump cycle)		Leak Rate (per pump cycle)
	Precipitation				Evaporation		Pumping					
Date	(in)	(ft)	Daily Inflow (cu-ft)	Cumulative Inflow (cu-ft)	Daily (cu-ft)	Cumulative (cu-ft)	Water Pumped Out (cu-ft)	Total Outflow (cu-ft)	Cumulative Outflow (cu-ft)	Net Outflow (cu-ft)	Net Outflow (gal)	(gpm)
01-Dec-14	0.00	0.00	0	0	15.5	15.5	0	15	15			
02-Dec-14	0.00	0.00	0	0	15.5	31.0	0	31	46			
03-Dec-14	0.00	0.00	0	0	15.5	46.5	0	46	93			
04-Dec-14	0.00	0.00	0	0	15.5	61.9	0	62	155			
05-Dec-14	0.00	0.00	0	0	15.5	77.4	0	77	232			
06-Dec-14	0.00	0.00	0	0	15.5	92.9	0	93	325			
07-Dec-14	0.00	0.00	0	0	15.5	108.4	0	108	434			
08-Dec-14	0.00	0.00	0	0	15.5	123.9	0	124	557			
09-Dec-14	0.00	0.00	0	0	15.5	139.4	0	139	697			
10-Dec-14	0.00	0.00	0	0	15.5	154.8	0	155	852			
11-Dec-14	0.00	0.00	0	0	15.5	170.3	0	170	1,022			
12-Dec-14	0.00	0.00	0	0	15.5	185.8	0	186	1,208			
13-Dec-14	0.00	0.00	0	0	15.5	201.3	0	201	1,409			
14-Dec-14	0.00	0.00	0	0	15.5	216.8	0	217	1,626			
15-Dec-14	0.15	0.01	6,463	6,463	15.5	232.3	0	232	1,858			
16-Dec-14	0.00	0.00	0	6,463	15.5	247.7	0	248	2,106			
17-Dec-14	0.00	0.00	0	6,463	15.5	263.2	0	263	2,369			
18-Dec-14	0.00	0.00	0	6,463	15.5	278.7	238,360	238,639	241,008	234,545	1,754,630	67.7

J&T Consulting, Inc.

West Farm Pit - Lamar, CO

Slurry Wall Leak Test
2/12/2015

Water Accounting
© 2015 J&T Consulting, Inc.

TABLE V

	Inflow Volumes				Outflow Volumes					Leak Volume (per pump cycle)		Leak Rate (per pump cycle)
	Precipitation				Evaporation		Pumping					
Date	(in)	(ft)	Daily Inflow (cu-ft)	Cumulative Inflow (cu-ft)	Daily (cu-ft)	Cumulative (cu-ft)	Water Pumped Out (cu-ft)	Total Outflow (cu-ft)	Cumulative Outflow (cu-ft)	Net Outflow (cu-ft)	Net Outflow (gal)	(gpm)
19-Dec-14	0.00	0.00	0	0	15.5	15.5	0	15	15			
20-Dec-14	0.00	0.00	0	0	15.5	31.0	0	31	46			
21-Dec-14	0.00	0.00	0	0	15.5	46.5	0	46	93			
22-Dec-14	0.00	0.00	0	0	15.5	61.9	0	62	155			
23-Dec-14	0.00	0.00	0	0	15.5	15.5	0	15	15			
24-Dec-14	0.00	0.00	0	0	15.5	31.0	0	31	46			
25-Dec-14	0.00	0.00	0	0	15.5	46.5	0	46	93			
26-Dec-14	0.00	0.00	0	0	15.5	61.9	0	62	155			
27-Dec-14	0.03	0.00	1,293	1,293	15.5	77.4	0	77	232			
28-Dec-14	0.00	0.00	0	1,293	15.5	92.9	0	93	325			
29-Dec-14	0.00	0.00	0	1,293	15.5	108.4	0	108	434			
30-Dec-14	0.25	0.02	10,772	12,065	15.5	123.9	0	124	557			
31-Dec-14	0.00	0.00	0	12,065	15.5	139.4	0	139	697			
01-Jan-15	0.00	0.00	0	12,065	15.5	154.8	0	155	852			
02-Jan-15	0.00	0.00	0	12,065	15.5	170.3	0	170	1,022			
03-Jan-15	0.00	0.00	0	12,065	15.5	185.8	0	186	1,208			
04-Jan-15	0.05	0.00	2,154	14,219	15.5	201.3	0	201	1,409			
05-Jan-15	0.00	0.00	0	14,219	15.5	216.8	0	217	1,626			
06-Jan-15	0.00	0.00	0	14,219	15.5	232.3	259,138	259,371	260,997	246,777	1,846,142	67.5

J&T Consulting, Inc.

West Farm Pit - Lamar, CO

Slurry Wall Leak Test
2/12/2015

TABLE V

Water Accounting
© 2015 J&T Consulting, Inc.

	Inflow Volumes				Outflow Volumes					Leak Volume (per pump cycle)		Leak Rate (per pump cycle)
	Precipitation				Evaporation		Pumping					
Date	(in)	(ft)	Daily Inflow (cu-ft)	Cumulative Inflow (cu-ft)	Daily (cu-ft)	Cumulative (cu-ft)	Water Pumped Out (cu-ft)	Total Outflow (cu-ft)	Cumulative Outflow (cu-ft)	Net Outflow (cu-ft)	Net Outflow (gal)	(gpm)
07-Jan-15	0.00	0.00	0	0	15.5	15.5	0	15	15			
08-Jan-15	0.00	0.00	0	0	15.5	31.0	0	31	46			
09-Jan-15	0.00	0.00	0	0	15.5	46.5	0	46	93			
10-Jan-15	0.00	0.00	0	0	15.5	61.9	0	62	155			
11-Jan-15	0.00	0.00	0	0	15.5	77.4	0	77	232			
12-Jan-15	0.00	0.00	0	0	15.5	92.9	0	93	325			
13-Jan-15	0.00	0.00	0	0	15.5	108.4	0	108	434			
14-Jan-15	0.00	0.00	0	0	15.5	123.9	0	124	557			
15-Jan-15	0.00	0.00	0	0	15.5	139.4	0	139	697			
16-Jan-15	0.00	0.00	0	0	15.5	154.8	0	155	852			
17-Jan-15	0.00	0.00	0	0	15.5	170.3	0	170	1,022			
18-Jan-15	0.00	0.00	0	0	15.5	185.8	0	186	1,208			
19-Jan-15	0.00	0.00	0	0	15.5	201.3	0	201	1,409			
20-Jan-15	0.00	0.00	0	0	15.5	216.8	0	217	1,626			
21-Jan-15	0.00	0.00	0	0	15.5	232.3	0	232	1,858			
22-Jan-15	0.12	0.01	5,171	5,171	15.5	247.7	0	248	2,106			
23-Jan-15	0.00	0.00	0	5,171	15.5	263.2	0	263	2,369			
24-Jan-15	0.00	0.00	0	5,171	15.5	278.7	0	279	2,648			
25-Jan-15	0.00	0.00	0	5,171	15.5	294.2	0	294	2,942			
26-Jan-15	0.00	0.00	0	5,171	15.5	309.7	0	310	3,252			
27-Jan-15	0.00	0.00	0	5,171	15.5	325.2	0	325	3,577			
28-Jan-15	0.00	0.00	0	5,171	15.5	340.6	0	341	3,917			
29-Jan-15	0.00	0.00	0	5,171	15.5	356.1	0	356	4,274			
30-Jan-15	0.00	0.00	0	5,171	15.5	371.6	0	372	4,645			
31-Jan-15	0.15	0.01	6,463	11,634	15.5	387.1	181,994	182,381	187,026	175,392	1,312,109	36.4
Totals	**1.07**	**0.09**		**46,104**		**1,538**	**969,776**		**989,234**	**943,130**	**7,055,556**	**53.3**

Indicates Test Period 1
Indicates Test Period 2
Indicates Test Period 3
Indicates Test Period 4
Indicates Overall Test Period (92 days)

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801
www.ncdc.noaa.gov

Station: **LAMAR, CO US** GHCND:USC00054770

Observation Time Temperature: 0700 Observation Time Precipitation: 0700 Elev: 3627 ft. Lat: 38.094° N Lon: 102.631° W

Preliminary	Year	Month	Day	Temperature (F)			Precipitation(see **)					Evaporation		Soil Temperature (F)					
				24 hrs. ending at observation time		at Observation	24 Hour Amounts ending at observation time				At Obs Time			4 in depth			8 in depth		
				Max.	Min.		Rain, melted snow, etc. (in)	Flag	Snow, ice pellets, hail (in)	Flag	Snow, ice pellets, hail, ice on ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
	2014	11	1	58	33	39	0.00		0.0		0								
	2014	11	2	78	37	38	0.00		0.0		0								
	2014	11	3	80	38	53	0.02		0.0		0								
	2014	11	4	63	27	29	0.00		0.0		0								
	2014	11	5	59	26	28	0.00		0.0		0								
	2014	11	6	67	27	28	0.00		0.0		0								
	2014	11	7	69	28	43	0.00		0.0		0								
	2014	11	8	77	37	38	0.00		0.0		0								
	2014	11	9	63	31	33	0.00		0.0		0								
	2014	11	10	77	33	44	0.00		0.0		0								
	2014	11	11	77	18	18	0.10		2.0		2								
	2014	11	12	22	11	11	0.03		1.0		2								
	2014	11	13	14	-5	-5	0.05		1.0		3								
	2014	11	14	17	-5	13	0.00		0.0		3								
	2014	11	15	33	13	15	0.00		0.0		0								
	2014	11	16	37	12	13	0.12		3.0		3								
	2014	11	17	26	1	2	0.00		0.0		2								
	2014	11	18	33	2	9	0.00		0.0		0								
	2014	11	19	48	9	19	0.00		0.0		0								
	2014	11	20	51	19	26	0.00		0.0		0								
	2014	11	21	53	24	24	0.00		0.0		0								
	2014	11	22	54	23	24	0.00		0.0		0								
	2014	11	23	66	24	43	0.00		0.0		0								
	2014	11	24	49	20	21	0.00		0.0		0								
	2014	11	25	50	15	16	0.00		0.0		0								
	2014	11	26	53	16	24	0.00		0.0		0								
	2014	11	27	47	19	20	0.00		0.0		0								
	2014	11	28	62	20	26	0.00		0.0		0								
	2014	11	29	75	26	32	0.00		0.0		0								
	2014	11	30	73	29	30	0.00		0.0		0								
			Summary	54.4	20.3		0.32		7.0										

The '*' flags in Preliminary indicate the data have not completed processing and qualitycontrol and may not be identical to the original observation
Empty, or blank, cells indicate that a data observation was not reported.
***Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown**
"s" This data value failed one of NCDC's quality control tests.
"T" values in the Precipitation category above indicate a TRACE value was recorded.
"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.
Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801
www.ncdc.noaa.gov

Station: **LAMAR, CO US** GHCND:USC00054770

Observation Time Temperature: 0700 Observation Time Precipitation: 0700 Elev: 3627 ft. Lat: 38.094° N Lon: 102.631° W

Preliminary	Year	Month	Day	Temperature (F)			Precipitation(see **)					Evaporation		Soil Temperature (F)					
				24 hrs. ending at observation time		at Observation	24 Hour Amounts ending at observation time				At Obs Time			4 in depth			8 in depth		
				Max.	Min.		Rain, melted snow, etc. (in)	Flag	Snow, ice pellets, hail (in)	Flag	Snow, ice pellets, hail, ice on ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
	2014	12	1	35	12	12	0.00		0.0		0								
	2014	12	2	32	11	15	0.00		0.0		0								
	2014	12	3	56	15	28	0.00		0.0		0								
	2014	12	4	42	22	25	0.00		0.0		0								
	2014	12	5	48	25	26	0.00		0.0		0								
	2014	12	6	64	23	23	0.00		0.0		0								
	2014	12	7	51	23	26	0.00		0.0		0								
	2014	12	8	62	21	21	0.00		0.0		0								
	2014	12	9	54	18	19	0.00		0.0		0								
	2014	12	10	53	19	23	0.00		0.0		0								
	2014	12	11	59	20	20	0.00		0.0		0								
	2014	12	12	63	20	22	0.00		0.0		0								
	2014	12	13	50	22	33	0.00		0.0		0								
	2014	12	14	55	30	47	0.00		0.0		0								
	2014	12	15	55	31	31	0.15		0.0		0								
	2014	12	16	41	20	20	0.00		0.0		0								
	2014	12	17	39	19	26	0.00		0.0		0								
	2014	12	18	30	25	28	0.00		0.0		0								
	2014	12	19	43	20	20	0.00		0.0		0								
	2014	12	20	45	20	20	0.00		0.0		0								
	2014	12	21	46	20	21	0.00		0.0		0								
	2014	12	22	54	21	38	0.00		0.0		0								
	2014	12	23	47	30	33	0.00		0.0		0								
	2014	12	24	35	16	16	0.00		0.0		0								
	2014	12	25	49	16	29	0.00		0.0		0								
	2014	12	26	62	25	25	0.00		0.0		0								
	2014	12	27	26	6	7	0.03		0.0		0								
	2014	12	28	31	6	9	0.00		0.0		0								
	2014	12	29	37	9	11	0.00		0.0		0								
	2014	12	30	24	3	3	0.25		5.0		5								
	2014	12	31	6	-9	-7	0.00		0.0		5								
			Summary	45.0	18.0		0.43		5.0										

The '*' flags in Preliminary indicate the data have not completed processing and qualitycontrol and may not be identical to the original observation
Empty, or blank, cells indicate that a data observation was not reported.
***Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown**
"s" This data value failed one of NCDC's quality control tests.
"T" values in the Precipitation category above indicate a TRACE value was recorded.
"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.
Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

U.S. Department of Commerce
National Oceanic & Atmospheric Administration
National Environmental Satellite, Data, and Information Service

Record of Climatological Observations

These data are quality controlled and may not be identical to the original observations.

National Climatic Data Center
Federal Building
151 Patton Avenue
Asheville, North Carolina 28801
www.ncdc.noaa.gov

Station: **LAMAR, CO US** GHCND:USC00054770

Observation Time Temperature: 0700 Observation Time Precipitation: 0700 Elev: 3627 ft. Lat: 38.094° N Lon: 102.631° W

Preliminary	Year	Month	Day	Temperature (F)			Precipitation(see **)					Evaporation		Soil Temperature (F)					
				24 hrs. ending at observation time		at Observation	24 Hour Amounts ending at observation time				At Obs Time			4 in depth			8 in depth		
				Max.	Min.		Rain, melted snow, etc. (in)	Flag	Snow, ice pellets, hail (in)	Flag	Snow, ice pellets, hail, ice on ground (in)	24 Hour Wind Movement (mi)	Amount of Evap. (in)	Ground Cover (see *)	Max.	Min.	Ground Cover (see *)	Max.	Min.
	2015	1	1	12	-7	3	0.00		0.0		0								
	2015	1	2	26	2	3	0.00		0.0		0								
	2015	1	3	33	3	19	0.00		0.0		0								
	2015	1	4	37	-1	0	0.05		2.0		2								
	2015	1	5	20	-1	4	0.00		0.0		0								
	2015	1	6	37	4	15	0.00		0.0		0								
	2015	1	7	47	14	15	0.00		0.0		0								
	2015	1	8	21	13	18	0.00		0.0		0								
	2015	1	9	54	17	23	0.00		0.0		0								
	2015	1	10	30	15	15	0.00		0.0		0								
	2015	1	11	37	15	17	0.00		0.0		0								
	2015	1	12	51	17	23	0.00		0.0		0								
	2015	1	13	25	18	18	0.00		0.0		0								
	2015	1	14	36	18	24	0.00		0.0		0								
	2015	1	15	40	19	20	0.00		0.0		0								
	2015	1	16	53	20	20	0.00		0.0		0								
	2015	1	17	64	20	37	0.00		0.0		0								
	2015	1	18	56	21	26	0.00		0.0		0								
	2015	1	19	63	21	24	0.00		0.0		0								
	2015	1	20	62	24	35	0.00		0.0		0								
	2015	1	21	42	29	33	0.00		0.0		0								
	2015	1	22	33	8	8	0.12		4.0		4								
	2015	1	23	29	4	5	0.00		0.0		3								
	2015	1	24	48	5	26	0.00		0.0		0								
	2015	1	25	53	26	32	0.00		0.0		0								
	2015	1	26	57	30	31	0.00		0.0		0								
	2015	1	27	70	30	31	0.00		0.0		0								
	2015	1	28	74	31	38	0.00		0.0		0								
	2015	1	29	69	36	39	0.00		0.0		0								
	2015	1	30	53	33	40	0.00		0.0		0								
	2015	1	31	45	35	37	0.15		0.0		0								
			Summary	44.4	16.7		0.32		6.0										

The '*' flags in Preliminary indicate the data have not completed processing and qualitycontrol and may not be identical to the original observation
Empty, or blank, cells indicate that a data observation was not reported.
***Ground Cover: 1=Grass; 2=Fallow; 3=Bare Ground; 4=Brome grass; 5=Sod; 6=Straw mulch; 7=Grass muck; 8=Bare muck; 0=Unknown**
"s" This data value failed one of NCDC's quality control tests.
"T" values in the Precipitation category above indicate a TRACE value was recorded.
"A" values in the Precipitation Flag or the Snow Flag column indicate a multiday total, accumulated since last measurement, is being used.
Data value inconsistency may be present due to rounding calculations during the conversion process from SI metric units to standard imperial units.

WEST 4-7-12

Form 3.1 05/01/2014	S. Platte River – Division 1 970-352-8712 Fax 970-392-1816 810 9th Street, 2nd Floor, Greeley, CO 80631 Republican River – Division 1 970-352-8712 Fax 970-392-1816 810 9th Street, 2nd Floor, Greeley, CO 80631 Arkansas River – Division 2 719-542-3368 Fax 719-544-0800 310 E. Abriendo, Suite B, Pueblo, CO 81004 Rio Grande River – Division 3 719-589-6683 Fax 719-589-6685 P.O. Box 269, 301 Murphy Drive, Alamosa, CO 81101 Designated Basins – Division 8 303-866-3581 Fax 303-866-2223 1313 Sherman St. Rm. 818, Denver, CO 80237	For Office Use Only ☐ Passed ☐ Failed ☐ Variance Approved Date of variance _____
Colorado Division of Water Resources www.water.state.co.us		

NOTICE OF TOTALIZING FLOW METER RE-VERIFICATION, INSTALLATION OR REPLACEMENT

Check appropriate box

- ☐ To be filed in Compliance with Rule 16.5 of the Rules Governing the Measurement of Tributary Ground Water Diversions in the **Republican River Basin (Complete pages 1-6)**
- ☐ To be filed in Compliance with Rules 3.1 of the Amended Rules Governing the Measurement of Tributary Ground Water Diversions in the **Arkansas River Basin (Complete pages 1-5)**
- ☐ To be filed in Compliance with Rule 3.1 of the Rules Governing the Measurement of Tributary Ground Water Diversions in the **Rio Grande River Basin (Complete pages 1-5)**
- ☐ To be filed in Compliance with the Ground Water Commission Rules Governing **Designated Basins (Complete pages 1-5)**
- ☐ To be filed in Compliance with Rule 3.1 of the Rules Governing the Measurement of Tributary Ground Water Diversions in the **South Platte River Basin (Complete pages 1-5)**

Reason for meter verification (Check all that apply)

☐	Re-Verify Previously Verified TFM		**The following MUST be provided for new & replaced meters**		
☐	New TFM (No previous meter)		Date New TFM installed:		
☐	Replacing Previous TFM (also complete area at right)		Date Previous TFM removed:		7-14
	Previous TFM Serial No.: 14-05261-6		Previous TFM Reading (Estimate required if not readable):		380917 X100
☐	Change in Measurement Method from:	Hour Meter ☐	Slave Meter ☐	Power Co Meter ☐	Previous Meter SN
☐	Register seal replaced due to:	New Seal No.	Old Seal No.	TFM Reading	K-Factor (Test req'd. if changed)
☐	(Sensor) (meter) seal replaced due to:	New Seal No.	Old Seal No.	TFM Reading	

Contact Information:

Well Owner: GR Irrigated Farms		User (if not same as well owner): Cross Fire		
Name c/o Karl Nyquist		Name c/o		
Mailing Address 7991 Shaffer Pkwy Suite 200		Mailing Address 820 Airport Rd		
City Littleton	State CO Zip 80127	City Durango	State CO	Zip 81303
Phone 303-369-5100	Email	Phone	Email	

Well Information and Location (Provide Permit No. and/or Case or Decree No. if no WDID exists or is not known

WDID	Permit No.	Case or Decree No.	Location (¼,¼, Sec., T., R., PM)	GPS Coord. (UTM, meters, NAD 83) Northing	Easting	Zone (12/13)
Gravel Pit						

Power Supply

☐ Electric ☐ Artesian ☐ Solar ☐ Windmill ☒ Fossil Fuel ☐ Other (describe):

Provide the following for all wells with electric power:

Power Company Name	Power Company Service No.	Meter Manufacturer	Manufacturer's Serial No.
Power Company Meter Reading on Date of Test (including all rotating and leading zeroes):		Multiplier	Number of Rotating Digits:

Uses on power company meter:

Does the same Power Company Meter serve other devices, including other wells/pumps? If yes, describe system.
☐ Yes ☐ No

Installed TFM Information

Manufacturer: McCrometer		Model No.: MJ308	Meter GPS Coordinates (NAD83 UTM Zone 13N)
Sensor/Meter: Serial No.	06-8-1722	Reading on Test Date: 019.791	Northing: 4219918
Register			Easting: 711955

Provide sensor serial number ONLY if meter has a remote readout. Provide BOTH sensor and meter serial number only if different.

Beginning Remote Reading: N/A Time: _____ Ending Remote Reading: N/A Time: _____

Do these readings match the installed TFM readings? ☐ Yes ☐ No If no, explain:

Meter Type	Meter Size	Multiplier	No. of recording digits
PROP	8"	X .001	6

Meter Units: ☐ Gallons ☒ Acre Feet ☐ Cubic Feet ☐ Other, describe:

Meter Orientation	Diameters of Straight Pipe: Upstream	Diameters of Straight Pipe: Downstream	Diameter of Discharge Pipe: ID	Diameter of Discharge Pipe: OD
☒ Horizontal ☐ Vertical	16" (24)	48 (6)	8.027	8.625

Is the meter installed to manufacturer's specifications? ☒ Yes ☐ No If no, explain:

Test Meter Information

Test Meter Manufacturer:	Test Meter Serial Number:	Date of Last Calibration:
FUJI	AQP7492	1-7-14

Meter Orientation	Pipe Wall Thickness	Diameters of Straight Pipe: Upstream	Diameters of Straight Pipe: Downstream	Diameter of Discharge Pipe: ID	Diameter of Discharge Pipe: OD
☒ Horizontal ☐ Vertical	.299	17" (25.5)	48" (4.65)	8.027	8.625

Verification of Installed Meter (if more than one meter tested for same discharge, show all tests. Use second sheet if necessary)

Date of Test:	Time of Test (Begin):	Length of time pump has been running prior to Tester's arrival:
7-21-14	12:30	24 : +- (HH:MM)

Test Meter Calculations (Show All Work)

Collins Meter GPM Factor: N/A Stop Clamp Settings: N/A

FINISH − 17445.01 / START − 0 } = 17445.01 Gallons

Time − 1507.44 = 907.44 Seconds

17445.01 Gallons / 907.44 Seconds } = 1153.46 GPM

Installed Meter Calculations (Show All Work)

FINISH − 019.845 / START − 019.791 } = 0.054

0.054 × 325851 = 17595.95 Gallons

Time − 1507.06 = 907.06 Seconds

17595.95 Gallons / 907.06 Seconds } = 1163.93 GPM

Existing K-factor N/A

Adjusted K-factor N/A

Flow rate with Collins tube removed:

(Show Q to the nearest 0.00 GPM) Avg QT: 1153.46

(Show Q to the nearest 0.00 GPM) Avg QI: 1163.93

Correction Factor = AVG QT 1153.46 / AVG QI 1163.93 = 0.991

Calibration Coefficient must be shown to the nearest 0.000

If Correction Factor Is:	Div. 1, Div. 2 and Republican River Correction Factor Policies	Div. 3 Correction Factor Policies
0.950 to 1.050	The installed TFM is in accurate working condition. *No Request for Variance is required.* No Correction Factor is Applied.	
0.920 to 0.949 OR 1.051 to 1.080	**Test will be valid for a maximum of four years.** The Variance Request to Use Correction Factor portion of this Form must be completed and signed by the Owner/User. *Note: A Correction Factor will be applied to determine diversions.	May grant a request for a variance to allow the use of a Correction Factor. **Test will be valid for one year from the date of the test.** A variance will be allowed for a maximum of three years, after which the TFM must be repaired or replaced AND a new Test conducted. That Test must confirm an accuracy within ±5.0%. The Variance Request to Use Correction Factor for TFM portion of this Form must be completed and signed by the Owner/User. *Note: A Correction Factor will be applied to determine diversions.
0.900 to 0.919 OR 1.081 to 1.100	**Test will be valid for one year only.** No later than one year from the date of this Test the installed TFM must be repaired or replaced AND a new test conducted that confirms an accuracy of within ±5.0%. The Variance Request to Use Correction Factor portion of this Form must be completed and signed by the Owner/User. *Note: A Correction Factor will be applied to determine diversions.	**Test will be rejected** and the installed TFM must be repaired or replaced AND a new Test conducted. The second Test must confirm an accuracy of within ±5.0%. If TFM fails test and is re-calibrated (k-factor modified), show failed Test, indicate below k-factor before and after, AND show new test on additional duplicate page (include failed and passed test page 3).
<0.900 OR >1.100	Test will be **rejected** and the installed TFM must be repaired or replaced AND a new Test conducted.	

Uses through this totalizing flow meter

Does well have multiple discharges measured through TFM? ☒ Yes ☐ No

If yes, check all that apply: ☒ Open ☒ Pressure ☐ Artesian ☐ Other

Use this space to describe all discharges DISCHARGES to A SETTLING POND AND to A TRUCK LOAD OUT

Meter Testing

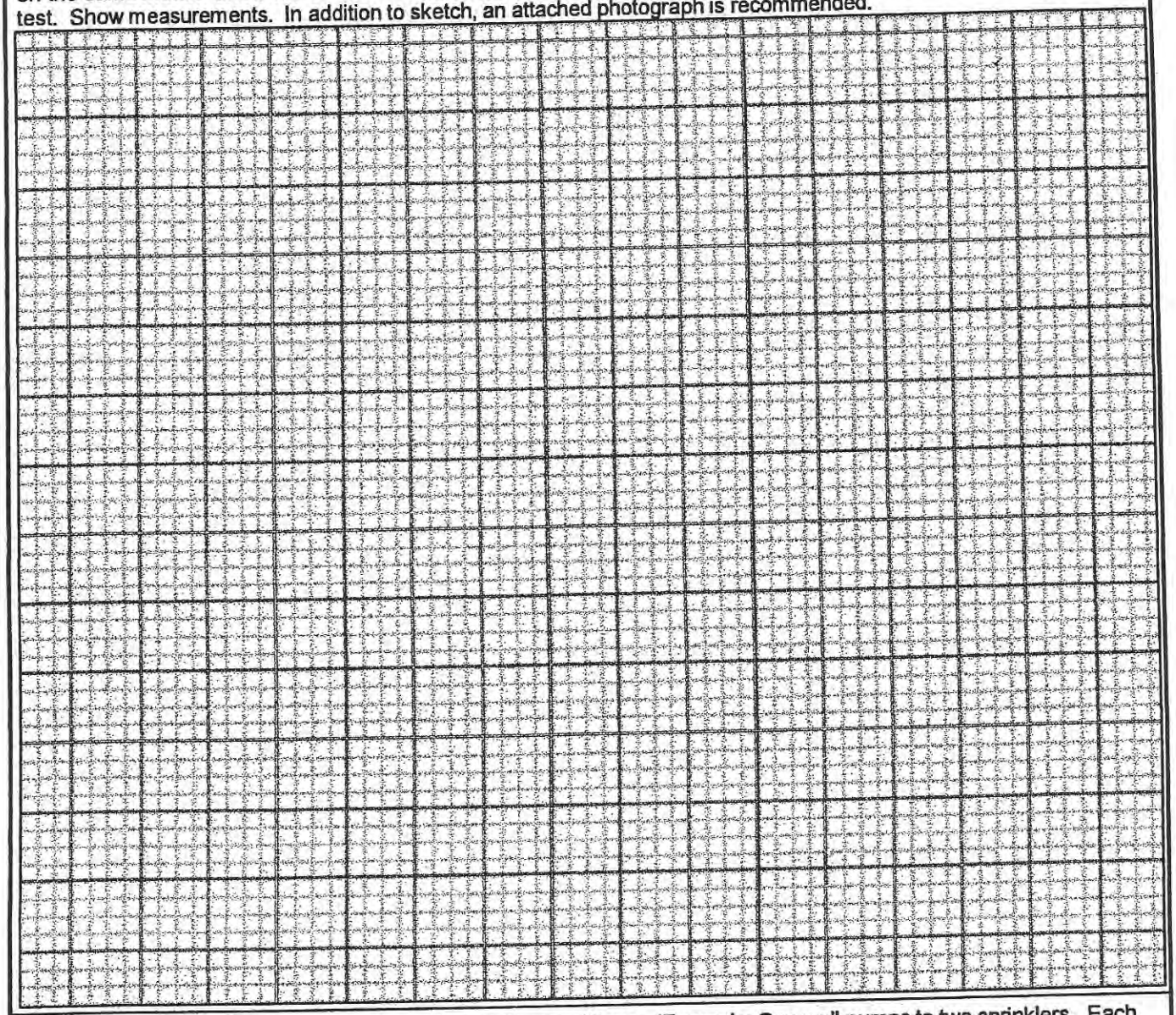
How was the well/meter tested with test equipment (open discharge, pressure, or more than one way)?

Show information in detailed sketch on next page or as an attachment

PUMP WAS RUNNING ON ARRIVAL to A SETTELING POND APPRO 4000' AWAY

Detailed Sketch:

Show total system from pump to discharge, other pumps in the same well, and electrical system including other devices on the same meter. Show where test meter and pressure gauge were placed and how system was modified to perform test. Show measurements. In addition to sketch, an attached photograph is recommended.



Detailed description of system under normal operating conditions. (Example: One well pumps to two sprinklers. Each sprinkler has an end gun that operates when the sprinkler is operating.) Include number of irrigated acres.

THIS METER IS USED FOR DEWATERING A GRAVEL PIT & FOR DUST CONTROL

Tester Verification

I, the undersigned, state that I am currently a person approved by the State Engineer to conduct well tests pursuant to the Rules Governing the Measurement of Ground Water Diversions as indicated on page 1 of this form. I have determined the installed Totalizing Flow Meter to either be in accurate working condition as defined by the Rules indicated on page 1 of this form OR have advised the Owner/User to complete the Variance Request below of this form.

I understand that "accurate working condition" is determined when the indicated flow through the installed METER is within plus or minus 5% of an independent field measurement made using Calibrated Test Equipment. I understand that falsifying the accuracy and/or condition of a Totalizing Flow Meter can subject me to a fine of up to $500.00.

Signature of Tester: Dan Richards Date 7/21/14

Tester Name, Company, Phone, Email

Name: DAN RICHARDS	Company Name: RICHARDS' WELL CALIBRATIONS
Phone: 719-688-5451	Email:

Variance Request to Allow a Correction Factor to be Used when Calibrating a Meter with the Tester's Test Equipment

I request a Variance to allow the use of the Correction Factor. I understand that a Variance WILL NOT be issued to allow a Correction Factor for a Totalizing Flow Meter (TFM) if the inaccuracy is due to the TFM or appurtenances being intentionally damaged or modified by the owner and/or user of the well/meter.

I understand that the Correction Factor as computed by the above Qualified Well Tester will be verified by or revised by the Division of Water Resources and that final Correction Factor will be applied to ALL use records until the TFM is repaired/replaced and/or a new test conducted for this Well.

I understand and agree to the required conditions of the variance as indicated below:

Division 1, Division 2 or Republican River Basin (Check only one)

☐	If Correction Factor is between 0.920 to 0.949 or is between 1.051 to 1.080, the Test will be valid for no more than **four years**. The Correction Factor will be applied to determine diversions from the well.
☐	If Correction Factor is between 0.900 to 0.919 or is between 1.081 to 1.100, the Test will be valid **one year**. No later than one year from the date of this Test, a new Measurement Test must be conducted and the accuracy of the new Test must be within ±5.0%. The Correction Factor will be applied to determine diversions from the well. Further, I acknowledge that repair and/or replacement of this Meter and/or portions of the Discharge System is required within that one year AND I agree to make the necessary changes within that time.

Division 3

☐	If Correction Factor is between 0.920 to 0.949 or 1.051 to 1.080, and Division 3 approves this Variance Request, the Test will be valid for no more than one year. A new variance including new correction factor computed by a Qualified Well Tester shall be required each year thereafter. A variance will only be allowed for TFM for a maximum of three years. After three years the TFM must be repaired or replaced and working within the required ± 5%. The Correction Factor will be applied to determine diversions from the well.

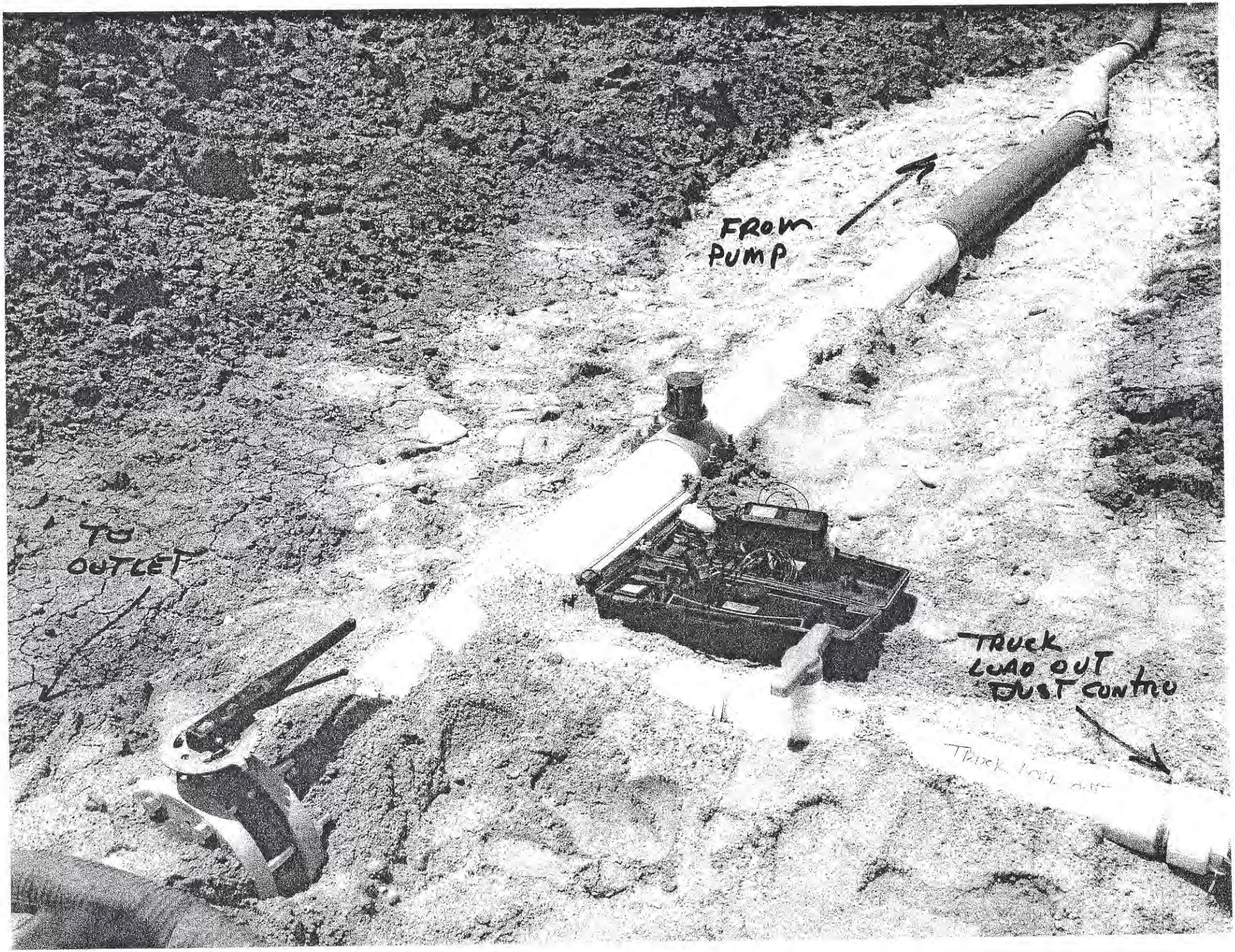
For Electrically Powered Wells/Pumps, I agree to the release of information pertaining to my Electric Service and Use, including Current Transformer Factor, Voltage/Potential Transformer Factor and Electric Meter Readings, to the Colorado Division of Water Resources by my electric supplier for the purposes of determining or verifying Water Use from the Well/Pump.

The above information is true to the best of my knowledge. I understand that falsifying the accuracy and/or condition of a Totalizing Flow Meter can subject me to a fine of up to $500.00. If any Variance is requested on my behalf to apply a Calibration Coefficient to my TFM, I agree to such Variance.

I am the ☐Well Owner OR ☐Well User

Signature of Well Owner/User Natalie Musick Date 7/21/14

Print Name of Well Owner/User


FROM PUMP
TO OUTLET
TRUCK LOAD OUT DUST CONTRO

Appendix K

Projected Revenues and Expenses

Year	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2036	2037	2038	2039 - 2053
Year of Loan Term	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20 -34
(1) Share Assessment Revenue	1,187,903	1,285,041	1,285,041	1,285,041	1,285,041	1,327,444	1,327,444	1,327,444	1,327,444	1,327,444	1,327,444	1,306,092	1,306,092	1,306,092	1,306,092	1,306,092	1,197,527	1,197,527	1,197,527	1,197,527	793,038
(2) Membership Dues Revenue	202,550	202,550	202,550	202,550	202,550	202,550	202,550	202,550	202,550	202,550	202,550	202,550	202,550	202,550	202,550	202,550	202,550	202,550	202,550	202,550	202,550
(3) CS-U Payments	-	125,000	125,000	125,000	1,557,093	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Revenue	1,390,453	1,612,591	1,612,591	1,612,591	3,044,684	1,529,994	1,529,994	1,529,994	1,529,994	1,529,994	1,529,994	1,508,642	1,508,642	1,508,642	1,508,642	1,508,642	1,400,077	1,400,077	1,400,077	1,400,077	995,588
(4) Operating Expenses	519,633	519,633	519,633	519,633	519,633	519,633	519,633	519,633	519,633	519,633	519,633	519,633	519,633	519,633	519,633	519,633	519,633	519,633	519,633	519,633	519,633
(5) WFGP Operating Expenses	4,315	17,260	17,260	17,260	17,260	17,260	17,260	17,260	17,260	17,260	17,260	17,260	17,260	17,260	17,260	17,260	17,260	17,260	17,260	17,260	17,260
(6) Legal	177,769	177,769	177,769	177,769	177,769	177,769	177,769	177,769	177,769	177,769	177,769	177,769	177,769	177,769	177,769	177,769	177,769	177,769	177,769	177,769	177,769
(7) Engineering	150,420	150,420	150,420	150,420	150,420	150,420	150,420	150,420	150,420	150,420	150,420	150,420	150,420	150,420	150,420	150,420	150,420	150,420	150,420	150,420	150,420
(8) CWCB Loan Payments	513,046	726,006	726,006	726,006	2,070,139	643,344	643,344	643,344	643,344	643,344	643,344	643,344	643,344	643,344	643,344	643,344	534,769	534,769	534,769	246,288	130,298
(9) CWCB 10% Reserve Payments	-	21,296	21,296	21,296	21,296	21,296	21,296	21,296	21,296	21,296	21,296	-	-	-	-	-	-	-	-	-	-
Total Expenses	1,365,183	1,612,384	1,612,384	1,612,384	2,956,517	1,529,722	1,529,722	1,529,722	1,529,722	1,529,722	1,529,722	1,508,426	1,508,426	1,508,426	1,508,426	1,508,426	1,399,851	1,399,851	1,399,851	1,111,370	995,380
Net Position	25,270	207	207	207	88,167	272	272	272	272	272	272	216	216	216	216	216	226	226	226	288,707	208

	Share Assessments
2019	$ 39.50
2020-2023	$ 42.73
2024-2029	$ 44.14
2030-2034	$ 43.43
2035-2038	$ 39.82
2039-2053	$ 26.37

Outstanding shares (converted to common stock) 30,073.50

Notes:

(1) Share Assessment Revenue is calculated by multiplying the outstanding number of converted common stock by the projected share assessment for a given year.
(2) Membership Dues are projected to remain the same for the term of the WFGP loan.
(3) CS-U Payments are based on the lease payments from CS-U for 500 acre-feet of storage under the Water-Sharing Agreement and the adjusted purchase price for 500 acre-feet of storage LAWMA common shares to CS-U once LAWMA obtains a water court decree for the direct delivery of 2,500 LAWMA shares to CS-U's municipal system.
(4) Operating Expenses were projected to remain at the 2019 projected levels for the term of the loan.
(5) WFGP Operating Expenses include pumping costs (average outflows from the pit 761 acre-feet * $15 per acre foot), insurance costs, and some additional maintenance and operational expenses.
(6) Legal expenses were projected to remain at the 2019 projected levels for the term of the loan.
(7) Engineering expenses were projected to remain at the 2019 projected levels for the term of the loan.
(8) CWCB Loan Payments equal the outstanding annual payments on Loan Nos. C153715, C153768, C150150, C150258, and the new WFGP loan.
(9) CWCG 10% Reserve Payments are calculated as 10% of the annual payment ($212,296) on the new WFGP loan for the first 10 years of the loan term.

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

Water Project Loan Program

Projects financed by the Water Project Loan Program must align with the goals identified in Colorado's Water Plan and its measurable objectives.

Application Type

☐ Prequalification *(Attach 3 years of financial statements)* ☑ Loan Approval *(Attach Loan Feasibility Study)*

Agency/Company Information

Company / Borrower Name: Lower Arkansas Water Management Association ("LAWMA")

Authorized Agent &Title: Donald F. Higbee, Manager

Address: P.O. Box 1161, Lamar, Colorado 81052

Phone: (719) 336-9696 | Email: lawma@cminet.net

Organization Type: ☑ Ditch Co, ☐ District, ☐ Municipality ☐ other:_____ | Incorporated? ☑ YES ☐ NO

County: Prowers | Number of Shares/Taps: 30073.5

Water District: 67 | Avg. Water Diverted/Yr 52,516 acre-feet

Number of Shareholders/Customers Served: 205 | Current Assessment per Share $ 39.50 (Ditch Co)

Average monthly water bill $ N/A (Municipality)

Contact Information

Project Representative: Donald F. Higbee

Phone: (719) 688-9696 | Email: lawma@cminet.net

Engineer: Randy Hendrix

Phone: (720) 930-4360 | Email: randy@hendrix-wai.com

Attorney: Richard Mehren

Phone: (303) 443-8782 | Email: rmehren@mwhw.com

Project Information

Project Name: West Farm Gravel Pit

Brief Description of Project: (Attach separate sheets if needed)

LAWMA is seeking a $4,640,950 CWCB loan to finance the purchase of the West Farm Gravel Pit Reservoir located outside of Lamar, Colorado. The West Farm Gravel Pit Reservoir has been constructed and is functional for the storage and release of water. LAWMA will use the reservoir to store and release water for the benefit of its members.

Project Start Date(s) Design: N/A Construction: Already Complete

General Location: (Attach Map of Area)

Lamar, Colorado

Project Costs - Round to the nearest thousand

Estimated Engineering Costs: N/A | Estimated Construction Costs: N/A

Other Costs (Describe Above): N/A | Estimated Total Project Costs: $4,595,000

Requested Loan Amount: $4,640,950 | Requested Loan Term(10, 20, or 30 years): 30 Years

Signature

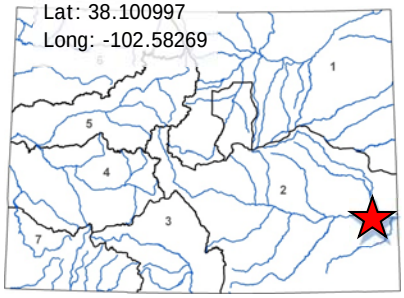
Donald F. Higbee Sec/Treas 2-1-19
Signature / Title Date

Return to: Finance Section Attn: Anna Mauss
1313 Sherman St #718
Denver, CO 80203
Ph. 303/866.3449
e-mail: anna.mauss@state.co.us

COLORADO
Colorado Water Conservation Board
Department of Natural Resources

West Farm Gravel Pit Acquisition
Lower Arkansas Water Management Association
July 2019 Board Meeting

Water Plan Grant Application



LOCATION	
County/Counties:	Prowers
Drainage Basin:	Arkansas

DETAILS	
Total Project Cost:	$4,595,000
Water Plan Grant Request:	$1,000,000
Recommended Amount:	$1,000,000
Other CWCB Funding:	$3,630,950 (CWCB Loan)
Other Funding Amount:	$1,750,000 (pending CS-U)
Applicant Match:	$3,630,950 (CWCB Loan)
Project Type(s): Other (storage purchase)	
Project Category(Categories): Storage & Supply	
Measurable Result: 1,638 AF of storage, 7,900 AF of new pumping by LAWMA members, 2,100 AF of shared water through ATMs	

Lower Arkansas Water Management Association (LAWMA) is a non-profit, member-owned corporation formed in 1973. LAWMA's primary purpose is to replace out-of-priority depletions caused by its shareholders' well pumping for irrigation and other uses in the lower Arkansas River Basin. LAWMA annually allocates replacement water on a per-share basis to offset shareholders' depletions.

LAWMA has a purchase agreement to acquire 1,638 acre-feet (AF) of storage capacity in the West Farm Gravel Pit for use in its augmentation plan and Rule 14 plans. The dedicated storage will increase LAWMA's allocations of water to LAWMA common shares while also re-timing LAWMA's use of its direct-flow supplies to assist in compliance with the Arkansas River Compact. The gravel pit is located on the Arkansas River mainstem, with an inlet directly off the Lamar Canal.

LAWMA members use share water for irrigation, municipal, industrial, and other purposes. The significantly increased yield to those shares will mean increased security for, and therefore the more likely continuation of irrigated agriculture in the lower Arkansas Valley.

The project also will make possible the implementation of LAWMA's agricultural-municipal water-sharing agreement with Colorado Springs Utilities (CS-U) whereby 2,500 LAWMA shares will be delivered for direct use within CS-U's municipal system in every 5 out of 10 years, and LAWMA will retain the water for its shareholders' use in the other 5 of 10 years. As part of the perpetual agreement, CS-U will purchase 500 AF of the the West Farm Gravel Pit for LAWMA to offset any potential shortages to LAWMA shareholders caused by operation of the water-sharing agreement in the years in which CS-U is taking delivery of the water. While this project is not contingent upon the success of the agricultural-municipal water-sharing agreement, upon LAWMA's obtaining a water court decree authorizing the direct delivery of LAWMA shares to CS-U, CS-U will pay LAWMA $1,750,000 for 500 AF of storage in the gravel pit. The $1,750,000 will then be used to pay down the CWCB loan.

This project addresses multiple needs including municipal, agricultural, industrial, storage, alternative water transfers, and compact compliance. An augmentation supply gap was identified in the Arkansas BIP of 25,000-30,000 AF of augmentation supply needed to maintain the current irrigated acreage.

Funding Recommendation: Staff is recommending approval the full request of $1,000,000 from the Storage and Supply category.

Note: This was a delayed decision from the May 2019 board meeting.

DISTRICT COURT, WATER DIVISION NO. 2, COLORADO 501 North Elizabeth Street, Suite 116 Pueblo, Colorado 81003 (719) 583-7048	DATE FILED: February 25, 2019 12:27 PM CASE NUMBER: 2015CW3067
IN THE MATTER OF THE APPLICATION FOR WATER RIGHTS OF LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION IN THE ARKANSAS RIVER AND ITS TRIBUTARIES IN BENT AND PROWERS COUNTIES	▲ **COURT USE ONLY** ▲ Case Number: 15CW3067

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECREE OF THE WATER COURT

This matter comes before the Water Court upon the Application of Lower Arkansas Water Management Association ("LAWMA") for a decree approving changes of water rights and the addition of augmentation and replacement supplies to LAWMA's plan for augmentation decreed in Case No. 02CW181 ("02CW181 Decree"). Having considered the pleadings, the stipulations of the parties, and the evidence presented, and being fully advised in the premises, the Water Court enters the following Findings of Fact, Conclusions of Law, and Decree of the Water Court:

FINDINGS OF FACT

1. Applicant: The name, address, and telephone number of the Applicant is Lower Arkansas Water Management Association, 310 Sixth Street, P.O. Box 1161, Lamar, Colorado 81052, (719) 336-9696.

2. Application, notice, and jurisdiction: LAWMA filed the application in this matter on December 29, 2015 ("Application"). The Court finds that the Application is complete and covers all matters required by law. Timely and adequate notice of the Application was given in the manner prescribed by law, and the Court has jurisdiction over the subject matter of this proceeding and over all persons, property, and water rights affected hereby, whether or not those persons have appeared. The land and water rights involved herein are not included within the boundaries of a designated ground water basin.

3. Statements of opposition: Timely statements of opposition to the Application were filed by the Fort Lyon Canal Company; the Amity Mutual Irrigation Company; Public Service Company of Colorado; Kathleen Gamble-Hughes; May Farms Partnership; the Prowers

Conservation District; John P. Sutphin; Tri-State Generation and Transmission Association, Inc.; Lower Arkansas Valley Water Conservancy District; Arkansas Valley Ditch Association; Five Rivers Cattle Feeding LLC d/b/a/ Colorado Beef; and the City of Lamar. By Order dated December 12, 2016, the Court granted the Unopposed Motion to Intervene filed by the State Engineer and the Division Engineer for Water Division 2. By Orders dated December 13, 2017, the Court dismissed the statements of opposition of John P. Sutphin and the Prowers Conservation District. The time for filing statements of opposition has expired.

4. Summary of Consultation: The Referee consulted with the Division Engineer regarding the Application as required by law. The Division Engineer submitted a Summary of Consultation dated February 12, 2016, and LAWMA filed its Response to the Summary of Consultation on March 16, 2016. Copies of both the Summary of Consultation and LAWMA's Response were properly served on all parties to the case.

5. Stipulations: LAWMA has entered into stipulations with the following parties on the basis that these parties would not oppose entry of a decree at least as restrictive on LAWMA and no less protective of these parties' interests than the version of the decree to which they stipulated: the Fort Lyon Canal Company; the Amity Mutual Irrigation Company; Public Service Company of Colorado; Kathleen Gamble-Hughes; May Farms Partnership; Tri-State Generation and Transmission Association, Inc.; Lower Arkansas Valley Water Conservancy District; Arkansas Valley Ditch Association; Five Rivers Cattle Feeding LLC d/b/a/ Colorado Beef; the City of Lamar; and the State Engineer and the Division Engineer for Water Division 2. The Court has approved the stipulations as orders of the Court. The Court finds that this Decree is at least as restrictive on LAWMA and no less protective of these parties' interests than the earlier versions of this Decree to which these parties stipulated.

6. Description of Application: LAWMA is a non-profit corporation organized for the primary purpose of providing a means for its members to continue to make ground water diversions from wells and other structures with junior priorities and to continue to make surface water diversions from structures with junior priorities in the Arkansas River water rights regime. The purposes of the Application are as follows:

   6.1 To change the use of the water rights described in paragraphs 7.1 through 7.4 below ("15CW3067 Water Rights"), which currently are decreed for agricultural irrigation purposes, to allow the water available to those water rights to be used both directly and after storage for augmentation and replacement purposes within LAWMA's plan for augmentation decreed on March 8, 2007, in Case No. 02CW181, Water Division No. 2, as that plan for augmentation has been expanded and modified by the decrees entered in Case Nos. 05CW52, 08CW18,

10CW85, 10CW91, 12CW37, 13CW3004, 13CW3065, 14CW3004, 15CW3014, 16CW3018, 17CW3000, 17CW3001, and 17CW3035 and as it may be expanded or modified in pending Case Nos. 17CW3068, 17CW3069, and 18CW3072 and in other future cases ("Augmentation Plan"); in LAWMA's annual Arkansas River Replacement Plan pursuant to Rule 14 of the Amended Rules and Regulations Governing the Diversion and Use of Tributary Ground Water in the Arkansas River Basin ("Rule 14 Plan"); and/or in any LAWMA-operated Compact Compliance Plan pursuant to Rule 10 of the Compact Rules Governing Improvements to Surface Water Irrigation Systems in the Arkansas River Basin in Colorado ("Rule 10 Plan"); and to make those water rights available for use for replacement of historical return flows under the decree to be entered in this case, the decree entered in Case No. 02CW181 ("02CW181 Decree"), and any future change of water rights decree that LAWMA obtains in this Court ("Future LAWMA Change Decree")—provided, however, that LAWMA shall not use the 15CW3067 Water Rights for replacement of historical return flows for the water rights changed under the 02CW181 Decree or a Future LAWMA Change Decree unless and until LAWMA obtains a future Water Court decree providing for such use; and

6.2 To add the 15CW3067 Water Rights, as changed herein, as a new source of augmentation and replacement supply under LAWMA's Augmentation Plan.

6.3 The Application also sought confirmation of LAWMA's appropriation of the historical return flows associated with the 15CW3067 Water Rights, such that LAWMA would replace those historical return flows to the stream only when they were subject to a call senior to the date of the Application. LAWMA hereby withdraws that claim for appropriation of historical return flows.

6.4 The Application erroneously recited that LAWMA sought to change the use of 783.5 of the 3,030 shares outstanding of the capital stock of the Granada Irrigation Company ("Granada Company"). In fact, as described in paragraph 7.2 below, LAWMA seeks to change the use of only 750.5 shares of stock in the Granada Company, which are the only shares of Granada Company stock that LAWMA owned at the time of the Application and currently owns. LAWMA hereby withdraws any claim to change the use of more than 750.5 shares of stock in the Granada Company.

6.5 The Application did not seek, and this Decree does not confirm, any appropriative rights of exchange.

CHANGE OF WATER RIGHTS

7. Description of water rights to be changed: LAWMA seeks to change the use of the 15CW3067 Water Rights, which are described in paragraphs 7.1 through 7.4 below, and which LAWMA owns.

7.1 Lamar Canal: 897 shares of the 26,127 shares outstanding of the capital stock of the Lamar Canal and Irrigation Company ("Lamar Canal Company"). The 897 Lamar Canal Company shares that are the subject of the Application are referred to herein as the "Lamar Canal Shares."

7.1.1 Appropriation date, priority, and amount of the Lamar Canal Company's decreed water rights:

7.1.1.1 November 30, 1875, Priority No. 3 for 15.75 cfs.

7.1.1.2 November 4, 1886, Priority No. 6½ for 72.09 cfs.

7.1.1.3 April 16, 1887, Priority No. 7½ for 13.64 cfs.

7.1.1.4 July 16, 1890, Priority No. 13 for 184.27 cfs.

7.1.2 Original decree: The Lamar Canal Company water rights were decreed in the Adjudication of Priorities to the Use of Water for Irrigation in District Number 67, dated July 1, 1895, in the Bent County District Court ("District 67 General Adjudication").

7.1.3 Decreed point of diversion: By decree of the Bent County District Court dated November 9, 1899, Priority Nos. 3, 6½, 7½, and 13 were decreed for diversion at the headgates of the "Home Ranch ditch or the main canal, located on the south bank of the Arkansas river, in the northeast quarter of the southeast quarter of Section 29, of township 22, south of range 46, west of the 6th P.M., in Prowers County, Colorado or through its headgate known as the A.R. Black's Lamar ditch, or Feeder No. one, located on the south bank of the Arkansas River in the northeast quarter of the southwest quarter of section 25, of township 22, south of range 47 west of the 6th P.M., in Prowers County, Colorado or into both the said headgates." By this same decree, Priority No. 13 only was also decreed for diversion at the "headgate of what is called Feeder No. two or the Lamar, Granada and State Line Land and Irrigating Company's ditch, located on the south bank of the Arkansas River, on lot 3, of the northwest quarter of Section 33, of township 22 south of range 47 west of the 6th P.M., in Prowers County, Colorado." The decree

in Case No. W-1836, entered by the District Court in and for Water Division No. 2 on June 21, 1977 ("W-1836 Decree"), confirmed an alternate point of diversion for the Lamar Canal at a point where the pipeline from the steam-electric generating plant of the City of Lamar, Colorado, discharges water from said plant into the Lamar Canal, which point is located on the South bank of said Canal whence the Northwest corner of Section 31, T22S, R46W of the 6th P.M. bears North 10°44'26" East, 1,342.6 feet, subject to a maximum rate of diversion at said alternate point of 37.8 cfs, and subject to the condition that all water diverted at said alternate point be charged to the water rights of the Lamar Canal Company. The Lamar Canal's river headgate is located on the south bank of the Arkansas River in the NE¼ of the SW¼ of Section 25, Township 22 South, Range 47 West of the 6th P.M. in Prowers County, consistent with the decreed point of diversion for the A.R. Black's Lamar ditch, or Feeder No. one described above and was the headgate used during the study period described in paragraph 8 below.

7.1.4 Source: The Arkansas River and, pursuant to the W-1836 Decree, ground water tributary to the Arkansas River.

7.1.5 Decreed use: Irrigation.

7.1.6 Pro-rata interest in the Lamar Canal Company water rights to be changed: The 897 Lamar Canal Shares represent a pro-rata interest in the Lamar Canal Company water rights as follows:

7.1.6.1 Priority No. 3: 0.54 cfs of the 15.75 cfs.

7.1.6.2 Priority No. 6½: 2.48 cfs of the 72.09 cfs.

7.1.6.3 Priority No. 7½: 0.47 cfs of the 13.64 cfs.

7.1.6.4 Priority No. 13: 6.33 cfs of the 184.27 cfs.

7.2 Granada Irrigation Company: 750.5 of the 3,030 shares outstanding of the capital stock of the Granada Company. The Granada Company owns 10,600 shares of the capital stock of the Lamar Canal Company, or approximately 41% of the 26,127 shares outstanding in the Lamar Canal Company; therefore, one share of the capital stock of the Granada Company equates to approximately 3.498 shares of capital stock of the Lamar Canal Company. The 750.5 Granada Company shares that are the subject of the Application are referred to herein as the "Granada Shares."

7.2.1 Appropriation date, priority, and amount of the Lamar Canal Company's decreed water rights: As described in paragraph 7.1.1 above.

7.2.2 Original decree: As described in paragraph 7.1.2 above.

7.2.3 Decreed point of diversion: As described in paragraph 7.1.3 above.

7.2.4 Source: As described in paragraph 7.1.4 above.

7.2.5 Decreed use: As described in paragraph 7.1.5 above.

7.2.6 Pro-rata interest in the Lamar Canal Company water rights to be changed: Based on the Granada Company's ownership of 10,600 shares of stock in the Lamar Canal Company, the 750.5 Granada Shares represent 2,625.51 shares of stock in the Lamar Canal Company. Therefore, the 750.5 Granada Shares equate to the following pro-rata interest in the Lamar Canal Company water rights:

7.2.6.1 Priority No. 3: 1.58 cfs of the 15.75 cfs.

7.2.6.2 Priority No. 6½: 7.24 cfs of the 72.09 cfs.

7.2.6.3 Priority No. 7½: 1.37 cfs of the 13.64 cfs.

7.2.6.4 Priority No. 13: 18.52 cfs of the 184.27 cfs.

7.3 XY Canal: 2.0 cfs of the 69.0 cfs decreed to the XY Irrigating Ditch Company's Canal ("XY Canal"). The 2.0 cfs interest in the XY water right that is the subject of the Application is referred to herein as the "XY 2.0 cfs."

7.3.1 Appropriation date, priority, and amount of the XY Canal's decreed water rights: July 22, 1889, Priority No. 11 for 69.0 cfs.

7.3.2 Original decree: The District 67 Original Adjudication.

7.3.3 Decreed point of diversion: The decreed headgate location is "on the south bank of the Arkansas River in the northeast quarter of the northwest quarter of section numbered 36 of township 22 south of range 45 west of the 6th P.M. in Prowers County, Colorado."

7.3.4 Source: The Arkansas River.

7.3.5 Decreed use: Irrigation.

7.3.6 Pro-rata interest in the XY Canal water rights to be changed: 2.0 cfs of the 69.0 cfs decreed to the XY Canal. The remaining 67.0 cfs of the 69.0 cfs decreed to the XY Canal is owned by LAWMA and was changed in Case No. 02CW181.

7.4 Article II Storage Account Water: Section II of the Resolution Concerning an Operating Plan for John Martin Reservoir, adopted on April 24, 1980 and amended on May 10, 1984, December 11, 1984, and February 11, 2010 ("1980 Operating Plan"), provides that 60% of the water attributable to conservation storage in John Martin Reservoir shall be for the Colorado Water District 67 ditches including the Fort Bent Ditch, the Keesee Ditch, the Amity Canal, the Lamar Canal, the Hyde Ditch, the Manvel Canal, the X-Y and Graham Canal, the Buffalo Canal, and the Sisson-Stubbs Ditch; and that 40% of the water attributable to conservation storage in John Martin Reservoir shall be for Kansas. In this Decree, the accounts in John Martin Reservoir in which such water is stored are referred to as "Article II Storage Accounts," and the water stored in such accounts is referred to as "Article II Water." Under the 1980 Operating Plan, Kansas and the Colorado Water District 67 ditches may demand the release of water from their respective Article II Storage Accounts at any time and at any rate. The 1980 Operating Plan provides that the Colorado Water District 67 ditches' share of water released from conservation storage in John Martin Reservoir is distributed to those ditches' respective Article II Storage Accounts as follows:

Fort Bent Ditch	9.9%
Keesee Ditch	2.3%
Amity Canal	49.5%
Lamar Canal	19.8%
Hyde Ditch	1.3%
Manvel Canal	2.4%

X-Y and Graham Ditch	5.1%
Buffalo Canal	8.5%
Sisson-Stubbs Ditch	1.2%

LAWMA is entitled to use the Article II Water associated with the Lamar Canal Shares and the Granada Shares and seeks to change that Article II Water in this case. LAWMA previously changed all of the X-Y and Graham Ditch Article II Water in Case No. 02CW181 and therefore does not seek to change any X-Y and Graham Ditch Article II Water in this case.

8. Historical use of the 15CW3067 Water Rights: The 15CW3067 Water Rights were used historically on the farms shown on the maps attached as **Exhibits A-1**, **B-1**, and **C-1**. LAWMA's engineering consultant, Hendrix Wai Engineering, Inc., has quantified the historical consumptive use attributable to the 15CW3067 Water Rights and has determined the amount, timing, and location of return flows resulting from the historical use of those water rights. The historical use analysis for the 15CW3067 Water Rights is summarized in paragraphs 8.1 through 8.3 below.

8.1 Lamar Canal Shares: The 897 shares of the 26,127 shares outstanding of the capital stock of the Lamar Canal Company that LAWMA seeks to change in this case represent approximately 3.43% of the Lamar Canal Company water rights, including associated Lamar Canal Company Article II Water. As used throughout this Decree, the term "Lamar Canal Shares" includes the Lamar Canal Company Article II Water associated with those 897 shares.

8.1.1 The Lamar Canal Shares historically were used for agricultural irrigation purposes on the land shown on the map attached as **Exhibit A-1** ("Lamar Canal Historically Irrigated Land"). The number of acres irrigated with the Lamar Canal Shares varied from year to year within the 1950 through 2013 study period but averaged 779. Based on recorded diversion records for the study period, the historical pro-rata river headgate diversions for the Lamar Canal Shares averaged 1,387.2 acre-feet per year (1,256.5 acre-feet for the months of April through October and 130.7 acre-feet for the months of November through March), or approximately 1.5 acre-feet per Lamar Canal Share. Those diversions included water available to the Lamar Canal Shares under the Lamar Canal direct-flow water rights, John Martin

Reservoir conservation pool water that was diverted by the Lamar Canal, and Article II Water that was diverted by the Lamar Canal. The historical farm headgate delivery for LAWMA's Lamar Canal Shares averaged 1,204.1 acre-feet per year, and averaged 1,090.6 acre-feet per irrigation season (April 1 through October 31). The historical depletions associated with the Lamar Canal Shares averaged 71% of farm headgate deliveries, or approximately 855.0 acre-feet per year.

8.1.2 LAWMA acquired the Lamar Canal Shares in 2014.

8.2 Granada Shares: LAWMA owns 750.5 of the 3,030 shares outstanding of the capital stock of the Granada Company, or approximately 24.8% of the Granada Company water rights. As described in paragraph 7.2 above, one share of the capital stock of the Granada Company equates to approximately 3.498 shares of capital stock of the Lamar Canal Company. As used throughout this Decree, the term "Granada Shares" includes the Lamar Canal Company Article II Water associated with those shares.

8.2.1 The Granada Shares historically were used for agricultural irrigation purposes on the land shown on the map attached as **Exhibit B-1** ("Granada Historically Irrigated Land"). **Exhibit B-1** also shows the location of the Granada Irrigation Company Ditch ("Granada Lateral"). The number of acres irrigated with the Granada Shares varied from year to year within the 1950 through 2013 study period but averaged 716. Based on recorded diversion records for the Lamar Canal for the study period, the historical pro-rata river headgate diversions for the Granada Shares averaged 4,060.2 acre-feet per year (3,677.6 acre-feet for the months of April through October and 382.6 acre-feet for the months of November through March), or approximately 5.4 acre-feet per Granada Share. Those diversions included water available to the Granada Shares under the Lamar Canal direct-flow water rights, John Martin Reservoir conservation pool water that was diverted by the Lamar Canal, and Article II Water that was diverted by the Lamar Canal. The historical farm headgate delivery for the Granada Shares averaged 3,524.3 acre-feet per year and averaged 3,192.2 acre-feet per irrigation season (April 1 through October 31). The historical depletions associated with the Granada Shares averaged 44.0% of farm headgate deliveries, or approximately 1,550.34 acre-feet per year.

8.2.2 LAWMA acquired 436 of the Granada Shares in 2014 ("Grasmick Granada Shares"). LAWMA acquired the right to use the remaining 314.5 Granada

Shares in 2015 ("Gass Granada Shares"), and became the owner of those shares in 2017.

8.3 XY 2.0 cfs: LAWMA owns the entire 69.0 cfs decreed to the XY Canal, along with all of the XY and Graham Article II Water. LAWMA previously changed 67.0 cfs of the XY Canal water right and all of the XY and Graham Article II Water in the 02CW181 Decree; that portion of the XY Canal water right and all of the XY and Graham Article II Water are not included in the 15CW3067 Water Rights and are not before the Court in this case. The XY 2.0 cfs is the only portion of the XY Canal water right being changed in this case.

8.3.1 The XY 2.0 cfs historically was used for agricultural irrigation purposes on the land shown on the map attached as **Exhibit C-1** ("XY Historically Irrigated Land"). The number of acres irrigated with the XY 2.0 cfs varied from year to year within the 1950 through 1993 study period but averaged 186. Based on recorded diversion records for the XY Canal for the study period, the historical pro-rata river headgate diversions for the XY 2.0 cfs averaged 147.0 acre-feet per year (136.2 acre-feet for the months of April through October and 10.8 acre-feet for the months of November through March). The historical farm headgate delivery for the XY 2.0 cfs averaged approximately 131.0 acre-feet per year and averaged 121.5 acre-feet per irrigation season (April 1 through October 31). The historical depletions associated with the XY 2.0 cfs averaged 61.1% of pro-rata river headgate diversions, or approximately 89.8 acre-feet per year.

8.3.2 LAWMA acquired the XY 2.0 cfs in 2014.

9. Historical consumptive use: A portion of the 15CW3067 Water Rights historically applied to irrigation was consumed. Water so consumed was lost to the Arkansas River system and not available for other uses. The amount of water changed to the New Uses described in paragraph 14.1 below is based upon the historical depletion associated with the 15CW3067 Water Rights.

10. Historical return flows: A portion of the 15CW3067 Water Rights historically applied to irrigation returned to the stream system as return flow ("Historical Return Flows"). LAWMA will replace Historical Return Flows in accordance with paragraphs 15.2, 15.7, 16.2, 16.7, 17.2, and 17.6 below. Some of the Historical Return Flows returned as surface water during the irrigation season and some of the Historical Return Flows returned as ground water during and after the irrigation season. The amounts and timing of return flow varied with conditions. LAWMA shall replace the Historical Return Flows to the Arkansas River on a daily basis during the irrigation season (April 1 through October 31) in accordance with the terms and conditions of this Decree. To the extent the Historical

Return Flows accrued above downstream calling water rights, LAWMA shall replace them to the river at or above the point of diversion of any such downstream calling water right. LAWMA's replacement of Historical Return Flows in accordance with the terms and conditions of this Decree will prevent injury to vested water rights in Colorado and will not cause a violation of the Arkansas River Compact, § 37-69-101, C.R.S. ("Compact").

11. Historical depletions: As more specifically described in paragraphs 8.1 through 8.3 above, the historical use of the 15CW3067 Water Rights resulted in depletions to the stream system. The terms and conditions of this Decree are sufficient to prevent an expansion of the historical use and depletions attributable to the 15CW3067 Water Rights as a result of the changes approved herein, and will not cause a violation of the Compact.

12. Dry-up of historically irrigated lands: The lands historically irrigated with the 15CW3067 Water Rights, as shown in attached **Exhibits A-1**, **B-1**, and **C-1** ("Historically Irrigated Lands"), have been removed from irrigation with the 15CW3067 Water Rights. As of the date of entry of this Decree, the Historically Irrigated Lands have been dried up or are being re-irrigated with the permissible sources of water described in paragraph 20.2 below. Due to the removal of the 15CW3067 Water Rights from the Historically Irrigated Lands in accordance with the terms and conditions of this Decree, the historical consumptive use attributable to the irrigation of those lands with the 15CW3067 Water Rights has ceased. Dry-up of the Historically Irrigated Lands will be administered in accordance with paragraph 50 below and Appendix B.3 of the decree entered in Kansas v. Colorado, No. 105, Original (Administration of Parcels Claimed for Augmentation Agreement) ("Appendix B.3"). Should Kansas dispute LAWMA's entitlement to dry-up credit for any portion of the Historically Irrigated Lands, such disputes must be resolved per paragraph 5 of Appendix B.3.

13. Maintenance of historical stream conditions: Irrigation of the Historically Irrigated Lands with the 15CW3067 Water Rights historically resulted in impacts to stream flows that varied from year to year. The terms and conditions imposed by this Decree are designed to and will yield varying amounts of water for the New Uses described in paragraphs 14.1.1 through 14.1.5 below depending upon conditions, but will reasonably approximate and not exceed historical use and thereby prevent injury to other water rights and prevent a violation of the Compact.

14. Change of water rights: The Application requested approval of the following changes of the 15CW3067 Water Rights. The changes are approved subject to the terms and conditions of this Decree.

    14.1 New types of use: The Application requested that the type of use of the 15CW3067 Water Rights be changed such that they may be used for the following new purposes at the new places of use described in paragraph 14.2 below, in addition to

their currently decreed purpose of agricultural irrigation. LAWMA hereby withdraws its request for the continued use of the 15CW3067 Water Rights for their originally decreed purpose of agricultural irrigation, and instead will use the 15CW3067 Water Rights only for the following changed purposes:

14.1.1 Augmentation or replacement of out-of-priority depletions and depletions to Stateline flows caused by the "LAWMA Structures" included in the Augmentation Plan decreed in Case No. 02CW181, as expanded and modified by the decrees entered in Case Nos. 05CW52, 08CW18, 10CW85, 10CW91, 12CW37, 13CW3004, 13CW3065, 14CW3004, 15CW3014, 17CW3000, 17CW3001, 16CW3018, and 17CW3035, and as it may be expanded or modified in pending Case Nos. 17CW3068, 17CW3069, and 18CW3072 and in other future cases, and as the term "LAWMA Structures" is defined in those decrees, to the extent such depletions can be replaced downstream from John Martin Reservoir without injury;

14.1.2 Augmentation or replacement of out-of-priority depletions and depletions to Stateline flows caused by the wells included in LAWMA's Rule 14 Plan, to the extent such depletions can be replaced downstream from John Martin Reservoir without injury;

14.1.3 Replacement of Historical Return Flows attributable to the 15CW3067 Water Rights; and

14.1.4 Replacement of historical return flows for the water rights changed under the 02CW181 Decree or Future LAWMA Change Decrees to the extent such depletions can be replaced downstream from John Martin Reservoir without injury—provided, however, that LAWMA shall not use the 15CW3067 Water Rights for replacement of historical return flows for the water rights changed under the 02CW181 Decree or a Future LAWMA Change Decree unless and until LAWMA obtains a future Water Court decree providing for such use;

14.1.5 Replacement of historical seepage losses and/or return flows under any Rule 10 Plan operated by LAWMA.

14.1.6 The new uses described in paragraphs 14.1.1 through 14.1.5 above are referred to collectively in this Decree as the "New Uses."

14.2 New places of use: In accordance with the New Uses, the Application requested that the place of use of the 15CW3067 Water Rights be changed from the historical place of use to other locations in the Arkansas River Basin that are at or downstream

from John Martin Reservoir. Subject to the above-stated limitations, the locations of the New Uses will be the locations at which LAWMA delivers augmentation or replacement water to the Arkansas River downstream from John Martin Reservoir and as required by LAWMA's Augmentation Plan, Rule 14 Plan, any LAWMA-operated Rule 10 Plan, or any future Water Court decree providing for use of the 15CW3067 Water Rights to replace historical return flows for the water rights changed under the 02CW181 Decree or a Future LAWMA Change Decree.

14.3 New manner of use and place of storage: The Application requested that the Lamar Canal Shares and the Granada Shares be changed such that they may be used for the New Uses both directly and after storage in the structure described in paragraph 14.3.1 below.

14.3.1 Fully consumable water derived from farm headgate deliveries of the Lamar Canal Shares and the Granada Shares may be stored in the West Farm Gravel Pit, which is located in the S½ of the SE¼ of Section 28 and in the NE¼ and the NE¼ of the NW¼ of Section 33, Township 22 South, Range 46 West of the 6th P.M. in Prowers, County, Colorado, as shown on **Exhibit D**. As confirmed by a letter dated February 16, 2016, from the Office of the Division Engineer, the first storage cell of the West Farm Gravel Pit has been lined in accordance with the State Engineer's lining criteria ("Lining Criteria"). Before water is stored in any future cell of the West Farm Gravel Pit, that cell must have been lined in accordance with the Lining Criteria. As of the date of this Decree, no water right has been claimed by LAWMA or decreed for the West Farm Gravel Pit and this decree only authorizes storage of the Lamar Canal Shares and the Granada Shares in the West Farm Gravel Pit.

14.3.2 LAWMA may store its full farm headgate deliveries associated with the Lamar Canal Shares and the Granada Shares, so long as all Historical Return Flows for the Lamar Canal Shares and the Granada Shares decreed herein are replaced by LAWMA in accordance with the terms and conditions of this Decree.

14.3.3 Article II Water that was stored in John Martin Reservoir in the Lamar Canal Company account ("Lamar Article II Water") may not be re-stored in the West Farm Gravel Pit without approval from the Arkansas River Compact Administration ("ARCA") and subsequent approval by this Court pursuant to the procedures described below. Such water may be used for the New Uses by release through the augmentation stations described in paragraph 15.1 below. These uses constitute prompt beneficial use and do

not require ARCA approval under the Compact. If LAWMA desires to re-store Lamar Article II Water, LAWMA will apply to ARCA for authorization to re-store such water in the West Farm Gravel Pit. The Court shall retain jurisdiction, as provided in paragraph 48.6 below, to consider whether ARCA's action with respect to a request by LAWMA to re-store water in the West Farm Gravel Pit requires any further or different terms and conditions in this Decree with respect to such re-storage. LAWMA shall invoke such jurisdiction within 12 months after action by ARCA on LAWMA's request.

14.4 Full consumption and use to extinction: Provided that LAWMA replaces the Historical Return Flows attributable to the 15CW3067 Water Rights in accordance with the terms and conditions of this Decree, LAWMA will fully consume and use to extinction the consumptive use stream credits attributable to the 15CW3067 Water Rights during LAWMA's initial use of such credits for augmentation or replacement.

15. Lamar Canal terms and conditions to prevent injury: The following terms and conditions will prevent injury from LAWMA's use of the Lamar Canal Shares as changed herein:

15.1 The Lamar Canal Shares, including but not limited to all Article II Water associated with the Lamar Canal Shares, will continue to be diverted at the Lamar Canal river headgate, and the farm headgate deliveries will be delivered to and measured at one or more of the following locations:

15.1.1 West Farm Augmentation Station, located in the SE¼ of the SW¼ of Section 29, Township 22 South, Range 46 West of the 6th P.M. in Prowers County, Colorado.

15.1.2 Center Farm Augmentation Station, located in the SE¼ of the SE¼ of Section 31, Township 22 South, Range 45 West of the 6th P.M. in Prowers County, Colorado.

15.1.3 Granada East Augmentation Station, located in the NW¼ of the NE¼ of Section 1, Township 23 South, Range 44 West of the 6th P.M. in Prowers County, Colorado.

15.1.4 Granada West Augmentation Station, located in the located in the NW¼ of the NE¼ of Section 2, Township 23 South, Range 44 West of the 6th P.M. in Prowers County, Colorado.

15.1.5 West Farm Gravel Pit, located as described in paragraph 14.3.1 above.

15.2 To quantify the consumptive use stream credits that may be applied to the New Uses, LAWMA shall apply the following monthly consumptive use factors to the farm headgate deliveries available to the Lamar Canal Shares, as those farm headgate deliveries are measured at the locations described in paragraph 15.1 above. LAWMA shall quantify Historical Return Flows as the portion of the farm headgate deliveries that is not quantified as consumptive use stream credits.

April	May	June	July	Aug.	Sept.	Oct.
79.9%	80.2%	81.4%	80.4%	76.5%	71.2%	65.9%

15.3 In addition to the augmentation stations described in paragraph 15.1 above, LAWMA may use another augmentation station on the Lamar Canal for the delivery of the Lamar Canal Shares by filing a petition with the Court in this matter and in Case No. 02CW181 and following the procedure described in paragraph 47.D. of the 02CW181 Decree. In any such petition, LAWMA shall include the following information: (1) the location of the proposed new augmentation station by quarter-quarter section; (2) the stream or structure to which water will be delivered; (3) a description of how losses, if any, between the new augmentation station and the point of introduction to the receiving stream will be determined; (4) a description of how losses, if any, between the point of introduction to the receiving stream and the place of use of the water will be determined; (5) a description of all measuring devices proposed to be used in connection with the new augmentation station; and (6) updated accounting forms containing the information required by paragraph 44 and the necessary information to account for use of the new augmentation station for delivery of the Lamar Canal Shares.

15.4 After delivery to the Arkansas River at one or more of the augmentation stations described in paragraph 15.1 above or an augmentation station added to this Decree pursuant to paragraph 15.3 above, the consumptive use stream credits derived from the Lamar Canal Shares will be left undiverted in the Arkansas River for the New Uses.

15.5 LAWMA may divert and use the Lamar Canal Shares only between April 1 and October 31 when the Lamar Canal Company water rights are in priority. When water is available to the Lamar Canal Shares under paragraph 15.14 below, LAWMA shall take delivery of the Lamar Canal Shares' pro-rata volume of Lamar Canal Company deliveries; provided, however, that at any given time, LAWMA's deliveries may vary by up to one rotation. If and when LAWMA reaches a volumetric limit imposed on the Lamar Canal Shares by this Decree, this pro-rata requirement will not apply and LAWMA shall take deliveries to the Lamar Canal

Shares in accordance with the provisions of paragraph 15.14 and either 15.12 or 15.13 below.

15.6 The Historical Return Flows associated with the Lamar Canal Shares accrued to the Arkansas River above the headgate of the Buffalo Canal. To prevent injury to vested water rights, during the irrigation season (April 1 through October 31) LAWMA shall maintain Historical Return Flows for the Lamar Canal Shares by limiting the consumptive use stream credits for the Lamar Canal Shares as provided in paragraph 15.2 of this Decree and delivering the Historical Return Flow component of the farm headgate delivery to the Arkansas River through one or more of the augmentation stations described in paragraph 15.1 above or an augmentation station added to this Decree pursuant to paragraph 15.3 above.

15.7 To prevent injury to vested water rights, during the non-irrigation season (November 1 through March 31), LAWMA shall maintain Historical Return Flows for the Lamar Canal Shares as follows:

15.7.1 LAWMA shall not take delivery of the Lamar Canal Shares from November 1 through March 31. LAWMA shall forgo any diversions and consumptive use stream credits for the Lamar Canal Shares and leave the Historical Return Flows undiverted in the Arkansas River. To the extent the Lamar Canal diverts during the non-irrigation season, LAWMA shall divert all water available to the Lamar Canal Shares and measure and return the full farm headgate delivery, less ditch loss, promptly to the Arkansas River, without taking consumptive use stream credits, through one or more of the augmentation stations described in paragraph 15.1 above or an augmentation station added to this Decree pursuant to paragraph 15.3 above.

15.7.2 LAWMA's engineers have determined that because LAWMA will not be taking delivery of water available to the Lamar Canal Shares in the non-irrigation season, the operation of the condition set forth in paragraph 15.7.1 above will result in over-replacement of historical non-irrigation season return flows for the Lamar Canal Shares ("Lamar Winter Return Flows") in the average annual amount of 12.38 acre-feet. Accordingly, the Court finds that the operation of the condition set forth in paragraph 15.7.1 will replace the Lamar Winter Return Flows in a manner that will prevent injury to Colorado water users and will prevent injury to Kansas's rights under the Compact.

15.8 LAWMA shall limit farm headgate deliveries to the Lamar Canal Shares to the volumes described in this paragraph 15.8 and its incorporated table. Farm headgate

deliveries attributable to the Lamar Canal Shares from April 1 through October 31 will be limited to a maximum cumulative volume of 69,799 acre-feet in any 64-year period; to a maximum annual volume of 1,959 acre-feet; and to the following maximum and 20-year cumulative monthly volumes:

Month	April	May	June	July	August	September	October
Maximum volume (acre-feet)	340	333	442	446	367	292	249
20-year cumulative maximum (acre-feet)	3,486	4,204	5,189	5,647	4,337	3,806	2,981

15.9 For purposes of starting the calculation of the 20-year cumulative maximum monthly farm headgate delivery limits, for the 19 years prior to the first year in which the Lamar Canal Shares or any portion thereof are used pursuant to this Decree, LAWMA shall assume that the farm headgate deliveries were equal to the following monthly volumes per year: April, 165.6 acre-feet; May, 203.8 acre-feet; June, 249.8 acre-feet; July, 273.7 acre-feet; August, 209 acre-feet; September, 184.9 acre-feet; and October, 143.8 acre-feet.

15.10 LAWMA shall limit consumptive use stream credits available under the Lamar Canal Shares to a maximum cumulative volume of 54,724 acre-feet in any 64-year period.

15.11 For purposes of starting the calculation of the 64-year cumulative farm headgate delivery limit and the 64-year consumptive use stream depletion credit limit, for the 63 years prior to the first year in which the Lamar Canal Shares, or any portion thereof, are used pursuant to this Decree, LAWMA shall assume that the farm headgate deliveries were equal to 1,074.1 acre-feet per year and that the consumptive use stream depletion credits were equal to 845.5 acre-feet per year.

15.12 If and when LAWMA reaches a volumetric limit imposed on the Lamar Canal Shares by this Decree and there is water available to the Lamar Canal Shares under paragraph 15.14 below, diversions into the Lamar Canal will be limited as follows:

15.12.1 Diversions under the Lamar Canal Company's direct flow water rights will be limited to the amounts listed in section 4 of the table below. Diversions under the Lamar Canal Company's direct flow water rights only include diversions under Priority Nos. 3, 6½, 7½, and 13 decreed in the District 67

General Adjudication and do not include diversions of Lamar Canal Company's Article II Water.

1. Priority No.	**2.** Decreed Flowrate (cfs)	**3.** Lamar Canal Shares' CU Component (cfs)							**4.** Maximum Allowable Lamar Canal Diversion (cfs) (Col. 2- Col. 3)						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Apr	May	Jun	Jul	Aug	Sep	Oct
3	15.75	0.38	0.38	0.38	0.38	0.36	0.33	0.31	15.37	15.37	15.37	15.37	15.39	15.42	15.44
6.5	72.09	1.72	1.72	1.75	1.73	1.64	1.53	1.42	70.37	70.37	70.34	70.36	70.45	70.56	70.67
7.5	13.64	0.32	0.33	0.33	0.33	0.31	0.29	0.27	13.32	13.31	13.31	13.31	13.33	13.35	13.37
13	184.27	4.39	4.40	4.47	4.42	4.20	3.91	3.62	179.88	179.87	179.80	179.85	180.07	180.36	180.65
Total	285.75	6.80	6.83	6.93	6.85	6.51	6.06	5.61	278.95	278.92	278.82	278.90	279.24	279.69	280.14

If less direct flow water rights water is available at the Lamar Canal's Arkansas River headgate in priority than the limits in section 4 of the table above, the Lamar Canal Company will be entitled to divert the entire amount available in priority.

15.12.2 If and when LAWMA reaches a volumetric limit imposed on the Lamar Canal Shares by this Decree and there is water available to the Lamar Canal Shares under paragraph 15.14 below, LAWMA shall continue to take delivery of the return flow component of the Lamar Canal Shares' share of Lamar Canal diversions and return that component to the Arkansas River pursuant to paragraph 15.6 above. The continued delivery of the Lamar Canal Shares' return flow component when LAWMA has reached a volumetric limit on the Lamar Canal Shares will not count against the volumetric limits on the Lamar Canal Shares. At any time the Lamar Canal Company is not diverting water for delivery to shares other than the Lamar Canal Shares, LAWMA shall not require the Lamar Canal Company to call for or divert water solely to satisfy this term and condition; and in that circumstance, LAWMA will not be and is not to be deemed out of compliance with this term and condition.

15.12.3 If and when LAWMA reaches a volumetric limit imposed on the Lamar Canal Shares by this Decree and the Lamar Canal Company calls for water stored in the Lamar Canal Company's Article II account in John Martin Reservoir, LAWMA shall not take delivery of the consumptive use component of the Lamar Canal Shares' share of the amount of such water diverted into the Lamar Canal.

15.12.4 The terms and conditions included in this paragraph 15.12 are administrable using the Lamar Canal Company's existing diversion and measurement infrastructure.

15.13 If and when LAWMA simultaneously reaches a volumetric limit imposed on the Lamar Canal Shares by this Decree and a volumetric limit imposed on the Granada Shares by this Decree, and there is water available to the Lamar Canal Shares under paragraph 15.14 below and to the Granada Shares under paragraph 16.13 below, diversions into the Lamar Canal will be limited as described in paragraph 16.14 below.

15.14 The Lamar Canal historically has operated on a rotational basis from time to time, and such operations are expected to continue. For purposes of determining (a) when LAWMA must take delivery of the Lamar Canal Shares' under paragraph 15.5 above and (b) limitations on diversions into the Lamar Canal under paragraph 15.12 above or paragraph 16.13 below, water will be deemed to be available to the Lamar Canal Shares when the Lamar Canal is operating on a rotational basis and the Lamar Canal Shares are in rotation and will not be deemed to be available to the Lamar Canal Shares when the Lamar Canal is operating on a rotational basis and the Lamar Canal Shares are not in rotation.

15.15 LAWMA's entitlement to use consumptive use credits available to the Lamar Canal Shares for the New Uses is subject to the actual dry-up of the Lamar Canal Historically Irrigated Land. LAWMA holds recorded dry-up covenants on each of the five tracts that make up the Lamar Canal Historically Irrigated Land. Those covenants run with the land and require the landowners to dry up the tracts in accordance with their specific terms, and LAWMA is therefore entitled to such dry-up. The Lamar Canal Historically Irrigated Land dried up in accordance with this paragraph 15.15 will not be irrigated with water diverted under the Lamar Canal Shares, or with any other source of water except as described in paragraph 20.2 below.

16. Granada Lateral terms and conditions to prevent injury: The following terms and conditions will prevent injury from LAWMA's use of the Granada Shares as changed herein:

16.1 The Granada Shares, including but not limited to all Article II Water associated with the Granada Shares, will continue to be diverted at the Lamar Canal river headgate, and the farm headgate deliveries will be delivered to and measured at one or more of the following locations:

16.1.1 West Farm Augmentation Station, located as described in paragraph 15.1.1 above.

16.1.2 Center Farm Augmentation Station, located as described in paragraph 15.1.2 above.

16.1.3 Granada East Augmentation Station, located as described in paragraph 15.1.3 above.

16.1.4 Granada West Augmentation Station, located as described in paragraph 15.1.4 above.

16.1.5 West Farm Gravel Pit, located as described in paragraph 14.3.1 above.

16.2 To quantify the consumptive use stream credits that may be applied to the New Uses, LAWMA shall apply the following monthly consumptive use factors to the farm headgate deliveries available to the Granada Shares, as those farm headgate deliveries are measured at the locations described in paragraph 16.1 above. LAWMA shall quantify Historical Return Flows as the portion of the farm headgate deliveries that is not quantified as consumptive use stream credits.

April	May	June	July	Aug.	Sept.	Oct.
63.0%	63.8%	67.3%	66.1%	59.0%	47.9%	34.2%

16.3 In addition to the augmentation stations described in paragraph 16.1 above, LAWMA may use another augmentation station on the Lamar Canal for the delivery of the Granada Shares by filing a petition with the Court in this matter and in Case No. 02CW181 and following the procedure described in paragraph 47.D. of the 02CW181 Decree and the further procedure described in paragraph 15.3 above.

16.4 After delivery to the Arkansas River through one or more of the augmentation stations described in paragraph 16.1 above or an augmentation station added to this Decree pursuant to paragraph 16.3 above, the consumptive use stream credits derived from the Granada Shares will be left undiverted in the Arkansas River for the New Uses.

16.5 LAWMA may divert and use the Granada Shares only between April 1 and October 31 when the Lamar Canal Company water rights are in priority. When there is water available to the Granada Shares under paragraph 16.13 below, LAWMA shall take delivery of the Granada Shares' pro-rata volume of Granada Company deliveries; provided, however, that at any given time, LAWMA's

deliveries may vary by up to one rotation. If and when LAWMA reaches a volumetric limit imposed on the Granada Shares by this Decree, this pro-rata requirement will not apply and LAWMA shall take deliveries to the Granada Shares in accordance with the provisions of paragraph 16.12 or 16.14 and 16.13 below.

16.6 The Historical Return Flows associated with the Granada Shares accrued to the Arkansas River above the headgate of the Buffalo Canal. To prevent injury to vested water rights, during the irrigation season (April 1 through October 31) LAWMA shall maintain Historical Return Flows for the Granada Shares by limiting the consumptive use stream credits for the Granada Shares as provided in paragraph 16.2 of this Decree and delivering the Historical Return Flow component of the farm headgate delivery to the Arkansas River through one or more of the augmentation stations described in paragraph 16.1 above or an augmentation station added to this Decree under paragraph 16.3 above.

16.7 To prevent injury to vested water rights, during the non-irrigation season (November 1 through March 31), LAWMA shall maintain Historical Return Flows for the Granada Shares as follows:

16.7.1 LAWMA shall not take delivery of the Granada Shares from November 1 through March 31. LAWMA shall forgo any diversions and consumptive use stream credits for the Granada Shares and leave the Historical Return Flows undiverted in the Arkansas River. To the extent the Lamar Canal diverts during the non-irrigation season, LAWMA shall divert all water available to the Granada Shares and measure and return the full farm headgate delivery, less ditch loss, promptly to the Arkansas River, without taking consumptive use stream credits, through one or more of the augmentation stations described in paragraph 16.1 above or an augmentation station added to this Decree under paragraph 16.3 above.

16.7.2 LAWMA's engineers have determined that because LAWMA will not be taking delivery of water available to the Granada Shares in the non-irrigation season, the operation of the condition set forth in paragraph 16.7.1 above, without more, would result in under-replacement of historical non-irrigation season return flows for the Granada Shares ("Granada Winter Return Flows") in the average annual amount of 342.95 acre-feet. The Granada Winter Return Flows are a component of the Historical Return Flows. To prevent injury to vested water rights and to Kansas's rights under the Compact, LAWMA shall take the following additional action to replace non-irrigation season return flows for the Granada Shares: At the beginning of each irrigation season, LAWMA shall calculate the Granada Winter

Return Flows as 10.7% of the farm headgate deliveries to the Granada Shares during the previous irrigation season (April 1 through October 31). LAWMA shall replace the Granada Winter Return Flows to the stream no later than the last day of May each year by delivering consumptive use stream credits attributable to the Granada Shares or the Lamar Canal Shares through one of the augmentation stations described in paragraph 16.1 above or an augmentation station added to this Decree under paragraph 16.3 above. The Court finds that such return flow replacement operations will prevent injury to Colorado water users and will prevent injury to Kansas's rights under the Compact.

16.8 LAWMA shall limit farm headgate deliveries to the Granada Shares to the volumes described in this paragraph 16.8 and its incorporated table. Farm headgate deliveries attributable to the Granada Shares from April 1 through October 31 will be limited to a maximum cumulative volume of 204,300 acre-feet in any 64-year period; to a maximum annual volume of 5,733 acre-feet; and to the following maximum and 20-year cumulative monthly volumes:

Month	April	May	June	July	August	September	October
Maximum volume (acre-feet)	996	975	1,294	1,307	1,074	855	728
20-year cumulative maximum (acre-feet)	10,203	12,306	15,187	16,528	12,696	11,139	8,726

16.9 For purposes of starting the calculation of the 20-year cumulative maximum monthly farm headgate delivery limits, for the 19 years prior to the first year in which the Granada Shares, or any portion thereof, are used pursuant to this Decree, LAWMA shall assume that the farm headgate deliveries were equal to the following monthly volumes per year: April, 484.6 acre-feet; May, 596.4 acre-feet; June, 731.2 acre-feet; July, 801.1 acre-feet; August, 611.6 acre-feet; September, 541.2 acre-feet; and October, 420.9 acre-feet.

16.10 LAWMA shall limit consumptive use stream depletion credits available under the Granada Shares to a maximum cumulative volume of 98,802 acre-feet in any 64-year period.

16.11 For purposes of starting the calculation of the 64-year cumulative farm headgate delivery limit and the 64-year consumptive use stream depletion credit limit, for the

63 years prior to the first year in which the Granada Shares, or any portion thereof, are used pursuant to this Decree, LAWMA shall assume that the farm headgate deliveries were equal to 3,144.0 acre-feet per year and that the consumptive use stream depletion credits were equal to 1,535.1 acre-feet per year.

16.12 If and when LAWMA reaches a volumetric limit imposed on the Granada Shares by this Decree and water is available to the Granada Shares pursuant to paragraph 16.13 below, diversions into the Lamar Canal will be limited as follows:

16.12.1 Diversions under the Lamar Canal Company's direct flow water rights will be limited to the amounts listed in section 4 of the table below. Diversions under the Lamar Canal Company's direct flow water rights only include diversions under Priority Nos. 3, 6½, 7½, and 13 decreed in the District 67 General Adjudication and do not include diversions of water released from the Lamar Canal Company's Article II Water.

1. Priority No.	**2.** Decreed Flowrate (cfs)	**3.** Granada Shares' CU Component (cfs)							**4.** Maximum Allowable Lamar Canal Diversion (cfs) (Col. 2 - Col. 3)						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Apr	May	Jun	Jul	Aug	Sep	Oct
3	15.75	0.87	0.88	0.92	0.91	0.81	0.66	0.47	14.88	14.87	14.83	14.84	14.94	15.09	15.28
6.5	72.09	3.96	4.01	4.23	4.16	3.71	3.01	2.15	68.13	68.08	67.86	67.93	68.38	69.08	69.94
7.5	13.64	0.75	0.76	0.80	0.79	0.70	0.57	0.41	12.89	12.88	12.84	12.85	12.94	13.07	13.23
13	184.27	10.13	10.25	10.82	10.62	9.48	7.70	5.50	174.14	174.02	173.45	173.65	174.79	176.57	178.77
Total	285.75	15.70	15.90	16.77	16.48	14.71	11.94	8.52	270.05	269.85	268.98	269.27	271.04	273.81	277.23

If less direct flow water rights water is available at the Lamar Canal's Arkansas River headgate in priority than the limits in section 4 of the table above, the Lamar Canal Company will be entitled to divert the entire amount available in priority.

16.12.2 If and when LAWMA reaches a volumetric limit imposed on the Granada Shares by this Decree and there is water available to the Granada Shares under paragraph 16.13 below, LAWMA shall continue to take delivery of the return flow component of the Granada Shares' share of Lamar Canal diversions and return that component to the Arkansas River pursuant to paragraph 16.6 above. The continued delivery of the Granada Shares' return flow component when LAWMA has reached a volumetric limit on the Granada Shares will not count against the volumetric limits on the Granada Shares. At any time the Lamar Canal Company is not diverting

water for delivery to shares other than the Granada Shares, LAWMA shall not require the Lamar Canal Company to call for or divert water solely to satisfy this term and condition; and in that circumstance, LAWMA will not be and is not to be deemed out of compliance with this term and condition.

16.12.3 If and when LAWMA reaches a volumetric limit imposed on the Granada Shares by this Decree and the Lamar Canal Company calls for water stored in The Lamar Canal Company's Article II account in John Martin Reservoir, LAWMA shall not take delivery of the consumptive use component of the Granada Shares' share of the amount of such water diverted into the Lamar Canal.

16.12.4 The terms and conditions included in this paragraph 16.12 are administrable using the Lamar Canal Company's existing diversion and measurement infrastructure.

16.13 The Lamar Canal historically has operated on a rotational basis from time to time, and such operations are expected to continue. For purposes of determining (a) when LAWMA must take delivery of the Granada Shares' under paragraph 16.5 above and (b) limitations on diversions into the Lamar Canal under paragraph 16.12 above or paragraph 16.14 below, water will be deemed to be available to the Lamar Canal Shares when the Lamar Canal is operating on a rotational basis and the Lamar Canal Shares are in rotation and will not be deemed to be available to the Granada Shares when the Lamar Canal is operating on a rotational basis and the Granada Shares are not in rotation.

16.14 If and when LAWMA simultaneously reaches a volumetric limit imposed on the Lamar Canal Shares by this Decree and a volumetric limit imposed on the Granada Shares by this Decree, and there is water available to the Lamar Canal Shares under paragraph 15.14 above and to the Granada Shares under paragraph 16.13 above, diversions into the Lamar Canal will be limited as follows:

16.14.1 Diversions under the Lamar Canal Company's direct flow water rights will be limited to the amounts listed in section 4 the table below. Diversions under the Lamar Canal Company's direct flow water rights only include diversions under Priority Nos. 3, 6½, 7½, and 13 decreed in the District 67 General Adjudication and do not include diversions of water released from the Lamar Canal Company's Article II Water.

1. Priority No.	**2.** Decreed Flowrate (cfs)	**3.** Combined Shares' CU Component (cfs)							**4.** Maximum Allowable Lamar Canal Diversion (cfs) (Col. 2 – Col. 3)						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Apr	May	Jun	Jul	Aug	Sep	Oct
3	15.75	1.24	1.25	1.31	1.29	1.17	0.99	0.78	14.51	14.50	14.44	14.46	14.58	14.76	14.97
6.5	72.09	5.68	5.73	5.98	5.88	5.35	4.54	3.57	66.41	66.36	66.11	66.21	66.74	67.55	68.52
7.5	13.64	1.07	1.09	1.13	1.11	1.01	0.86	0.67	12.57	12.55	12.51	12.53	12.63	12.78	12.97
13	184.27	14.51	14.66	15.29	15.04	13.68	11.61	9.12	169.76	169.61	168.98	169.23	170.59	172.66	175.15
Total	285.75	22.51	22.73	23.71	23.32	21.22	18.00	14.14	263.24	263.02	262.04	262.43	264.53	267.75	271.61

If less direct flow water rights water is available at the Lamar Canal's Arkansas River headgate in priority than the limits in section 4 of the table above, the Lamar Canal Company will be entitled to divert the entire amount available in priority.

16.14.2 If and when LAWMA simultaneously reaches a volumetric limit imposed on the Lamar Canal Shares by this Decree and a volumetric limit imposed on the Granada Shares by this Decree and there is water available to the Lamar Canal Shares under paragraph 15.14 above and to the Granada Shares under paragraph 16.13 above, LAWMA shall continue to take delivery of the return flow component of the Lamar Canal Shares' and the Granada Shares' share of Lamar Canal diversions and return that component to the Arkansas River pursuant to paragraphs 15.6 and 16.6 above. The continued delivery of the Lamar Canal Shares' Granada Shares' return flow component when LAWMA has reached volumetric limits on the Lamar Canal Shares and the Granada Shares will not count against the volumetric limits on the Lamar Canal Shares and the Granada Shares. At any time the Lamar Canal Company is not diverting water for delivery to shares other than the Lamar Canal Shares and the Granada Shares, LAWMA shall not require the Lamar Canal Company to call for or divert water solely to satisfy this term and condition; and in that circumstance, LAWMA will not be and is not to be deemed out of compliance with this term and condition.

16.14.3 If and when LAMWA simultaneously reaches a volumetric limit imposed on the Lamar Canal Shares by this Decree and a volumetric limit imposed on the Granada Shares by this Decree and the Lamar Canal Company calls for water stored in The Lamar Canal Company's Article II account in John Martin Reservoir, LAWMA shall not take delivery of the consumptive use

component of the Lamar Canal Shares' share and the Granada Shares' share of the amount of such water diverted into the Lamar Canal.

16.14.4 The terms and conditions included in this paragraph 16.14 are administrable using the Lamar Canal Company's existing diversion and measurement infrastructure.

16.15 LAWMA's entitlement to use consumptive use credits available to the Granada Shares for the New Uses is subject to the actual dry-up of the Granada Historically Irrigated Land. LAWMA holds recorded dry-up covenants on each of the two tracts that make up the Granada Historically Irrigated Land. Those covenants run with the land and require the landowners to dry up the tracts in accordance with their specific terms, and LAWMA is therefore entitled to such dry-up. The Granada Historically Irrigated Land dried up in accordance with this paragraph 16.15 will not be irrigated with water diverted under the Granada Shares, or with any other source of water except as described in paragraph 20.2 below.

17. XY Canal terms and conditions to prevent injury: The following terms and conditions will prevent injury from LAWMA's use of the XY 2.0 cfs as changed herein:

17.1 The amount of water physically and legally available for diversion by the XY 2.0 cfs at the XY Canal historical river headgate location will be calculated and measured in-stream at the Granada Stream Gauge as described in LAWMA's memorandum dated September 22, 2017, attached as **Exhibit E** to this Decree. To make any change to this methodology, LAWMA shall serve written notice of the proposed change on the parties herein, the Division Engineer, and ARCA. Any party or ARCA may submit comments to the Division Engineer within 56 days of such notice. Following that comment period, the Division Engineer shall approve or disapprove the proposed change in methodology by written notice served on the parties to this case and ARCA.

17.2 To quantify the consumptive use stream credits that may be applied to the New Uses, LAWMA shall apply the following monthly consumptive use factors to the river headgate diversions available to the XY 2.0 cfs, as measured and calculated in accordance with paragraph 17.1 above. LAWMA shall quantify Historical Return Flows as the portion of the river headgate diversions that is not quantified as consumptive use stream credits.

April	May	June	July	Aug.	Sept.	Oct.
72.6%	74.5%	75.8%	73.0%	74.0%	67.1%	59.2%

17.3 The consumptive use stream credits attributable to the XY 2.0 cfs will be available to LAWMA at the XY Canal historical river headgate location, and will be left undiverted in the Arkansas River for the New Uses.

17.4 LAWMA may take and use the consumptive use stream credits derived from the XY 2.0 cfs between April 1 and October 31, when the XY Canal water right is in priority.

17.5 To prevent injury to vested water rights, during the irrigation season (April 1 through October 31) LAWMA shall maintain the Historical Return Flows for the XY 2.0 cfs by limiting the consumptive use stream credits derived from the XY 2.0 cfs as provided in paragraph 17.2 of this Decree, and therefore leaving the Historical Return Flows undiverted in the Arkansas River.

17.6 The Historical Return Flows associated with the XY 2.0 cfs accrued to the Arkansas River above the headgate of the Sisson-Stubbs Ditch. To prevent injury to vested water rights, during the non-irrigation season (November 1 through March 31) LAWMA shall maintain return flows for the XY 2.0 cfs as follows:

17.6.1 LAWMA shall not divert the XY 2.0 cfs from November 1 through March 31. LAWMA shall forgo any diversions and consumptive use stream credits for the XY 2.0 cfs and leave the Historical Return Flows undiverted in the Arkansas River.

17.6.2 LAWMA's engineers have determined that because LAWMA will not be taking delivery of water available to the XY 2.0 cfs in the non-irrigation season, the operation of the condition set forth in paragraph 17.6.1 above, without more, would result in under-replacement of historical non-irrigation season return flows for the XY 2.0 cfs ("XY Winter Return Flows") in the average annual amount of 7.4 acre-feet. The XY Winter Return Flows are a component of the Historical Return Flows. To prevent injury to vested water rights and to Kansas's rights under the Compact, LAWMA shall take the following additional action to replace non-irrigation season return flows: At the beginning of each irrigation season, LAWMA shall calculate the XY Winter Return Flows as 5.5% of the river headgate diversions available to the XY 2.0 cfs during the previous irrigation season (April 1 through October 31). LAWMA shall replace the XY Winter Return Flows to the stream no later than the last day of May each year by forgoing use of consumptive use credits available to the XY 2.0 cfs. The Court finds that such return flow replacement operations will prevent injury to Colorado water users and will prevent injury to Kansas's rights under the Compact.

17.7 LAWMA shall limit river headgate diversions for the XY 2.0 cfs, as those river headgate diversions will be determined and measured as set forth in paragraph 17.1, to the volumes described in this paragraph 17.7 and its incorporated table. River headgate diversions attributable to the XY 2.0 cfs from April 1 through October 31 will be limited to a maximum cumulative volume of 5,995 acre-feet in any 44-year period; to a maximum annual volume of 329 acre-feet; and to the following maximum monthly volumes:

Month	April	May	June	July	August	September	October
Maximum volume (acre-feet)	50	63	77	71	70	55	48

17.8 LAWMA shall limit consumptive use stream depletion credits available under the to the XY 2.0 cfs to a maximum cumulative volume of 3,946 acre-feet in any 44-year period.

17.9 For purposes of starting the calculation of the 44-year cumulative river headgate diversion limit and the 44-year consumptive use stream depletion credit limit, for the 43 years prior to the first year in which the XY 2.0 cfs, or any portion thereof, is used pursuant to this Decree, LAWMA shall assume that the river headgate diversions were equal to 131.6 acre-feet per year and that the consumptive use stream depletion credits were equal to 86.8 acre-feet per year.

17.10 LAWMA's entitlement to use consumptive use credits available to the XY 2.0 cfs for the New Uses is subject to the actual dry-up of the XY Historically Irrigated Land. LAWMA holds recorded dry-up covenants on each of the two tracts that make up the XY Historically Irrigated Land. Those covenants run with the land and require the landowners to dry up the tracts in accordance with their specific terms, and LAWMA is therefore entitled to such dry-up. The XY Historically Irrigated Land dried up in accordance with this paragraph 17.10 will not be irrigated with water diverted under the XY 2.0 cfs, or with any other source of water except as described in paragraph 20.2 below.

18. Projection of the 15CW3067 Water Rights: LAWMA shall project the annual consumptive use credit yield of the 15CW3067 Water Rights as part of the annual projection required by paragraph 47.E of the 02CW181 Decree, and shall project such yield as no more than the average monthly historical consumptive use amounts of the 15CW3067 Water Rights.

19. Establishment and Maintenance of Groundcover or Dry-Land Farming Practices on the Historically Irrigated Lands: The provisions of paragraph 19 of this Decree are designed to accomplish the revegetation, noxious weed management, and erosion control of the

Historically Irrigated Lands as required by section 37-92-305(4.5)(a), C.R.S. As of the date of entry of this Decree, the Historically Irrigated Lands have been permanently removed from irrigation with the 15CW3067 Water Rights and have been dried up or are being re-irrigated with the permissible sources of water described in paragraph 20.2 below. Attached **Exhibits A-2**, **B-2**, **and C-2** depict, respectively, the individual parcels of the Lamar Canal Historically Irrigated Land, the Granada Historically Irrigated Land, and the XY Historically Irrigated Land for which LAWMA will claim dry-up credit ("Dry-Up Parcels"). Attached **Exhibits A-3**, **B-3**, **and C-3** identify, as of the date of entry of this Decree, the status of the Dry-Up Parcels within the following categories ("Revegetation Categories"): (i) irrigated with a source of water described in paragraph 20.2 below ("Irrigated Farming"); (ii) developed for non-agricultural use ("Developed Non-Ag Use"); (iii) established and maintained in native grasses or such other self-sustaining (under the conditions prevailing on the land) suitable dry-land cover with weeds adequately controlled ("Established Groundcover"); (iv) established and maintained in dry-land farming practices with weeds adequately controlled (Established Dry-Land Farming"); or (v) not Irrigated Farming, Developed Non-Ag Use, Established Groundcover, or Established Dry-Land Farming ("Not Established"). Attached **Exhibit F** specifies the criteria a Dry-Up Parcel must meet to be classified within each Revegetation Category.

19.1 Those Dry-Up Parcels that are identified on **Exhibits A-3, B-3, and C-3** as Developed Non-Ag Use, Established Groundcover, or Established Dry-Land Farming are referred to collectively in this Decree as the "Phase I Land." The Phase I Land is not subject to the Court's retained jurisdiction under this Decree or to any further requirements under this paragraph 19.

19.2 Those Dry-Up Parcels that are identified on **Exhibits A-3, B-3, and C-3** as Irrigated Farming or Not Established are referred to collectively in this Decree as the "Phase II Land." Subject to paragraph 20.2 below, and within the Compliance Period defined in paragraph 22 below, LAWMA shall ensure that each parcel of Phase II Land is established and maintained as Established Groundcover, Established Dry-Land Farming, or Developed Non-Ag Use, all with weeds adequately controlled, in accordance with the criteria specified in **Exhibit F** ("Revegetated"). When a parcel of Phase II Land has been accepted as Revegetated under the process described in paragraph 19.3 below, the parcel will be classified as "Confirmed Revegetated" in future Annual Revegetation Status Reports filed under paragraph 21 below.

19.3 When a parcel or multiple parcels of Phase II Land has/have been Revegetated as required by paragraph 19.2 above, LAWMA shall file a report with the Court demonstrating that the parcel or parcels has/have been Revegetated ("Revegetated Parcel(s) Report"). Each Revegetated Parcel(s) Report must be prepared by a

person accepted by the Court as an expert on revegetation pursuant to C.R.E. 702. If any party to this case disagrees with the conclusions documented in a Revegetated Parcel(s) Report, such party may submit objections for the Court's consideration within 45 days after service of such report. The Court will retain jurisdiction to resolve disputes regarding any Revegetated Parcel(s) Report. If no objections are filed within the 45-day period, or if the Court confirms the conclusions documented in a disputed Revegetated Parcel(s) Report, the report will be deemed accepted and all parties will be bound by the conclusions documented in the report. Once a Revegetated Parcel(s) Report has been accepted, LAWMA will have met the requirements of paragraph 19.2 above with respect to the parcel(s) described in that report and will have no further obligations with respect to revegetation of such parcel(s). LAWMA may file Revegetated Parcel(s) Reports as part of or separate from an Annual Revegetation Status Report required by paragraph 21 below.

20. Development for non-agricultural uses and irrigation of the Historically Irrigated Lands:

20.1 Consistent with paragraph 19 above, this Decree is not intended to prevent the owner of any particular parcel(s) of the Phase II Land from developing that land for other uses. The requirements of paragraph 19.2 above do not and will not apply to any Revegetation Parcel if and when such parcel is developed for non-agricultural uses in accordance with the criteria specified for Developed Non-Ag Use in **Exhibit F**.

20.2 Consistent with paragraph 19 above, this Decree also is not intended to prevent the owner of any particular parcel(s) of the Phase II Land from re-irrigating that land with one or more of the following sources, which do not include water available to the 15CW3067 Water Rights: (i) surface water from a source authorized by a future Water Court decree or by a final and unappealable substitute water supply plan approved by the State Engineer; (ii) ground water diverted pursuant to a Water Court-approved plan for augmentation or a substitute supply plan approved by the State Engineer; (iii) ground water diverted from a permitted exempt well; (iv) water supplied by a municipal or quasi-municipal entity, provided that use of such water for re-irrigation of the Phase-II land is consistent with all relevant Water Court decrees or substitute water supply plan approvals; or (v) water available pursuant to a statutorily authorized water banking arrangement (collectively, "Re-Irrigation Sources").

20.2.1 The requirements of paragraph 19.2 above do not and will not apply to any parcel of the Phase II Land during the period such parcel is being irrigated with one or more of the Re-Irrigation Sources ("Re-Irrigated Phase II

Parcel"). When irrigation of a Re-Irrigation Phase II Parcel has ceased, LAWMA shall file notice with the Court, with service on the parties herein, that the requirements of paragraph 19.2 have been triggered for that parcel.

20.2.2 Within 5 years of filing notice of the cessation of irrigation of any Re-Irrigated Phase II Parcel, as described in paragraph 20.2.1 above, LAWMA shall ensure that such parcel is Revegetated in accordance with paragraph 19.2 above. When a Re-Irrigated Phase II Parcel has been Revegetated, LAWMA shall file a Revegetated Parcel(s) Report as described in paragraph 19.3 above.

21. Annual Revegetation Status Report: Until each parcel of Phase II Land identified as Not Established on **Exhibits A-3, B-3,** and **C-3** has been Revegetated, as confirmed by an accepted Revegetated Parcel(s) Report, on or before December 1 of each year, LAWMA shall produce and serve upon the objectors in this case an Annual Revegetation Status Report containing the information specified in this paragraph and **Exhibit F**. The Annual Revegetation Status Report must be prepared by a person accepted by the Court as an expert on revegetation pursuant to C.R.E. 702, and must classify each parcel of the Phase II Land as Irrigated Farming, Developed Non-Ag Use, Established Groundcover, Established Dry-Land Farming, Not Established, or Confirmed Revegetated based on the revegetation expert's inspection of each parcel during September, October, or November of that year. The Annual Revegetation Status Report may classify as Confirmed Revegetated only those parcels that are the subject of an accepted Revegetated Parcel(s) Report.

22. Compliance Period for Phase II Land: For parcels of Phase II Land classified as Not Established on Exhibits **A-3, B-3,** and **C-3**, LAWMA will have a period of ten years from the date of entry of this Decree ("Compliance Period") to ensure that such parcels are Revegetated in accordance with paragraph 19.2 above.

22.1 The Water Court may extend the Compliance Period, upon petition by LAWMA under retained jurisdiction, for all or a portion of the Phase II Land upon a showing by LAWMA that its efforts to establish and maintain Established Groundcover or Established Dry-land Farming have been hindered due to circumstances beyond LAWMA's control, including fire, hail storms, wind storms, tornadoes, flooding, and freezes after May 15th and before September 15th of any year. The Water Court shall extend the Compliance Period, upon petition by LAWMA under retained jurisdiction, for one year for each year the amount of precipitation measured at the Lamar precipitation station falls below 80% of the March through August average of 10.4 inches (1950-2004 average).

22.2 Subject to the terms and conditions of paragraph 20.2 above, if the parcels of Phase II Land classified as Not Established on Exhibits **A-3, B-3,** and **C-3** are not Revegetated by the end of the Compliance Period (as it may be extended by the Water Court under retained jurisdiction), then LAWMA shall calculate as described in paragraphs 22.2.1 and 22.2.2 below the amount of water available to the 15CW3067 Water Rights as changed herein. All years referred to in paragraphs 21.2.1 and 21.2.2 below (e.g., "Year 1," "Year 2") are the number of years following the end of the Compliance Period. LAWMA shall demonstrate through its accounting that it has not taken credit for consumptive use credit, if any, that LAWMA is required to forgo under this paragraph.

22.2.1 Lamar Canal Shares and Granada Shares:

22.2.1.1 Year 1: Multiply the farm headgate deliveries available to the Lamar Canal Shares and the Granada Shares under each of the Lamar Canal priorities by the greater of either (a) the number of acres of the Phase I Land under the Lamar Canal and the Granada Lateral plus the number of acres of the Phase II Land under the Lamar Canal and the Granada Lateral classified as Established Groundcover, Established Dry-Land Farming, and/or Developed Ag Use, or Confirmed Revegetated in the most recent Annual Revegetation Status Report, plus the number of acres of the Phase II Land under the Lamar Canal and the Granada Lateral that make up Re-Irrigated Phase II Parcels, divided by 1,611.4 acres ("Percentage of Lamar-Granada Completion"); or (b) 80%. In no event may LAWMA's total annual farm headgate deliveries associated with the Lamar Canal Shares and the Granada Shares exceed the greater of 80% or the Percentage of Lamar-Granada Completion, multiplied by LAWMA's annual maximum of farm headgate deliveries to the Lamar Canal Shares (as described in paragraph 15.8 above) and the Granada Shares (as described in paragraph 16.8 above) (the "Combined Lamar-Granada Annual Volumetric Limit")

22.2.1.2 Year 2: Multiply the farm headgate deliveries available to the Lamar Canal Shares and the Granada Shares under each of the Lamar Canal priorities by the greater of either (a) the Percentage of Lamar-Granada Completion; or (b) 60%. In no event may LAWMA's total annual farm headgate deliveries associated with the Lamar Canal Shares and the Granada Shares exceed the greater of 60% or the Percentage of Lamar-Granada Completion

multiplied by the Combined Lamar-Granada Annual Volumetric Limit.

22.2.1.3 Year 3: Multiply the farm headgate deliveries available to the Lamar Canal Shares and the Granada Shares under each of the Lamar Canal priorities by the greater of either (a) the Percentage of Lamar-Granada Completion; or (b) 40%. In no event may LAWMA's total annual farm headgate deliveries associated with the Lamar Canal Shares and the Granada Shares exceed the greater of 40% or the Percentage of Lamar-Granada Completion multiplied by the Combined Lamar-Granada Annual Volumetric Limit.

22.2.1.4 Year 4: Multiply the farm headgate deliveries available to the Lamar Canal Shares and the Granada Shares under each of the Lamar Canal priorities by the greater of either (a) the Percentage of Lamar-Granada Completion; or (b) 20%. In no event may LAWMA's total annual farm headgate deliveries associated with the Lamar Canal Shares and the Granada Shares exceed the greater of 20% or the Percentage of Lamar-Granada Completion multiplied by the Combined Lamar-Granada Annual Volumetric Limit.

22.2.1.5 Year 5 and on: Multiply the farm headgate deliveries available to the Lamar Canal Shares and the Granada Shares under each of the Lamar Canal priorities by the greater of either (a) the Percentage of Lamar-Granada Completion; or (b) 0%. In no event may LAWMA's total annual farm headgate deliveries associated with the Lamar Canal Shares and the Granada Shares exceed the Percentage of Lamar-Granada Completion multiplied by the Combined Lamar-Granada Annual Volumetric Limit.

22.2.2 XY 2.0 cfs:

22.2.2.1 Year 1: Multiply 2.0 cfs by the greater of either (a) the number of acres of the Phase I Land under the XY Canal plus the number of acres of the Phase II Land under the XY Canal classified as Established Groundcover, Established Dry-Land Farming, Developed Ag Use, and or Confirmed Revegetated in the most recent Annual Revegetation Status Report, plus the number of acres of the Phase II Land under the XY Canal that make up Re-Irrigated Phase II Parcels, divided by 92.8 acres (the "Percentage

of XY Completion") or (b) 80%. In no event may LAWMA's total annual river headgate diversions associated with the XY 2.0 cfs exceed the greater of 80% or the Percentage of XY Completion multiplied by LAWMA's annual maximum of river headgate diversions under the XY 2.0 cfs (as described in paragraph 17.7 above) ("XY Annual Volumetric Limit")

22.2.2.2 Year 2: Multiply 2.0 cfs by the greater of either (a) the Percentage of XY Completion; or (b) 60%. In no event may LAWMA's total annual river headgate diversions associated with the XY 2.0 cfs exceed the greater of 60% or the Percentage of XY Completion multiplied by the XY Annual Volumetric Limit.

22.2.2.3 Year 3: Multiply 2.0 cfs by the greater of either (a) the Percentage of XY Completion; or (b) 40%. In no event may LAWMA's total annual river headgate diversions associated with the XY 2.0 cfs exceed the greater of 40% or the Percentage of XY Completion multiplied by the XY Annual Volumetric Limit.

22.2.2.4 Year 4: Multiply 2.0 cfs by the greater of either (a) the Percentage of XY Completion; or (b) 20%. In no event may LAWMA's total annual river headgate diversions associated with the XY 2.0 cfs exceed the greater of 20% or the Percentage of XY Completion multiplied by the XY Annual Volumetric Limit.

22.2.2.5 Year 5: Multiply 2.0 cfs by the greater of either (a) the Percentage of XY Completion; or (b) 0%. In no event may LAWMA's total annual river headgate diversions associated with the XY 2.0 cfs exceed the greater of the Percentage of XY Completion multiplied by the XY Annual Volumetric Limit.

22.3 The portion of the water rights for which LAWMA must forgo taking consumptive use stream credits under paragraphs 21.2.1 and 21.2.2 above ("Forgone Credits") may be used by LAWMA for the New Uses, by means of augmentation and replacement, but only for purposes of establishing and maintaining Established Groundcover on all or any portion of the Phase II Land. In addition, within twenty years of the date of entry of this Decree, such Forgone Credits may be leased by LAWMA downstream of John Martin Reservoir and the funds used to establish and maintain Established Groundcover on all or any portion of the Phase II Land. If LAWMA leases the Forgone Credits, it shall hold the revenues from such lease in trust for satisfying LAWMA's obligations under paragraph 19.2 of this Decree. LAWMA shall provide the Court and counsel of record for the parties hereto with

an annual accounting of the proceeds from any such lease. Any use or lease of such Forgone Credits pursuant to this paragraph 22.3 must be in accordance with the terms and conditions of this Decree and/or subsequent decrees of the Water Court, or as approved by the State Engineer.

23. Alteration of provisions regarding replacement of Granada Winter Return Flows and XY Winter Return Flows: The operations described in paragraphs 15, 16, and 17 above will ensure that the Historical Return Flows are replaced in location and amount on an annual basis, but will result in the Granada Winter Return Flows and the XY Winter Return Flows being replaced during the irrigation season rather than during the non-irrigation season. The evidence shows that replacing the Historical Return Flows in this pattern will not injure any Colorado water rights and will not violate the Compact. If, however, it is determined that the Compact requires return flows owed to the Stateline under this Decree or the 02CW181 Decree to be delivered in a manner that matches historical return flows in timing, LAWMA will invoke the Court's retained jurisdiction under paragraph 48.5 below to amend this Decree to require replacement of the Historical Return Flows owed to the Stateline in a manner that matches historical Stateline return flows in timing. Such a determination must take the form of one of the following: (i) an agreement between Colorado and Kansas that is approved by the Colorado State Engineer, the Kansas Chief Engineer, and ARCA; or (ii) a final determination under the dispute resolution provisions of the decree in Kansas v. Colorado, No. 105, Original.

24. Agreement "B": The water users of former Water District 67 and the water users of former Water Districts 14 and 17 have entered into an agreement known as Agreement "B" that provides a method for determining when a call from Water District 67 will be enforced above John Martin Reservoir. So long as Agreement "B" remains in force and effect, the change of the 15CW3067 Water Rights sought herein will be administered in a manner that is consistent with Agreement "B." Further, so long as Agreement "B" remains in force and effect, "summer stored water," as defined in Agreement "B," may be transferred into the Offset Account in John Martin Reservoir or released for the New Uses from the XY Graham Article II Storage Account in John Martin Reservoir at any rate. LAWMA, however, may not place a call against water rights above John Martin Reservoir for the XY 2.0 cfs until all of the "summer stored water" in the XY Graham Article II Storage Account has been paper-evacuated in accordance with the following accounting procedure: LAWMA shall account for paper-evacuation of "summer stored water" from the XY Graham Article II Storage Account at a rate of 20.0 acre-feet per day from April 1 through October 31 of each year until all of said water has been accounted for as being paper evacuated from the XY Graham Article II Storage Account. This accounting will be conducted in accordance with procedures of the Division Engineer established for the regular John Martin Reservoir accounting, taking into account inflows, releases, and spills. LAWMA shall provide this accounting to the Division Engineer with a copy to the

Arkansas Valley Ditch Association between five and ten days (calculated to exclude weekends and holidays pursuant to C.R.C.P. 6) prior to the time the accounting shows that the XY Graham Article II Storage Account will be paper evacuated. There are no flow rate limitations on the release of "summer stored water" from the Lamar Canal Article II Storage Account.

25. Use of the 15CW3067 Water Rights in LAWMA's Augmentation Plan, Rule 14 Plans, and Rule 10 Plans, and under future change decrees: The terms and conditions in this Decree will apply to and govern the use of the 15CW3067 Water Rights for the New Uses in LAWMA's Augmentation Plan, Rule 14 Plans, and Rule 10 Plans.

26. Requests to use the 15CW3067 Water Rights in substitute water supply plans: In any request to use the 15CW3067 Water Rights as a replacement supply in a substitute water supply plan pursuant to § 37-92-308, C.R.S., LAWMA shall propose as a term and condition of approval that such use be consistent with the terms and conditions in this Decree.

27. No injury or violation of the Arkansas River Compact: Use of the 15CW3067 Water Rights for the New Uses in compliance with the terms and conditions of this Decree, including both direct use and use after storage in the West Farm Gravel Pit described in paragraph 14.3.1 above, and the addition of the 15CW3067 Water Rights as changed herein to the LAWMA Augmentation Plan will not materially injure the water rights of any owner or user of any vested water right or decreed conditional water right, and will not violate or cause a violation of the Compact.

28. Approval of change of water rights: The change of water rights described in paragraph 14 above is in accordance with law and should be granted subject to the terms of this Decree.

29. Approval of addition of changed water rights to Augmentation Plan: The addition of the 15CW3067 Water Rights as changed herein to the LAWMA Augmentation Plan is in accordance with paragraph 41.A of the 02CW181 Decree and in accordance with law, and should be approved subject to the terms of this Decree and the 02CW181 Decree.

CONCLUSIONS OF LAW

30. Incorporation: The foregoing Findings of Fact are incorporated herein as part of these Conclusions of Law.

31. Consistent with law: The application is contemplated and authorized by law. C.R.S. § 37-92-302(1)(a).

32. Notice and jurisdiction: The Water Court for Water Division No. 2 has jurisdiction over the subject matter of these proceedings and over all persons, property, and water rights that may be affected hereby, whether or not those persons have chosen to appear. The Application in this matter and the resume publication of the Application placed such persons on notice of the relief requested by the Application and granted by this Decree.

33. Compliance with Arkansas River Compact: The Application seeks approval of a change of the 15CW3067 Water Rights so that, among other things, they may be used to replace stream depletions to stateline flows. This Court has jurisdiction to determine the beneficial uses that may be made of Colorado water rights, including whether the 15CW3067 Water Rights and associated Article II Water can be used to replace depletions to stateline flows and can be used for augmentation and replacement purposes and other beneficial uses specified in this Decree. The Court concludes that the 15CW3067 Water Rights and associated Article II Water may lawfully be used to replace depletions to stateline flows under the Compact and may lawfully be used for augmentation and replacement purposes and the other beneficial uses described in this Decree. The Court has no jurisdiction over the State of Kansas in determining that this change of water rights will not violate the Compact. However, the Court is required to determine the effect of this change of water rights on compliance with the Compact. *SE Colo. Water Conservancy Dist. v. Fort Lyon Canal Co.*, 720 P.2d 133, 150 (Colo. 1986). The Court has considered the Compact and concludes that, if implemented in accordance with the terms and conditions imposed by this Decree, this change of water rights will not violate the Compact.

34. Change of water rights: The change of water rights requested by LAWMA is permissible and contemplated by law, and satisfies the requirements of § 37-92-101 – § 37-92-602, C.R.S. If implemented subject to the terms and conditions imposed by this Decree, this change will not cause injury to the owner or user of any vested water right or decreed conditional water right.

35. Addition of changed water rights to Augmentation Plan: The addition of the 15CW3067 Water Rights as changed herein to the LAWMA Augmentation Plan is permissible and contemplated by law, and satisfies the requirements of § 37-92-101 – § 37-92-602, C.R.S. If implemented subject to the terms and conditions imposed by this Decree and the 02CW181 Decree, such addition will not cause injury to the owner or user of any vested water right or decreed conditional water right.

36. Retained jurisdiction limitations: Pursuant to § 37-92-304(6), C.R.S., the Court is required to retain jurisdiction over the change of water rights decreed herein for some period following entry of this Decree, such period to be determined by the Court, to reconsider the question of injury to the vested rights of others as a result of the change of water rights. The Court will retain jurisdiction as more particularly described in paragraphs 47 and 48

below on the specific matters described therein, as well as on the question of injury to the vested rights of others. For all other purposes, this judgment and decree is final.

37. Retention of dominion: Dominion over water depends on a water user's intent and ability to quantify and use a certain quantity of water which may be distinguished by volume from other water in a stream. *Pub. Serv. Co. v. Willows Water Dist.*, 856 P.2d 829, 833 (Colo. 1993). LAWMA has the intent and ability to maintain dominion over, and to use for the purposes adjudicated by this Decree, the consumptive use stream credits derived from the 15CW3067 Water Rights until they are used for the New Uses pursuant to the terms of this Decree.

38. Administrability: The change of the 15CW3067 Water Rights and addition of the 15CW3067 Water Rights as changed herein to LAWMA's Augmentation Plan are administrable by the officials of the State of Colorado, so long as operated in accordance with the terms of this Decree.

39. Requirements, standards and burden of proof: LAWMA has complied with all requirements and met all standards and burdens of proof, including but not limited to §§ 37-92-302, 37-92-304 and 37-92-305, C.R.S., and is therefore entitled to a decree confirming and approving the claims in the Application.

DECREE OF THE WATER COURT

40. Incorporation: The foregoing Findings of Fact and Conclusions of Law, together with all attached Exhibits, are fully incorporated into this Decree.

41. Change of water rights: The application for change of water rights described herein is hereby approved, adjudicated, and decreed.

42. Addition of changed water rights to decreed augmentation plan: The application for addition of the 15CW3067 Water Rights to the LAWMA Augmentation Plan as described herein is hereby approved, adjudicated, and decreed.

43. No injury and no Compact violation: The terms and conditions provided for in this Decree are adequate to ensure that no injury to any water users will occur from the operation of the change of water rights or addition of the 15CW3067 Water Rights to the LAWMA Augmentation Plan, and are adequate to ensure that the Compact will not be violated as a result of such operations.

44. Accounting: LAWMA has demonstrated an appropriate method for accounting for diversions associated with the operation of the change of water rights. The initial accounting form is attached as **Exhibit G**. LAWMA shall integrate its accounting under

this Decree with the accounting for the 02CW181 Decree, and shall include in such accounting, at minimum, the following data, tracked on a daily basis: (i) measured diversion at the Lamar Canal headgate, (ii) measured diversion at the alternate point of diversion approved by the W-1836 Decree, (iii) measured diversion of Lamar Canal Company's direct flow water rights, (iv) measured diversion of Lamar Canal Company's Article II Water from John Martin Reservoir, (v) number of Lamar Canal Shares and number of Granada Shares delivered to the West Farm Gravel Pit and the measured delivery of direct flow sources (excluding Lamar Article II Water unless restorage of Lamar Article II Water is approved under paragraphs 14.3.3 and 48.6 of this Decree) to those shares, (vi) the amount and location of Historical Return Flows owed based on deliveries of Lamar Canal Shares and Granada Shares to the West Farm Gravel Pit, (vii) the amount and location of measured deliveries to replace the Historical Return Flows owed based on deliveries of Lamar Canal Shares and Granada Shares to the West Farm Gravel Pit pursuant to paragraph 14.3.2 of this Decree, (viii) number of Lamar Canal Shares and number of Granada Irrigation Company shares delivered at each augmentation station, (ix) the portion of the measured delivery at each augmentation station that falls into each of the following categories: the decree in Case No. 02CW181, this Decree, LAWMA's Rule 14 Plan, LAWMA's Rule 10 Compact Compliance Plan, any other Rule 14 Plan, any other Rule 10 Plan and any other deliveries, (x) the total amount of water physically and legally available for diversion by the XY Canal quantified at the Granada Stream Gauge (xi) the amount of water physically and legally available for diversion by the XY 2.0 cfs, (xii) consumptive use credits delivered to the Lamar Canal Shares and the Granada Shares at each augmentation station and the consumptive use credits for the XY 2.0 cfs; (xiii) cumulative total of farm headgate deliveries to the Lamar Canal Shares, tracked alongside the volumetric limits provided in paragraph 15 of this Decree; (xiv) cumulative total of farm headgate deliveries to the Granada Shares, tracked alongside the volumetric limits provided in paragraph 16 of this Decree; (xv) cumulative total of river headgate deliveries to the XY 2.0 cfs, tracked alongside the volumetric limits provided in paragraph 17 of this Decree; (xvi) amounts of transportation losses assessed in accordance with paragraph 45; (xvii) Arkansas River call by priority and location; (xviii) the amount of Granada Winter Return Flows and the amount of XY Winter Return Flows that must be replaced before May 31; and (xix) Granada Winter Return Flows and XY Winter Return Flows replacement deliveries by location and water rights source.

LAWMA shall file with the Division Engineer, on a monthly basis, all accounting records required by this Decree. LAWMA may modify its accounting forms at the reasonable request of or as approved by the Division Engineer provided that LAWMA shall provide written notice to opposers of the proposed amendments to the accounting form no less than 35 days before they are approved by the Division Engineer. The accounting forms shall always include, at minimum, the information required by this Decree and included on **Exhibit G**.

45. Transportation losses: When water available under the 15CW3067 Water Rights is transported in the Arkansas River or its tributaries for any of the purposes adjudicated by this Decree, the Division Engineer or his designated representative, when determining the amount of water available for use by LAWMA, shall assess reasonable losses resulting from such transportation in the same manner as for other water users using the stream for carriage.

46. No precedent: There was no trial in this matter and no issues were litigated. The Findings of Fact, Conclusions of Law, and Decree of the Water Court were completed as the result of substantial discussions, negotiations and compromises by, between and among LAWMA and the several objectors pertaining to all parts of the findings, conclusions, and decree and are based on the specific characteristics of the irrigation ditches and water rights that are the subject of this Decree, including the historical use and operation of those ditches and water rights. The parties hereto specifically understand and agree, and the Court finds and concludes the following:

46.1 The acquiescence of the parties to a stipulated decree under the specific factual and legal circumstances of this contested matter and upon the numerous and interrelated compromises reached by the parties shall never give rise to any argument, claim, defense or theory of acquiescence, waiver, bar, merger, *stare decisis*, *res judicata*, estoppel, laches, or otherwise, nor to any engineering, administrative or judicial practice or precedent, by or against any of the parties hereto in any other matter, case or dispute, nor shall testimony concerning such acquiescence of any party to a stipulated decree herein be allowed in any other matter, case or dispute.

46.2 This Findings of Fact, Conclusions of Law, and Decree of the Water Court shall not have the effect of precedent or preclusion on any factual or legal issue in any other matter.

46.3 The parties hereto reserve the right to propose or to challenge any legal or factual position in any other change of water rights, plan for augmentation or other matter filed in this or any other court without limitation by these findings, conclusions, and decree.

47. General retained jurisdiction: In accordance with § 37-92-304(6), C.R.S., the portions of this Decree authorizing the change of water rights will be subject to reconsideration by the Water Judge on the question of injury to vested rights of others that may result from operation of the change of water rights, including but not limited to injury resulting from changes in historical patterns of calls or return flows or from ineffective dry-up of the Historically Irrigated Lands, for a period of fifteen years from the date of this Decree. However, all findings of fact, conclusions of law and rulings of this Court quantifying the historical consumptive use of the 15CW3067 Water Rights changed by this Decree are

final and not subject to reconsideration. *Farmers Reservoir & Irrigation Co. v. Consol. Mut. Water Co.*, 33 P.3d 799, 805 (Colo. 2001) ("[H]istoric consumptive use determinations are not susceptible to redetermination under the retained jurisdiction provision."). Pursuant to § 37-92-304(6), C.R.S., the five-year period of retained jurisdiction may be extended upon further decision by the Water Judge that the nonoccurrence of injury has not been conclusively established.

48. Perpetual retained jurisdiction: In addition to the general retained jurisdiction described in paragraph 47 above, the Court specifically retains perpetual jurisdiction over the following matters:

48.1 To review any disputed proposed addition of an augmentation station pursuant to paragraph 15.3 above.

48.2 To consider any petition to extend the Compliance Period filed pursuant to paragraph 22.1 above.

48.3 To resolve any timely-filed objection to a Revegetated Parcel(s) Report pursuant to paragraph 19.3 above.

48.4 To review the modification, termination or expiration of the 1980 Operating Plan, the Offset Account Resolution, or the Offset Account Crediting Agreement, and the effect the modification, termination or expiration may have on the change of water rights decreed herein.

48.5 To review any changes in the H-I Model, changes to the methodology for determining Compact compliance under the Arkansas River Use Rules, changes in the methodology for determining Compact compliance pursuant to agreements between Colorado and Kansas that are approved by the Colorado State Engineer, the Kansas Chief Engineer, and ARCA, changes in the methodology for determining Compact compliance pursuant to final determinations under the dispute resolution provisions of the decree in Kansas v. Colorado, No. 105, Original or otherwise, or changes that may be ordered by the United States Supreme Court pursuant to its retained jurisdiction in Kansas v. Colorado, or in further proceedings in Kansas v. Colorado or any other original jurisdiction action involving the Compact to protect the rights of the State of Kansas under the Compact, which changes lead any party herein to seek modification of this Decree with respect to such change. If the conflict between such change and this Decree is indisputable, LAWMA shall voluntarily file a motion to amend this Decree as required by the change. Otherwise, the party seeking such modification shall have the burden of establishing a *prima facie* case that such amendment is required by the change or is otherwise necessary to prevent injury to the vested rights of Colorado water users

or to prevent a Compact violation. Such jurisdiction must be invoked within three years of the time of the change described in this paragraph 48.5. The period for invoking such jurisdiction may be extended beyond three years upon motion by any party before the close of the three-year period, and upon conclusion by the Court that non-injury or Compact compliance has not been conclusively established.

48.6 Consistent with paragraph 14.3.3 above, to consider whether ARCA's action with respect to a request by LAWMA to re-store, in the West Farm Gravel Pit, water that was stored in John Martin Reservoir in the Lamar Canal Company's Article II Account requires any further or different terms and conditions in this Decree with respect to such re-storage.

49. Procedure for general retained jurisdiction: Any party seeking to invoke the retained jurisdiction of the Court pursuant to paragraph 47 shall file a petition with the Court under the caption and case number of this Decree and shall serve a copy of the petition on the counsel of record for all parties to the case and ARCA. The party who files such a petition must plead sufficient facts which, if proved, meet its burden of going forward to show that injury has occurred or is likely to occur based on operational experience involving the change of water rights decreed herein. If the petition alleges such facts, the Court will conduct additional proceedings. In such additional proceedings, the petitioner has the burden of going forward with sufficient evidence that injury has occurred or is likely to occur because the existing decree is inadequate to preclude or remedy injury. If the petitioner meets its burden of going forward, the burden of establishing non-injury and the existence of adequate provisions in the existing decree to preclude and remedy injury rests upon LAWMA. Following presentation of the parties' evidence, the Court will make findings of fact and conclusions of law on the issues of non-injury and, if appropriate, amend the decree for the purpose of precluding and remedying injury. If the Court finds that insufficient operational experience exists to permit it to consider the question of injury or to conclusively establish non-injury, it will extend the period of retained jurisdiction by an additional specified period in the amended decree pursuant to C.R.S. § 37–92–304(6).

50. Administration of the Historically Irrigated Lands: The Historically Irrigated Lands will be administered in accordance with the Administration of Parcels Claimed for Augmentation Credit Agreement between the State of Colorado and the State of Kansas dated September 30, 2005, as such agreement may be amended.

51. Use of structures: Nothing in this Decree creates or enlarges, or is to be construed as creating or enlarging, any right of LAWMA to utilize land or structures owned by parties other than LAWMA. LAWMA may utilize existing water diversion, carriage, and storage structures only to the extent it has acquired the right to use such structures from the appropriate entities by purchase or other means.

52. Filing with Water Clerk: It is ordered that this Decree be filed with the Water Clerk, and that it become effective upon such filing.

53. Filing with State and Division Engineers: It is further ordered that a copy of this Decree be filed with the Division Engineer for Water Division 2 and the State Engineer.

DATED: February 25, 2019

BY THE COURT:

LARRY C. SCHWARTZ, WATER JUDGE
WATER DIVISION 2

DATE FILED: February 22, 2019 4:55 PM

Attachment 1 to Order 2015CV3067

R 47 W | R 46 W | R 46 W | R 45 W | R 45 W | R 44 W | R 44 W | R 43 W

T 21 S | T 22 S | T 23 S

Arkansas River @ Lamar, CO

Lamar Canal Headgate

Lamar Canal Measurement Flume

Lamar West Farm Augmentation Station

Lamar Light & Power Return Flow

Center Farm Augmentation Station

Arkansas River near Granada, CO

Granada West Augmentation Station

Granada East Augmentation Station

Legend

- Arkansas River Gaging Stations
- Lamar Canal Headgate
- Lamar Canal Features
- Lamar Canal
- Granada Lateral
- West Farm Augmentation Station
- Center Farm Augmentation Station
- Granada East & West Augmentation Stations
- Higbee West Farm Historically Irrigated Acreage
- DJC-Koehn Farm Historically Irrigated Acreage
- Grasmick Lamar Farm Historically Irrigated Acreage
- Farms where Lamar Canal Shares were used

0 0.75 1.5 3

Miles

N W E S

Hendrix Wai Engineering, Inc.

Job No. L101

File: Exhibit A1 Decree.mxd

Date: 01/31/17

Prepared For: LAWMA

Exhibit A1

Parcels Historically Irrigated with the Lamar Canal Shares

Copyright © 2013 National Geographic Society, i-cubed

R 45 W

R 44 W

T 22 S

T 23 S

22453621
22453602
22453615
22453605
22443105
22443101
22443102
22443111
22443205
22443218
22443211
22443201
22443204
22443203
22443217
22453403
22453404
22453415
22453407
22453417
22453406
22453416
22453405
22453613
22453614
22453608
22443103
22443109
23450301
23440502
23440503
23440412
23440420
23440512
23440401
23440504
23440408
23440423

Attachment to Order - 2015CW3067

Legend

Dry-Up Parcels

0 1,000 2,000 4,000

Scale in Feet

N W E S

Hendrix Wai Engineering, Inc.

Job No. L7501

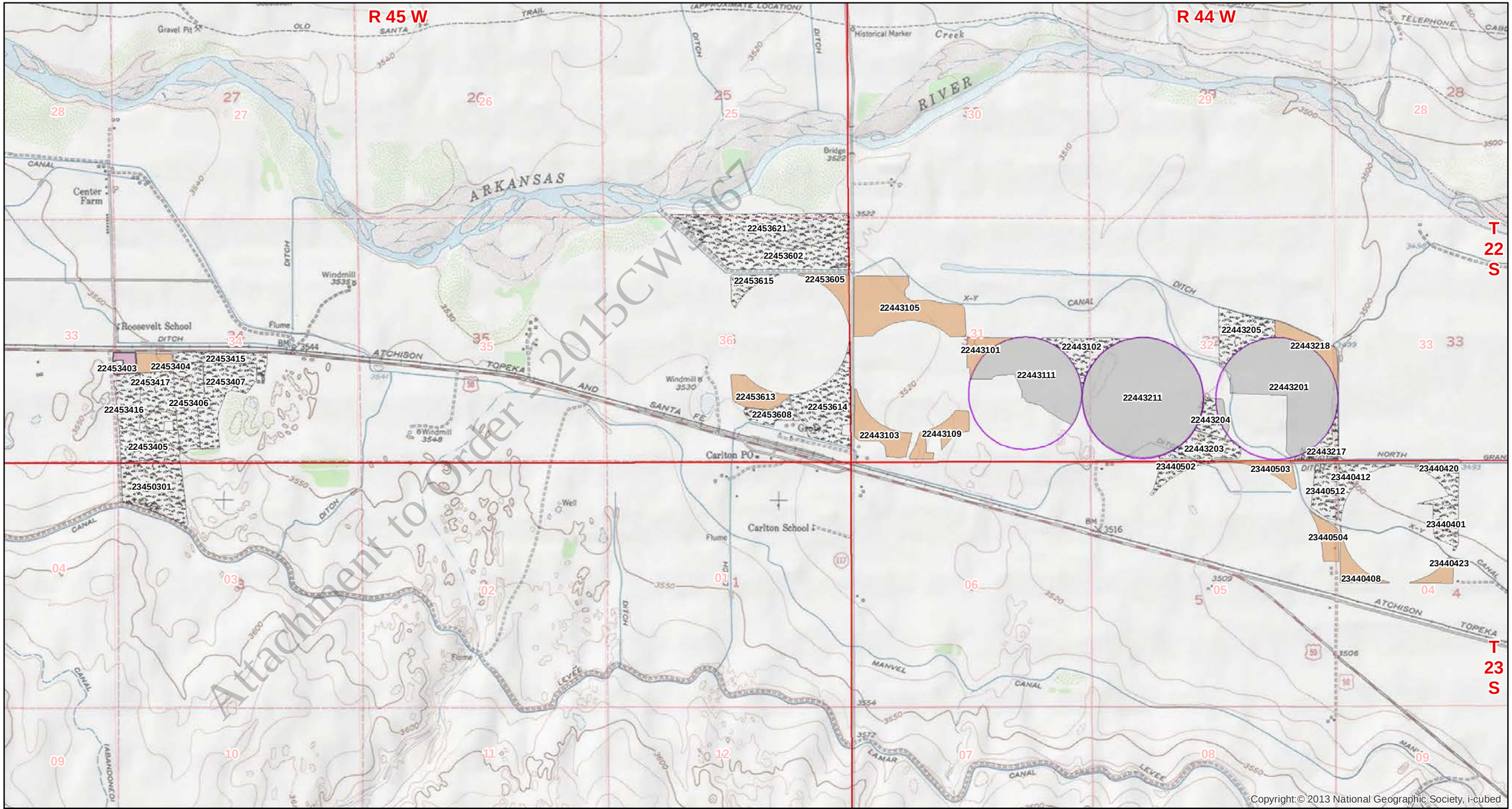
File: Exhibit A2 Decree.mxd

Date: 01/08/19

Prepared For: LAWMA

Exhibit A2

15CW3067 Dry-Up Parcels Lamar Canal



Attachment to Order - 2015CW3067

Copyright:© 2013 National Geographic Society, i-cubed

Legend

- Phase I - Developed Non-Ag Use
- Phase I - Established Groundcover
- Phase II - Irrigated Farming
- Phase II - Not Established
- Center Pivot Sprinkler

0 1,000 2,000 4,000

Scale in Feet

N W E S

Hendrix Wai Engineering, Inc.

Job No. L7501

File: Exhibit A3 Decree.mxd

Date: 01/07/2019

Prepared For: LAWMA

Exhibit A3

Revegetation Status of 15CW3067 Dry-Up Parcels Lamar Canal

Exhibit A3
Revegetation Status of Lamar Canal Dry-Up Parcels

Parcel No.	Acres	Dev'd - Non Ag Use (acres)	Irrigated Farming (acres)	Est'd Dryland Farming (acres)	Established Ground Cover (acres)	Not Established (acres)	If Irrigated Farming, WDID #(s) of sources of irrigation water	If Irrigated Farming, well permit #(s) of well(s) that supply irrigation water	If Irrigated Farming, case #(s) of augmentation plan(s) of sources of irrigation water
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
22443101	7.6	0.0	0.0	0.0	0.0	7.6			
22443102	15.2	0.0	0.0	0.0	15.2	0.0			
22443103	16.3	0.0	0.0	0.0	0.0	16.3			
22443105	46.7	0.0	0.0	0.0	0.0	46.7			
22443109	11.7	0.0	0.0	0.0	0.0	11.7			
22443111	56.7	0.0	56.7	0.0	0.0	0.0	6705543, 6705545, 6705546	3124-F, 3642-F, 15620-R	14CW3004, 02CW181
22443201	84.2	0.0	84.2	0.0	0.0	0.0	6705543, 6705545, 6705546	3124-F, 3642-F, 15620-R	14CW3004, 02Cw181
22443203	15.7	0.0	0.0	0.0	15.7	0.0			
22443204	7.6	0.0	0.0	0.0	7.6	0.0			
22443205	20.6	0.0	0.0	0.0	20.6	0.0			
22443211	122.1	0.0	122.1	0.0	0.0	0.0	6705543, 6705545, 6705546	3124-F, 3642-F, 15620-R	14CW3004, 02CW181
22443217	8.7	0.0	0.0	0.0	8.7	0.0			
22443218	11.3	0.0	0.0	0.0	0.0	11.3			
22453403	4.5	4.5	0.0	0.0	0.0	0.0			
22453404	7.2	0.0	0.0	0.0	0.0	7.2			
22453405	18.4	0.0	0.0	0.0	18.4	0.0			
22453406	23.5	0.0	0.0	0.0	23.5	0.0			
22453407	28.3	0.0	0.0	0.0	28.3	0.0			
22453415	11.6	0.0	0.0	0.0	11.6	0.0			
22453416	14.0	0.0	0.0	0.0	14.0	0.0			
22453417	21.2	0.0	0.0	0.0	21.2	0.0			
22453602	38.5	0.0	0.0	0.0	38.5	0.0			
22453605	8.5	0.0	0.0	0.0	0.0	8.5			
22453608	8.1	0.0	0.0	0.0	8.1	0.0			
22453613	12.6	0.0	0.0	0.0	0.0	12.6			
22453614	33.9	0.0	0.0	0.0	33.9	0.0			
22453615	6.8	0.0	0.0	0.0	6.8	0.0			
22453621	51.4	0.0	0.0	0.0	51.4	0.0			
23440401	10.2	0.0	0.0	0.0	10.2	0.0			
23440408	8.4	0.0	0.0	0.0	0.0	8.4			
23440412	9.7	0.0	0.0	0.0	9.7	0.0			
23440420	11.1	0.0	0.0	0.0	11.1	0.0			
23440423	5.3	0.0	0.0	0.0	0.0	5.3			
23440502	7.3	0.0	0.0	0.0	7.3	0.0			
23440503	8.2	0.0	0.0	0.0	0.0	8.2			
23440504	7.9	0.0	0.0	0.0	0.0	7.9			
23440512	13.4	0.0	0.0	0.0	13.4	0.0			
23450301	35.4	0.0	0.0	0.0	35.4	0.0			
Total	830.0	4.5	263.1	0.0	410.6	151.8			

Note: The source(s) irrigation water for parcels classified as Irrigated Farming may change from time to time.

Attachment to Order - 2015CW3067

R 44 W

R 43 W

T 22 S

T 23 S

DATE FILED: February 22, 2019 4:55 PM

Lamar Canal

Granada Lateral

Granada

Koen

Wolf

Flume

Dams

Siphon

Windmill & Sewage Disposal Plant

Water Tank

Pumping Sta

Windmill 3479

Windmill 3462

Well 3493

Well 3491

BM 3484

BM 3481

Attachment to Order - 2015CW3067

Legend

- Arkansas River Gaging Stations
- Lamar Canal
- Granada Lateral
- Granada East & West Augmentation Stations
- Farms where Granada Shares were used
- Grasmick Granada Farm Historically Irrigated Acreage
- Gass Farm Historically Irrigated Acreage

0 1,000 2,000 4,000

Scale in Feet

N W E S

Hendrix Wai Engineering, Inc.

Job No.	L101
File:	Exhibit B1 Decree.mxd
Date:	01/31/17
Prepared For:	LAWMA

Exhibit B1

Parcels Historically Irrigated with the Granada Shares

R 44 W

R 43 W

T 22 S

T 23 S

23440307
23440309
23440320
23440301
23440203
23440204
23440103
23440313
23440314
23440302
23440211
23440324
23440214
23440206
23440303
23440304
23440207
23440108
23440105
23440106
23440111
23440325
23440216
23440318
23440215
23440315
23440209
23440119
23440323
23440213
23440212
23440113
23440110
23441018
23441014
23440208
23441003
23441102
23441103
23441005
23441101
23441105
23441107
23441007
23441015
23441004
23441113
23441112
23441109
23441118

Attachment to Order - 15CW3067

Legend

Dry-Up Parcels

0 1,000 2,000 4,000

Scale in Feet

N W E S

Hendrix Wai Engineering, Inc.

Job No. L7501

File: Exhibit B2 Decree.mxd

Date: 01/08/19

Prepared For: LAWMA

Exhibit B2

15CW3067 Dry-Up Parcels
Granada Lateral

R 44 W

R 43 W

T 22 S

T 23 S

23440307 23440309 23440320 23440301 23440203 23440204 23440103 23440324 23440313 23440314 23440303 23440304 23440302 23440206 23440211 23440108 23440105 23440207 23440214 23440106 23440111 23440325 23440215 23440216 23440318 23440315 23440209 23440119 23440323 23440213 23440212 23440113 23440110 23441014 23441018 23441003 23440208 23441102 23441103 23441005 23441101 23441007 23441015 23441004 23441105 23441107 23441113 23441109 23441112 23441118

Well 3493 Well 3491 Windmill 3479 Bridge CANAL RIVER Windmill 3462 Windmill 3458 Flume Windmill & Sewage Disposal Plant Siphon Granada (BM 3484) Koen Wolf Dams Water Tank Pumping Sta Well

NORTH GRANADA DITCH NORTH GRANADA DITCH X-Y CANAL ATCHISON TOPEKA AND SANTA FE MANVEL CANAL LAMAR CANAL DITCH LEVEE HOLD-O-COM SOUTH GRANADA ATCHISON

Attachment to Order - 2015CW3067

Copyright:© 2013 National Geographic Society, i-cubed

Legend

- Phase I - Established Groundcover
- Phase II - Not Established

0 1,000 2,000 4,000

Scale in Feet

N W E S

Hendrix Wai Engineering, Inc.

Job No. L7501

File: Exhibit B-3 Decree.mxd

Date: 01/07/2019

Prepared For: LAWMA

Exhibit B3

Revegetation Status of 15CW3067 Dry-Up Parcels Granada Lateral

Exhibit B3
Revegetation Status of Granada Lateral Dry-Up Parcels

Parcel No.	Acres	Dev'd - Non Ag Use (acres)	Irrigated Farming (acres)	Est'd Dryland Farming (acres)	Established Ground Cover (acres)	Not Established (acres)	If Irrigated Farming, WDID #(s) of sources of irrigation water	If Irrigated Farming, well permit #(s) of well(s) that supply irrigation water	If Irrigated Farming, case #(s) of augmentation plan(s) for sources of irrigation water
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
23440103	22.9	0.0	0.0	0.0	22.9	0.0			
23440105	9.1	0.0	0.0	0.0	9.1	0.0			
23440106	9.7	0.0	0.0	0.0	0.0	9.7			
23440108	7.9	0.0	0.0	0.0	0.0	7.9			
23440110	5.2	0.0	0.0	0.0	5.2	0.0			
23440111	27.5	0.0	0.0	0.0	27.5	0.0			
23440113	8.3	0.0	0.0	0.0	8.3	0.0			
23440119	9.0	0.0	0.0	0.0	0.0	9.0			
23440203	18.2	0.0	0.0	0.0	0.0	18.2			
23440204	15.1	0.0	0.0	0.0	15.1	0.0			
23440206	17.8	0.0	0.0	0.0	0.0	17.8			
23440207	31.8	0.0	0.0	0.0	0.0	31.8			
23440208	13.0	0.0	0.0	0.0	0.0	13.0			
23440209	41.4	0.0	0.0	0.0	0.0	41.4			
23440211	7.7	0.0	0.0	0.0	0.0	7.7			
23440212	11.3	0.0	0.0	0.0	11.3	0.0			
23440213	16.4	0.0	0.0	0.0	0.0	16.4			
23440214	21.8	0.0	0.0	0.0	0.0	21.8			
23440215	28.2	0.0	0.0	0.0	0.0	28.2			
23440216	35.4	0.0	0.0	0.0	0.0	35.4			
23440301	9.4	0.0	0.0	0.0	0.0	9.4			
23440302	8.4	0.0	0.0	0.0	0.0	8.4			
23440303	7.6	0.0	0.0	0.0	0.0	7.6			
23440304	8.6	0.0	0.0	0.0	0.0	8.6			
23440307	8.6	0.0	0.0	0.0	0.0	8.6			
23440309	8.1	0.0	0.0	0.0	0.0	8.1			
23440313	6.3	0.0	0.0	0.0	6.3	0.0			
23440314	6.9	0.0	0.0	0.0	0.0	6.9			
23440315	5.2	0.0	0.0	0.0	0.0	5.2			
23440318	18.8	0.0	0.0	0.0	18.8	0.0			
23440320	7.7	0.0	0.0	0.0	0.0	7.7			
23440323	5.7	0.0	0.0	0.0	5.7	0.0			
23440324	14.8	0.0	0.0	0.0	0.0	14.8			
23440325	7.1	0.0	0.0	0.0	0.0	7.1			
23441003	8.9	0.0	0.0	0.0	8.9	0.0			
23441004	8.4	0.0	0.0	0.0	8.4	0.0			
23441005	6.9	0.0	0.0	0.0	0.0	6.9			
23441007	21.9	0.0	0.0	0.0	0.0	21.9			
23441014	5.9	0.0	0.0	0.0	0.0	5.9			
23441015	26.1	0.0	0.0	0.0	26.1	0.0			
23441018	24.1	0.0	0.0	0.0	24.1	0.0			
23441101	20.1	0.0	0.0	0.0	0.0	20.1			
23441102	41.1	0.0	0.0	0.0	0.0	41.1			
23441103	47.3	0.0	0.0	0.0	0.0	47.3			
23441105	17.6	0.0	0.0	0.0	17.6	0.0			
23441107	29.4	0.0	0.0	0.0	0.0	29.4			
23441109	15.6	0.0	0.0	0.0	0.0	15.6			
23441112	8.1	0.0	0.0	0.0	8.1	0.0			
23441113	12.8	0.0	0.0	0.0	0.0	12.8			
23441118	6.0	0.0	0.0	0.0	0.0	6.0			
Total	781.2	0.0	0.0	0.0	223.5	557.8			

Attachment to Order 2015CW3067

DATE FILED: February 22, 2019 4:55 PM

Attachment to Order - 2014CW3067

R 45 W | R 44 W | R 43 W | R 42 W

T 22 S | T 23 S

Former X-Y Canal Headgate

Arkansas River near Granada, CO

Bristol | Warwick | Hartman | Parrish | Goodale | Center Farm | Carlton | Grote | Koen | Granada | Barton | Amity | Camp Amache | Water Tank | Verhoeff Reservoir | Gravel Pit

AMITY LEVEE | Centennial CANAL | Boggs Creek | DITCH | DEADMAN LATERAL | CHENOWETH FORK EAST DITCH | SWEDE OLD LATERAL | RAILROAD | BUFFALO | NORTH GRANADA CANAL | X-Y CANAL | SANTA FE TRAIL | ARKANSAS | HOLLY | SISSON | Wolf Creek | Arroyo | LAMAR CANAL

Copyright © 2013 National Geographic Society, i-cubed

Legend

- Arkansas River Gaging Stations
- Former X-Y Canal Headgate
- X-Y Canal
- Farms where XY 2.0 cfs was used
- McMillan Farm Historically Irrigated Acreage
- Grasmick XY Farm Historically Irrigated Acreage

0 0.5 1 2 Miles

N W E S

Hendrix Wai Engineering, Inc.

Job No.	L101
File:	Exhibit C1 Decree.mxd
Date:	12/28/15
Prepared For:	LAWMA

Exhibit C1

Parcels Historically Irrigated with the X-Y 2.0 cfs

R 44 W

R 43 W

T 22 S

T 23 S

23440121

23440102

23430712

Granada (BM 3484)

Koen

Wolf Creek

Flume

Windmill 3462

Windmill 3458

Windmill 3479

Windmill 3491

Windmill 3493

Sewage Disposal Plant

Siphon

Water Tank

Pumping Sta

Dams

Well

BM 3511

BM 3481X

RIVER

CANAL

DITCH

LEVEE

GRANADA

NORTH

SOUTH

X-Y

MANVEL

LAMAR

ATCHISON TOPEKA AND SANTA FE

BUFFALO

Attachment to Order - 15CW3067

Legend

Dry-Up Parcels

0 1,000 2,000 4,000

Scale in Feet

N W E S

Hendrix Wai Engineering, Inc.

Job No. L7501

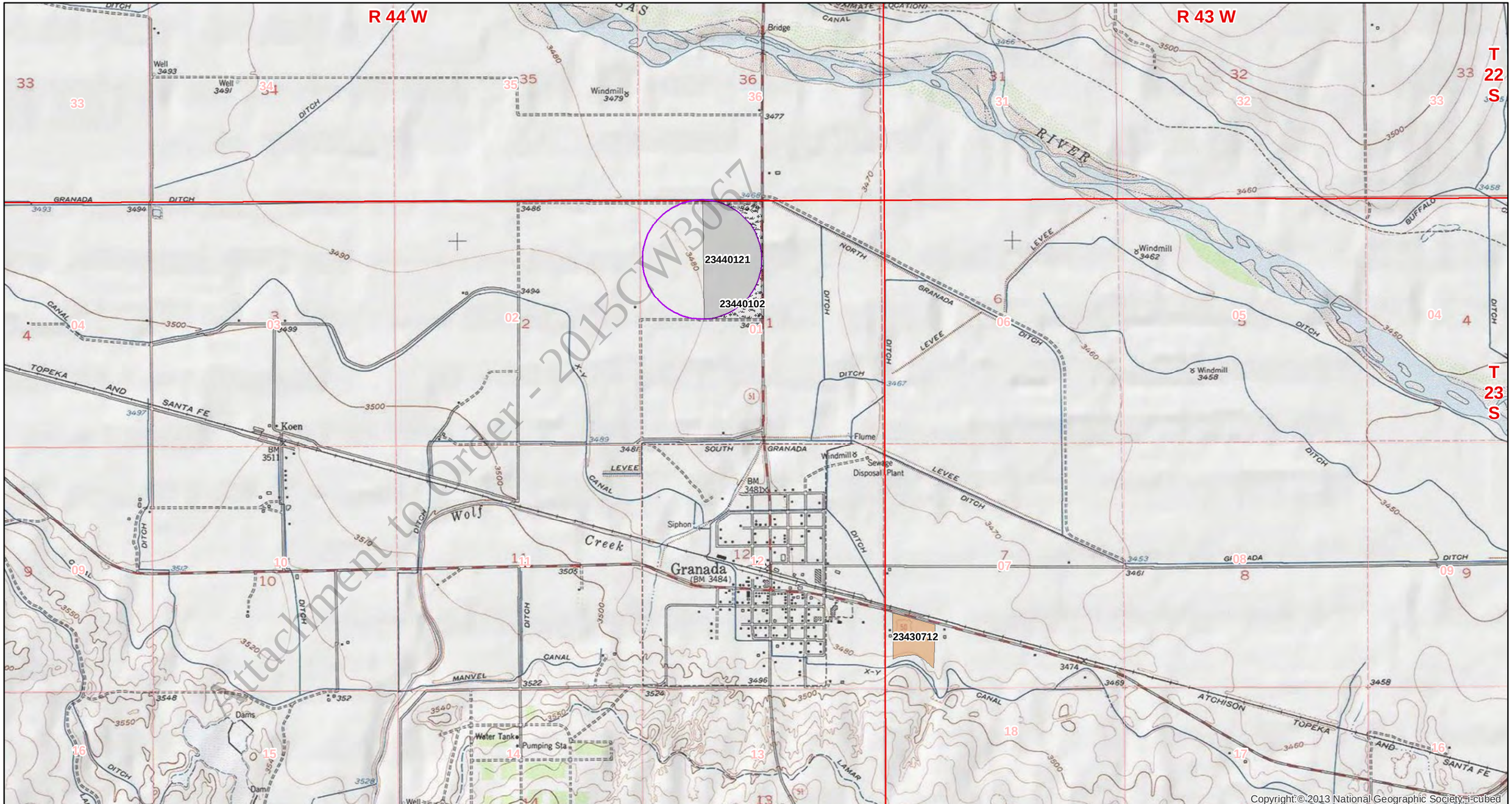
File: Exhibit C2 Decree.mxd

Date: 01/26/17

Prepared For: LAWMA

Exhibit C2

15CW3067 Dry-Up Parcels X-Y Canal



Attachment to Order - 15CW3067

Copyright © 2013 National Geographic Society, i-cubed

Legend

- Phase I - Established Groundcover
- Phase II - Not Established
- Phase II - Irrigated Farming
- Center Pivot Sprinkler

0 1,000 2,000 4,000

Scale in Feet

N W E S

Hendrix Wai Engineering, Inc.

Job No. L7501

File: Exhibit C3 Decree.mxd

Date: 01/07/2019

Prepared For: LAWMA

Exhibit C3

Revegetation Status of 15CW3067 Dry-Up Parcels X-Y Canal

Exhibit C3
Revegetation Status of X-Y Canal Dry-Up Parcels

Parcel No.	Acres	Dev'd - Non Ag Use (acres)	Irrigated Farming (acres)	Est'd Dryland Farming (acres)	Established Ground Cover (acres)	Not Established (acres)	If Irrigated Farming, WDID #(s) of sources of irrigation water	If Irrigated Farming, well permit #(s) of well(s) that supply irrigation water	If Irrigated Farming, case #(s) of augmentation plan(s) for sources of irrigation water
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
23430712	17.7	0.0	0.0	0.0	0.0	17.7			
23440102	16.9	0.0	0.0	0.0	16.9	0.0			
23440121	58.1	0.0	58.1	0.0	0.0	0.0	6705477	12876-R-R	02CW181, 14CW3004
Total:	92.8	0.0	58.1	0.0	16.9	17.7			

Note: The source(s) of irrigation water for parcels classified as Irrigated Farming may change from time to time.

Attachment to Order - 2015CW3067

DATE FILED: February 22, 2019 4:55 PM

R 46 W

Arkansas River @ Lamar, CO

Lamar West Farm Augmentation Station

Lamar Canal Measurement Flume

Lamar Light & Power Return Flow

Lamar Canal

T 22 S

T 23 S

Copyright:© 2013 National Geographic Society, i-cubed

Legend

- Lamar Canal Features
- Arkansas River Gaging Stations
- West Farm Augmentation Station
- Lamar Canal
- West Farm Gravel Pit

0 1,000 2,000 4,000

Scale in Feet

N W E S

Hendrix Wai Engineering, Inc.

Job No.	L101
File:	Exhibit D.mxd
Date:	03/15/2018
Prepared For:	LAWMA

Exhibit D

West Farm Gravel Pit Storage

Hendrix Wai Engineering, Inc.
Water Resources, Water Rights and GIS/Computer Modeling

EXHIBIT E

P.O. Box 4487
Parker, CO 80134

Telephone: (720) 930-4360
E-Mail: Randy@Hendrix-Wai.com

To: Richard Mehren – Moses, Wittemyer, Harrison & Woodruff, P.C.
Jennifer DiLalla – Moses, Wittemyer, Harrison & Woodruff, P.C.
William Davidson – Moses, Wittemyer, Harrison & Woodruff, P.C.

From: Randy L. Hendrix

Date: September 22, 2017

Subject: Measurement of the X-Y Canal Water Right at the Arkansas River near Granada, CO Streamflow Gage – 15CW3067

Attachment to Order - 15CW3067

The diversion dam for the X-Y Canal headgate is no longer a functional diversion structure. Therefore, the yield of LAWMA's X-Y Rights will be measured using the USGS streamflow gage Arkansas River near Granada, CO (07134180). This stream gage is located approximately one mile downstream from the Buffalo Headgate. The following description applies to days when Kansas Offset Account Water and Kansas Article II water is not being delivered to the Stateline. The replacement water available to LAWMA's X-Y Rights may be measured using the following 3 steps on a daily basis:

1. Available diversion is limited to the measured flow at the Granada stream gage minus any deliveries to the Stateline minus 5 cfs. The 5 cfs reduction is to account for the small amount of gain between the Buffalo Canal Headgate and the Granada stream gage. This measurement accounts for the stream gain in the reach from the Lamar Canal Headgate to the Buffalo Canal Headgate that is available for diversion by the X-Y Canal since the measured flow at the Granada stream gage already reflects the diversions by the senior water rights of the Buffalo Canal and the Hyde Ditch. The 5 cfs gain was derived from inspection of the Granada stream gage during periods the Buffalo Canal was sweeping the river in dry years. An example of a Stateline delivery would be LAWMA's Lamar Canal shares delivered to the river at the Center Farm augmentation station.
2. Available diversion is further limited by the estimated physical flow at the XY Headgate minus any deliveries to the Stateline. During most days, the calculation in this step will be greater than the available flow calculated in step 1 because a portion of the available flow calculated in this step is gain necessary to satisfy the Buffalo Canal. However, the flow in this step will be the controlling flow during periods when the stream gain between the X-Y Canal headgate and the Buffalo Canal Headgate exceeds the demands of the Buffalo Canal. The flow at the XY Diversion Dam is estimated as 0.79 x (Buffalo Diversions + Granada Gage). This relationship was determined by a regression analysis of the Carlton Gage versus the Total of the Buffalo Diversions + Granada Gage. The Carlton Gage is located just downstream from the old X-Y Canal headgate.
3. The minimum of the available flow determined in steps 1 and 2 is further limited by LAWMA's water right amount of 2 cfs and the monthly, annual, and 20-year volumetric limitations.

Historically, estimating the yield of the XY water right has been difficult when Kansas is releasing water from John Martin Reservoir and LAWMA has worked with the Division Engineers office to try to refine the procedure. Based on the recent agreement between Colorado and Kansas to govern the releases from the Offset Account it appears that the XY deliveries to the Stateline would be included in the 6-day antecedent flow calculations. Therefore, when Kansas makes a reservoir release, the XY yield will be estimated with appropriate limitations at the Stateline and the Granada gage as described in Paragraphs 3 and 5 of the "AGREEMENT CONCERNING THE OFFSET ACCOUNT IN JOHN MARTIN RESERVOIR FOR COLORADO PUMPING, DETERMINATION OF CREDITS FOR DELIVERY OF WATER RELEASED FOR COLORADO PUMPING, AND RELATED MATTERS". It would also appear that if the flow at the stateline is above the "Muskingham Routed Flow", this flow should be considered an increase in antecedent flow and a portion of this flow is attributable to the XY water right.[1]

Attachment to Order - 2015CW3067

[1] Reference from Exhibit H of LAWMA's Case No. 02CW181

EXHIBIT F

I. Revegetation Category Criteria

DATE FILED: February 22, 2019 4:55 PM

A Dry-Up Parcel must meet the following criteria to be classified within the following Revegetation Categories:

a. **Irrigated Farming**: The Dry-Up Parcel is irrigated with a source of water described in paragraph 20.2 of this Decree.

b. **Developed Non-Ag Use**: The Dry-Up Parcel has been developed with buildings, grain storage facilities, railways or railroad facilities, oil or gas facilities, wind power generation facilities, power transmission facilities, pump houses, recharge facilities, augmentation stations, feed yards, roads, reservoirs, drains, impervious surfaces, or other facilities or structures that will adequately control weeds and/or erosion of the soil caused by wind; or the Dry-Up Parcel has been developed for a non-agricultural use that is allowed under applicable land-use regulations but that precludes establishing groundcover or dry-land farming on the Dry-Up Parcel, and weeds and/or erosion of the soil caused by wind are adequately controlled in a manner consistent with state and local law.

c. **Established Groundcover**: The Dry-Up Parcel meets the criteria for Class VI or Class VII of the Groundcover Classification Schedule in section III below, with weeds adequately controlled in a manner consistent with state and local law; or groundcover has been established on the Dry-Up Parcel as far as can be reasonably expected and weeds and/or erosion of the soil caused by wind are adequately controlled in a manner consistent with state and local law.

d. **Established Dry-Land Farming**:

1. Definition: Dry-land Farming means the establishment and maintenance of dry-land farming practices with weeds adequately controlled and with soil erosion from wind controlled in a manner consistent with state and local law. Dry-land farming practices include No-Till Dry-Land Farming and Minimum-Tillage Dry-Land Farming, as those terms are defined below.

i. No-Till Dry-Land Farming means a system of planting seeds into untilled soil by opening a narrow slot, trench or band, of sufficient width and depth to obtain proper seed coverage. Because no soil tillage is utilized, a farmer must rely on herbicides to control the weeds. Both contact and residual herbicides may be used. Periodic fallowing and crop rotation may be used to stabilize the crop yields and allow the soil to rest.

Attachment to Order - 2015CV3087

ii. Minimum-Tillage Dry-Land Farming means management of farming operations which seeks to minimize impacts from tilling through the use of a sweep plow, strip-till, or similar technology. Additionally, a farmer may rely on herbicides to control weeds. Both contact and residual herbicides may be used. Periodic fallowing and crop rotation may be used to stabilize the crop yields and allow the soil to rest.

2. Criteria for classification as Established Dry-Land Farming in an Annual Revegetation Status Report: The Dry-Up Parcel has been planted to a dry-land crop or is in a fallow period following a dry-land crop; the crop was planted and farmed without irrigation water, such that it is dependent solely upon precipitation to meet crop water requirements; if other dry-land farming in the region is producing crops, the farm also is producing a dry-land crop with weeds adequately controlled and with soil erosion from wind controlled in a manner consistent with state and local law; and minimum crop residue after harvest of the dry-land crop is as described below, and the crop residue is left on the Dry-Up Parcel until the Dry-Up Parcel is prepared for the next rotation of planting; provided, however, that this requirement for crop residue does not prevent a farmer from controlling weeds by mechanical tillage of the Dry-Up Parcel or using other acceptable methods of weed control that do not disturb the residue on the surface. For grain crops, such as winter wheat or milo, minimum crop residue must be at least thirty percent (30%), determined by the step-point method. For hay or forage crops, crop stubble must measure at least five inches, with row spacing no more than thirty inches.

3. Additional criteria for classification as Established Dry-Land Farming in a Revegetated Parcel(s) Report: In order to be classified as Established Dry-Land Farming in a Revegetated Parcel(s) Report, a Dry-Up Parcel must meet the following criteria in addition to the criteria listed above: The Dry-Up Parcel has been classified as Established Dry-Land Farming in accordance with the criteria in section II.d.2 above for three full crop rotation cycles (one cycle equals two years crop production and one year fallow with appropriate stubble and weed control, for a total of three years).

e. **Not Established**: The Dry-Up Parcel does not meet the criteria to be classified as Irrigated Farming, Developed Non-Ag Use, Established Groundcover, or Established Dry-Land Farming.

f. **Confirmed Revegetated**: The Dry-Up Parcel is the subject of a Revegetated Parcel(s) Report that has been filed and accepted under paragraph 19.3 of this Decree.

Attachment to Order - 2015CV3067

II. Groundcover Classification Schedule

a. **CLASS I**: Full seeding and irrigation needed, either first seeding or reapplication of seeding. Desired plants scarce or absent.

b. **CLASS II**: Seeding and irrigation completed. Stand undetermined. Usually this will occur at the beginning of the second growing season following seeding.

c. **CLASS III**: Stand is variable. Part of the field has an adequate stand and part does not. Plants may be juvenile plants to well-developed mature plants. More than 10% of field with an inadequate stand on areas exceeding one acre in size. Plant frequency of desirable plant on deficient areas is less than 10%. Such deficient areas will require reseeding.

d. **CLASS IV-A**: Stand is inadequate; frequency is less than 10% but plants are fairly well distributed over field. Field may need reseeding.

e. **CLASS IV-B**: Stand is inadequate; frequency is between 10% to 15%. Plants are uniformly distributed over the field. No further seeding then recommended as the stand is expected to develop.

g. **CLASS V**: Stand appears adequate, but root system is undeveloped. There are 10% to 15% or more desired plants per count. Good potential for stand establishment. Generally found after the first growing season but possibly the second growing season.

h. **CLASS VI**: Stand adequate. Plants well rooted. Desirable plant frequency range 15% to 20%; no deficient areas larger than one acre in size over 90% of the field. This may occur following second growing season but more likely after the third growing season and beyond.

i. **CLASS VII**: Stand adequate. Plants well rooted with vigorous top growth. Desirable Plant frequencies are 20% to 30% or more over 90% of the field. No deficient areas larger than one acre in size. Generally occurring the third growing season and beyond.

III. Annual Revegetation Status Report

In addition to the information required by Paragraph 21 of this Decree, each Annual Revegetation Status Report must include the following information:

a. For each Dry-Up Parcel not classified as Not Established, whether the Dry-Up Parcel is being dry-land farmed or established in groundcover.

Attachment to Order - 2015CV3067

b. For each Dry-Up Parcel classified as Not Established and not dry-land farmed during the preceding year, the efforts undertaken in the preceding year to establish groundcover on the dried-up acreage, including without limitation the seeding rate, type and composition of blend by percentage and date planted, information about herbicides or pesticides applied, and information about efforts to control erosion of the soil caused by wind.

c. For each Dry-Up Parcel not classified as Confirmed Revegetated, Irrigated Farming, or Developed Non-Ag Use and not dry-land farmed during the preceding year, a classification of the Dry-Up Parcel under the Groundcover Classification Schedule in section II above, including whether groundcover has been established on the Dry-Up Parcel as far as can reasonably be expected.

d. For each Dry-Up Parcel not classified as Confirmed Revegetated that was dry-land farmed during the preceding year, the efforts undertaken in the preceding year to convert the Farm to dry-land Farming, including information about tilling practices, the planting and fallowing rotation, the crops planted, and the acres fallowed; information about herbicides or pesticides applied; information about efforts to control erosion of the soil caused by wind; information about the amount of crops harvested or the number of animal units grazing the land; and information about the amount of crops planted and harvested by other dry-land farmers in the area during the preceding year;

e. For each Dry-Up Parcel not classified as Confirmed Revegetated that was dry-land farmed during the preceding year, whether the crop is a grain crop or a hay/forage crop. If the crop is a grain crop, the percentage crop residue determined using the step-point method, and if the crop is a hay/forage crop, the stubble height in inches and the row spacing in inches.

f. The approximate annual precipitation that fell on the Phase II Land, which may be estimated based on the average of published local weather station data.

g. Any factors that had a negative impact on efforts to establish groundcover on or dry-land farm the Phase II Land.

h. Whether water was used to assist in establishing groundcover or converting to dry-land farming, and if water was so used, the source of the water, the amount applied, and the method of application.

i. A comparison of the current conditions of the Dry-Up Parcels included in the Annual Revegetation Status Report to their past conditions as reported in previous Annual Revegetation Status Reports.

Attachment to Order - 2015CV3067

j. A map: (i) depicting the then current status of the Phase II Land; and (ii) identifying the source of irrigation water for any parcel of the Phase II Land classified as Irrigated Farming.

Attachment to Order - 2015CW3067

EXHIBIT G

PRELIMINARY - PROVIDED SEPTEMBER 11, 2018
TABLE 1
LAWMA's REPLACEMENT SOURCES FROM X-Y AND MANVEL DIRECT FLOW WATER RIGHTS
(values in cfs unless otherwise noted)

Month: September **Year: 2018**

DATE FILED: February 22, 2019 4:55 PM

Attachment to Order 15CW3067

Day	Flow at Lamar Gage	Hyde Div	Buffalo Div	Flow at Granada Gage	Flow at Stateline (Coolidge + Frontier)	Gain Lamar to Granada	Gain Lamar to Stateline	LAWMA's Delivery to Reaches Above Buffalo	LAWMA's Delivery to Reaches Below Buffalo	Winter Return Flows above the Buffalo	Sisson & Stubbs Delivery to Stateline	Kansas JMR Delivery @ Stateline	Stateline Flow in Excess of Kansas Delivery	Unused Native Flow at Lamar R.G.	Granada Gage: LAWMA's Divertable Water	Granada Gage: Total Avail Under X-Y Right	Granada Gage: Total Avail 02CW181 X-Y	Granada Gage: Total Avail 15CW3067 X-Y	Granada Gage: Total Avail Under Manvel Right	Granada Gage: Total Avail Under Graham Right	Unused Native Flow
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
1	121.0	11.0	64.3	128.0	196.6	82.3	150.9	27.40	6.55	0.00	2.25	Yes	128.0	No	128.0	69.0	67.0	2.0	25.2	16.5	17.3
2	121.0	10.8	64.4	129.0	203.5	83.2	157.7	28.03	6.01	0.00	2.25	Yes	129.0	No	129.0	69.0	67.0	2.0	0.0	16.5	43.5
3	122.0	10.7	64.6	133.0	241.9	86.3	195.2	27.44	6.30	0.00	2.25	Yes	133.0	No	133.0	69.0	67.0	2.0	0.0	16.5	47.5
4	115.0	11.4	65.1	139.0	324.9	100.4	286.3	25.83	6.91	0.00	2.25	Yes	139.0	No	139.0	45.1	43.8	1.3	0.0	16.5	77.4
5	36.6	12.5	64.3	123.0	300.5	163.2	340.7	22.42	5.05	0.00	2.25	Yes	123.0	No	123.0	0.0	0.0	0.0	0.0	16.5	106.5
6	26.9	16.1	62.0	95.2	257.0	146.3	308.1	18.65	4.80	0.00	2.25	Yes	95.2	No	95.2	0.0	0.0	0.0	0.0	16.5	78.7
7	24.5	22.0	61.4	90.8	244.0	149.7	302.9	21.07	5.61	0.00	2.25	No	90.8	No	85.8	0.0	0.0	0.0	0.0	16.5	69.3
8	17.8	20.0	61.0	85.6	232.0	148.8	295.2	24.04	6.83	0.00	2.25	No	85.6	No	80.6	0.0	0.0	0.0	0.0	16.5	64.1
9	16.7	16.4	60.6	82.8	222.0	143.1	282.3	24.51	8.70	0.00	2.25	No	82.8	No	77.8	0.0	0.0	0.0	0.0	16.5	61.3
10	20.5	14.3	60.0	79.0	221.0	132.9	274.9	24.78	11.53	0.00	2.25	No	79.0	No	74.0	0.0	0.0	0.0	0.0	16.5	57.5
11	20.9	16.2	59.7	76.9	218.0	131.9	273.0	24.05	8.77	0.00	2.25	No	76.9	No	71.9	0.0	0.0	0.0	0.0	16.5	55.4
12	19.9	13.8	59.6	75.5	208.0	129.0	261.5	24.02	4.70	0.00	2.25	No	75.5	No	70.5	0.0	0.0	0.0	0.0	16.5	54.0
13	19.5	10.5	59.2	72.0	192.0	122.3	242.3	24.00	5.43	0.00	2.25	No	72.0	No	67.0	0.0	0.0	0.0	0.0	16.5	50.5
14	18.6	10.4	59.0	70.0	177.0	120.8	227.8	22.91	5.23	0.00	2.25	No	70.0	No	65.0	0.0	0.0	0.0	0.0	16.5	48.5
15	17.1	10.5	58.4	66.7	175.0	118.6	226.9	23.61	3.65	0.00	2.25	No	66.7	No	61.7	0.0	0.0	0.0	0.0	16.5	45.2
16	16.3	11.0	58.4	64.8	172.0	117.9	225.1	23.34	2.35	0.00	2.25	No	64.8	No	59.8	0.0	0.0	0.0	0.0	16.5	43.3
17	16.4	11.0	63.1	59.5	155.0	117.2	212.7	22.80	2.35	0.00	2.25	No	59.5	No	54.5	0.0	0.0	0.0	0.0	16.5	38.0
18	16.0	10.8	65.9	55.0	147.0	115.7	207.7	20.78	2.50	0.00	2.25	No	0.0	No	50.0	0.0	0.0	0.0	0.0	16.5	33.5
19	15.5	11.6	65.6	52.8	146.0	114.5	207.7	18.38	2.71	0.00	2.25	No	0.0	No	47.8	0.0	0.0	0.0	0.0	16.5	31.3
20	15.5	11.2	65.0	49.2	150.0	109.9	210.7	8.65	5.51	0.00	2.25	No	0.0	No	44.2	0.0	0.0	0.0	0.0	16.5	27.7
21	15.6	11.6	64.1	43.9	147.0	104.0	207.1	6.29	3.94	0.00	2.25	No	0.0	No	38.9	0.0	0.0	0.0	0.0	16.5	22.4
22	16.2	12.0	63.6	41.4	143.0	100.7	202.3	9.51	5.77	0.00	2.25	No	0.0	No	36.4	0.0	0.0	0.0	0.0	16.5	19.9
23	16.4	12.3	64.2	42.6	152.0	102.8	212.2	10.29	9.86	0.00	2.25	No	0.0	No	37.6	0.0	0.0	0.0	0.0	16.5	21.1
24	15.3	11.7	64.0	40.7	150.0	101.1	210.4	9.02	9.02	0.00	2.25	No	0.0	No	35.7	0.0	0.0	0.0	0.0	16.5	19.2
25	16.2	11.4	63.5	38.2	147.0	96.9	205.7	9.77	6.56	0.00	2.25	No	0.0	No	33.2	0.0	0.0	0.0	0.0	16.5	16.7
26	16.8	11.7	63.5	38.1	147.0	96.5	205.4	10.07	6.66	0.00	2.25	No	0.0	No	33.1	0.0	0.0	0.0	0.0	16.5	16.6
27	28.5	12.8	63.9	40.4	141.0	88.6	189.2	11.51	6.79	0.00	2.25	No	0.0	No	35.4	0.0	0.0	0.0	0.0	16.5	18.9
28	17.6	12.8	64.6	42.6	138.0	102.4	197.8	14.33	6.79	0.00	2.25	No	0.0	No	37.6	0.0	0.0	0.0	0.0	16.5	21.1
29	26.8	11.5	64.6	44.5	142.0	93.9	191.4	14.71	4.44	0.00	2.25	No	0.0	No	39.5	0.0	0.0	0.0	0.0	16.5	23.0
30	15.1	10.8	64.8	43.8	141.0	104.3	201.5	16.83	6.06	0.00	2.25	No	0.0	No	38.8	0.0	0.0	0.0	0.0	16.5	22.3
31																					
Monthly Average (cfs)																					
	32.7	12.7	62.7	71.5	187.7	114.2	230.4	18.97	5.91	0.00	2.25			---	67.5	8.4	8.2	0.2	0.8	16.5	41.7
Total (ac-ft)																					
	1,948.2	754.9	3,733.6	4,252.6	11,169.9	6,793.0	13,710.2	1,128.7	351.8	0.0	134.1			---	4,014.6	500.0	485.5	14.5	50.0	980.4	2,484.2
LAWMA CU CREDITS (ac-ft)											88.0					314.5	305.4	9.7	29.2		

Days With Unused Native Flow	0	Days Graham Ditch in Priority	30
Percentage of Month Call on John Martin to Lamar Canal	100%	% of Month Graham In Priority	100%
		Percentage of Month Call on River	0%

15CW3067 X-Y Winter Return Flow Obligation (Delivered during April and/or May) **0** ac-ft

Notes:
1) All Values are demonstrative and not an actual representation of actual September 2018 accounting
2) 15CW3067 X-Y Winter Return Flows will be tracked on the previous year's monthly river headgate diversions and delivered out of the monthly CU credits in April and/or May. In other source such as CU water in the gravel pit will be noted.

Column Explanations:
1) Day of the current month of accounting.

LAWMA's REPLACEMENT SOURCES FROM X-Y AND MANVEL DIRECT FLOW WATER RIGHTS
(values in cfs unless otherwise noted)

Month: September **Year: 2018**

Day	Flow at Lamar Gage	Hyde Div	Buffalo Div	Flow at Granada Gage	Flow at Stateline (Coolidge + Frontier)	Gain Lamar to Granada	Gain Lamar to Stateline	LAWMA's Delivery to Reaches Above Buffalo	LAWMA's Delivery to Reaches Below Buffalo	Winter Return Flows above the Buffalo	Sisson & Stubbs Delivery to Stateline	Kansas JMR Delivery @ Stateline	Stateline Flow in Excess of Kansas Delivery	Unused Native Flow at Lamar R.G.	**Granada Gage** LAWMA's Divertable Water	Total Avail Under X-Y Right	Total Avail 02CW181 X-Y	Total Avail 15CW3067 X-Y	Total Avail Under Manvel Right	Total Avail Under Graham Right	Unused Native Flow
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)

2) Arkansas River at Lamar, CO streamflow gage obtained from USGS data imported onto the Streamflows tab
3) Hyde Ditch river headgate diversion obtained from CDWR data imported onto the Streamflows tab
4) Buffalo Canal river headgate diversions obtained from CDWR data imported onto the Streamflows tab
5) Arkansas River near Granada, CO streamflow gage obtained from USGS data imported onto the Streamflows tab
6) Stateline stream flow (Arkansas River near Coolidge, KS + Frontier Ditch diversions) obtained from USGS data imported onto the Streamflows tab
7) Column 5 + Column 4 + Column 3 - Column 2
8) Column 6 + Column 4 + Column 3 - Column 2
9) Total flow from West Farm and Center Farm Augmentation stations - West Farm and Center Farm Rule 10 deliveries - Return flows owed to Stateline
10) Total flow from Granada West farm and Granada East Augmentation stations - Granada West and Granada East Rule 10 deliveries - Return flows owed to Stateline
11) Winter Return flows owed to Stateline above Buffalo Canal (Table 5 column 27)
12) Sisson & Stubbs Ditch estimated at 134.1 acre-feet per month of diversions and 88 acre-feet per month consumptive use credits.
13) Kansas John Martin Reservoir releases at the Stateline (Yes / No)
14) Arkansas River near Granada, CO streamflow greater than the release rate of Kansas John Martin Reservoir water after a 2 day lag.
15) Unused Native flow at the Arkansas River at Lamar, CO streamflow gage greater than 20 cfs (Yes / No)
16) If Column 13 = Yes then Column 14.
If Column 13 = No then maximum of Column 5 - 5 cfs - Column 11, 79% of Columns 4 and 5 - Column 9
17) Minimum of Column 16 and 69 cfs; daily totals are then limited to the maximum amount of XY Call on the river in acre-feet.
18) Column 17 x 67/69
19) Column 17 x 2/69
20) Minimum of (Column 16 - Column 17) and 54 cfs; daily totals are then limited to a maximum monthly amount of 150 acre-feet or amount determined less than that by LAWMA.
21) Minimum of (Column 16 - Column 17 - Column 20) and monthly rate defined in the Control Table for the Graham APOD wells.
22) Column 16 - Column 17 - Column 20 - Column 21

Attachment to Order - 15CW3067

PRELIMINARY - PROVIDED SEPTEMBER 11, 2018
TABLE 5
LAWMA'S REPLACEMENT SOURCES FROM LAMAR CANAL & GRANADA IRRIGATION COMPANY DITCH

Month: September **Year:** 2018

LAMAR / GIC SHARES DELIVERED

Day (1)	Lamar Canal Diversions: Total Diversions (cfs) (2)	Rotation (Yes / No) (3)	DF Diversions (LAMCANCO + LLPRETCO) (cfs) (4)	Lamar Canal Article II Diversions (cfs) (5)	West Farm Gravel Pit CU Water (cfs) (6)	GP Aggregates - Free River Water (cfs) (7)	Manvel Canal Article II Diversions (cfs) (8)
1	106.3		106.3				
2	106.4		106.4				
3	107.1		107.1				
4	101.9		101.9				
5	96.4		96.4				
6	86.5		86.5				
7	97.9		97.9				
8	105.6		105.6				
9	107.8		107.8				
10	108.4		108.4				
11	103.8		103.8				
12	105.7		105.7				
13	107.3		107.3				
14	99.5		99.5				
15	106.6		106.6				
16	105.1		104.1				1.0
17	105.5		104.5				1.0
18	85.2		84.2				1.0
19	78.7		78.7				
20	49.1		49.1				
21	51.0		51.0				
22	61.4		61.4				
23	62.6		62.6				
24	57.5		57.5				
25	59.6		59.6				
26	60.2		60.2				
27	73.3		73.3				
28	74.2		74.2				
29	84.7		84.7				
30	76.1		76.1				
31							
cfsd	2,631.4		2,628.4	0.0	0.0	0.0	3.0
ac-ft	5,219.3		5,213.3	0.0	0.0	0.0	6.0
MONTHLY CU FACTOR							
CU CREDITS (ac-ft)							

Day (1)	West Farm: Total Flow (cfs) (9)	02CW181 to River (cfs) (10)	Manvel Canal Article II Diversions (cfs) (11)	15CW3067 Lamar Shares (12)	15CW306 7 to River (cfs) (13)	(Rule 6) LAWMA's Rule 14 Plan (cfs) (14)	LAWMA Rule 10 (cfs) (15)	Non-LAWMA Rule 14 Plan (cfs) (16)	Non-LAWMA Rule 10 (cfs) (17)	Other (cfs) (18)
1	11.11	8.93		103.19	0.45		0.92			0.00
2	11.72	9.41		106.69	0.53		0.97			0.00
3	11.00	8.83		110.16	0.46		0.91			0.00
4	10.16	8.23		70.27	0.27		0.84			0.00
5	10.25	8.42		21.88	0.17		0.85			0.00
6	9.91	6.58		897.00	2.51		0.82			0.00
7	10.38	6.89		897.00	2.63		0.86			0.00
8	10.57	7.02		897.00	2.68		0.88			0.00
9	10.83	7.18		897.00	2.75		0.90			0.00
10	11.83	7.85		897.00	3.00		0.98			0.00
11	12.36	8.21		897.00	3.14		1.02			0.00
12	12.42	8.24		897.00	3.15		1.03			0.00
13	12.38	8.21		897.00	3.14		1.02			0.00
14	12.20	8.10		897.00	3.10		1.01			0.00
15	12.19	8.09		897.00	3.09		1.01			0.00
16	12.25	9.09	0.88	96.11	0.46		1.01			0.00
17	11.99	7.32	0.89	897.00	2.80		0.99			0.00
18	11.89	7.27	0.86	897.00	2.78		0.98			0.00
19	10.37	6.88		897.00	2.63		0.86			0.00
20	4.72	3.13		897.00	1.20		0.39			0.00
21	3.11	2.07		897.00	0.79		0.26			0.00
22	4.75	3.15		897.00	1.20		0.39			0.00
23	5.15	3.42		897.00	1.31		0.43			0.00
24	4.89	3.24		897.00	1.24		0.40			0.00
25	4.96	3.29		897.00	1.26		0.41			0.00
26	4.92	3.27		897.00	1.25		0.41			0.00
27	3.85	2.55		897.00	0.98		0.32			0.00
28	7.17	4.76		897.00	1.82		0.59			0.00
29	7.85	5.21		897.00	1.99		0.65			0.00
30	7.96	5.28		897.00	2.02		0.66			0.00
31										
cfsd	275.1	190.1	2.6		54.8	0.0	22.8	0.0	0.0	0.0
ac-ft	545.8	377.1	5.2		108.7	0.0	45.2	0.0	0.0	0.0
MONTHLY CU FACTOR		0.583	0.583		0.712					
CU CREDITS (ac-ft)		219.8	219.8		77.4					

Day (1)	West Farm Gravel Pit: 15CW3067 Lamar Shares (19)	Maximum Allowable FHG to Gravel Pit (cfs) (20)	15CW3067 CU to Grav. Pit (cfs) (21)	15CW3067 Return Flow to River at West Farm Aug St. (cfs) (22)
1	793.81	3.23	2.00	0.81
2	790.31	3.22	2.00	0.81
3	786.84	3.23	2.00	0.81
4	826.73	3.22	2.00	0.81
5	875.12	3.23	2.00	0.81
6	0.00	0.00		0.00
7	0.00	0.00		0.00
8	0.00	0.00		0.00
9	0.00	0.00		0.00
10	0.00	0.00		0.00
11	0.00	0.00		0.00
12	0.00	0.00		0.00
13	0.00	0.00		0.00
14	0.00	0.00		0.00
15	0.00	0.00		0.00
16	800.89	3.19	2.00	0.81
17	0.00	0.00		0.00
18	0.00	0.00		0.00
19	0.00	0.00		0.00
20	0.00	0.00		0.00
21	0.00	0.00		0.00
22	0.00	0.00		0.00
23	0.00	0.00		0.00
24	0.00	0.00		0.00
25	0.00	0.00		0.00
26	0.00	0.00		0.00
27	0.00	0.00		0.00
28	0.00	0.00		0.00
29	0.00	0.00		0.00
30	0.00	0.00		0.00
31				
cfsd			12.0	4.9
ac-ft			23.8	9.6

Day (1)	Center Farm: Total Flow (cfs) (23)	02CW181 to River (cfs) (24)	15CW3067 Lamar Shares (25)	15CW3067 to River (cfs) (26)	(Rule 6) LAWMA's Rule 14 Plan (cfs) (27)	LAWMA Rule 10 (cfs) (28)	Non-LAWMA Rule 14 Plan (cfs) (29)	Non-LAWMA Rule 10 (cfs) (30)	Other (cfs) (31)
1	18.76	17.21	0.00	0.00		1.55			0.00
2	18.84	17.28	0.00	0.00		1.56			0.00
3	18.91	17.35	0.00	0.00		1.57			0.00
4	18.01	16.51	0.00	0.00		1.49			0.00
5	14.20	13.02	0.00	0.00		1.18			0.00
6	10.43	9.56	0.00	0.00		0.86			0.00
7	12.59	11.55	0.00	0.00		1.04			0.00
8	15.64	14.34	0.00	0.00		1.29			0.00
9	15.89	14.58	0.00	0.00		1.32			0.00
10	15.18	13.92	0.00	0.00		1.26			0.00
11	13.85	12.71	0.00	0.00		1.15			0.00
12	13.77	12.63	0.00	0.00		1.14			0.00
13	13.79	12.65	0.00	0.00		1.14			0.00
14	12.78	11.72	0.00	0.00		1.06			0.00
15	13.55	12.43	0.00	0.00		1.12			0.00
16	13.20	12.11	0.00	0.00		1.09			0.00
17	12.86	11.80	0.00	0.00		1.06			0.00
18	10.77	9.87	0.00	0.00		0.89			0.00
19	9.68	8.87	0.00	0.00		0.80			0.00
20	4.71	4.32	0.00	0.00		0.39			0.00
21	3.74	3.43	0.00	0.00		0.31			0.00
22	5.62	5.15	0.00	0.00		0.47			0.00
23	6.06	5.56	0.00	0.00		0.50			0.00
24	4.95	4.54	0.00	0.00		0.41			0.00
25	5.69	5.22	0.00	0.00		0.47			0.00
26	6.05	5.55	0.00	0.00		0.50			0.00
27	8.70	7.98	0.00	0.00		0.72			0.00
28	8.46	7.76	0.00	0.00		0.70			0.00
29	8.18	7.51	0.00	0.00		0.68			0.00
30	10.39	9.53	0.00	0.00		0.86			0.00
31									
cfsd	345.2	316.7		0.0	0.0	28.6	0.0	0.0	0.0
ac-ft	684.8	628.1		0.0	0.0	56.7	0.0	0.0	0.0
MONTHLY CU FACTOR		0.583		0.712					
CU CREDITS (ac-ft)		366.2		0.0					

Day (1)	Granada West: Total Flow (cfs) (32)	02CW181 to River (cfs) (33)	15CW3067 GIC Equivalent Lamar Shares (34)	15CW3067 to River (cfs) (35)	(Rule 6) LAWMA's Rule 14 Plan (cfs) (36)	LAWMA Rule 10 (cfs) (37)	Non-LAWMA Rule 14 Plan (cfs) (38)	Non-LAWMA Rule 10 (cfs) (39)	Other (cfs) (40)
1	6.96	0.00	1312.76	5.52		1.4			0.00
2	6.41	0.00	1312.76	5.09		1.3			0.00
3	6.44	0.00	1312.76	5.12		1.3			0.00
4	6.52	0.00	1312.76	5.17		1.3			0.00
5	5.14	0.00	1312.76	4.08		1.1			0.00
6	5.13	0.00	1312.76	4.07		1.1			0.00
7	5.20	0.00	1312.76	4.13		1.1			0.00
8	7.50	0.00	1312.76	5.96		1.5			0.00
9	9.70	0.00	1312.76	7.70		2.0			0.00
10	13.11	0.00	1312.76	10.41		2.7			0.00
11	9.99	0.00	1312.76	7.93		2.1			0.00
12	4.49	0.00	1312.76	3.57		0.9			0.00
13	4.27	0.00	1312.76	3.39		0.9			0.00
14	4.51	0.00	1312.76	3.58		0.9			0.00
15	3.92	0.00	1312.76	3.11		0.8			0.00
16	2.82	0.00	1312.76	2.24		0.6			0.00
17	2.47	0.00	1312.76	1.96		0.5			0.00
18	2.35	0.00	1312.76	1.87		0.5			0.00
19	2.00	0.00	1312.76	1.59		0.4			0.00
20	5.58	0.00	1312.76	4.43		1.2			0.00
21	4.96	0.00	1312.76	3.94		1.0			0.00
22	7.26	0.00	1312.76	5.77		1.5			0.00
23	12.42	0.00	1312.76	9.86		2.6			0.00
24	11.37	0.00	1312.76	9.02		2.3			0.00
25	8.26	0.00	1312.76	6.56		1.7			0.00
26	8.39	0.00	1312.76	6.66		1.7			0.00
27	8.56	0.00	1312.76	6.79		1.8			0.00
28	8.55	0.00	1312.76	6.79		1.8			0.00
29	5.59	0.00	1312.76	4.44		1.2			0.00
30	7.63	0.00	1312.76	6.06		1.6			0.00
31									
cfsd	197.5	0.0		156.8	0.0	40.7	0.0	0.0	0.0
ac-ft	391.7	0.0		311.0	0.0	80.7	0.0	0.0	0.0
MONTHLY CU FACTOR		0.583		0.479					
CU CREDITS (ac-ft)		0.0		0.0					

Day (1)	Granada East: Total Flow (cfs) (41)	02CW181 to River (cfs) (42)	15CW306 7 GIC Equivalent Lamar Shares (43)	15CW306 7 to River (cfs) (44)	(Rule 6) LAWMA's Rule 14 Plan (cfs) (45)	LAWMA Rule 10 (cfs) (46)	Non-LAWMA Rule 14 Plan (cfs) (47)	Non-LAWMA Rule 10 (cfs) (48)	Other (cfs) (49)
1	1.30	0.00	1312.76	1.03		0.3			0.00
2	1.16	0.00	1312.76	0.92		0.2			0.00
3	1.49	0.00	1312.76	1.18		0.3			0.00
4	2.18	0.00	1312.76	1.73		0.5			0.00
5	1.23	0.00	1312.76	0.98		0.3			0.00
6	0.91	0.00	1312.76	0.72		0.2			0.00
7	1.87	0.00	1312.76	1.49		0.4			0.00
8	1.10	0.00	1312.76	0.88		0.2			0.00
9	1.26	0.00	1312.76	1.00		0.3			0.00
10	1.42	0.00	1312.76	1.13		0.3			0.00
11	1.07	0.00	1312.76	0.85		0.2			0.00
12	1.43	0.00	1312.76	1.13		0.3			0.00
13	2.58	0.00	1312.76	2.04		0.5			0.00
14	2.08	0.00	1312.76	1.65		0.4			0.00
15	0.68	0.00	1312.76	0.54		0.1			0.00
16	0.14	0.00	1312.76	0.11		0.0			0.00
17	0.49	0.00	1312.76	0.39		0.1			0.00
18	0.80	0.00	1312.76	0.64		0.2			0.00
19	1.42	0.00	1312.76	1.12		0.3			0.00
20	1.36	0.00	1312.76	1.08		0.3			0.00
21	0.00	0.00	1312.76	0.00		0.0			0.00
22	0.00	0.00	1312.76	0.00		0.0			0.00
23	0.00	0.00	1312.76	0.00		0.0			0.00
24	0.00	0.00	1312.76	0.00		0.0			0.00
25	0.00	0.00	1312.76	0.00		0.0			0.00
26	0.00	0.00	1312.76	0.00		0.0			0.00
27	0.00	0.00	1312.76	0.00		0.0			0.00
28	0.00	0.00	1312.76	0.00		0.0			0.00
29	0.00	0.00	1312.76	0.00		0.0			0.00
30	0.00	0.00	1312.76	0.00		0.0			0.00
31									
cfsd	26.0	0.0		20.6	0.0	5.4	0.0	0.0	0.0
ac-ft	51.5	0.0		40.9	0.0	10.6	0.0	0.0	0.0
MONTHLY CU FACTOR		0.583		0.479					
CU CREDITS (ac-ft)		0.0		0.0					

			WINTER RETURN FLOW DELIVERY	WINTER RETURN FLOW DELIVERY
Day (1)	Flow (cfs) (50)	Flow (cfs) (51)		
1	0.0	0.0		
2	0.0	0.0		
3	0.0	0.0		
4	0.0	0.0		
5	0.0	0.0		
6	0.0	0.0		
7	0.0	0.0		
8	0.0	0.0		
9	0.0	0.0		
10	0.0	0.0		
11	0.0	0.0		
12	0.0	0.0		
13	0.0	0.0		
14	0.0	0.0		
15	0.0	0.0		
16	0.0	0.0		
17	0.0	0.0		
18	0.0	0.0		
19	0.0	0.0		
20	0.0	0.0		
21	0.0	0.0		
22	0.0	0.0		
23	0.0	0.0		
24	0.0	0.0		
25	0.0	0.0		
26	0.0	0.0		
27	0.0	0.0		
28	0.0	0.0		
29	0.0	0.0		
30	0.0	0.0		
31				
cfsd	0.0	0.0		
ac-ft	0.0	0.0		

Rule 10 return flow obligation above the Buffalo Canal river headgate **101.9** ac-ft (- value is credit, + value is deficit)
Rule 10 return flow obligation below the Buffalo Canal river headgate **91.4** ac-ft (- value is credit, + value is deficit)
Total Rule 10 return flow obligation if there is no Buffalo Canal call **No** **101.9** ac-ft (- value is credit, + value is deficit)
Wilger Farms CU delivery for Rule 10 Compliance
Rule 10 return flow obligation above the Buffalo Canal river headgate **5.1** ac-ft (- value is credit, + value is deficit)
Rule 10 return flow obligation below the Buffalo Canal river headgate **3.7** ac-ft (- value is credit, + value is deficit)

Stateline winter return flow obligation (9.3% of Lamar Canal non-Rule 10 deliveries) **0** ac-ft (- value is credit, + value is deficit)
15CW3067 Granada Winter Return Flows Obligation **0** ac-ft

Note:
1) All Values are demonstrative and not an actual representation of actual September 2018 accounting
2) 15CW3067 Granada Winter Return Flows will be tracked on the previous year's monthly farm headgate diversions and delivered out of the monthly CU credits in April and/or May. Any other source such as CU water in Gravel Pit will be noted.

Column Explanations:
1 Day of the current month of accounting.
2 Sum of Lamar Canal River headgate gage and Lamar Power Plant outflow gage obtained from CDWR data imported onto the Streamflows tab
3 Lamar Canal Rotation status as determined by the Lamar Canal Board
4 Column 2 - Sum (Columns 5-7)
5 Lamar Canal Article 2 releases - Transit Loss
6 Fully Consumable water delivered to Lamar Canal headgate (this would include fully consumable water purchased from CS-U, Consumptive Use water from LAWMA future decreed change of water rights).
7 Portion of measured diversion of free river diversion at Lamar Canal headgate to West Farm Gravel pit approved in advance in writing by the DE in accordance with Appendix J-2 of the Special Master's January 2008 Fifth and Final Report in KS v. CO.
8 Manvel Canal Article 2 releases - Transit Loss
9 West Farm augmentation station flow obtained from CDWR data imported onto the Streamflows tab
10 City of Lamar + Colorado Beef Shares as shown on Control tab / (Shares to augmentation + Gravel Pit Return Flow Shares)*(Column 8 - Column 12 - Column 10)
11 Column 7 * (1 - Column 8 / Column 2)
12 Number of 15CW3067 Lamar Canal Shares through the aug. station.
13 Column 9 - Sum (Columns 10, 11, 15, 18)
14 Portion of Measured delivery at the aug. station that is LAWMA Rule 6 water for LAWMA's Rule 14 plan.
15 West Farm Rule 10 obligation based on the Rule 10 return flow obligation above the Buffalo Canal river headgate, this will include Lamar Canal Shareholder's portion of their Lamar Canal shares needed to replace Rule 10 Return Flows.
16 Portion of Measured delivery at the aug. station that is Non-LAWMA Rule 14 delivery (not used at this time).
17 Portion of Measured delivery at the aug. station that is Non-LAWMA Rule 10 (not used at this time).
18 Portion of Measured delivery at the aug. station not classified (not used at this time).
19 Number of 15CW3067 Lamar Canal Shares through to the West Farm Gravel Pit.
20 Maximum Allowable Farm Headgate delivery of direct flow water only to the West Farm Gravel Pit calculated as (column 19 / 26127 * column 4)
21 Fully Consumable water under 15CW3067 right delivered to the West Farm gravel pit
22 Portion of measured Return Flows owed by the 15CW3067 right based on the Consumable use delivery to the gravel pit and the Monthly CU factor delivered through the West Farm Augmentation Station.
23 Center Farm Augmentation station diversions obtained from CDWR data imported onto the Streamflows tab
24 (Center Farm Augmentation station diversions - Rule 10 obligation) * (Colorado Parks & Wildlife Shares)
25 Number of 15CW3067 Lamar Canal Shares through the aug. station.
26 Center Farm Rule 10 obligation based on the Rule 10 return flow obligation above the Buffalo Canal river headgate, this will include Lamar Canal Shareholder's portion of their Lamar Canal shares needed to replace Rule 10 Return Flows.
27 Portion of Measured delivery at the aug. station that is LAWMA Rule 6 water for LAWMA's Rule 14 plan (not used at this time).
28 Center Farm Rule 10 obligation based on the Rule 10 return flow obligation above the Buffalo Canal river headgate, this will include Lamar Canal Shareholder's portion of their Lamar Canal shares needed to replace Rule 10 Return Flows.
29 Portion of Measured delivery at the aug. station that is Non-LAWMA Rule 14 delivery (not used at this time).
30 Portion of Measured delivery at the aug. station that is Non-LAWMA Rule 10 (not used at this time).
31 Portion of Measured delivery at the aug. station not classified (not used at this time).
32 Granada West Augmentation station diversions obtained from CDWR data imported onto the Streamflows tab
33 (Granada West Farm Augmentation station diversions - Rule 10 obligation) * 02CW181 Shares / (02CW181 Shares + 15CW3067 GIC shares)
34 All 2625.51 GIC Equivalent Lamar Shares are taken from the same lateral off of the GIC lateral and are split between the two aug. stations.
35 Granada West Farm Augmentation station diversions - 02CW181 obligation to river - Rule 10 obligation
36 Portion of Measured delivery at the aug. station that is LAWMA Rule 6 water for LAWMA's Rule 14 plan (not used at this time).
37 Granada West Farm Rule 10 obligation based on the Rule 10 return flow obligation below the Buffalo Canal river headgate, this will include Lamar Canal Shareholder's portion of their Lamar Canal shares needed to replace Rule 10 Return Flows.
38 Portion of Measured delivery at the aug. station that is Non-LAWMA Rule 14 delivery (not used at this time).
39 Portion of Measured delivery at the aug. station that is Non-LAWMA Rule 10 (not used at this time).
40 Portion of Measured delivery at the aug. station not classified (not used at this time).
41 Granada East Augmentation station diversions obtained from CDWR data imported onto the Streamflows tab
42 (Granada East Farm Augmentation station diversions - Rule 10 obligation) * 02CW181 Shares / (02CW181 Shares + 15CW3067 GIC shares)
43 All 2625.51 GIC Equivalent Lamar Shares are taken from the same lateral off of the GIC lateral and are split between the two aug. stations.
44 Granada East Farm Augmentation station diversions - 02CW181 obligation to river - Rule 10 obligation
45 Portion of Measured delivery at the aug. station that is LAWMA Rule 6 water for LAWMA's Rule 14 plan (not used at this time).
46 Granada East Farm Rule 10 obligation based on the Rule 10 return flow obligation below the Buffalo Canal river headgate, this will include Lamar Canal Shareholder's portion of their Lamar Canal shares needed to replace Rule 10 Return Flows.
47 Portion of Measured delivery at the aug. station that is Non-LAWMA Rule 14 delivery (not used at this time).
48 Portion of Measured delivery at the aug. station that is Non-LAWMA Rule 10 (not used at this time).
49 Portion of Measured delivery at the aug. station not classified (not used at this time).
50 Water designated under the Lamar Canal shares and Lamar Article 2 deliveries in Case No. 02CW181 from the West Farm and Center Farm Augmentation Station (9.3% total)
51 Water designated under the Lamar Canal shares and Lamar Article 2 deliveries in Case No. 02CW181 from the Granada West Farm and Granada East Farm Augmentation Station (9.3% total)

Attachment to Order 2018CW3067

PRELIMINARY - PROVIDED SEPTEMBER 11, 2018
TABLE 10
LAWMA'S MONTHLY AND ANNUAL VOLUMETRIC LIMITS

Month: September **Year: 2018**

Day	March	April	May	June	July	August	September	October	November	Annual Maximum Volumetric Limit
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
02CW181 Highland Canal (River Headgate Diversions)										
Monthly Maximum Volumetric Limits	0	1,445	1,854	2,172	2,369	2,570	1,996	1,142	0	12,257
Diversions	0	1,445	957	116	342	1,276	627		0	4,764
							20 Year Annual Volumetric Limit			136,120
							20-Year Annual Volumetric Limit / 20			6,806
10CW85 Highland Canal (River Headgate Diversions)										
Monthly Maximum Volumetric Limits	0	71	91	107	116	126	98	56	0	602
Diversions	0	71	47	6	17	63	31		0	234
							20 Year Annual Volumetric Limit			6,243
							20-Year Annual Volumetric Limit / 20			312
Fort Lyon Canal Shares (Farm Headgate Deliveries)										
Monthly Maximum Volumetric Limits	1,597	2,156	2,868	3,561	3,854	3,909	2,588	2,095	1,652	20,029
Diversions	155	362	434	507	445	450	450			2,802
							10 Year Annual Volumetric Limit			140,234
							10-Year Annual Volumetric Limit / 10			14,023
02CW181 Keesee Ditch (River Headgate Diversions)										
Monthly Maximum Volumetric Limits	0	431	445	431	445	445	431	445	0	2,503
Diversions	0	0	397	402	344	402	402		0	1,946
							20 Year Annual Volumetric Limit			37,282
							20-Year Annual Volumetric Limit / 20			1,864
05CW52 Keesee Ditch (River Headgate Diversions)										
Monthly Maximum Volumetric Limits	0	431	445	431	445	445	431	445	0	2,503
Diversions	0	0	397	402	344	402	402		0	1,946
							20 Year Annual Volumetric Limit			37,282
							20-Year Annual Volumetric Limit / 20			1,864
02CW181 Fort Bent Canal (Farm Turnout Deliveries)										
Monthly Maximum Volumetric Limits	0	683	678	765	868	952	644	541	0	2,950
Diversions	0	82	79	98	126	57	57		0	500
							20 Year Annual Volumetric Limit			46,506
							20-Year Annual Volumetric Limit / 20			2,325
10CW85 Fort Bent Canal (Farm Turnout Deliveries)										
Monthly Maximum Volumetric Limits	0	55	54	61	69	76	51	43	0	235
Diversions	0	25	25	30	39	18	18		0	155
							20 Year Annual Volumetric Limit			3,735
							20-Year Annual Volumetric Limit / 20			187
T-1 Shares - Fort Bent Canal (Farm Turnout Deliveries)										
Monthly Maximum Volumetric Limits	0	105	104	118	134	147	99	83	0	454
Diversions	0	29	28	34	44	20	20			175
							20 Year Annual Volumetric Limit			7,157
							20-Year Annual Volumetric Limit / 20			358
02CW181 Lamar Canal (Farm Turnout Deliveries) shares through the West Farm, Center Farm, Granada West and Granada East augmentation stations										
Monthly Maximum Volumetric Limits	0	2,884	2,823	3,748	3,783	3,111	2,476	2,107	0	14,100
Diversions	0	1,312	1,105	1,654	1,576	1,164	909		0	7,720
							20 Year Annual Volumetric Limit			200,280
							20-Year Annual Volumetric Limit / 20			10,014
15CW3067 Lamar Canal (Farm Turnout Deliveries) shares through the West Farm, and Center Farm augmentation stations										
Monthly Maximum Volumetric Limits	0	340	333	442	446	367	292	249	0	1,959
Diversions	0	203	165	248	224	224	142		0	2,612
							64 Year Annual Volumetric Limit			69,799
							64 Year Annual Volumetric Limit / 64			1,091
15CW3067 GIC Ditch (Farm Turnout Deliveries) shares through the Granada West and Granada East augmentation stations										
Monthly Maximum Volumetric Limits	0	996	975	1,294	1,307	1,074	855	728	0	5,733
Diversions	0	593	484	725	655	655	352		0	755
							64 Year Annual Volumetric Limit			204,300
							64-Year Annual Volumetric Limit / 64			3,192
02CW181 X-Y Canal (River Headgate Diversions) 67 cfs										
Monthly Maximum Volumetric Limits	0	1,402	2,107	2,606	1,554	2,194	1,855	1,429	0	9,231
Diversions	0	1,129	1,834	461	486	486	486		0	4,881
							20 Year Annual Volumetric Limit			108,227
							20-Year Annual Volumetric Limit / 20			5,411
15CW3067 X-Y Canal (River Headgate Diversions) 2 cfs										
Monthly Maximum Volumetric Limits	0	50	63	77	71	70	55	48	0	329
Diversions	0	34	55	14	14	14	14		0	146
							44 Year Annual Volumetric Limit			5,995
							44-Year Annual Volumetric Limit / 44			136
02CW181 Manvel Canal (River Headgate Diversions)										
Monthly Maximum Volumetric Limits	0	150	150	150	150	150	150	150	0	750
Diversions	0	150	150	150	150	50	50		0	700

Note:
a) Ft Bent water rights acquired by LAWMA will use the factors for each ditch in Case No. 02CW181 until water rights have been changed in water court.
b) Fort Lyon Canal shares acquired in March 2017 will have 10-year volumetric limits pending water court approval.
c) Long-term monthly volumetric limits for the Highland, Keesee, 15CW3067 Lamar, 15CW3067 GIC, and 15CW3067 are included in the integrated accounting.

Attachment to Order - 2015CW3067

PRELIMINARY - PROVIDED SEPTEMBER 11, 2018
TABLE 11
LAWMA'S DAILY CONSUMPTIVE USE DELIVERIES
(values in cfs unless otherwise noted)

Month: September **Year:** 2018

	Highland Canal		Keesee Ditch		Ft Bent Ditch			Lamar Canal									Manvel	X-Y Irrigating Ditch		Sisson	Stubbs
Day	02CW181	10CW85	02CW181	05CW52	02CW181	10CW85	17CW3068	02CW181 WF	15CW3067 WF	15CW3067 WFGP	02CW181 CF	15CW3067 CF	02CW181 GW	15CW3067 GW	02CW181 GE	15CW3067 GE	02CW181	02CW181	15CW3067	10CW85	02CW181
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
1	14.20	0.70	4.39	4.39	4.64	1.15	1.63	5.20	0.32	2.00	10.03	0.00	0.00	2.58	0.00	0.49	14.70	42.14	1.34	0.74	0.74
2	13.15	0.65	4.39	4.39	4.63	1.14	1.63	5.49	0.38	2.00	10.07	0.00	0.00	2.37	0.00	0.43	0.00	42.14	1.34	0.74	0.74
3	12.49	0.61	4.39	4.39	4.65	1.15	1.63	5.15	0.33	2.00	10.11	0.00	0.00	2.39	0.00	0.56	0.00	42.14	1.34	0.74	0.74
4	21.07	1.03	4.39	4.39	3.00	0.74	1.05	4.80	0.19	2.00	9.63	0.00	0.00	2.41	0.00	0.82	0.00	27.53	0.88	0.74	0.74
5	22.88	1.12	4.39	4.39	0.08	0.02	0.03	4.91	0.12	2.00	7.59	0.00	0.00	1.90	0.00	0.46	0.00	0.00	0.00	0.74	0.74
6	22.88	1.12	4.39	4.39	0.08	0.02	0.03	3.83	1.79	0.00	5.57	0.00	0.00	1.90	0.00	0.34	0.00	0.00	0.00	0.74	0.74
7	22.88	1.12	4.39	4.39	0.00	0.00	0.00	4.02	1.88	0.00	6.73	0.00	0.00	1.93	0.00	0.70	0.00	0.00	0.00	0.74	0.74
8	22.88	1.12	4.39	4.39	0.00	0.00	0.00	4.09	1.91	0.00	8.36	0.00	0.00	2.78	0.00	0.41	0.00	0.00	0.00	0.74	0.74
9	22.88	1.12	4.39	4.39	0.00	0.00	0.00	4.19	1.95	0.00	8.50	0.00	0.00	3.59	0.00	0.47	0.00	0.00	0.00	0.74	0.74
10	22.88	1.12	4.39	4.39	0.00	0.00	0.00	4.58	2.14	0.00	8.12	0.00	0.00	4.86	0.00	0.53	0.00	0.00	0.00	0.74	0.74
11	18.97	0.93	4.39	4.39	0.00	0.00	0.00	4.78	2.23	0.00	7.41	0.00	0.00	3.70	0.00	0.40	0.00	0.00	0.00	0.74	0.74
12	15.35	0.75	4.39	4.39	0.00	0.00	0.00	4.81	2.24	0.00	7.36	0.00	0.00	1.66	0.00	0.53	0.00	0.00	0.00	0.74	0.74
13	12.96	0.64	4.39	4.39	0.00	0.00	0.00	4.79	2.23	0.00	7.37	0.00	0.00	1.58	0.00	0.96	0.00	0.00	0.00	0.74	0.74
14	10.77	0.53	4.39	4.39	0.00	0.00	0.00	4.72	2.20	0.00	6.83	0.00	0.00	1.67	0.00	0.78	0.00	0.00	0.00	0.74	0.74
15	9.21	0.45	4.39	4.39	0.00	0.00	0.00	4.72	2.20	0.00	7.25	0.00	0.00	1.45	0.00	0.26	0.00	0.00	0.00	0.74	0.74
16	8.05	0.39	4.39	4.39	0.00	0.00	0.00	5.30	0.32	2.00	7.06	0.00	0.00	1.04	0.00	0.05	0.00	0.00	0.00	0.74	0.74
17	6.87	0.34	4.39	4.39	0.00	0.00	0.00	4.27	1.99	0.00	6.88	0.00	0.00	0.91	0.00	0.18	0.00	0.00	0.00	0.74	0.74
18	5.97	0.29	4.39	4.39	0.09	0.02	0.03	4.24	1.98	0.00	5.76	0.00	0.00	0.87	0.00	0.30	0.00	0.00	0.00	0.74	0.74
19	5.06	0.25	4.39	4.39	0.22	0.05	0.08	4.01	1.87	0.00	5.17	0.00	0.00	0.74	0.00	0.53	0.00	0.00	0.00	0.74	0.74
20	4.50	0.22	4.39	4.39	0.22	0.05	0.08	1.83	0.85	0.00	2.52	0.00	0.00	2.07	0.00	0.51	0.00	0.00	0.00	0.74	0.74
21	3.56	0.18	4.39	4.39	0.22	0.05	0.08	1.20	0.56	0.00	2.00	0.00	0.00	1.84	0.00	0.00	0.00	0.00	0.00	0.74	0.74
22	2.68	0.13	4.39	4.39	0.21	0.05	0.07	1.84	0.86	0.00	3.01	0.00	0.00	2.69	0.00	0.00	0.00	0.00	0.00	0.74	0.74
23	2.26	0.11	4.39	4.39	0.21	0.05	0.07	1.99	0.93	0.00	3.24	0.00	0.00	4.60	0.00	0.00	0.00	0.00	0.00	0.74	0.74
24	1.97	0.10	4.39	4.39	0.22	0.05	0.08	1.89	0.88	0.00	2.65	0.00	0.00	4.21	0.00	0.00	0.00	0.00	0.00	0.74	0.74
25	1.72	0.08	4.39	4.39	0.22	0.05	0.08	1.92	0.90	0.00	3.04	0.00	0.00	3.06	0.00	0.00	0.00	0.00	0.00	0.74	0.74
26	1.54	0.08	4.39	4.39	0.21	0.05	0.07	1.90	0.89	0.00	3.24	0.00	0.00	3.11	0.00	0.00	0.00	0.00	0.00	0.74	0.74
27	1.50	0.07	4.39	4.39	0.20	0.05	0.07	1.49	0.69	0.00	4.65	0.00	0.00	3.17	0.00	0.00	0.00	0.00	0.00	0.74	0.74
28	1.38	0.07	4.39	4.39	0.00	0.00	0.00	2.77	1.29	0.00	4.52	0.00	0.00	3.17	0.00	0.00	0.00	0.00	0.00	0.74	0.74
29	1.33	0.07	4.39	4.39	0.00	0.00	0.00	3.04	1.42	0.00	4.38	0.00	0.00	2.07	0.00	0.00	0.00	0.00	0.00	0.74	0.74
30	1.21	0.06	4.39	4.39	0.00	0.00	0.00	3.08	1.44	0.00	5.56	0.00	0.00	2.83	0.00	0.00	0.00	0.00	0.00	0.74	0.74
31																					
cfsd	315.04	15.46	131.74	131.60	19.08	4.71	6.71	110.83	39.00	12.00	184.61	0.00	0.00	73.16	0.00	9.72	14.70	153.96	4.90	22.18	22.18
ac-ft	624.9	30.7	261.3	261.0	37.8	9.3	13.3	219.8	77.4	23.8	366.2	0.0	0.0	145.1	0.0	19.3	29.2	305.4	9.7	44.0	44.0

Note:
a) Columns 13 & 14 include a transit loss of 2.57% to the Arkansas River from the Granada West augmentation station.
b) Columns 15 & 16 include a transit loss of 1.57% to the Arkansas River from the Granada East augmentation station.
c) Winter Return Flows owed to the stateline for 15CW3067 GIC and XY are included as a portion of columns 15, 17, and 20

Attachment to Order - 15CW3067

TABLE 11 (continued)
LAWMA'S DAILY RETURN FLOWS FROM CONSUMPTIVE USE DELIVERIES
(values in cfs unless otherwise noted)

	Highland Canal		Keesee Ditch		Ft Bent Ditch			Lamar Canal									Manvel	X-Y Irrigating Ditch		Sisson	Stubbs
Day	02CW181	10CW85	02CW181	05CW52	02CW181	10CW85	17CW3068	02CW181 WF	15CW3067 WF	15CW3067 WFGP	02CW181 CF	15CW3067 CF	02CW181 GW	15CW3067 GW	02CW181 GE	15CW3067 GE	02CW181	02CW181	15CW3067	10CW85	02CW181
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
1	4.57	0.21	2.36	2.36	2.37	1.04	0.83	3.72	0.13	0.81	7.18	0.00	0.00	2.88	0.00	0.54	10.51	24.86	0.66	0.39	0.39
2	4.24	0.20	2.36	2.36	2.36	1.04	0.83	3.92	0.15	0.81	7.20	0.00	0.00	2.65	0.00	0.48	0.00	24.86	0.66	0.39	0.39
3	4.02	0.19	2.36	2.36	2.37	1.04	0.83	3.68	0.13	0.81	7.23	0.00	0.00	2.67	0.00	0.61	0.00	24.86	0.66	0.39	0.39
4	6.78	0.31	2.36	2.36	1.53	0.67	0.54	3.43	0.08	0.81	6.89	0.00	0.00	2.70	0.00	0.90	0.00	16.24	0.43	0.39	0.39
5	7.37	0.34	2.36	2.36	0.04	0.02	0.01	3.51	0.05	0.81	5.43	0.00	0.00	2.12	0.00	0.51	0.00	0.00	0.00	0.39	0.39
6	7.37	0.34	2.36	2.36	0.04	0.02	0.01	2.74	0.72	0.00	3.99	0.00	0.00	2.12	0.00	0.38	0.00	0.00	0.00	0.39	0.39
7	7.37	0.34	2.36	2.36	0.00	0.00	0.00	2.87	0.76	0.00	4.82	0.00	0.00	2.15	0.00	0.77	0.00	0.00	0.00	0.39	0.39
8	7.37	0.34	2.36	2.36	0.00	0.00	0.00	2.93	0.77	0.00	5.98	0.00	0.00	3.10	0.00	0.46	0.00	0.00	0.00	0.39	0.39
9	7.37	0.34	2.36	2.36	0.00	0.00	0.00	3.00	0.79	0.00	6.08	0.00	0.00	4.01	0.00	0.52	0.00	0.00	0.00	0.39	0.39
10	7.37	0.34	2.36	2.36	0.00	0.00	0.00	3.27	0.86	0.00	5.81	0.00	0.00	5.42	0.00	0.59	0.00	0.00	0.00	0.39	0.39
11	6.11	0.28	2.36	2.36	0.00	0.00	0.00	3.42	0.90	0.00	5.30	0.00	0.00	4.13	0.00	0.44	0.00	0.00	0.00	0.39	0.39
12	4.94	0.23	2.36	2.36	0.00	0.00	0.00	3.44	0.91	0.00	5.27	0.00	0.00	1.86	0.00	0.59	0.00	0.00	0.00	0.39	0.39
13	4.17	0.19	2.36	2.36	0.00	0.00	0.00	3.42	0.90	0.00	5.27	0.00	0.00	1.77	0.00	1.07	0.00	0.00	0.00	0.39	0.39
14	3.47	0.16	2.36	2.36	0.00	0.00	0.00	3.38	0.89	0.00	4.89	0.00	0.00	1.86	0.00	0.86	0.00	0.00	0.00	0.39	0.39
15	2.96	0.14	2.36	2.36	0.00	0.00	0.00	3.37	0.89	0.00	5.18	0.00	0.00	1.62	0.00	0.28	0.00	0.00	0.00	0.39	0.39
16	2.59	0.12	2.36	2.36	0.00	0.00	0.00	3.79	0.13	0.81	5.05	0.00	0.00	1.17	0.00	0.06	0.00	0.00	0.00	0.39	0.39
17	2.21	0.10	2.36	2.36	0.00	0.00	0.00	3.05	0.81	0.00	4.92	0.00	0.00	1.02	0.00	0.20	0.00	0.00	0.00	0.39	0.39
18	1.92	0.09	2.36	2.36	0.05	0.02	0.02	3.03	0.80	0.00	4.12	0.00	0.00	0.97	0.00	0.33	0.00	0.00	0.00	0.39	0.39
19	1.63	0.08	2.36	2.36	0.11	0.05	0.04	2.87	0.76	0.00	3.70	0.00	0.00	0.83	0.00	0.59	0.00	0.00	0.00	0.39	0.39
20	1.45	0.07	2.36	2.36	0.11	0.05	0.04	1.31	0.34	0.00	1.80	0.00	0.00	2.31	0.00	0.56	0.00	0.00	0.00	0.39	0.39
21	1.15	0.05	2.36	2.36	0.11	0.05	0.04	0.86	0.23	0.00	1.43	0.00	0.00	2.05	0.00	0.00	0.00	0.00	0.00	0.39	0.39
22	0.86	0.04	2.36	2.36	0.11	0.05	0.04	1.31	0.35	0.00	2.15	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.39	0.39
23	0.73	0.03	2.36	2.36	0.11	0.05	0.04	1.43	0.38	0.00	2.32	0.00	0.00	5.14	0.00	0.00	0.00	0.00	0.00	0.39	0.39
24	0.64	0.03	2.36	2.36	0.11	0.05	0.04	1.35	0.36	0.00	1.89	0.00	0.00	4.70	0.00	0.00	0.00	0.00	0.00	0.39	0.39
25	0.55	0.03	2.36	2.36	0.11	0.05	0.04	1.37	0.36	0.00	2.18	0.00	0.00	3.42	0.00	0.00	0.00	0.00	0.00	0.39	0.39
26	0.50	0.02	2.36	2.36	0.11	0.05	0.04	1.36	0.36	0.00	2.31	0.00	0.00	3.47	0.00	0.00	0.00	0.00	0.00	0.39	0.39
27	0.48	0.02	2.36	2.36	0.10	0.04	0.04	1.06	0.28	0.00	3.33	0.00	0.00	3.54	0.00	0.00	0.00	0.00	0.00	0.39	0.39
28	0.45	0.02	2.36	2.36	0.00	0.00	0.00	1.98	0.52	0.00	3.24	0.00	0.00	3.54	0.00	0.00	0.00	0.00	0.00	0.39	0.39
29	0.43	0.02	2.36	2.36	0.00	0.00	0.00	2.17	0.57	0.00	3.13	0.00	0.00	2.31	0.00	0.00	0.00	0.00	0.00	0.39	0.39
30	0.39	0.02	2.36	2.36	0.00	0.00	0.00	2.20	0.58	0.00	3.97	0.00	0.00	3.16	0.00	0.00	0.00	0.00	0.00	0.39	0.39
31																					
cfsd	101.44	4.70	70.88	70.88	9.74	4.28	3.43	79.27	15.78	4.85	132.05	0.00	0.00	81.68	0.00	10.74	10.51	90.81	2.40	11.63	11.63
ac-ft	201.2	9.3	140.6	140.6	19.3	8.5	6.8	157.2	31.3	9.6	261.9	0.0	0.0	162.0	0.0	21.3	20.9	180.1	4.8	23.1	23.1

Note:
a) Totals in Columns 13 & 15 accounts for 9.3% delivery through augmentation station for winter return flow deliveries in April and May as part of Case No. 02CW181.
b) Totals in Columns 14 & 16 accounts for the winter return flow deliveries as required for the GIC shares in Case No. 15CW3067 in April and May.
c) Location of historical Return Flows delivered in columns 10, 11 (see Table 5 Column 19),and 13 for 15CW3067 are owed to HI model reaches 15 and 16.
d) Location of historical Return Flows delivered in columns 15 and 17 for 15CW3067 are owed to HI model reach 17.
d) Location of historical Return Flows delivered in column 20 for 15CW3067 are owed to HI model reach 17.

Attachment to Order - 15CW3067

PRELIMINARY - PROVIDED SEPTEMBER 11, 2018
TABLE 12
LAWMA's WATER REPLACEMENT SOURCES
(Values in Acre-Feet)

Month: September **Plan Year: 2018**

Row	Source	Reach 7	Reach 8	Reach 9	Reach 10	Reach 11	Reach 12	Reach 13	Reach 14	Reach 15	Reach 16	Reach 17	Reach 18	Total
1	Fry-Ark Project Water	**6.37**	**7.92**	**17.00**	**9.14**	**10.57**	**5.55**	**7.77**	**5.91**	0.00	0.00	0.00	0.00	**70.23**
4	Misc below JMR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
5	02CW181 Highland CU Direct Flow to In-State	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
6	10CW85 Highland CU Direct Flow to In-State	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
7	Highland unconsumed TL Credits	0.00	0.00	0.00	**70.16**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**70.16**
8	Offset Account TL Credits on CU Deliveries to Stateline	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
9	02CW181 Keesee Direct Flow CU	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
10	05CW52 Keesee Direct Flow CU	0.00	0.00	0.00	0.00	**261.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**261.00**
11	02CW181 Fort Bent Ditch Shares @ Aug Station	0.00	0.00	0.00	0.00	0.00	0.00	**37.84**	0.00	0.00	0.00	0.00	0.00	**37.84**
12	10CW85 Fort Bent Ditch Shares @ Aug Station	0.00	0.00	0.00	0.00	0.00	0.00	**9.33**	0.00	0.00	0.00	0.00	0.00	**9.33**
14	02CW181 Lamar Canal Shares at Lamar Canal West Farm Turnout	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**219.85**	0.00	0.00	0.00	0.00	**219.85**
15	15CW3067 Lamar Canal Shares at Lamar Canal West Farm Turnout	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**77.39**	0.00	0.00	0.00	0.00	**77.39**
16	02CW181 Lamar Canal Shares at Lamar Canal Center Farm Turnout	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**366.18**	0.00	0.00	0.00	**366.18**
17	15CW3067 Lamar Canal Shares at Lamar Canal Center Farm Turnout	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**
18	02CW181 Lamar Canal Shares atGIC Granada West Aug Station (includes TL to Arkansas River)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	**0.00**
19	15CW3067 Lamar Canal Shares at GIC Granada West Aug Station (includes TL to Arkansas River)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	**0.00**
20	02CW181 Lamar Canal Shares at GIC Granada East Aug Station (includes TL to Arkansas River)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	**0.00**
21	15CW3067 Lamar Canal Shares at GIC Granada East Aug Station (includes TL to Arkansas River)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	**0.00**
22	Manvel Account Water at West Farm Turnout	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**
23	02CW181 Manvel Ditch Direct Flow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**29.20**	0.00	0.00	0.00	**29.20**
24	02CW181 X-Y Ditch Direct Flow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**305.40**	0.00	0.00	**305.40**
25	15CW3067 X-Y Ditch Direct Flow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**9.70**	0.00	0.00	**9.70**
26	02CW181 Stubbs Ditch Direct Flow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**44.00**	**44.00**
27	10CW85 Sisson Ditch Direct Flow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**44.00**	**44.00**
28	Offset Account Stateline Credit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
29	Release from Meredith	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
30	Release of Consumable Water from West Farm Gravel Pit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**
31	Excess City of Lamar Credits	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**
32	Sub-Total	0.00	15.04	0.00	77.75	281.42	32.17	67.99	297.24	395.38	315.10	0.00	88.00	**1,570.10**
	SECWCD Structures													
33	Portion for Augmentation Plan / SWSP	2.32	6.37	32.62	21.12	0.74	0.00	1.05	17.56	0.00	0.00	0.00	0.00	**81.78**
34	Portion for Rule 14 Plan	4.05	1.55	-15.62	-11.98	9.83	5.55	6.72	-11.65	0.00	0.00	0.00	0.00	**-11.55**
	Non-SECWCD Structures													
35	Portion for Augmentation Plan / SWSP	0.00	0.00	0.80	0.00	2.21	410.38	214.78	44.21	71.21	64.59	88.30	669.48	**1,565.98**
36	Portion for Rule 14 Plan	0.00	15.04	-0.80	77.75	279.21	-378.21	-146.79	253.03	324.17	250.51	-88.30	-581.48	**4.12**

Attachment to Order - 15CW3067

Table 13
Arkansas River H-I Model Reaches (Approximate Mileage Distance)

	Reach 7	Upper Terminus	131 mile		Lower Terminus	108 mi	
Date	locationWdid	locationStructure	locationWdidStreamMile	priorityWdid	priorityStructure	priorityAdminNo	priorityDate	Percent call
9/1/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/2/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/3/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/4/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/5/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/6/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/7/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/8/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/9/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/10/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/11/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/12/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/13/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/14/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/15/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/16/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/17/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/18/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/19/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/20/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/21/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/22/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/23/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/24/2018	6700607	AMITY CANAL / LAMAR CANAL	48.6 / 40.3	6700607	AMITY CANAL / LAMAR CANAL	13566.00000 / 13457.00000	1887-02-21 / 1886-11-04	100
9/25/2018	6700614	LAMAR CANAL	40.3	6700614	LAMAR CANAL	13457.00000	1886-11-04	100
9/26/2018	6700614	LAMAR CANAL	40.3	6700614	LAMAR CANAL	13457.00000	1886-11-04	100
9/27/2018	6700614	LAMAR CANAL	40.3	6700614	LAMAR CANAL	13457.00000	1886-11-04	100
9/28/2018	6700614	LAMAR CANAL	40.3	6700614	LAMAR CANAL	13457.00000	1886-11-04	100
9/29/2018	6700614	LAMAR CANAL	40.3	6700614	LAMAR CANAL	13457.00000	1886-11-04	100
9/30/2018	6700614	LAMAR CANAL	40.3	6700614	LAMAR CANAL	13457.00000	1886-11-04	100

Note: Similar format is used for Reaches 8 through 18.

Attachment to Order 15CW3067

PRELIMINARY - PROVIDED SEPTEMBER 11, 2018
CONTROL DATA FOR CALCULATING LAWMA CREDITS FOR SELECTED WATER SOURCES

Parameters for Table 1

Projected diversion rates:				
Month	X-Y	Manvel	Graham	
April	69.0	54.0	16.5	
May	69.0	54.0	18.2	
June	69.0	54.0	16.9	
July	69.0	54.0	19.7	
August	69.0	54.0	15.0	
September	69.0	54.0	12.4	
October	69.0	54.0	11.7	
Nov - Mar	0.0	0.0	0.0	

(PARAMETERS WHICH ARE PRELIMINARY ARE IN RED)

Parameters for Table 5
Lamar Canals Shares

Owner	Case	Aug Station	Shares	
City of Lamar	02CW181	Center Farm	50	
DOW	02CW181	Center Farm	4297	
LAWMA Lamar	15CW3067	West Farm / West Farm GP	897	
Lamar Rule 10		WF,CF,GE,GW		Varies based on next months return flow obligation
Other			0	
LAWMA GIC	15CW3067	Granada East / West	2625.51	750.5 GIC Shares (Lamar Shares Equivalent = GIC shares x 10,600 / 3,030)
Colo. Beef	02CW181	West Farm	2297.09	
Total			10166.60	
		Canal Rotation	No	

LAWMA

Parameters for Table 6
Fort Bent Ditch Shares through LAWMA Augmentation Station

LAWMA	02CW181	462
LAWMA	10CW85	144
LAWMA	T-1 Trade	162.5
City of Lamar Return Flow Obligation		1064.2
City of Lamar Augmentation		0
Total		1832.7
LAWMA only Ft Bent Shares		768.5

City of Lamar		April	May	June	July	August	September	October	November	December	January	February	March
Idler Shares % for RFO:	1880.6	24.9%	26.0%	26.0%	25.4%	29.5%	40.0%	53.5%	0.0%	0.0%	0.0%	0.0%	0.0%
City of Lamar RFO		752.2											
City of Lamar Augmentation		0											
Days in Month		30	31	30	31	31	30	31	30	31	31	28	31

Decreed Consumptive Use Factors

Case No.	Ditch												
02CW181	Fort Bent	66.2%	66.2%	66.2%	66.2%	66.2%	66.2%	66.2%	0.0%	0.0%	0.0%	0.0%	0.0%
02CW181	Lamar	58.3%	58.3%	58.3%	58.3%	58.3%	58.3%	58.3%	0.0%	0.0%	0.0%	0.0%	0.0%
02CW181	Manvel	58.3%	58.3%	58.3%	58.3%	58.3%	58.3%	58.3%	0.0%	0.0%	0.0%	0.0%	0.0%
02CW181	X-Y	62.9%	62.9%	62.9%	62.9%	62.9%	62.9%	62.9%	0.0%	0.0%	0.0%	0.0%	0.0%
02CW181	Stubbs	65.6%	65.6%	65.6%	65.6%	65.6%	65.6%	65.6%	0.0%	0.0%	0.0%	0.0%	0.0%
10CW85	Fort Bent	65.2%	62.2%	64.8%	65.0%	61.6%	52.4%	44.2%	0.0%	0.0%	0.0%	0.0%	0.0%
10CW85	Sisson	65.6%	65.6%	65.6%	65.6%	65.6%	65.6%	65.6%	0.0%	0.0%	0.0%	0.0%	0.0%
02CW181	Keesee	75.0%	77.0%	73.0%	74.0%	70.0%	65.0%	57.5%	0.0%	0.0%	0.0%	0.0%	0.0%
05CW52	Keesee	75.0%	77.0%	73.0%	74.0%	70.0%	65.0%	57.5%	0.0%	0.0%	0.0%	0.0%	0.0%
02CW181	Highland	61.6%	67.6%	75.2%	79.1%	80.7%	67.8%	35.6%	0.0%	0.0%	0.0%	0.0%	0.0%
10CW85	Highland	62.1%	68.3%	76.3%	80.4%	81.9%	69.6%	38.7%	0.0%	0.0%	0.0%	0.0%	0.0%
15CW3067	Lamar	79.9%	80.2%	81.4%	80.4%	76.5%	71.2%	65.9%	0.0%	0.0%	0.0%	0.0%	0.0%
15CW3067	GIC	63.0%	63.8%	67.3%	66.1%	59.0%	47.9%	34.2%	0.0%	0.0%	0.0%	0.0%	0.0%
15CW3067	XY	72.6%	74.5%	75.8%	73.0%	74.0%	67.1%	59.2%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment to Order - 2015CW3067

09/01/2018
10/1/2018

	ARKLASCO USGS 07124000	PURLASCO USGS 07128500	ARKJMRCO USGS 07130500	ARKLAMCO USGS 07133000	ARKGRACO USGS 07134180	FRODITKS USGS 07137000	ARKCOOKS USGS 07137500	PURHILCO CDWR	HILCANCO CDWR	FLYCANCO CDWR	FTBDITCO CDWR	AMYCANCO CDWR	FTBAUGCO CDWR	LAMCANCO CDWR	HYDDITCO CDWR	LLPRETCO CDWR	LAWAUGCO CDWR	CEFAUGCO CDWR	GICAGWCO CDWR	GICAGECO CDWR	BUFDITCO CDWR	LAMCANCO CDWR Total	Stateline USGS Total
	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge		
9/1/2018	27.40	22.50	536.00	121.00	128.00	28.60	168.00	17.48	0.00	113.88	52.86	238.48	11.67	106.27	10.97		11.11	18.76	6.96	1.30	64.29	106.2708	196.6
9/2/2018	27.40	20.00	535.00	121.00	129.00	29.50	174.00	14.92	0.00	112.75	52.90	237.15	11.63	106.44	10.75		11.72	18.84	6.41	1.16	64.42	106.4375	203.5
9/3/2018	32.00	19.10	536.00	122.00	133.00	30.90	211.00	13.81	0.00	123.80	52.90	238.71	11.68	107.11	10.74		11.00	18.91	6.44	1.49	64.56	107.1146	241.9
9/4/2018	31.50	19.40	467.00	115.00	139.00	21.90	303.00	13.10	0.00	122.02	52.77	235.54	7.53	101.86	11.38		10.16	18.01	6.52	2.18	65.06	101.8579	324.9
9/5/2018	29.80	17.60	414.00	36.60	123.00	14.50	286.00	22.07	0.00	147.04	52.47	231.67	0.19	96.41	12.48		10.25	14.20	5.14	1.23	64.32	96.41	300.5
9/6/2018	30.50	43.90	425.00	26.90	95.20	0.00	257.00	48.59	0.00	142.70	52.10	233.96	0.19	86.45	16.08		9.91	10.43	5.13	0.91	61.96	86.45417	257
9/7/2018	31.30	98.50	435.00	24.50	90.80	0.00	244.00	185.30	0.00	161.40	48.44	234.38	0.36	97.91	21.95		10.38	12.59	5.20	1.87	61.41	97.91292	244
9/8/2018	48.80	142.00	433.00	17.80	85.60	0.00	232.00	147.11	0.00	166.20	43.90	234.98	5.21	105.55	20.02		10.57	15.64	7.50	1.10	60.96	105.5521	232
9/9/2018	96.90	62.20	433.00	16.70	82.80	0.00	222.00	59.10	0.00	166.01	45.09	233.63	7.14	107.83	16.37		10.83	15.89	9.70	1.26	60.60	107.8333	222
9/10/2018	51.90	47.60	426.00	20.50	79.00	0.00	221.00	34.35	0.00	166.33	40.63	232.88	5.59	108.39	14.34		11.83	15.18	13.11	1.42	60.04	108.3854	221
9/11/2018	42.60	29.20	421.00	20.90	76.90	0.00	218.00	25.65	0.00	154.02	34.00	232.77	0.84	103.75	16.23		12.36	13.85	9.99	1.07	59.68	103.75	218
9/12/2018	30.60	23.60	421.00	19.90	75.50	0.00	208.00	19.87	0.00	143.30	33.96	232.40	0.65	105.69	13.82		12.42	13.77	4.49	1.43	59.56	105.6875	208
9/13/2018	27.80	21.70	417.00	19.50	72.00	0.00	192.00	16.08	0.00	126.11	33.98	231.75	0.62	107.32	10.54		12.38	13.79	4.27	2.58	59.24	107.3217	192
9/14/2018	26.10	16.70	421.00	18.60	70.00	0.00	177.00	13.58	0.00	139.06	33.99	234.46	0.60	99.51	10.40		12.20	12.78	4.51	2.08	58.97	99.50542	177
9/15/2018	23.80	14.00	425.00	17.10	66.70	0.00	175.00	11.26	0.00	128.38	33.96	233.02	0.62	106.58	10.54		12.19	13.55	3.92	0.68	58.43	106.5833	175
9/16/2018	23.70	12.10	424.00	16.30	64.80	0.00	172.00	9.66	0.00	127.38	34.00	233.44	0.55	105.07	10.95		12.25	13.20	2.82	0.14	58.43	105.0729	172
9/17/2018	22.70	11.00	421.00	16.40	59.50	0.00	155.00	8.44	0.00	120.75	34.01	237.52	0.55	105.47	10.98		11.99	12.86	2.47	0.49	63.11	105.4688	155
9/18/2018	22.50	9.65	419.00	16.00	55.00	0.00	147.00	7.21	0.00	112.96	35.88	257.27	0.55	85.23	10.77		11.89	10.77	2.35	0.80	65.89	85.2275	147
9/19/2018	22.00	8.17	353.00	15.50	52.80	0.00	146.00	6.26	0.00	119.04	38.11	249.32	0.55	78.65	11.57		10.37	9.68	2.00	1.42	65.59	78.65208	146
9/20/2018	22.30	7.49	371.00	15.50	49.20	0.00	150.00	5.31	0.00	138.64	38.10	233.30	0.55	49.11	11.16		4.72	4.71	5.58	1.36	65.03	49.11083	150
9/21/2018	22.30	6.85	410.00	15.60	43.90	0.00	147.00	4.72	0.00	152.76	38.10	271.54	0.55	50.99	11.57		3.11	3.74	4.96	0.00	64.14	50.99458	147
9/22/2018	31.20	6.02	414.00	16.20	41.40	0.00	143.00	3.74	0.00	158.44	38.10	267.19	0.52	61.44	11.98		4.75	5.62	7.26	0.00	63.55	61.44125	143
9/23/2018	33.80	5.15	412.00	16.40	42.60	0.00	152.00	2.81	0.00	159.98	38.10	270.56	0.52	62.62	12.34		5.15	6.06	12.42	0.00	64.25	62.62042	152
9/24/2018	24.40	4.29	411.00	15.30	40.70	0.00	150.00	2.37	0.00	159.05	38.10	271.40	0.55	57.52	11.67		4.89	4.95	11.37	0.00	64.00	57.51917	150
9/25/2018	24.20	3.72	412.00	16.20	38.20	0.00	147.00	2.07	0.00	161.42	38.10	269.68	0.55	59.64	11.43		4.96	5.69	8.26	0.00	63.45	59.63875	147
9/26/2018	24.60	3.34	339.00	16.80	38.10	0.00	147.00	1.80	0.00	162.06	38.10	241.59	0.53	60.21	11.69		4.92	6.05	8.39	0.00	63.52	60.20917	147
9/27/2018	24.20	3.31	285.00	28.50	40.40	0.00	141.00	1.62	0.00	176.30	38.10	140.14	0.49	73.32	12.77		3.85	8.70	8.56	0.00	63.90	73.32208	141
9/28/2018	22.90	3.41	145.00	17.60	42.60	0.00	138.00	1.57	0.00	184.44	38.10	108.79	0.49	74.16	12.76		7.17	8.46	8.55	0.00	64.63	74.15667	138
9/29/2018	26.00	3.47	70.40	26.80	44.50	0.00	142.00	1.45	0.00	190.82	37.85	0.01	8.52	84.74	11.54		7.85	8.18	5.59	0.00	64.62	84.74292	142
9/30/2018	23.40	4.40	69.60	15.10	43.80	0.00	141.00	1.41	0.00	183.28	37.44	0.00	16.37	76.11	10.81		7.96	10.39	7.63	0.00	64.76	76.1075	141
10/1/2018	24.20	4.46	69.40	14.80	40.80	0.00	141.00															0	141
	27.4	8.92	495	118	128	28.6	165.00	17.5	0	114	52.9	238	11.7	106	11		11.1	18.8	6.96	1.3	64.3		
												6567.503333										2631.361	
												13026.6										5219.3	
																						1084.285	
																						2150.7	

Attachment to Order - 2019CV30357

Table 13
SUMMARY OF LAWMA's 15CW3067 LAMAR CANAL WATER RIGHTS LIMITATIONS
(values in acre-feet unless noted)

	Lamar			Consumptive Use			April			May			June		
	Max Annual FHG Delivery 1,959		Max Cum. 64 yr Water Del 69,799	Max 1st Year CU 1458.0		Max 64 yr CU Credits 54,724	Max Monthly FHG Delivery 340		Max Cum 20 yr FHG Del 3,486	Max Monthly FHG Delivery 333		Max Cum 20 yr FHG Del 4,204	Max Monthly FHG Delivery 442		Max Cum 20 yr FHG Del 5,189
	Average Annual Del 1,091			Average Annual CU 855			Avg Monthly Del 174			Avg Monthly Del 210			Avg Monthly Del 259		
Year	FHG Del	Proj. FHG Del	Cumulative Water Del for 64 years	CU Del	Proj. CU Del	Cumulative CU Del for 64 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
2019	1,959		69,799	1,458		54,724	340		3,486	333		4,204	442		5,189
2020		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2021		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2022		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2023		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2024		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2025		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2026		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2027		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2028		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2029		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2030		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2031		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2032		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2033		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2034		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2035		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2036		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2037		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2038		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2039		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2040		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2041		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2042		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2043		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2044		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2045		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2046		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2047		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2048		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2049		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2050		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2051		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2052		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2053		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2054		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2055		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2056		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2057		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2058		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2059		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2060		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2061		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2062		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2063		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2064		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2065		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2066		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2067		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2068		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2069		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2070		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2071		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2072		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2073		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2074		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2075		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2076		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2077		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2078		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2079		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2080		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2081		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2082		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
Average	1,959	1,077		1,458	845		340	166		333	204		442	250	

Note: 2019 Annual and Monthly Data is the maximum allowed in the first year.

Attachment 10 Order 2015 CW3067

Table 13 (continued)
SUMMARY OF LAWMA's 15CW3067 LAMAR CANAL WATER RIGHTS LIMITATIONS
(values in acre-feet unless noted)

	July			August			September			October		
	Max Monthly FHG Delivery 446		Max Cum 20 yr FHG Del 5,647	Max Monthly FHG Delivery 367		Max Cum 20 yr FHG Del 4,337	Max Monthly FHG Delivery 292		Max Cum 20 yr FHG Del 3,806	Max Monthly FHG Delivery 249		Max Cum 20 yr FHG Del 2,981
	Avg Monthly Del		282	Avg Monthly Del		217	Avg Monthly Del		190	Avg Monthly Del		149
Year	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years
(1)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
2019	446		5,647	367		4,337	292		3,806	249		2,981
2020		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2021		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2022		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2023		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2024		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2025		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2026		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2027		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2028		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2029		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2030		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2031		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2032		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2033		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2034		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2035		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2036		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2037		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2038		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2039		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2040		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2041		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2042		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2043		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2044		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2045		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2046		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2047		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2048		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2049		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2050		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2051		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2052		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2053		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2054		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2055		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2056		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2057		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2058		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2059		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2060		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2061		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2062		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2063		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2064		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2065		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2066		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2067		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2068		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2069		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2070		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2071		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2072		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2073		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2074		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2075		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2076		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2077		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2078		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2079		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2080		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2081		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2082		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
Average	446	274		367	209		292	185		249	144	

Attachment to Order 2015CW3067

Table 14
SUMMARY OF LAWMA's 15CW3067 GIC DITCH WATER RIGHTS LIMITATIONS
(values in acre-feet unless noted)

	Lamar			Consumptive Use			April			May			June		
	Max Annual FHG Delivery 5,733		Max Cum. 64 yr Water Del 204,300	Max 1st Year CU 2092.2		Max 64 yr CU Credits 98,802	Max Monthly FHG Delivery 996		Max Cum 20 yr FHG Del 10,203	Max Monthly FHG Delivery 975		Max Cum 20 yr FHG Del 12,306	Max Monthly FHG Delivery 1,294		Max Cum 20 yr FHG Del 15,187
	Average Annual Del		3,192	Average Annual CU		1,544	Avg Monthly Del		510	Avg Monthly Del		615	Avg Monthly Del		759
Year	FHG Del	Proj. FHG Del	Cumulative Water Del for 64 years	CU Del	Proj. CU Del	Cumulative CU Del for 64 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
2019	5,733		204,300	2,092		98,802	996		10,203	975		12,306	1,294		15,187
2020		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2021		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2022		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2023		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2024		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2025		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2026		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2027		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2028		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2029		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2030		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2031		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2032		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2033		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2034		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2035		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2036		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2037		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2038		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2039		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2040		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2041		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2042		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2043		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2044		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2045		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2046		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2047		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2048		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2049		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2050		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2051		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2052		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2053		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2054		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2055		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2056		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2057		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2058		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2059		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2060		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2061		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2062		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2063		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2064		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2065		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2066		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2067		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2068		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2069		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2070		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2071		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2072		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2073		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2074		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2075		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2076		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2077		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2078		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2079		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2080		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2081		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2082		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
Average	5,733	3,152		2,092	1,535		996	485		975	596		1,294	731	

Note: 2019 Annual and Monthly Data is the maximum allowed in the first year.

Attachment 2 Order 15CW3067

Table 14 (continued)
SUMMARY OF LAWMA's 15CW3067 GIC DITCH WATER RIGHTS LIMITATIONS
(values in acre-feet unless noted)

	July			August			September			October		
	Max Monthly FHG Delivery 1,307		Max Cum 20 yr FHG Del 16,528	Max Monthly FHG Delivery 1,074		Max Cum 20 yr FHG Del 12,696	Max Monthly FHG Delivery 855		Max Cum 20 yr FHG Del 11,139	Max Monthly FHG Delivery 728		Max Cum 20 yr FHG Del 8,726
	Avg Monthly Del		826	Avg Monthly Del		635	Avg Monthly Del		557	Avg Monthly Del		436
Year	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years
(1)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
2019	1,307		16,528	1,074		12,696	855		11,139	728		8,726
2020		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2021		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2022		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2023		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2024		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2025		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2026		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2027		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2028		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2029		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2030		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2031		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2032		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2033		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2034		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2035		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2036		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2037		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2038		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2039		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2040		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2041		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2042		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2043		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2044		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2045		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2046		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2047		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2048		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2049		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2050		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2051		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2052		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2053		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2054		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2055		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2056		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2057		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2058		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2059		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2060		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2061		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2062		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2063		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2064		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2065		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2066		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2067		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2068		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2069		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2070		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2071		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2072		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2073		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2074		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2075		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2076		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2077		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2078		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2079		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2080		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2081		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2082		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
Average	1,307	801		1,074	612		855	541		728	421	

Attachment to Order 2015CW3067

Table 17
SUMMARY OF LAWMA's 15CW3067 X-Y IRRIGATING DITCH WATER RIGHTS LIMITATIONS
(values in acre-feet unless noted)

	X-Y			Consumptive Use									
	Max Annual rhg Delivery 329		Max Cum. 44 yr Water Del 5,995	Max 1st Year CU 213.6		Max 44 yr CU Credits 3,946	Maximum Monthly River Headgate Delivery						
	Average Annual Del		94	Average Annual CU		62	April	May	June	July	August	September	October
							50	63	77	71	70	55	48
Year	rhg Del	Proj. rhg Del	Cumulative Water Del for 64 years	CU Del	Proj. CU Del	Cumulative CU Del for 64 years							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
2019	329		5,995	214		3,946							
2020		132	5,995		87	3,946							
2021		132	5,995		87	3,946							
2022		132	5,995		87	3,946							
2023		132	5,995		87	3,946							
2024		132	5,995		87	3,946							
2025		132	5,995		87	3,946							
2026		132	5,995		87	3,946							
2027		132	5,995		87	3,946							
2028		132	5,995		87	3,946							
2029		132	5,995		87	3,946							
2030		132	5,995		87	3,946							
2031		132	5,995		87	3,946							
2032		132	5,995		87	3,946							
2033		132	5,995		87	3,946							
2034		132	5,995		87	3,946							
2035		132	5,995		87	3,946							
2036		132	5,995		87	3,946							
2037		132	5,995		87	3,946							
2038		132	5,995		87	3,946							
2039		132	5,995		87	3,946							
2040		132	5,995		87	3,946							
2041		132	5,995		87	3,946							
2042		132	5,995		87	3,946							
2043		132	5,995		87	3,946							
2044		132	5,995		87	3,946							
2045		132	5,995		87	3,946							
2046		132	5,995		87	3,946							
2047		132	5,995		87	3,946							
2048		132	5,995		87	3,946							
2049		132	5,995		87	3,946							
2050		132	5,995		87	3,946							
2051		132	5,995		87	3,946							
2052		132	5,995		87	3,946							
2053		132	5,995		87	3,946							
2054		132	5,995		87	3,946							
2055		132	5,995		87	3,946							
2056		132	5,995		87	3,946							
2057		132	5,995		87	3,946							
2058		132	5,995		87	3,946							
2059		132	5,995		87	3,946							
2060		132	5,995		87	3,946							
2061		132	5,995		87	3,946							
2062		132	5,995		87	3,946							
Average	329	132		214	87		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Note: 2019 Annual is the maximum allowed in the first year.

Attachment 10 Order - 2015CW3067

COLORADO
Colorado Water Conservation Board
Department of Natural Resources
1313 Sherman Street, Room 718
Denver, CO 80203

May 7, 2019

Mr. Don Higbee, Manager
Lower Arkansas Water Management Association
P.O. Box 1161
Lamar, Colorado 81052

Re: Grant and Loan Applications for CWCB Funding of the West Farm Gravel Pit Purchase

Mr. Higbee:

The Colorado Water Conservation Board (CWCB) staff has reviewed your applications for CWCB grant and loan funding related to the purchase of the West Farm Gravel Pit (WFGP). We will need additional time before a recommendation can be made to the CWCB Board. This letter serves to notify you that CWCB staff intends to continue to work through the issues over the next few months to determine if CWCB funding should be used for this purchase. The earliest opportunity for a Board recommendation is July 2019.

The following are issues that will need to be resolved prior to a staff recommendation. This list should not be considered all-inclusive but was considered substantial enough to delay the recommendation until we can complete additional research and evaluations.

1) Review the use of State funds to permanently dry-up agricultural land with a possible export of agricultural water from Bent County.
2) Receive WFGP ownership and contact information.
3) Review LAWMA shareholders that will directly benefit from the purchase of the WFGP. Disclosure of any and all conflicts of interest. CWCB looking into asking remaining non-conflicted shareholders have an opportunity to review details and vote to approve or deny taking on debt for the WFGP price of purchase.
4) Review Bent County 1041 Show/Cause public hearing results.
5) Receive appraisal or independent opinion of value to support the WFGP purchase price.
6) Review documents pertaining to the LAWMA 2018 Annual and past Special Meetings including the Meeting Notice and Meeting Minutes.
7) Consider meeting(s) with stakeholders and basin area representatives to address project questions and concerns prior to CWCB Board meeting.

Thank you for your patience as we continue our review process.

Sincerely,

Kirk Russell, P.E.
Finance Section Chief

cc: Jack Goble, Arkansas River Basin CWCB Director
Jennifer Mele, Colorado Attorney General's Office
Anna Mauss, CWCB Chief Operating Officer
Rachel Pittinger, CWCB Project Manager

Lower Arkansas Valley WATER CONSERVANCY DISTRICT
Serving Bent, Crowley, Otero, Prowers and Pueblo counties

March 25, 2019

Anna Mauss
Chief Operating Officer
Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver, CO 80203

RE: Lower Arkansas Water Management Association
West Farm Gravel Pit Project

Dear Ms. Anna Mauss:

The Lower Arkansas Valley Water Conservancy District (LAVWCD) cannot support, at this time, the Lower Arkansas Water Management Association (LAWMA) grant and loan request for the West Farm Gravel Pit. The Colorado Water Plan states that there is a requirement for collaboration and though LAWMA represents a collaboration, LAWMA failed to have a conversation with LAVWCD about this project or the grant and loan request.

The Lower Arkansas Valley Water Conservancy District recently conversed with Dallas May, a Lower Arkansas Water Management Association shareholder and one of many shareholders who will be paying back the debt for the loan. Mr. May has had no such conversation with LAWMA about the gravel pit and was not aware of the project or loan. LAVWCD believes this could be a valuable and viable storage project but cannot support it at this time because there has been no communication or collaboration involved with other entities and LAWMA shareholders.

Best Wishes,

Lynden Gill
Chairman
Lower Arkansas Valley Water Conservancy District

LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION
P. O. Box 1161
Lamar, Colorado 81052
(719) 336 9696 (719) 336 2422 FAX
lawma@cminet.net

June 13, 2019

BY EMAIL

Kirk Russell, P.E.
Finance Section Chief
Colorado Water Conservation Board
Department of Natural Resources
1313 Sherman Street, Room 718
Denver, Colorado 80203

Re: LAWMA's Water Plan Grant and Water Project Loan Applications for CWCB Funding of the West Farm Gravel Pit Purchase

Dear Mr. Russell:

The Lower Arkansas Water Management Association ("LAWMA") appreciates the opportunity to work with the Colorado Water Conservation Board ("CWCB") staff to resolve the outstanding issues with LAWMA's pending grant and loan applications for CWCB funding to purchase the West Farm Gravel Pit ("WFGP") that were identified in your May 7, 2019 letter. I hope that LAWMA's responses below resolve the outstanding issues so that CWCB staff will be in a position to recommend approval of LAWMA's pending grant and loan applications to the CWCB at its July 17-18, 2019 meeting. Each of the issues identified in your May 7, 2019 letter are quoted below in ***bold and italics*** and LAWMA's response to each issue follows.

1. ***Review the use of State funds to permanently dry-up agricultural land with a possible export of agricultural water from Bent County.***

The WFGP project does not include any new permanent dry-up of agricultural land

LAWMA will not use any funds made available under its requested grant or loan to dry-up any agricultural land because LAWMA already owns enough changed senior irrigation water rights in the Lamar Canal for it to fully-utilize the storage in the WFGP. In Case No. 15CW3067, District Court, Water Division No. 2 entered February 25, 2019 ("15CW3067 Decree"), LAWMA changed water rights it owns in the Lamar Canal that yield, on average, approximately 2,398 acre-feet of consumptive use water each year ("Lamar Canal CU Credits"). *See* paragraphs 15.10 and 16.10 of the 15CW3067 Decree. A copy of the 15CW3067 Decree is attached hereto as **Exhibit A**. Under the 15CW3067 Decree, the Lamar Canal CU Credits may be used by LAWMA for augmentation and replacement purposes and may be stored in the WFGP for later use by LAWMA. *See* paragraph 14 of the 15CW3067 Decree.

As described in detail in Section IV of LAWMA's February 1, 2019 Feasibility Study prepared by Hendrix Wai Engineering, Inc. in support of LAWMA's grant and loan applications and that has been provided to the CWCB, the Lamar Canal CU Credits will provide enough water each year to allow LAWMA to fully-utilize the storage in the WFGP. According to the modeling of LAWMA's planned operation of the WFGP summarized in Section IV of the Feasibility Study, LAWMA will need to deliver, on average, 933 acre-feet of water into the WFGP each year in order to maximize its use of the WFGP as part of LAWMA's augmentation and replacement plans. Because the Lamar Canal CU Credits available will yield, on average, 2,398 acre-feet of water each year for storage in the WFGP under the 15CW3067 Decree, those credits will provide more than enough yield to supply water to the WFGP for later use by LAWMA. Therefore, no new permanent dry-up of agricultural land is required for completion and use of the WFGP project by LAWMA.

No export of agricultural water from Bent County

LAWMA has no plans to use the WFGP to export agricultural water from Bent County. As described in the Feasibility Study and above, LAWMA's plans to use the WFGP to store the Lamar Canal CU Credits in the WFGP until those credits are needed for use by LAWMA. The Lamar Canal CU Credits are derived from the dry-up of previously irrigated land under the Lamar Canal in Prowers County.

LAWMA acknowledges, however, that there appears to be some concern that LAWMA will use the WFGP to deliver water LAWMA has removed from farms located under the Fort Lyon Canal in Bent County to Colorado Springs Utilities ("CS-U") under the July 16, 2018 Water Sharing Agreement between LAWMA and CS-U. That concern is not reasonable because it is contrary to the terms of the Water Sharing Agreement. Exhibit B to the Water Sharing Agreement identifies three direct delivery points on the mainstem of the Arkansas River above John Martin Dam where CS-U's LAWMA allocation water will be delivered to CS-U. Exhibit B to the Water Sharing Agreement is attached to this letter as **Exhibit B** and a complete copy of the Water Sharing Agreement was submitted as an attachment to LAWMA's CWCB grant application.

The WFGP is located below John Martin Dam in Prowers County and is not one of the direct delivery points identified in Exhibit B of the Water Sharing Agreement. Similarly, there are no provisions in the Water Sharing Agreement that allow CS-U to use the WFGP to exchange water upstream for use in its municipal system. Therefore, there is no direct connection between the WFGP and the delivery of water to CS-U's LAWMA shares or to the delivery of any other water to CS-U. However, as LAWMA has documented in the Feasibility Study, CS-U will benefit from LAWMA's purchase and integration of the WFGP into LAWMA's operations just like all other LAWMA shareholders in the form of an increased average year yield to its LAWMA shares and a reduction in the frequency of dry year yields to its LAWMA shares.

As you know, the WFGP is described in the Water Sharing Agreement in a provision that requires CS-U to reimburse LAWMA $1.75 million dollars for LAWMA's purchase of 500 acre-

feet of storage in the WFGP, subject to certain contingencies. CS-U agreed to make the $1.75 million-dollar reimbursement payment to offset any potential adverse impacts to LAWMA from delivering water to CS-U under the Water Sharing Agreement. As described in the Feasibility Study, LAWMA plans to use CS-U's reimbursement payment to pay down the principal on the CWCB loan for the WFGP and to then ask the CWCB to restructure the loan to reduce the required annual payments and the corresponding share assessments on LAWMA's shareholders.

2. Receive WFGP ownership and contact information.

The WFGP is wholly owned by GP Aggregates, LLC; the registered agent is:

Karl Nyquist
7991 Shaffer Parkway, Suite 200
Littleton, Colorado 80127

GP Aggregates, LLC, is a wholly owned subsidiary of Prowers Holding Company, LLC; the registered agent is:

Karl Nyquist
7991 Shaffer Parkway, Suite 200
Littleton, Colorado 80127

Prowers Holding Company, LLC, has three members: (1) GP Resources, LLC; (2) Syracuse Diary, LLC; and (3) Prowers Aggregate Investors, LLC. Their respective registered agents are listed below:

GP Resources, LLC
Karl Nyquist
7991 Shaffer Parkway, Suite 200
Littleton, Colorado 80127

Syracuse Dairy, LLC
Jay Houtsma
751 SE CR 36
Syracuse, Kansas 67878

Prowers Aggregate Investors, LLC
David Pretzler
7991 Shaffer Parkway, Suite 200
Littleton, Colorado 80127

3. Review LAWMA shareholders that will directly benefit from the purchase of the WFGP. Disclosure of any and all conflicts of interest. CWCB looking into asking remaining

non-conflicted shareholders have an opportunity to review details and vote to approve or deny taking on debt for the WFGP price of purchase.

LAWMA director with a conflict of interest

William Grasmick is the president of LAWMA's Board of Directors, and he has a financial interest in GP Aggregates, LLC. GP Aggregates, LLC owns the WFGP. Given this relationship, Mr. Grasmick has a conflict of interest with respect to the WFGP purchase.

When LAWMA began negotiations with GP Aggregates, LLC for the purchase of the WFGP, Ron Peterson, another LAWMA director, was employed by GP Aggregates, LLC. Mr. Peterson was never a director, officer, or investor in GP Aggregates, LLC. To be conservative, LAWMA treated Mr. Peterson as having a conflict of interest while he was employed by GP Aggregates, LLC. Mr. Peterson is no longer employed by GP Aggregates, LLC. Accordingly, Mr. Peterson is no longer considered by LAWMA to have a conflict of interest with respect to LAWMA's proposed purchase of the WFGP.

From the outset of LAWMA's negotiations with GP Aggregates, LLC, LAWMA addressed the conflict of interest with Mr. Grasmick and the potential for a conflict of interest with Mr. Peterson by taking the following actions. LAWMA notified the board members of the material facts related to the conflict of interest with Mr. Grasmick and the employment status of Mr. Peterson. Whenever the LAWMA board discussed the WFGP, the board excluded Mr. Grasmick and Mr. Peterson from the conversation to prevent them from influencing the remaining 5 disinterested board members' decisions. When the 5 disinterested board members approved the WFGP purchase, they were fully-advised of the material facts of the conflict of interest with Mr. Grasmick and Mr. Peterson and understood the terms of the transaction. LAWMA's practices are consistent with the requirements of C.R.S. § 7-128-501(3)(a), which addresses conflicting interest transactions between a nonprofit corporation and a director with a conflict of interest.

For reasons unknown to LAWMA, the CWCB staff have also identified Donald Higbee, William Broyles, and Robert Wilger as directors with a conflict of interest. LAWMA is unaware of any conflicts of interest these directors have with the WFGP project. These three directors have no connection to GP Aggregates, LLC and have zealously represented LAWMA's interests when negotiating the terms for purchasing the WFGP from GP Aggregates, LLC. Please let me know why the CWCB staff believe that these three directors have a conflict of interest so that we can work with you to resolve those concerns.

LAWMA shareholders with a connection to the WFGP

The CWCB staff also identified the following shareholders as having a conflict of interest: (1) GP Aggregates, LLC; (2) Arkansas River Farms, LLC; (3) GP Irrigated Farms, LLC; and (4) J-S Farms. Unlike directors, shareholders do not typically owe a fiduciary duty to other shareholders of the corporation. Under Colorado law, only a controlling shareholder of a corporation owes a fiduciary duty to "act with an extreme measure of candor, unselfishness, and good faith in relation to remaining shareholders." *Michaelson v. Michaelson*, 939 P.2d 835, 841 (Colo. 1997). As a result, non-controlling shareholders do not owe a fiduciary duty to the remaining shareholders and, therefore, there is no legal basis to assert that a non-controlling shareholder has a conflict of interest. None of the shareholders identified by the CWCB own enough LAWMA shares to be a controlling shareholder; even when their shares are combined. Therefore, the above-listed shareholders do not, under the law, have a conflict of interest with the WFGP project.

Regardless, LAWMA is happy to disclose the names of its shareholders that have a connection to the WFGP transaction. As of the date of this letter, LAWMA has knowledge that the following shareholders have a connection to the WFGP for the reason listed:

(A) GP Aggregates, LLC – Owner of the WFGP.

(B) GP Irrigated Farms, LLC – A wholly owned subsidiary of Syracuse Dairy, LLC, which is a partial owner of GP Aggregates, LLC.

(C) Arkansas River Farms, LLC – Has overlapping managers and/or members with companies owning an interest in GP Aggregates, LLC.

(D) Natures Alternative Farms, LLC - Has overlapping managers and/or members with companies owning an interest in GP Aggregates, LLC.

LAWMA is unaware of any connection between J-S Farms and the WFGP project.

Opportunity for the non-conflicted shareholders to review and approve LAWMA's loan and grant applications

LAWMA will hold a special meeting at 10:00 am on June 21, 2019 at its office in Lamar to give its shareholders an opportunity to vote to approve: (1) the LAWMA Board entering into loan and/or grant contract(s) with the CWCB for the purchase of the WFGP; and (2) the share assessments, in concept, necessary to make the required CWCB loan payments. The notice of the special meeting that was mailed to all shareholders earlier this week disclosed the conflict of interest between Mr. Grasmick and the WFGP project and disclosed the names of the shareholders with a connection to the WFGP and the nature of that connection. The notice also included a summary of the costs and benefits of the WFGP project. A copy of the notice of the June 21, 2019 special meeting is attached hereto as **Exhibit C**. I note that there is one typo on the notice that we

will correct at the special meeting. In the paragraph under the heading "Details of the West Farm Gravel Pit purchase" the cost for the purchase of the WFGP is erroneously stated as being $4,959,000 and, instead, should have been stated as being $4,595,000.

As I have also discussed with CWCB staff, at LAWMA's 2018 annual meeting LAWMA's attorney, Richard Mehren, gave a presentation to the shareholders on the WFGP project. That presentation included a description of the owner of the WFGP, the benefits of the project, and the share assessments needed to finance the project. Attached to this letter as **Exhibit D** is a copy of the handout provided to the shareholders during the presentation. After the presentation, the Board moved to approve a share assessment increase of $1.50 per LAWMA share, which matched the first incremental share assessment increase that is needed to make the estimated payments on a CWCB loan for LAWMA's planned purchase of the WFGP. The vote on the increased share assessment was 22,642.90 in favor and none opposed.

4. Review Bent County 1041 Show / Cause public hearing results.

Bent County continued the show-cause hearing from April 30, 2019, to July 16, 2019. At the continued hearing, LAWMA will continue to work with Arkansas River Farms, LLC, who holds a 1041 Permit from Bent County together with LAWMA, to address Bent County's concerns. However, the CWCB staff must understand that LAWMA does not need a 1041 permit from Bent County for its operation of the WFGP. The WFGP is in Prowers County and Bent County has absolutely no jurisdiction to regulate the WFGP. As explained above, LAWMA's Lamar Canal CU Credits that are derived from already dried-up farms under the Lamar Canal in Prowers County will provide enough water to meet LAWMA's water storage needs at the WFGP. Nevertheless, LAWMA will update the CWCB staff on any developments with the 1041 permit that Bent County has issued to LAWMA for the dry-up of farms located under the Fort Lyon Canal in Bent County.

5. Receive appraisal or independent opinion of value to support the WFGP purchase price.

LAWMA hired Gregory Gerken from Hegarty & Gerken, Inc., to provide an appraisal on the fair market value of the WFGP. Mr. Gerken will provide LAWMA with a verbal summary of his estimated fair market value for the WFGP on or before June 26, 2019 and LAWMA will promptly provide that valuation information to CWCB staff. LAWMA will provide the CWCB with the final written appraisal report prior to the CWCB's meeting on July 17, 2019.

6. Review documents pertaining to the LAWMA 2018 Annual and past Special Meetings including the Meeting Notice and Meeting Minutes.

Attached to this letter as **Exhibit E** are the following documents from the LAWMA's 2018 annual meeting:

(A) Meeting notice,

(B) Sign in list,

(C) Meeting handouts, and

(D) Meeting minutes.

Please let me know if you have any questions about these documents.

7. Consider meeting(s) with stakeholders and basin area representatives to address project questions and concerns prior to CWCB Board meeting.

LAWMA has met with and discussed the WFGP with the following individuals and entities in an effort to educate the community about the project and to answer their questions and concerns related to the project:

(A) Prowers County Commissioners

(B) Bent County Commissioners

(C) Arkansas Basin Roundtable

(D) Lower Arkansas Valley Water Conservancy District

(E) District 67 Ditch Association

(F) Colorado Parks and Wildlife

(G) Town of Eads

(H) Kiowa County Economic Development Foundation

(I) City of Lamar

(J) Several directors of upstream ditch companies

(K) Several directors of the Fort Lyon Canal Company's Board of Directors

(L) Matt Heimrich

(M) John Stulp

LAWMA appreciates the opportunity to work with the CWCB to resolve these outstanding issues. Please let me know if you have any questions or need any additional information in order to complete your recommendation to the CWCB on LAWMA's pending CWCB grant and loan applications.

Sincerely,

Donald F. Higbee
Manager, Lower Arkansas Water Management Association

cc: Richard J. Mehren, LAWMA attorney
Anna Mauss, CWCB Chief Operating Officer
Rachel Pittinger, CWCB Project Manager

EXHIBIT A

DISTRICT COURT, WATER DIVISION NO. 2, COLORADO 501 North Elizabeth Street, Suite 116 Pueblo, Colorado 81003 (719) 583-7048	DATE FILED: February 25, 2019 12:27 PM CASE NUMBER: 2015CW3067
IN THE MATTER OF THE APPLICATION FOR WATER RIGHTS OF LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION IN THE ARKANSAS RIVER AND ITS TRIBUTARIES IN BENT AND PROWERS COUNTIES	▲ **COURT USE ONLY** ▲ Case Number: 15CW3067

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND DECREE OF THE WATER COURT

This matter comes before the Water Court upon the Application of Lower Arkansas Water Management Association ("LAWMA") for a decree approving changes of water rights and the addition of augmentation and replacement supplies to LAWMA's plan for augmentation decreed in Case No. 02CW181 ("02CW181 Decree"). Having considered the pleadings, the stipulations of the parties, and the evidence presented, and being fully advised in the premises, the Water Court enters the following Findings of Fact, Conclusions of Law, and Decree of the Water Court:

FINDINGS OF FACT

1. Applicant: The name, address, and telephone number of the Applicant is Lower Arkansas Water Management Association, 310 Sixth Street, P.O. Box 1161, Lamar, Colorado 81052, (719) 336-9696.

2. Application, notice, and jurisdiction: LAWMA filed the application in this matter on December 29, 2015 ("Application"). The Court finds that the Application is complete and covers all matters required by law. Timely and adequate notice of the Application was given in the manner prescribed by law, and the Court has jurisdiction over the subject matter of this proceeding and over all persons, property, and water rights affected hereby, whether or not those persons have appeared. The land and water rights involved herein are not included within the boundaries of a designated ground water basin.

3. Statements of opposition: Timely statements of opposition to the Application were filed by the Fort Lyon Canal Company; the Amity Mutual Irrigation Company; Public Service Company of Colorado; Kathleen Gamble-Hughes; May Farms Partnership; the Prowers

Conservation District; John P. Sutphin; Tri-State Generation and Transmission Association, Inc.; Lower Arkansas Valley Water Conservancy District; Arkansas Valley Ditch Association; Five Rivers Cattle Feeding LLC d/b/a/ Colorado Beef; and the City of Lamar. By Order dated December 12, 2016, the Court granted the Unopposed Motion to Intervene filed by the State Engineer and the Division Engineer for Water Division 2. By Orders dated December 13, 2017, the Court dismissed the statements of opposition of John P. Sutphin and the Prowers Conservation District. The time for filing statements of opposition has expired.

4. Summary of Consultation: The Referee consulted with the Division Engineer regarding the Application as required by law. The Division Engineer submitted a Summary of Consultation dated February 12, 2016, and LAWMA filed its Response to the Summary of Consultation on March 16, 2016. Copies of both the Summary of Consultation and LAWMA's Response were properly served on all parties to the case.

5. Stipulations: LAWMA has entered into stipulations with the following parties on the basis that these parties would not oppose entry of a decree at least as restrictive on LAWMA and no less protective of these parties' interests than the version of the decree to which they stipulated: the Fort Lyon Canal Company; the Amity Mutual Irrigation Company; Public Service Company of Colorado; Kathleen Gamble-Hughes; May Farms Partnership; Tri-State Generation and Transmission Association, Inc.; Lower Arkansas Valley Water Conservancy District; Arkansas Valley Ditch Association; Five Rivers Cattle Feeding LLC d/b/a/ Colorado Beef; the City of Lamar; and the State Engineer and the Division Engineer for Water Division 2. The Court has approved the stipulations as orders of the Court. The Court finds that this Decree is at least as restrictive on LAWMA and no less protective of these parties' interests than the earlier versions of this Decree to which these parties stipulated.

6. Description of Application: LAWMA is a non-profit corporation organized for the primary purpose of providing a means for its members to continue to make ground water diversions from wells and other structures with junior priorities and to continue to make surface water diversions from structures with junior priorities in the Arkansas River water rights regime. The purposes of the Application are as follows:

   6.1 To change the use of the water rights described in paragraphs 7.1 through 7.4 below ("15CW3067 Water Rights"), which currently are decreed for agricultural irrigation purposes, to allow the water available to those water rights to be used both directly and after storage for augmentation and replacement purposes within LAWMA's plan for augmentation decreed on March 8, 2007, in Case No. 02CW181, Water Division No. 2, as that plan for augmentation has been expanded and modified by the decrees entered in Case Nos. 05CW52, 08CW18,

10CW85, 10CW91, 12CW37, 13CW3004, 13CW3065, 14CW3004, 15CW3014, 16CW3018, 17CW3000, 17CW3001, and 17CW3035 and as it may be expanded or modified in pending Case Nos. 17CW3068, 17CW3069, and 18CW3072 and in other future cases ("Augmentation Plan"); in LAWMA's annual Arkansas River Replacement Plan pursuant to Rule 14 of the Amended Rules and Regulations Governing the Diversion and Use of Tributary Ground Water in the Arkansas River Basin ("Rule 14 Plan"); and/or in any LAWMA-operated Compact Compliance Plan pursuant to Rule 10 of the Compact Rules Governing Improvements to Surface Water Irrigation Systems in the Arkansas River Basin in Colorado ("Rule 10 Plan"); and to make those water rights available for use for replacement of historical return flows under the decree to be entered in this case, the decree entered in Case No. 02CW181 ("02CW181 Decree"), and any future change of water rights decree that LAWMA obtains in this Court ("Future LAWMA Change Decree")—provided, however, that LAWMA shall not use the 15CW3067 Water Rights for replacement of historical return flows for the water rights changed under the 02CW181 Decree or a Future LAWMA Change Decree unless and until LAWMA obtains a future Water Court decree providing for such use; and

6.2 To add the 15CW3067 Water Rights, as changed herein, as a new source of augmentation and replacement supply under LAWMA's Augmentation Plan.

6.3 The Application also sought confirmation of LAWMA's appropriation of the historical return flows associated with the 15CW3067 Water Rights, such that LAWMA would replace those historical return flows to the stream only when they were subject to a call senior to the date of the Application. LAWMA hereby withdraws that claim for appropriation of historical return flows.

6.4 The Application erroneously recited that LAWMA sought to change the use of 783.5 of the 3,030 shares outstanding of the capital stock of the Granada Irrigation Company ("Granada Company"). In fact, as described in paragraph 7.2 below, LAWMA seeks to change the use of only 750.5 shares of stock in the Granada Company, which are the only shares of Granada Company stock that LAWMA owned at the time of the Application and currently owns. LAWMA hereby withdraws any claim to change the use of more than 750.5 shares of stock in the Granada Company.

6.5 The Application did not seek, and this Decree does not confirm, any appropriative rights of exchange.

CHANGE OF WATER RIGHTS

7. Description of water rights to be changed: LAWMA seeks to change the use of the 15CW3067 Water Rights, which are described in paragraphs 7.1 through 7.4 below, and which LAWMA owns.

7.1 Lamar Canal: 897 shares of the 26,127 shares outstanding of the capital stock of the Lamar Canal and Irrigation Company ("Lamar Canal Company"). The 897 Lamar Canal Company shares that are the subject of the Application are referred to herein as the "Lamar Canal Shares."

7.1.1 Appropriation date, priority, and amount of the Lamar Canal Company's decreed water rights:

7.1.1.1 November 30, 1875, Priority No. 3 for 15.75 cfs.

7.1.1.2 November 4, 1886, Priority No. 6½ for 72.09 cfs.

7.1.1.3 April 16, 1887, Priority No. 7½ for 13.64 cfs.

7.1.1.4 July 16, 1890, Priority No. 13 for 184.27 cfs.

7.1.2 Original decree: The Lamar Canal Company water rights were decreed in the Adjudication of Priorities to the Use of Water for Irrigation in District Number 67, dated July 1, 1895, in the Bent County District Court ("District 67 General Adjudication").

7.1.3 Decreed point of diversion: By decree of the Bent County District Court dated November 9, 1899, Priority Nos. 3, 6½, 7½, and 13 were decreed for diversion at the headgates of the "Home Ranch ditch or the main canal, located on the south bank of the Arkansas river, in the northeast quarter of the southeast quarter of Section 29, of township 22, south of range 46, west of the 6th P.M., in Prowers County, Colorado or through its headgate known as the A.R. Black's Lamar ditch, or Feeder No. one, located on the south bank of the Arkansas River in the northeast quarter of the southwest quarter of section 25, of township 22, south of range 47 west of the 6th P.M., in Prowers County, Colorado or into both the said headgates." By this same decree, Priority No. 13 only was also decreed for diversion at the "headgate of what is called Feeder No. two or the Lamar, Granada and State Line Land and Irrigating Company's ditch, located on the south bank of the Arkansas River, on lot 3, of the northwest quarter of Section 33, of township 22 south of range 47 west of the 6th P.M., in Prowers County, Colorado." The decree

in Case No. W-1836, entered by the District Court in and for Water Division No. 2 on June 21, 1977 ("W-1836 Decree"), confirmed an alternate point of diversion for the Lamar Canal at a point where the pipeline from the steam-electric generating plant of the City of Lamar, Colorado, discharges water from said plant into the Lamar Canal, which point is located on the South bank of said Canal whence the Northwest corner of Section 31, T22S, R46W of the 6th P.M. bears North 10°44'26" East, 1,342.6 feet, subject to a maximum rate of diversion at said alternate point of 37.8 cfs, and subject to the condition that all water diverted at said alternate point be charged to the water rights of the Lamar Canal Company. The Lamar Canal's river headgate is located on the south bank of the Arkansas River in the NE¼ of the SW¼ of Section 25, Township 22 South, Range 47 West of the 6th P.M. in Prowers County, consistent with the decreed point of diversion for the A.R. Black's Lamar ditch, or Feeder No. one described above and was the headgate used during the study period described in paragraph 8 below.

7.1.4 Source: The Arkansas River and, pursuant to the W-1836 Decree, ground water tributary to the Arkansas River.

7.1.5 Decreed use: Irrigation.

7.1.6 Pro-rata interest in the Lamar Canal Company water rights to be changed: The 897 Lamar Canal Shares represent a pro-rata interest in the Lamar Canal Company water rights as follows:

7.1.6.1 Priority No. 3: 0.54 cfs of the 15.75 cfs.

7.1.6.2 Priority No. 6½: 2.48 cfs of the 72.09 cfs.

7.1.6.3 Priority No. 7½: 0.47 cfs of the 13.64 cfs.

7.1.6.4 Priority No. 13: 6.33 cfs of the 184.27 cfs.

7.2 Granada Irrigation Company: 750.5 of the 3,030 shares outstanding of the capital stock of the Granada Company. The Granada Company owns 10,600 shares of the capital stock of the Lamar Canal Company, or approximately 41% of the 26,127 shares outstanding in the Lamar Canal Company; therefore, one share of the capital stock of the Granada Company equates to approximately 3.498 shares of capital stock of the Lamar Canal Company. The 750.5 Granada Company shares that are the subject of the Application are referred to herein as the "Granada Shares."

7.2.1 Appropriation date, priority, and amount of the Lamar Canal Company's decreed water rights: As described in paragraph 7.1.1 above.

7.2.2 Original decree: As described in paragraph 7.1.2 above.

7.2.3 Decreed point of diversion: As described in paragraph 7.1.3 above.

7.2.4 Source: As described in paragraph 7.1.4 above.

7.2.5 Decreed use: As described in paragraph 7.1.5 above.

7.2.6 Pro-rata interest in the Lamar Canal Company water rights to be changed: Based on the Granada Company's ownership of 10,600 shares of stock in the Lamar Canal Company, the 750.5 Granada Shares represent 2,625.51 shares of stock in the Lamar Canal Company. Therefore, the 750.5 Granada Shares equate to the following pro-rata interest in the Lamar Canal Company water rights:

7.2.6.1 Priority No. 3: 1.58 cfs of the 15.75 cfs.

7.2.6.2 Priority No. 6½: 7.24 cfs of the 72.09 cfs.

7.2.6.3 Priority No. 7½: 1.37 cfs of the 13.64 cfs.

7.2.6.4 Priority No. 13: 18.52 cfs of the 184.27 cfs.

7.3 XY Canal: 2.0 cfs of the 69.0 cfs decreed to the XY Irrigating Ditch Company's Canal ("XY Canal"). The 2.0 cfs interest in the XY water right that is the subject of the Application is referred to herein as the "XY 2.0 cfs."

7.3.1 Appropriation date, priority, and amount of the XY Canal's decreed water rights: July 22, 1889, Priority No. 11 for 69.0 cfs.

7.3.2 Original decree: The District 67 Original Adjudication.

7.3.3 Decreed point of diversion: The decreed headgate location is "on the south bank of the Arkansas River in the northeast quarter of the northwest quarter of section numbered 36 of township 22 south of range 45 west of the 6th P.M. in Prowers County, Colorado."

7.3.4 Source: The Arkansas River.

7.3.5 Decreed use: Irrigation.

7.3.6 Pro-rata interest in the XY Canal water rights to be changed: 2.0 cfs of the 69.0 cfs decreed to the XY Canal. The remaining 67.0 cfs of the 69.0 cfs decreed to the XY Canal is owned by LAWMA and was changed in Case No. 02CW181.

7.4 Article II Storage Account Water: Section II of the Resolution Concerning an Operating Plan for John Martin Reservoir, adopted on April 24, 1980 and amended on May 10, 1984, December 11, 1984, and February 11, 2010 ("1980 Operating Plan"), provides that 60% of the water attributable to conservation storage in John Martin Reservoir shall be for the Colorado Water District 67 ditches including the Fort Bent Ditch, the Keesee Ditch, the Amity Canal, the Lamar Canal, the Hyde Ditch, the Manvel Canal, the X-Y and Graham Canal, the Buffalo Canal, and the Sisson-Stubbs Ditch; and that 40% of the water attributable to conservation storage in John Martin Reservoir shall be for Kansas. In this Decree, the accounts in John Martin Reservoir in which such water is stored are referred to as "Article II Storage Accounts," and the water stored in such accounts is referred to as "Article II Water." Under the 1980 Operating Plan, Kansas and the Colorado Water District 67 ditches may demand the release of water from their respective Article II Storage Accounts at any time and at any rate. The 1980 Operating Plan provides that the Colorado Water District 67 ditches' share of water released from conservation storage in John Martin Reservoir is distributed to those ditches' respective Article II Storage Accounts as follows:

Fort Bent Ditch	9.9%
Keesee Ditch	2.3%
Amity Canal	49.5%
Lamar Canal	19.8%
Hyde Ditch	1.3%
Manvel Canal	2.4%

X-Y and Graham Ditch	5.1%
Buffalo Canal	8.5%
Sisson-Stubbs Ditch	1.2%

LAWMA is entitled to use the Article II Water associated with the Lamar Canal Shares and the Granada Shares and seeks to change that Article II Water in this case. LAWMA previously changed all of the X-Y and Graham Ditch Article II Water in Case No. 02CW181 and therefore does not seek to change any X-Y and Graham Ditch Article II Water in this case.

8. Historical use of the 15CW3067 Water Rights: The 15CW3067 Water Rights were used historically on the farms shown on the maps attached as **Exhibits A-1**, **B-1**, and **C-1**. LAWMA's engineering consultant, Hendrix Wai Engineering, Inc., has quantified the historical consumptive use attributable to the 15CW3067 Water Rights and has determined the amount, timing, and location of return flows resulting from the historical use of those water rights. The historical use analysis for the 15CW3067 Water Rights is summarized in paragraphs 8.1 through 8.3 below.

8.1 Lamar Canal Shares: The 897 shares of the 26,127 shares outstanding of the capital stock of the Lamar Canal Company that LAWMA seeks to change in this case represent approximately 3.43% of the Lamar Canal Company water rights, including associated Lamar Canal Company Article II Water. As used throughout this Decree, the term "Lamar Canal Shares" includes the Lamar Canal Company Article II Water associated with those 897 shares.

8.1.1 The Lamar Canal Shares historically were used for agricultural irrigation purposes on the land shown on the map attached as **Exhibit A-1** ("Lamar Canal Historically Irrigated Land"). The number of acres irrigated with the Lamar Canal Shares varied from year to year within the 1950 through 2013 study period but averaged 779. Based on recorded diversion records for the study period, the historical pro-rata river headgate diversions for the Lamar Canal Shares averaged 1,387.2 acre-feet per year (1,256.5 acre-feet for the months of April through October and 130.7 acre-feet for the months of November through March), or approximately 1.5 acre-feet per Lamar Canal Share. Those diversions included water available to the Lamar Canal Shares under the Lamar Canal direct-flow water rights, John Martin

Reservoir conservation pool water that was diverted by the Lamar Canal, and Article II Water that was diverted by the Lamar Canal. The historical farm headgate delivery for LAWMA's Lamar Canal Shares averaged 1,204.1 acre-feet per year, and averaged 1,090.6 acre-feet per irrigation season (April 1 through October 31). The historical depletions associated with the Lamar Canal Shares averaged 71% of farm headgate deliveries, or approximately 855.0 acre-feet per year.

8.1.2 LAWMA acquired the Lamar Canal Shares in 2014.

8.2 Granada Shares: LAWMA owns 750.5 of the 3,030 shares outstanding of the capital stock of the Granada Company, or approximately 24.8% of the Granada Company water rights. As described in paragraph 7.2 above, one share of the capital stock of the Granada Company equates to approximately 3.498 shares of capital stock of the Lamar Canal Company. As used throughout this Decree, the term "Granada Shares" includes the Lamar Canal Company Article II Water associated with those shares.

8.2.1 The Granada Shares historically were used for agricultural irrigation purposes on the land shown on the map attached as **Exhibit B-1** ("Granada Historically Irrigated Land"). **Exhibit B-1** also shows the location of the Granada Irrigation Company Ditch ("Granada Lateral"). The number of acres irrigated with the Granada Shares varied from year to year within the 1950 through 2013 study period but averaged 716. Based on recorded diversion records for the Lamar Canal for the study period, the historical pro-rata river headgate diversions for the Granada Shares averaged 4,060.2 acre-feet per year (3,677.6 acre-feet for the months of April through October and 382.6 acre-feet for the months of November through March), or approximately 5.4 acre-feet per Granada Share. Those diversions included water available to the Granada Shares under the Lamar Canal direct-flow water rights, John Martin Reservoir conservation pool water that was diverted by the Lamar Canal, and Article II Water that was diverted by the Lamar Canal. The historical farm headgate delivery for the Granada Shares averaged 3,524.3 acre-feet per year and averaged 3,192.2 acre-feet per irrigation season (April 1 through October 31). The historical depletions associated with the Granada Shares averaged 44.0% of farm headgate deliveries, or approximately 1,550.34 acre-feet per year.

8.2.2 LAWMA acquired 436 of the Granada Shares in 2014 ("Grasmick Granada Shares"). LAWMA acquired the right to use the remaining 314.5 Granada

Shares in 2015 ("Gass Granada Shares"), and became the owner of those shares in 2017.

8.3 XY 2.0 cfs: LAWMA owns the entire 69.0 cfs decreed to the XY Canal, along with all of the XY and Graham Article II Water. LAWMA previously changed 67.0 cfs of the XY Canal water right and all of the XY and Graham Article II Water in the 02CW181 Decree; that portion of the XY Canal water right and all of the XY and Graham Article II Water are not included in the 15CW3067 Water Rights and are not before the Court in this case. The XY 2.0 cfs is the only portion of the XY Canal water right being changed in this case.

8.3.1 The XY 2.0 cfs historically was used for agricultural irrigation purposes on the land shown on the map attached as **Exhibit C-1** ("XY Historically Irrigated Land"). The number of acres irrigated with the XY 2.0 cfs varied from year to year within the 1950 through 1993 study period but averaged 186. Based on recorded diversion records for the XY Canal for the study period, the historical pro-rata river headgate diversions for the XY 2.0 cfs averaged 147.0 acre-feet per year (136.2 acre-feet for the months of April through October and 10.8 acre-feet for the months of November through March). The historical farm headgate delivery for the XY 2.0 cfs averaged approximately 131.0 acre-feet per year and averaged 121.5 acre-feet per irrigation season (April 1 through October 31). The historical depletions associated with the XY 2.0 cfs averaged 61.1% of pro-rata river headgate diversions, or approximately 89.8 acre-feet per year.

8.3.2 LAWMA acquired the XY 2.0 cfs in 2014.

9. Historical consumptive use: A portion of the 15CW3067 Water Rights historically applied to irrigation was consumed. Water so consumed was lost to the Arkansas River system and not available for other uses. The amount of water changed to the New Uses described in paragraph 14.1 below is based upon the historical depletion associated with the 15CW3067 Water Rights.

10. Historical return flows: A portion of the 15CW3067 Water Rights historically applied to irrigation returned to the stream system as return flow ("Historical Return Flows"). LAWMA will replace Historical Return Flows in accordance with paragraphs 15.2, 15.7, 16.2, 16.7, 17.2, and 17.6 below. Some of the Historical Return Flows returned as surface water during the irrigation season and some of the Historical Return Flows returned as ground water during and after the irrigation season. The amounts and timing of return flow varied with conditions. LAWMA shall replace the Historical Return Flows to the Arkansas River on a daily basis during the irrigation season (April 1 through October 31) in accordance with the terms and conditions of this Decree. To the extent the Historical

Return Flows accrued above downstream calling water rights, LAWMA shall replace them to the river at or above the point of diversion of any such downstream calling water right. LAWMA's replacement of Historical Return Flows in accordance with the terms and conditions of this Decree will prevent injury to vested water rights in Colorado and will not cause a violation of the Arkansas River Compact, § 37-69-101, C.R.S. ("Compact").

11. Historical depletions: As more specifically described in paragraphs 8.1 through 8.3 above, the historical use of the 15CW3067 Water Rights resulted in depletions to the stream system. The terms and conditions of this Decree are sufficient to prevent an expansion of the historical use and depletions attributable to the 15CW3067 Water Rights as a result of the changes approved herein, and will not cause a violation of the Compact.

12. Dry-up of historically irrigated lands: The lands historically irrigated with the 15CW3067 Water Rights, as shown in attached **Exhibits A-1**, **B-1**, and **C-1** ("Historically Irrigated Lands"), have been removed from irrigation with the 15CW3067 Water Rights. As of the date of entry of this Decree, the Historically Irrigated Lands have been dried up or are being re-irrigated with the permissible sources of water described in paragraph 20.2 below. Due to the removal of the 15CW3067 Water Rights from the Historically Irrigated Lands in accordance with the terms and conditions of this Decree, the historical consumptive use attributable to the irrigation of those lands with the 15CW3067 Water Rights has ceased. Dry-up of the Historically Irrigated Lands will be administered in accordance with paragraph 50 below and Appendix B.3 of the decree entered in Kansas v. Colorado, No. 105, Original (Administration of Parcels Claimed for Augmentation Agreement) ("Appendix B.3"). Should Kansas dispute LAWMA's entitlement to dry-up credit for any portion of the Historically Irrigated Lands, such disputes must be resolved per paragraph 5 of Appendix B.3.

13. Maintenance of historical stream conditions: Irrigation of the Historically Irrigated Lands with the 15CW3067 Water Rights historically resulted in impacts to stream flows that varied from year to year. The terms and conditions imposed by this Decree are designed to and will yield varying amounts of water for the New Uses described in paragraphs 14.1.1 through 14.1.5 below depending upon conditions, but will reasonably approximate and not exceed historical use and thereby prevent injury to other water rights and prevent a violation of the Compact.

14. Change of water rights: The Application requested approval of the following changes of the 15CW3067 Water Rights. The changes are approved subject to the terms and conditions of this Decree.

    14.1 New types of use: The Application requested that the type of use of the 15CW3067 Water Rights be changed such that they may be used for the following new purposes at the new places of use described in paragraph 14.2 below, in addition to

their currently decreed purpose of agricultural irrigation. LAWMA hereby withdraws its request for the continued use of the 15CW3067 Water Rights for their originally decreed purpose of agricultural irrigation, and instead will use the 15CW3067 Water Rights only for the following changed purposes:

14.1.1 Augmentation or replacement of out-of-priority depletions and depletions to Stateline flows caused by the "LAWMA Structures" included in the Augmentation Plan decreed in Case No. 02CW181, as expanded and modified by the decrees entered in Case Nos. 05CW52, 08CW18, 10CW85, 10CW91, 12CW37, 13CW3004, 13CW3065, 14CW3004, 15CW3014, 17CW3000, 17CW3001, 16CW3018, and 17CW3035, and as it may be expanded or modified in pending Case Nos. 17CW3068, 17CW3069, and 18CW3072 and in other future cases, and as the term "LAWMA Structures" is defined in those decrees, to the extent such depletions can be replaced downstream from John Martin Reservoir without injury;

14.1.2 Augmentation or replacement of out-of-priority depletions and depletions to Stateline flows caused by the wells included in LAWMA's Rule 14 Plan, to the extent such depletions can be replaced downstream from John Martin Reservoir without injury;

14.1.3 Replacement of Historical Return Flows attributable to the 15CW3067 Water Rights; and

14.1.4 Replacement of historical return flows for the water rights changed under the 02CW181 Decree or Future LAWMA Change Decrees to the extent such depletions can be replaced downstream from John Martin Reservoir without injury—provided, however, that LAWMA shall not use the 15CW3067 Water Rights for replacement of historical return flows for the water rights changed under the 02CW181 Decree or a Future LAWMA Change Decree unless and until LAWMA obtains a future Water Court decree providing for such use;

14.1.5 Replacement of historical seepage losses and/or return flows under any Rule 10 Plan operated by LAWMA.

14.1.6 The new uses described in paragraphs 14.1.1 through 14.1.5 above are referred to collectively in this Decree as the "New Uses."

14.2 New places of use: In accordance with the New Uses, the Application requested that the place of use of the 15CW3067 Water Rights be changed from the historical place of use to other locations in the Arkansas River Basin that are at or downstream

from John Martin Reservoir. Subject to the above-stated limitations, the locations of the New Uses will be the locations at which LAWMA delivers augmentation or replacement water to the Arkansas River downstream from John Martin Reservoir and as required by LAWMA's Augmentation Plan, Rule 14 Plan, any LAWMA-operated Rule 10 Plan, or any future Water Court decree providing for use of the 15CW3067 Water Rights to replace historical return flows for the water rights changed under the 02CW181 Decree or a Future LAWMA Change Decree.

14.3 New manner of use and place of storage: The Application requested that the Lamar Canal Shares and the Granada Shares be changed such that they may be used for the New Uses both directly and after storage in the structure described in paragraph 14.3.1 below.

14.3.1 Fully consumable water derived from farm headgate deliveries of the Lamar Canal Shares and the Granada Shares may be stored in the West Farm Gravel Pit, which is located in the S½ of the SE¼ of Section 28 and in the NE¼ and the NE¼ of the NW¼ of Section 33, Township 22 South, Range 46 West of the 6th P.M. in Prowers, County, Colorado, as shown on **Exhibit D**. As confirmed by a letter dated February 16, 2016, from the Office of the Division Engineer, the first storage cell of the West Farm Gravel Pit has been lined in accordance with the State Engineer's lining criteria ("Lining Criteria"). Before water is stored in any future cell of the West Farm Gravel Pit, that cell must have been lined in accordance with the Lining Criteria. As of the date of this Decree, no water right has been claimed by LAWMA or decreed for the West Farm Gravel Pit and this decree only authorizes storage of the Lamar Canal Shares and the Granada Shares in the West Farm Gravel Pit.

14.3.2 LAWMA may store its full farm headgate deliveries associated with the Lamar Canal Shares and the Granada Shares, so long as all Historical Return Flows for the Lamar Canal Shares and the Granada Shares decreed herein are replaced by LAWMA in accordance with the terms and conditions of this Decree.

14.3.3 Article II Water that was stored in John Martin Reservoir in the Lamar Canal Company account ("Lamar Article II Water") may not be re-stored in the West Farm Gravel Pit without approval from the Arkansas River Compact Administration ("ARCA") and subsequent approval by this Court pursuant to the procedures described below. Such water may be used for the New Uses by release through the augmentation stations described in paragraph 15.1 below. These uses constitute prompt beneficial use and do

not require ARCA approval under the Compact. If LAWMA desires to re-store Lamar Article II Water, LAWMA will apply to ARCA for authorization to re-store such water in the West Farm Gravel Pit. The Court shall retain jurisdiction, as provided in paragraph 48.6 below, to consider whether ARCA's action with respect to a request by LAWMA to re-store water in the West Farm Gravel Pit requires any further or different terms and conditions in this Decree with respect to such re-storage. LAWMA shall invoke such jurisdiction within 12 months after action by ARCA on LAWMA's request.

14.4 Full consumption and use to extinction: Provided that LAWMA replaces the Historical Return Flows attributable to the 15CW3067 Water Rights in accordance with the terms and conditions of this Decree, LAWMA will fully consume and use to extinction the consumptive use stream credits attributable to the 15CW3067 Water Rights during LAWMA's initial use of such credits for augmentation or replacement.

15. Lamar Canal terms and conditions to prevent injury: The following terms and conditions will prevent injury from LAWMA's use of the Lamar Canal Shares as changed herein:

15.1 The Lamar Canal Shares, including but not limited to all Article II Water associated with the Lamar Canal Shares, will continue to be diverted at the Lamar Canal river headgate, and the farm headgate deliveries will be delivered to and measured at one or more of the following locations:

15.1.1 West Farm Augmentation Station, located in the SE¼ of the SW¼ of Section 29, Township 22 South, Range 46 West of the 6th P.M. in Prowers County, Colorado.

15.1.2 Center Farm Augmentation Station, located in the SE¼ of the SE¼ of Section 31, Township 22 South, Range 45 West of the 6th P.M. in Prowers County, Colorado.

15.1.3 Granada East Augmentation Station, located in the NW¼ of the NE¼ of Section 1, Township 23 South, Range 44 West of the 6th P.M. in Prowers County, Colorado.

15.1.4 Granada West Augmentation Station, located in the located in the NW¼ of the NE¼ of Section 2, Township 23 South, Range 44 West of the 6th P.M. in Prowers County, Colorado.

15.1.5 West Farm Gravel Pit, located as described in paragraph 14.3.1 above.

15.2 To quantify the consumptive use stream credits that may be applied to the New Uses, LAWMA shall apply the following monthly consumptive use factors to the farm headgate deliveries available to the Lamar Canal Shares, as those farm headgate deliveries are measured at the locations described in paragraph 15.1 above. LAWMA shall quantify Historical Return Flows as the portion of the farm headgate deliveries that is not quantified as consumptive use stream credits.

April	May	June	July	Aug.	Sept.	Oct.
79.9%	80.2%	81.4%	80.4%	76.5%	71.2%	65.9%

15.3 In addition to the augmentation stations described in paragraph 15.1 above, LAWMA may use another augmentation station on the Lamar Canal for the delivery of the Lamar Canal Shares by filing a petition with the Court in this matter and in Case No. 02CW181 and following the procedure described in paragraph 47.D. of the 02CW181 Decree. In any such petition, LAWMA shall include the following information: (1) the location of the proposed new augmentation station by quarter-quarter section; (2) the stream or structure to which water will be delivered; (3) a description of how losses, if any, between the new augmentation station and the point of introduction to the receiving stream will be determined; (4) a description of how losses, if any, between the point of introduction to the receiving stream and the place of use of the water will be determined; (5) a description of all measuring devices proposed to be used in connection with the new augmentation station; and (6) updated accounting forms containing the information required by paragraph 44 and the necessary information to account for use of the new augmentation station for delivery of the Lamar Canal Shares.

15.4 After delivery to the Arkansas River at one or more of the augmentation stations described in paragraph 15.1 above or an augmentation station added to this Decree pursuant to paragraph 15.3 above, the consumptive use stream credits derived from the Lamar Canal Shares will be left undiverted in the Arkansas River for the New Uses.

15.5 LAWMA may divert and use the Lamar Canal Shares only between April 1 and October 31 when the Lamar Canal Company water rights are in priority. When water is available to the Lamar Canal Shares under paragraph 15.14 below, LAWMA shall take delivery of the Lamar Canal Shares' pro-rata volume of Lamar Canal Company deliveries; provided, however, that at any given time, LAWMA's deliveries may vary by up to one rotation. If and when LAWMA reaches a volumetric limit imposed on the Lamar Canal Shares by this Decree, this pro-rata requirement will not apply and LAWMA shall take deliveries to the Lamar Canal

Shares in accordance with the provisions of paragraph 15.14 and either 15.12 or 15.13 below.

15.6 The Historical Return Flows associated with the Lamar Canal Shares accrued to the Arkansas River above the headgate of the Buffalo Canal. To prevent injury to vested water rights, during the irrigation season (April 1 through October 31) LAWMA shall maintain Historical Return Flows for the Lamar Canal Shares by limiting the consumptive use stream credits for the Lamar Canal Shares as provided in paragraph 15.2 of this Decree and delivering the Historical Return Flow component of the farm headgate delivery to the Arkansas River through one or more of the augmentation stations described in paragraph 15.1 above or an augmentation station added to this Decree pursuant to paragraph 15.3 above.

15.7 To prevent injury to vested water rights, during the non-irrigation season (November 1 through March 31), LAWMA shall maintain Historical Return Flows for the Lamar Canal Shares as follows:

15.7.1 LAWMA shall not take delivery of the Lamar Canal Shares from November 1 through March 31. LAWMA shall forgo any diversions and consumptive use stream credits for the Lamar Canal Shares and leave the Historical Return Flows undiverted in the Arkansas River. To the extent the Lamar Canal diverts during the non-irrigation season, LAWMA shall divert all water available to the Lamar Canal Shares and measure and return the full farm headgate delivery, less ditch loss, promptly to the Arkansas River, without taking consumptive use stream credits, through one or more of the augmentation stations described in paragraph 15.1 above or an augmentation station added to this Decree pursuant to paragraph 15.3 above.

15.7.2 LAWMA's engineers have determined that because LAWMA will not be taking delivery of water available to the Lamar Canal Shares in the non-irrigation season, the operation of the condition set forth in paragraph 15.7.1 above will result in over-replacement of historical non-irrigation season return flows for the Lamar Canal Shares ("Lamar Winter Return Flows") in the average annual amount of 12.38 acre-feet. Accordingly, the Court finds that the operation of the condition set forth in paragraph 15.7.1 will replace the Lamar Winter Return Flows in a manner that will prevent injury to Colorado water users and will prevent injury to Kansas's rights under the Compact.

15.8 LAWMA shall limit farm headgate deliveries to the Lamar Canal Shares to the volumes described in this paragraph 15.8 and its incorporated table. Farm headgate

deliveries attributable to the Lamar Canal Shares from April 1 through October 31 will be limited to a maximum cumulative volume of 69,799 acre-feet in any 64-year period; to a maximum annual volume of 1,959 acre-feet; and to the following maximum and 20-year cumulative monthly volumes:

Month	April	May	June	July	August	September	October
Maximum volume (acre-feet)	340	333	442	446	367	292	249
20-year cumulative maximum (acre-feet)	3,486	4,204	5,189	5,647	4,337	3,806	2,981

15.9 For purposes of starting the calculation of the 20-year cumulative maximum monthly farm headgate delivery limits, for the 19 years prior to the first year in which the Lamar Canal Shares or any portion thereof are used pursuant to this Decree, LAWMA shall assume that the farm headgate deliveries were equal to the following monthly volumes per year: April, 165.6 acre-feet; May, 203.8 acre-feet; June, 249.8 acre-feet; July, 273.7 acre-feet; August, 209 acre-feet; September, 184.9 acre-feet; and October, 143.8 acre-feet.

15.10 LAWMA shall limit consumptive use stream credits available under the Lamar Canal Shares to a maximum cumulative volume of 54,724 acre-feet in any 64-year period.

15.11 For purposes of starting the calculation of the 64-year cumulative farm headgate delivery limit and the 64-year consumptive use stream depletion credit limit, for the 63 years prior to the first year in which the Lamar Canal Shares, or any portion thereof, are used pursuant to this Decree, LAWMA shall assume that the farm headgate deliveries were equal to 1,074.1 acre-feet per year and that the consumptive use stream depletion credits were equal to 845.5 acre-feet per year.

15.12 If and when LAWMA reaches a volumetric limit imposed on the Lamar Canal Shares by this Decree and there is water available to the Lamar Canal Shares under paragraph 15.14 below, diversions into the Lamar Canal will be limited as follows:

15.12.1 Diversions under the Lamar Canal Company's direct flow water rights will be limited to the amounts listed in section 4 of the table below. Diversions under the Lamar Canal Company's direct flow water rights only include diversions under Priority Nos. 3, 6½, 7½, and 13 decreed in the District 67

General Adjudication and do not include diversions of Lamar Canal Company's Article II Water.

1. Priority No.	**2.** Decreed Flowrate (cfs)	**3.** Lamar Canal Shares' CU Component (cfs)							**4.** Maximum Allowable Lamar Canal Diversion (cfs) (Col. 2- Col. 3)						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Apr	May	Jun	Jul	Aug	Sep	Oct
3	15.75	0.38	0.38	0.38	0.38	0.36	0.33	0.31	15.37	15.37	15.37	15.37	15.39	15.42	15.44
6.5	72.09	1.72	1.72	1.75	1.73	1.64	1.53	1.42	70.37	70.37	70.34	70.36	70.45	70.56	70.67
7.5	13.64	0.32	0.33	0.33	0.33	0.31	0.29	0.27	13.32	13.31	13.31	13.31	13.33	13.35	13.37
13	184.27	4.39	4.40	4.47	4.42	4.20	3.91	3.62	179.88	179.87	179.80	179.85	180.07	180.36	180.65
Total	285.75	6.80	6.83	6.93	6.85	6.51	6.06	5.61	278.95	278.92	278.82	278.90	279.24	279.69	280.14

If less direct flow water rights water is available at the Lamar Canal's Arkansas River headgate in priority than the limits in section 4 of the table above, the Lamar Canal Company will be entitled to divert the entire amount available in priority.

15.12.2 If and when LAWMA reaches a volumetric limit imposed on the Lamar Canal Shares by this Decree and there is water available to the Lamar Canal Shares under paragraph 15.14 below, LAWMA shall continue to take delivery of the return flow component of the Lamar Canal Shares' share of Lamar Canal diversions and return that component to the Arkansas River pursuant to paragraph 15.6 above. The continued delivery of the Lamar Canal Shares' return flow component when LAWMA has reached a volumetric limit on the Lamar Canal Shares will not count against the volumetric limits on the Lamar Canal Shares. At any time the Lamar Canal Company is not diverting water for delivery to shares other than the Lamar Canal Shares, LAWMA shall not require the Lamar Canal Company to call for or divert water solely to satisfy this term and condition; and in that circumstance, LAWMA will not be and is not to be deemed out of compliance with this term and condition.

15.12.3 If and when LAWMA reaches a volumetric limit imposed on the Lamar Canal Shares by this Decree and the Lamar Canal Company calls for water stored in the Lamar Canal Company's Article II account in John Martin Reservoir, LAWMA shall not take delivery of the consumptive use component of the Lamar Canal Shares' share of the amount of such water diverted into the Lamar Canal.

15.12.4 The terms and conditions included in this paragraph 15.12 are administrable using the Lamar Canal Company's existing diversion and measurement infrastructure.

15.13 If and when LAWMA simultaneously reaches a volumetric limit imposed on the Lamar Canal Shares by this Decree and a volumetric limit imposed on the Granada Shares by this Decree, and there is water available to the Lamar Canal Shares under paragraph 15.14 below and to the Granada Shares under paragraph 16.13 below, diversions into the Lamar Canal will be limited as described in paragraph 16.14 below.

15.14 The Lamar Canal historically has operated on a rotational basis from time to time, and such operations are expected to continue. For purposes of determining (a) when LAWMA must take delivery of the Lamar Canal Shares' under paragraph 15.5 above and (b) limitations on diversions into the Lamar Canal under paragraph 15.12 above or paragraph 16.13 below, water will be deemed to be available to the Lamar Canal Shares when the Lamar Canal is operating on a rotational basis and the Lamar Canal Shares are in rotation and will not be deemed to be available to the Lamar Canal Shares when the Lamar Canal is operating on a rotational basis and the Lamar Canal Shares are not in rotation.

15.15 LAWMA's entitlement to use consumptive use credits available to the Lamar Canal Shares for the New Uses is subject to the actual dry-up of the Lamar Canal Historically Irrigated Land. LAWMA holds recorded dry-up covenants on each of the five tracts that make up the Lamar Canal Historically Irrigated Land. Those covenants run with the land and require the landowners to dry up the tracts in accordance with their specific terms, and LAWMA is therefore entitled to such dry-up. The Lamar Canal Historically Irrigated Land dried up in accordance with this paragraph 15.15 will not be irrigated with water diverted under the Lamar Canal Shares, or with any other source of water except as described in paragraph 20.2 below.

16. Granada Lateral terms and conditions to prevent injury: The following terms and conditions will prevent injury from LAWMA's use of the Granada Shares as changed herein:

16.1 The Granada Shares, including but not limited to all Article II Water associated with the Granada Shares, will continue to be diverted at the Lamar Canal river headgate, and the farm headgate deliveries will be delivered to and measured at one or more of the following locations:

16.1.1 West Farm Augmentation Station, located as described in paragraph 15.1.1 above.

16.1.2 Center Farm Augmentation Station, located as described in paragraph 15.1.2 above.

16.1.3 Granada East Augmentation Station, located as described in paragraph 15.1.3 above.

16.1.4 Granada West Augmentation Station, located as described in paragraph 15.1.4 above.

16.1.5 West Farm Gravel Pit, located as described in paragraph 14.3.1 above.

16.2 To quantify the consumptive use stream credits that may be applied to the New Uses, LAWMA shall apply the following monthly consumptive use factors to the farm headgate deliveries available to the Granada Shares, as those farm headgate deliveries are measured at the locations described in paragraph 16.1 above. LAWMA shall quantify Historical Return Flows as the portion of the farm headgate deliveries that is not quantified as consumptive use stream credits.

April	May	June	July	Aug.	Sept.	Oct.
63.0%	63.8%	67.3%	66.1%	59.0%	47.9%	34.2%

16.3 In addition to the augmentation stations described in paragraph 16.1 above, LAWMA may use another augmentation station on the Lamar Canal for the delivery of the Granada Shares by filing a petition with the Court in this matter and in Case No. 02CW181 and following the procedure described in paragraph 47.D. of the 02CW181 Decree and the further procedure described in paragraph 15.3 above.

16.4 After delivery to the Arkansas River through one or more of the augmentation stations described in paragraph 16.1 above or an augmentation station added to this Decree pursuant to paragraph 16.3 above, the consumptive use stream credits derived from the Granada Shares will be left undiverted in the Arkansas River for the New Uses.

16.5 LAWMA may divert and use the Granada Shares only between April 1 and October 31 when the Lamar Canal Company water rights are in priority. When there is water available to the Granada Shares under paragraph 16.13 below, LAWMA shall take delivery of the Granada Shares' pro-rata volume of Granada Company deliveries; provided, however, that at any given time, LAWMA's

deliveries may vary by up to one rotation. If and when LAWMA reaches a volumetric limit imposed on the Granada Shares by this Decree, this pro-rata requirement will not apply and LAWMA shall take deliveries to the Granada Shares in accordance with the provisions of paragraph 16.12 or 16.14 and 16.13 below.

16.6 The Historical Return Flows associated with the Granada Shares accrued to the Arkansas River above the headgate of the Buffalo Canal. To prevent injury to vested water rights, during the irrigation season (April 1 through October 31) LAWMA shall maintain Historical Return Flows for the Granada Shares by limiting the consumptive use stream credits for the Granada Shares as provided in paragraph 16.2 of this Decree and delivering the Historical Return Flow component of the farm headgate delivery to the Arkansas River through one or more of the augmentation stations described in paragraph 16.1 above or an augmentation station added to this Decree under paragraph 16.3 above.

16.7 To prevent injury to vested water rights, during the non-irrigation season (November 1 through March 31), LAWMA shall maintain Historical Return Flows for the Granada Shares as follows:

16.7.1 LAWMA shall not take delivery of the Granada Shares from November 1 through March 31. LAWMA shall forgo any diversions and consumptive use stream credits for the Granada Shares and leave the Historical Return Flows undiverted in the Arkansas River. To the extent the Lamar Canal diverts during the non-irrigation season, LAWMA shall divert all water available to the Granada Shares and measure and return the full farm headgate delivery, less ditch loss, promptly to the Arkansas River, without taking consumptive use stream credits, through one or more of the augmentation stations described in paragraph 16.1 above or an augmentation station added to this Decree under paragraph 16.3 above.

16.7.2 LAWMA's engineers have determined that because LAWMA will not be taking delivery of water available to the Granada Shares in the non-irrigation season, the operation of the condition set forth in paragraph 16.7.1 above, without more, would result in under-replacement of historical non-irrigation season return flows for the Granada Shares ("Granada Winter Return Flows") in the average annual amount of 342.95 acre-feet. The Granada Winter Return Flows are a component of the Historical Return Flows. To prevent injury to vested water rights and to Kansas's rights under the Compact, LAWMA shall take the following additional action to replace non-irrigation season return flows for the Granada Shares: At the beginning of each irrigation season, LAWMA shall calculate the Granada Winter

Return Flows as 10.7% of the farm headgate deliveries to the Granada Shares during the previous irrigation season (April 1 through October 31). LAWMA shall replace the Granada Winter Return Flows to the stream no later than the last day of May each year by delivering consumptive use stream credits attributable to the Granada Shares or the Lamar Canal Shares through one of the augmentation stations described in paragraph 16.1 above or an augmentation station added to this Decree under paragraph 16.3 above. The Court finds that such return flow replacement operations will prevent injury to Colorado water users and will prevent injury to Kansas's rights under the Compact.

16.8 LAWMA shall limit farm headgate deliveries to the Granada Shares to the volumes described in this paragraph 16.8 and its incorporated table. Farm headgate deliveries attributable to the Granada Shares from April 1 through October 31 will be limited to a maximum cumulative volume of 204,300 acre-feet in any 64-year period; to a maximum annual volume of 5,733 acre-feet; and to the following maximum and 20-year cumulative monthly volumes:

Month	April	May	June	July	August	September	October
Maximum volume (acre-feet)	996	975	1,294	1,307	1,074	855	728
20-year cumulative maximum (acre-feet)	10,203	12,306	15,187	16,528	12,696	11,139	8,726

16.9 For purposes of starting the calculation of the 20-year cumulative maximum monthly farm headgate delivery limits, for the 19 years prior to the first year in which the Granada Shares, or any portion thereof, are used pursuant to this Decree, LAWMA shall assume that the farm headgate deliveries were equal to the following monthly volumes per year: April, 484.6 acre-feet; May, 596.4 acre-feet; June, 731.2 acre-feet; July, 801.1 acre-feet; August, 611.6 acre-feet; September, 541.2 acre-feet; and October, 420.9 acre-feet.

16.10 LAWMA shall limit consumptive use stream depletion credits available under the Granada Shares to a maximum cumulative volume of 98,802 acre-feet in any 64-year period.

16.11 For purposes of starting the calculation of the 64-year cumulative farm headgate delivery limit and the 64-year consumptive use stream depletion credit limit, for the

63 years prior to the first year in which the Granada Shares, or any portion thereof, are used pursuant to this Decree, LAWMA shall assume that the farm headgate deliveries were equal to 3,144.0 acre-feet per year and that the consumptive use stream depletion credits were equal to 1,535.1 acre-feet per year.

16.12 If and when LAWMA reaches a volumetric limit imposed on the Granada Shares by this Decree and water is available to the Granada Shares pursuant to paragraph 16.13 below, diversions into the Lamar Canal will be limited as follows:

16.12.1 Diversions under the Lamar Canal Company's direct flow water rights will be limited to the amounts listed in section 4 of the table below. Diversions under the Lamar Canal Company's direct flow water rights only include diversions under Priority Nos. 3, 6½, 7½, and 13 decreed in the District 67 General Adjudication and do not include diversions of water released from the Lamar Canal Company's Article II Water.

1. Priority No.	**2.** Decreed Flowrate (cfs)	**3.** Granada Shares' CU Component (cfs)							**4.** Maximum Allowable Lamar Canal Diversion (cfs) (Col. 2 - Col. 3)						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Apr	May	Jun	Jul	Aug	Sep	Oct
3	15.75	0.87	0.88	0.92	0.91	0.81	0.66	0.47	14.88	14.87	14.83	14.84	14.94	15.09	15.28
6.5	72.09	3.96	4.01	4.23	4.16	3.71	3.01	2.15	68.13	68.08	67.86	67.93	68.38	69.08	69.94
7.5	13.64	0.75	0.76	0.80	0.79	0.70	0.57	0.41	12.89	12.88	12.84	12.85	12.94	13.07	13.23
13	184.27	10.13	10.25	10.82	10.62	9.48	7.70	5.50	174.14	174.02	173.45	173.65	174.79	176.57	178.77
Total	285.75	15.70	15.90	16.77	16.48	14.71	11.94	8.52	270.05	269.85	268.98	269.27	271.04	273.81	277.23

If less direct flow water rights water is available at the Lamar Canal's Arkansas River headgate in priority than the limits in section 4 of the table above, the Lamar Canal Company will be entitled to divert the entire amount available in priority.

16.12.2 If and when LAWMA reaches a volumetric limit imposed on the Granada Shares by this Decree and there is water available to the Granada Shares under paragraph 16.13 below, LAWMA shall continue to take delivery of the return flow component of the Granada Shares' share of Lamar Canal diversions and return that component to the Arkansas River pursuant to paragraph 16.6 above. The continued delivery of the Granada Shares' return flow component when LAWMA has reached a volumetric limit on the Granada Shares will not count against the volumetric limits on the Granada Shares. At any time the Lamar Canal Company is not diverting

water for delivery to shares other than the Granada Shares, LAWMA shall not require the Lamar Canal Company to call for or divert water solely to satisfy this term and condition; and in that circumstance, LAWMA will not be and is not to be deemed out of compliance with this term and condition.

16.12.3 If and when LAWMA reaches a volumetric limit imposed on the Granada Shares by this Decree and the Lamar Canal Company calls for water stored in The Lamar Canal Company's Article II account in John Martin Reservoir, LAWMA shall not take delivery of the consumptive use component of the Granada Shares' share of the amount of such water diverted into the Lamar Canal.

16.12.4 The terms and conditions included in this paragraph 16.12 are administrable using the Lamar Canal Company's existing diversion and measurement infrastructure.

16.13 The Lamar Canal historically has operated on a rotational basis from time to time, and such operations are expected to continue. For purposes of determining (a) when LAWMA must take delivery of the Granada Shares' under paragraph 16.5 above and (b) limitations on diversions into the Lamar Canal under paragraph 16.12 above or paragraph 16.14 below, water will be deemed to be available to the Lamar Canal Shares when the Lamar Canal is operating on a rotational basis and the Lamar Canal Shares are in rotation and will not be deemed to be available to the Granada Shares when the Lamar Canal is operating on a rotational basis and the Granada Shares are not in rotation.

16.14 If and when LAWMA simultaneously reaches a volumetric limit imposed on the Lamar Canal Shares by this Decree and a volumetric limit imposed on the Granada Shares by this Decree, and there is water available to the Lamar Canal Shares under paragraph 15.14 above and to the Granada Shares under paragraph 16.13 above, diversions into the Lamar Canal will be limited as follows:

16.14.1 Diversions under the Lamar Canal Company's direct flow water rights will be limited to the amounts listed in section 4 the table below. Diversions under the Lamar Canal Company's direct flow water rights only include diversions under Priority Nos. 3, 6½, 7½, and 13 decreed in the District 67 General Adjudication and do not include diversions of water released from the Lamar Canal Company's Article II Water.

1. Priority No.	**2.** Decreed Flowrate (cfs)	**3.** Combined Shares' CU Component (cfs)							**4.** Maximum Allowable Lamar Canal Diversion (cfs) (Col. 2 – Col. 3)						
		Apr	May	Jun	Jul	Aug	Sep	Oct	Apr	May	Jun	Jul	Aug	Sep	Oct
3	15.75	1.24	1.25	1.31	1.29	1.17	0.99	0.78	14.51	14.50	14.44	14.46	14.58	14.76	14.97
6.5	72.09	5.68	5.73	5.98	5.88	5.35	4.54	3.57	66.41	66.36	66.11	66.21	66.74	67.55	68.52
7.5	13.64	1.07	1.09	1.13	1.11	1.01	0.86	0.67	12.57	12.55	12.51	12.53	12.63	12.78	12.97
13	184.27	14.51	14.66	15.29	15.04	13.68	11.61	9.12	169.76	169.61	168.98	169.23	170.59	172.66	175.15
Total	285.75	22.51	22.73	23.71	23.32	21.22	18.00	14.14	263.24	263.02	262.04	262.43	264.53	267.75	271.61

If less direct flow water rights water is available at the Lamar Canal's Arkansas River headgate in priority than the limits in section 4 of the table above, the Lamar Canal Company will be entitled to divert the entire amount available in priority.

16.14.2 If and when LAWMA simultaneously reaches a volumetric limit imposed on the Lamar Canal Shares by this Decree and a volumetric limit imposed on the Granada Shares by this Decree and there is water available to the Lamar Canal Shares under paragraph 15.14 above and to the Granada Shares under paragraph 16.13 above, LAWMA shall continue to take delivery of the return flow component of the Lamar Canal Shares' and the Granada Shares' share of Lamar Canal diversions and return that component to the Arkansas River pursuant to paragraphs 15.6 and 16.6 above. The continued delivery of the Lamar Canal Shares' Granada Shares' return flow component when LAWMA has reached volumetric limits on the Lamar Canal Shares and the Granada Shares will not count against the volumetric limits on the Lamar Canal Shares and the Granada Shares. At any time the Lamar Canal Company is not diverting water for delivery to shares other than the Lamar Canal Shares and the Granada Shares, LAWMA shall not require the Lamar Canal Company to call for or divert water solely to satisfy this term and condition; and in that circumstance, LAWMA will not be and is not to be deemed out of compliance with this term and condition.

16.14.3 If and when LAMWA simultaneously reaches a volumetric limit imposed on the Lamar Canal Shares by this Decree and a volumetric limit imposed on the Granada Shares by this Decree and the Lamar Canal Company calls for water stored in The Lamar Canal Company's Article II account in John Martin Reservoir, LAWMA shall not take delivery of the consumptive use

component of the Lamar Canal Shares' share and the Granada Shares' share of the amount of such water diverted into the Lamar Canal.

16.14.4 The terms and conditions included in this paragraph 16.14 are administrable using the Lamar Canal Company's existing diversion and measurement infrastructure.

16.15 LAWMA's entitlement to use consumptive use credits available to the Granada Shares for the New Uses is subject to the actual dry-up of the Granada Historically Irrigated Land. LAWMA holds recorded dry-up covenants on each of the two tracts that make up the Granada Historically Irrigated Land. Those covenants run with the land and require the landowners to dry up the tracts in accordance with their specific terms, and LAWMA is therefore entitled to such dry-up. The Granada Historically Irrigated Land dried up in accordance with this paragraph 16.15 will not be irrigated with water diverted under the Granada Shares, or with any other source of water except as described in paragraph 20.2 below.

17. XY Canal terms and conditions to prevent injury: The following terms and conditions will prevent injury from LAWMA's use of the XY 2.0 cfs as changed herein:

17.1 The amount of water physically and legally available for diversion by the XY 2.0 cfs at the XY Canal historical river headgate location will be calculated and measured in-stream at the Granada Stream Gauge as described in LAWMA's memorandum dated September 22, 2017, attached as **Exhibit E** to this Decree. To make any change to this methodology, LAWMA shall serve written notice of the proposed change on the parties herein, the Division Engineer, and ARCA. Any party or ARCA may submit comments to the Division Engineer within 56 days of such notice. Following that comment period, the Division Engineer shall approve or disapprove the proposed change in methodology by written notice served on the parties to this case and ARCA.

17.2 To quantify the consumptive use stream credits that may be applied to the New Uses, LAWMA shall apply the following monthly consumptive use factors to the river headgate diversions available to the XY 2.0 cfs, as measured and calculated in accordance with paragraph 17.1 above. LAWMA shall quantify Historical Return Flows as the portion of the river headgate diversions that is not quantified as consumptive use stream credits.

April	May	June	July	Aug.	Sept.	Oct.
72.6%	74.5%	75.8%	73.0%	74.0%	67.1%	59.2%

17.3 The consumptive use stream credits attributable to the XY 2.0 cfs will be available to LAWMA at the XY Canal historical river headgate location, and will be left undiverted in the Arkansas River for the New Uses.

17.4 LAWMA may take and use the consumptive use stream credits derived from the XY 2.0 cfs between April 1 and October 31, when the XY Canal water right is in priority.

17.5 To prevent injury to vested water rights, during the irrigation season (April 1 through October 31) LAWMA shall maintain the Historical Return Flows for the XY 2.0 cfs by limiting the consumptive use stream credits derived from the XY 2.0 cfs as provided in paragraph 17.2 of this Decree, and therefore leaving the Historical Return Flows undiverted in the Arkansas River.

17.6 The Historical Return Flows associated with the XY 2.0 cfs accrued to the Arkansas River above the headgate of the Sisson-Stubbs Ditch. To prevent injury to vested water rights, during the non-irrigation season (November 1 through March 31) LAWMA shall maintain return flows for the XY 2.0 cfs as follows:

17.6.1 LAWMA shall not divert the XY 2.0 cfs from November 1 through March 31. LAWMA shall forgo any diversions and consumptive use stream credits for the XY 2.0 cfs and leave the Historical Return Flows undiverted in the Arkansas River.

17.6.2 LAWMA's engineers have determined that because LAWMA will not be taking delivery of water available to the XY 2.0 cfs in the non-irrigation season, the operation of the condition set forth in paragraph 17.6.1 above, without more, would result in under-replacement of historical non-irrigation season return flows for the XY 2.0 cfs ("XY Winter Return Flows") in the average annual amount of 7.4 acre-feet. The XY Winter Return Flows are a component of the Historical Return Flows. To prevent injury to vested water rights and to Kansas's rights under the Compact, LAWMA shall take the following additional action to replace non-irrigation season return flows: At the beginning of each irrigation season, LAWMA shall calculate the XY Winter Return Flows as 5.5% of the river headgate diversions available to the XY 2.0 cfs during the previous irrigation season (April 1 through October 31). LAWMA shall replace the XY Winter Return Flows to the stream no later than the last day of May each year by forgoing use of consumptive use credits available to the XY 2.0 cfs. The Court finds that such return flow replacement operations will prevent injury to Colorado water users and will prevent injury to Kansas's rights under the Compact.

17.7 LAWMA shall limit river headgate diversions for the XY 2.0 cfs, as those river headgate diversions will be determined and measured as set forth in paragraph 17.1, to the volumes described in this paragraph 17.7 and its incorporated table. River headgate diversions attributable to the XY 2.0 cfs from April 1 through October 31 will be limited to a maximum cumulative volume of 5,995 acre-feet in any 44-year period; to a maximum annual volume of 329 acre-feet; and to the following maximum monthly volumes:

Month	April	May	June	July	August	September	October
Maximum volume (acre-feet)	50	63	77	71	70	55	48

17.8 LAWMA shall limit consumptive use stream depletion credits available under the to the XY 2.0 cfs to a maximum cumulative volume of 3,946 acre-feet in any 44-year period.

17.9 For purposes of starting the calculation of the 44-year cumulative river headgate diversion limit and the 44-year consumptive use stream depletion credit limit, for the 43 years prior to the first year in which the XY 2.0 cfs, or any portion thereof, is used pursuant to this Decree, LAWMA shall assume that the river headgate diversions were equal to 131.6 acre-feet per year and that the consumptive use stream depletion credits were equal to 86.8 acre-feet per year.

17.10 LAWMA's entitlement to use consumptive use credits available to the XY 2.0 cfs for the New Uses is subject to the actual dry-up of the XY Historically Irrigated Land. LAWMA holds recorded dry-up covenants on each of the two tracts that make up the XY Historically Irrigated Land. Those covenants run with the land and require the landowners to dry up the tracts in accordance with their specific terms, and LAWMA is therefore entitled to such dry-up. The XY Historically Irrigated Land dried up in accordance with this paragraph 17.10 will not be irrigated with water diverted under the XY 2.0 cfs, or with any other source of water except as described in paragraph 20.2 below.

18. Projection of the 15CW3067 Water Rights: LAWMA shall project the annual consumptive use credit yield of the 15CW3067 Water Rights as part of the annual projection required by paragraph 47.E of the 02CW181 Decree, and shall project such yield as no more than the average monthly historical consumptive use amounts of the 15CW3067 Water Rights.

19. Establishment and Maintenance of Groundcover or Dry-Land Farming Practices on the Historically Irrigated Lands: The provisions of paragraph 19 of this Decree are designed to accomplish the revegetation, noxious weed management, and erosion control of the

Historically Irrigated Lands as required by section 37-92-305(4.5)(a), C.R.S. As of the date of entry of this Decree, the Historically Irrigated Lands have been permanently removed from irrigation with the 15CW3067 Water Rights and have been dried up or are being re-irrigated with the permissible sources of water described in paragraph 20.2 below. Attached **Exhibits A-2**, **B-2**, **and C-2** depict, respectively, the individual parcels of the Lamar Canal Historically Irrigated Land, the Granada Historically Irrigated Land, and the XY Historically Irrigated Land for which LAWMA will claim dry-up credit ("Dry-Up Parcels"). Attached **Exhibits A-3**, **B-3**, **and C-3** identify, as of the date of entry of this Decree, the status of the Dry-Up Parcels within the following categories ("Revegetation Categories"): (i) irrigated with a source of water described in paragraph 20.2 below ("Irrigated Farming"); (ii) developed for non-agricultural use ("Developed Non-Ag Use"); (iii) established and maintained in native grasses or such other self-sustaining (under the conditions prevailing on the land) suitable dry-land cover with weeds adequately controlled ("Established Groundcover"); (iv) established and maintained in dry-land farming practices with weeds adequately controlled (Established Dry-Land Farming"); or (v) not Irrigated Farming, Developed Non-Ag Use, Established Groundcover, or Established Dry-Land Farming ("Not Established"). Attached **Exhibit F** specifies the criteria a Dry-Up Parcel must meet to be classified within each Revegetation Category.

19.1 Those Dry-Up Parcels that are identified on **Exhibits A-3, B-3, and C-3** as Developed Non-Ag Use, Established Groundcover, or Established Dry-Land Farming are referred to collectively in this Decree as the "Phase I Land." The Phase I Land is not subject to the Court's retained jurisdiction under this Decree or to any further requirements under this paragraph 19.

19.2 Those Dry-Up Parcels that are identified on **Exhibits A-3, B-3, and C-3** as Irrigated Farming or Not Established are referred to collectively in this Decree as the "Phase II Land." Subject to paragraph 20.2 below, and within the Compliance Period defined in paragraph 22 below, LAWMA shall ensure that each parcel of Phase II Land is established and maintained as Established Groundcover, Established Dry-Land Farming, or Developed Non-Ag Use, all with weeds adequately controlled, in accordance with the criteria specified in **Exhibit F** ("Revegetated"). When a parcel of Phase II Land has been accepted as Revegetated under the process described in paragraph 19.3 below, the parcel will be classified as "Confirmed Revegetated" in future Annual Revegetation Status Reports filed under paragraph 21 below.

19.3 When a parcel or multiple parcels of Phase II Land has/have been Revegetated as required by paragraph 19.2 above, LAWMA shall file a report with the Court demonstrating that the parcel or parcels has/have been Revegetated ("Revegetated Parcel(s) Report"). Each Revegetated Parcel(s) Report must be prepared by a

person accepted by the Court as an expert on revegetation pursuant to C.R.E. 702. If any party to this case disagrees with the conclusions documented in a Revegetated Parcel(s) Report, such party may submit objections for the Court's consideration within 45 days after service of such report. The Court will retain jurisdiction to resolve disputes regarding any Revegetated Parcel(s) Report. If no objections are filed within the 45-day period, or if the Court confirms the conclusions documented in a disputed Revegetated Parcel(s) Report, the report will be deemed accepted and all parties will be bound by the conclusions documented in the report. Once a Revegetated Parcel(s) Report has been accepted, LAWMA will have met the requirements of paragraph 19.2 above with respect to the parcel(s) described in that report and will have no further obligations with respect to revegetation of such parcel(s). LAWMA may file Revegetated Parcel(s) Reports as part of or separate from an Annual Revegetation Status Report required by paragraph 21 below.

20. Development for non-agricultural uses and irrigation of the Historically Irrigated Lands:

20.1 Consistent with paragraph 19 above, this Decree is not intended to prevent the owner of any particular parcel(s) of the Phase II Land from developing that land for other uses. The requirements of paragraph 19.2 above do not and will not apply to any Revegetation Parcel if and when such parcel is developed for non-agricultural uses in accordance with the criteria specified for Developed Non-Ag Use in **Exhibit F**.

20.2 Consistent with paragraph 19 above, this Decree also is not intended to prevent the owner of any particular parcel(s) of the Phase II Land from re-irrigating that land with one or more of the following sources, which do not include water available to the 15CW3067 Water Rights: (i) surface water from a source authorized by a future Water Court decree or by a final and unappealable substitute water supply plan approved by the State Engineer; (ii) ground water diverted pursuant to a Water Court-approved plan for augmentation or a substitute supply plan approved by the State Engineer; (iii) ground water diverted from a permitted exempt well; (iv) water supplied by a municipal or quasi-municipal entity, provided that use of such water for re-irrigation of the Phase-II land is consistent with all relevant Water Court decrees or substitute water supply plan approvals; or (v) water available pursuant to a statutorily authorized water banking arrangement (collectively, "Re-Irrigation Sources").

20.2.1 The requirements of paragraph 19.2 above do not and will not apply to any parcel of the Phase II Land during the period such parcel is being irrigated with one or more of the Re-Irrigation Sources ("Re-Irrigated Phase II

Parcel"). When irrigation of a Re-Irrigation Phase II Parcel has ceased, LAWMA shall file notice with the Court, with service on the parties herein, that the requirements of paragraph 19.2 have been triggered for that parcel.

20.2.2 Within 5 years of filing notice of the cessation of irrigation of any Re-Irrigated Phase II Parcel, as described in paragraph 20.2.1 above, LAWMA shall ensure that such parcel is Revegetated in accordance with paragraph 19.2 above. When a Re-Irrigated Phase II Parcel has been Revegetated, LAWMA shall file a Revegetated Parcel(s) Report as described in paragraph 19.3 above.

21. Annual Revegetation Status Report: Until each parcel of Phase II Land identified as Not Established on **Exhibits A-3, B-3,** and **C-3** has been Revegetated, as confirmed by an accepted Revegetated Parcel(s) Report, on or before December 1 of each year, LAWMA shall produce and serve upon the objectors in this case an Annual Revegetation Status Report containing the information specified in this paragraph and **Exhibit F**. The Annual Revegetation Status Report must be prepared by a person accepted by the Court as an expert on revegetation pursuant to C.R.E. 702, and must classify each parcel of the Phase II Land as Irrigated Farming, Developed Non-Ag Use, Established Groundcover, Established Dry-Land Farming, Not Established, or Confirmed Revegetated based on the revegetation expert's inspection of each parcel during September, October, or November of that year. The Annual Revegetation Status Report may classify as Confirmed Revegetated only those parcels that are the subject of an accepted Revegetated Parcel(s) Report.

22. Compliance Period for Phase II Land: For parcels of Phase II Land classified as Not Established on Exhibits **A-3, B-3,** and **C-3**, LAWMA will have a period of ten years from the date of entry of this Decree ("Compliance Period") to ensure that such parcels are Revegetated in accordance with paragraph 19.2 above.

22.1 The Water Court may extend the Compliance Period, upon petition by LAWMA under retained jurisdiction, for all or a portion of the Phase II Land upon a showing by LAWMA that its efforts to establish and maintain Established Groundcover or Established Dry-land Farming have been hindered due to circumstances beyond LAWMA's control, including fire, hail storms, wind storms, tornadoes, flooding, and freezes after May 15th and before September 15th of any year. The Water Court shall extend the Compliance Period, upon petition by LAWMA under retained jurisdiction, for one year for each year the amount of precipitation measured at the Lamar precipitation station falls below 80% of the March through August average of 10.4 inches (1950-2004 average).

22.2 Subject to the terms and conditions of paragraph 20.2 above, if the parcels of Phase II Land classified as Not Established on Exhibits **A-3, B-3,** and **C-3** are not Revegetated by the end of the Compliance Period (as it may be extended by the Water Court under retained jurisdiction), then LAWMA shall calculate as described in paragraphs 22.2.1 and 22.2.2 below the amount of water available to the 15CW3067 Water Rights as changed herein. All years referred to in paragraphs 21.2.1 and 21.2.2 below (e.g., "Year 1," "Year 2") are the number of years following the end of the Compliance Period. LAWMA shall demonstrate through its accounting that it has not taken credit for consumptive use credit, if any, that LAWMA is required to forgo under this paragraph.

22.2.1 Lamar Canal Shares and Granada Shares:

22.2.1.1 Year 1: Multiply the farm headgate deliveries available to the Lamar Canal Shares and the Granada Shares under each of the Lamar Canal priorities by the greater of either (a) the number of acres of the Phase I Land under the Lamar Canal and the Granada Lateral plus the number of acres of the Phase II Land under the Lamar Canal and the Granada Lateral classified as Established Groundcover, Established Dry-Land Farming, and/or Developed Ag Use, or Confirmed Revegetated in the most recent Annual Revegetation Status Report, plus the number of acres of the Phase II Land under the Lamar Canal and the Granada Lateral that make up Re-Irrigated Phase II Parcels, divided by 1,611.4 acres ("Percentage of Lamar-Granada Completion"); or (b) 80%. In no event may LAWMA's total annual farm headgate deliveries associated with the Lamar Canal Shares and the Granada Shares exceed the greater of 80% or the Percentage of Lamar-Granada Completion, multiplied by LAWMA's annual maximum of farm headgate deliveries to the Lamar Canal Shares (as described in paragraph 15.8 above) and the Granada Shares (as described in paragraph 16.8 above) (the "Combined Lamar-Granada Annual Volumetric Limit")

22.2.1.2 Year 2: Multiply the farm headgate deliveries available to the Lamar Canal Shares and the Granada Shares under each of the Lamar Canal priorities by the greater of either (a) the Percentage of Lamar-Granada Completion; or (b) 60%. In no event may LAWMA's total annual farm headgate deliveries associated with the Lamar Canal Shares and the Granada Shares exceed the greater of 60% or the Percentage of Lamar-Granada Completion

multiplied by the Combined Lamar-Granada Annual Volumetric Limit.

22.2.1.3 Year 3: Multiply the farm headgate deliveries available to the Lamar Canal Shares and the Granada Shares under each of the Lamar Canal priorities by the greater of either (a) the Percentage of Lamar-Granada Completion; or (b) 40%. In no event may LAWMA's total annual farm headgate deliveries associated with the Lamar Canal Shares and the Granada Shares exceed the greater of 40% or the Percentage of Lamar-Granada Completion multiplied by the Combined Lamar-Granada Annual Volumetric Limit.

22.2.1.4 Year 4: Multiply the farm headgate deliveries available to the Lamar Canal Shares and the Granada Shares under each of the Lamar Canal priorities by the greater of either (a) the Percentage of Lamar-Granada Completion; or (b) 20%. In no event may LAWMA's total annual farm headgate deliveries associated with the Lamar Canal Shares and the Granada Shares exceed the greater of 20% or the Percentage of Lamar-Granada Completion multiplied by the Combined Lamar-Granada Annual Volumetric Limit.

22.2.1.5 Year 5 and on: Multiply the farm headgate deliveries available to the Lamar Canal Shares and the Granada Shares under each of the Lamar Canal priorities by the greater of either (a) the Percentage of Lamar-Granada Completion; or (b) 0%. In no event may LAWMA's total annual farm headgate deliveries associated with the Lamar Canal Shares and the Granada Shares exceed the Percentage of Lamar-Granada Completion multiplied by the Combined Lamar-Granada Annual Volumetric Limit.

22.2.2 XY 2.0 cfs:

22.2.2.1 Year 1: Multiply 2.0 cfs by the greater of either (a) the number of acres of the Phase I Land under the XY Canal plus the number of acres of the Phase II Land under the XY Canal classified as Established Groundcover, Established Dry-Land Farming, Developed Ag Use, and or Confirmed Revegetated in the most recent Annual Revegetation Status Report, plus the number of acres of the Phase II Land under the XY Canal that make up Re-Irrigated Phase II Parcels, divided by 92.8 acres (the "Percentage

of XY Completion") or (b) 80%. In no event may LAWMA's total annual river headgate diversions associated with the XY 2.0 cfs exceed the greater of 80% or the Percentage of XY Completion multiplied by LAWMA's annual maximum of river headgate diversions under the XY 2.0 cfs (as described in paragraph 17.7 above) ("XY Annual Volumetric Limit")

22.2.2.2 Year 2: Multiply 2.0 cfs by the greater of either (a) the Percentage of XY Completion; or (b) 60%. In no event may LAWMA's total annual river headgate diversions associated with the XY 2.0 cfs exceed the greater of 60% or the Percentage of XY Completion multiplied by the XY Annual Volumetric Limit.

22.2.2.3 Year 3: Multiply 2.0 cfs by the greater of either (a) the Percentage of XY Completion; or (b) 40%. In no event may LAWMA's total annual river headgate diversions associated with the XY 2.0 cfs exceed the greater of 40% or the Percentage of XY Completion multiplied by the XY Annual Volumetric Limit.

22.2.2.4 Year 4: Multiply 2.0 cfs by the greater of either (a) the Percentage of XY Completion; or (b) 20%. In no event may LAWMA's total annual river headgate diversions associated with the XY 2.0 cfs exceed the greater of 20% or the Percentage of XY Completion multiplied by the XY Annual Volumetric Limit.

22.2.2.5 Year 5: Multiply 2.0 cfs by the greater of either (a) the Percentage of XY Completion; or (b) 0%. In no event may LAWMA's total annual river headgate diversions associated with the XY 2.0 cfs exceed the greater of the Percentage of XY Completion multiplied by the XY Annual Volumetric Limit.

22.3 The portion of the water rights for which LAWMA must forgo taking consumptive use stream credits under paragraphs 21.2.1 and 21.2.2 above ("Forgone Credits") may be used by LAWMA for the New Uses, by means of augmentation and replacement, but only for purposes of establishing and maintaining Established Groundcover on all or any portion of the Phase II Land. In addition, within twenty years of the date of entry of this Decree, such Forgone Credits may be leased by LAWMA downstream of John Martin Reservoir and the funds used to establish and maintain Established Groundcover on all or any portion of the Phase II Land. If LAWMA leases the Forgone Credits, it shall hold the revenues from such lease in trust for satisfying LAWMA's obligations under paragraph 19.2 of this Decree. LAWMA shall provide the Court and counsel of record for the parties hereto with

an annual accounting of the proceeds from any such lease. Any use or lease of such Forgone Credits pursuant to this paragraph 22.3 must be in accordance with the terms and conditions of this Decree and/or subsequent decrees of the Water Court, or as approved by the State Engineer.

23. Alteration of provisions regarding replacement of Granada Winter Return Flows and XY Winter Return Flows: The operations described in paragraphs 15, 16, and 17 above will ensure that the Historical Return Flows are replaced in location and amount on an annual basis, but will result in the Granada Winter Return Flows and the XY Winter Return Flows being replaced during the irrigation season rather than during the non-irrigation season. The evidence shows that replacing the Historical Return Flows in this pattern will not injure any Colorado water rights and will not violate the Compact. If, however, it is determined that the Compact requires return flows owed to the Stateline under this Decree or the 02CW181 Decree to be delivered in a manner that matches historical return flows in timing, LAWMA will invoke the Court's retained jurisdiction under paragraph 48.5 below to amend this Decree to require replacement of the Historical Return Flows owed to the Stateline in a manner that matches historical Stateline return flows in timing. Such a determination must take the form of one of the following: (i) an agreement between Colorado and Kansas that is approved by the Colorado State Engineer, the Kansas Chief Engineer, and ARCA; or (ii) a final determination under the dispute resolution provisions of the decree in Kansas v. Colorado, No. 105, Original.

24. Agreement "B": The water users of former Water District 67 and the water users of former Water Districts 14 and 17 have entered into an agreement known as Agreement "B" that provides a method for determining when a call from Water District 67 will be enforced above John Martin Reservoir. So long as Agreement "B" remains in force and effect, the change of the 15CW3067 Water Rights sought herein will be administered in a manner that is consistent with Agreement "B." Further, so long as Agreement "B" remains in force and effect, "summer stored water," as defined in Agreement "B," may be transferred into the Offset Account in John Martin Reservoir or released for the New Uses from the XY Graham Article II Storage Account in John Martin Reservoir at any rate. LAWMA, however, may not place a call against water rights above John Martin Reservoir for the XY 2.0 cfs until all of the "summer stored water" in the XY Graham Article II Storage Account has been paper-evacuated in accordance with the following accounting procedure: LAWMA shall account for paper-evacuation of "summer stored water" from the XY Graham Article II Storage Account at a rate of 20.0 acre-feet per day from April 1 through October 31 of each year until all of said water has been accounted for as being paper evacuated from the XY Graham Article II Storage Account. This accounting will be conducted in accordance with procedures of the Division Engineer established for the regular John Martin Reservoir accounting, taking into account inflows, releases, and spills. LAWMA shall provide this accounting to the Division Engineer with a copy to the

Arkansas Valley Ditch Association between five and ten days (calculated to exclude weekends and holidays pursuant to C.R.C.P. 6) prior to the time the accounting shows that the XY Graham Article II Storage Account will be paper evacuated. There are no flow rate limitations on the release of "summer stored water" from the Lamar Canal Article II Storage Account.

25. Use of the 15CW3067 Water Rights in LAWMA's Augmentation Plan, Rule 14 Plans, and Rule 10 Plans, and under future change decrees: The terms and conditions in this Decree will apply to and govern the use of the 15CW3067 Water Rights for the New Uses in LAWMA's Augmentation Plan, Rule 14 Plans, and Rule 10 Plans.

26. Requests to use the 15CW3067 Water Rights in substitute water supply plans: In any request to use the 15CW3067 Water Rights as a replacement supply in a substitute water supply plan pursuant to § 37-92-308, C.R.S., LAWMA shall propose as a term and condition of approval that such use be consistent with the terms and conditions in this Decree.

27. No injury or violation of the Arkansas River Compact: Use of the 15CW3067 Water Rights for the New Uses in compliance with the terms and conditions of this Decree, including both direct use and use after storage in the West Farm Gravel Pit described in paragraph 14.3.1 above, and the addition of the 15CW3067 Water Rights as changed herein to the LAWMA Augmentation Plan will not materially injure the water rights of any owner or user of any vested water right or decreed conditional water right, and will not violate or cause a violation of the Compact.

28. Approval of change of water rights: The change of water rights described in paragraph 14 above is in accordance with law and should be granted subject to the terms of this Decree.

29. Approval of addition of changed water rights to Augmentation Plan: The addition of the 15CW3067 Water Rights as changed herein to the LAWMA Augmentation Plan is in accordance with paragraph 41.A of the 02CW181 Decree and in accordance with law, and should be approved subject to the terms of this Decree and the 02CW181 Decree.

CONCLUSIONS OF LAW

30. Incorporation: The foregoing Findings of Fact are incorporated herein as part of these Conclusions of Law.

31. Consistent with law: The application is contemplated and authorized by law. C.R.S. § 37-92-302(1)(a).

32. Notice and jurisdiction: The Water Court for Water Division No. 2 has jurisdiction over the subject matter of these proceedings and over all persons, property, and water rights that may be affected hereby, whether or not those persons have chosen to appear. The Application in this matter and the resume publication of the Application placed such persons on notice of the relief requested by the Application and granted by this Decree.

33. Compliance with Arkansas River Compact: The Application seeks approval of a change of the 15CW3067 Water Rights so that, among other things, they may be used to replace stream depletions to stateline flows. This Court has jurisdiction to determine the beneficial uses that may be made of Colorado water rights, including whether the 15CW3067 Water Rights and associated Article II Water can be used to replace depletions to stateline flows and can be used for augmentation and replacement purposes and other beneficial uses specified in this Decree. The Court concludes that the 15CW3067 Water Rights and associated Article II Water may lawfully be used to replace depletions to stateline flows under the Compact and may lawfully be used for augmentation and replacement purposes and the other beneficial uses described in this Decree. The Court has no jurisdiction over the State of Kansas in determining that this change of water rights will not violate the Compact. However, the Court is required to determine the effect of this change of water rights on compliance with the Compact. *SE Colo. Water Conservancy Dist. v. Fort Lyon Canal Co.*, 720 P.2d 133, 150 (Colo. 1986). The Court has considered the Compact and concludes that, if implemented in accordance with the terms and conditions imposed by this Decree, this change of water rights will not violate the Compact.

34. Change of water rights: The change of water rights requested by LAWMA is permissible and contemplated by law, and satisfies the requirements of § 37-92-101 – § 37-92-602, C.R.S. If implemented subject to the terms and conditions imposed by this Decree, this change will not cause injury to the owner or user of any vested water right or decreed conditional water right.

35. Addition of changed water rights to Augmentation Plan: The addition of the 15CW3067 Water Rights as changed herein to the LAWMA Augmentation Plan is permissible and contemplated by law, and satisfies the requirements of § 37-92-101 – § 37-92-602, C.R.S. If implemented subject to the terms and conditions imposed by this Decree and the 02CW181 Decree, such addition will not cause injury to the owner or user of any vested water right or decreed conditional water right.

36. Retained jurisdiction limitations: Pursuant to § 37-92-304(6), C.R.S., the Court is required to retain jurisdiction over the change of water rights decreed herein for some period following entry of this Decree, such period to be determined by the Court, to reconsider the question of injury to the vested rights of others as a result of the change of water rights. The Court will retain jurisdiction as more particularly described in paragraphs 47 and 48

below on the specific matters described therein, as well as on the question of injury to the vested rights of others. For all other purposes, this judgment and decree is final.

37. Retention of dominion: Dominion over water depends on a water user's intent and ability to quantify and use a certain quantity of water which may be distinguished by volume from other water in a stream. *Pub. Serv. Co. v. Willows Water Dist.*, 856 P.2d 829, 833 (Colo. 1993). LAWMA has the intent and ability to maintain dominion over, and to use for the purposes adjudicated by this Decree, the consumptive use stream credits derived from the 15CW3067 Water Rights until they are used for the New Uses pursuant to the terms of this Decree.

38. Administrability: The change of the 15CW3067 Water Rights and addition of the 15CW3067 Water Rights as changed herein to LAWMA's Augmentation Plan are administrable by the officials of the State of Colorado, so long as operated in accordance with the terms of this Decree.

39. Requirements, standards and burden of proof: LAWMA has complied with all requirements and met all standards and burdens of proof, including but not limited to §§ 37-92-302, 37-92-304 and 37-92-305, C.R.S., and is therefore entitled to a decree confirming and approving the claims in the Application.

DECREE OF THE WATER COURT

40. Incorporation: The foregoing Findings of Fact and Conclusions of Law, together with all attached Exhibits, are fully incorporated into this Decree.

41. Change of water rights: The application for change of water rights described herein is hereby approved, adjudicated, and decreed.

42. Addition of changed water rights to decreed augmentation plan: The application for addition of the 15CW3067 Water Rights to the LAWMA Augmentation Plan as described herein is hereby approved, adjudicated, and decreed.

43. No injury and no Compact violation: The terms and conditions provided for in this Decree are adequate to ensure that no injury to any water users will occur from the operation of the change of water rights or addition of the 15CW3067 Water Rights to the LAWMA Augmentation Plan, and are adequate to ensure that the Compact will not be violated as a result of such operations.

44. Accounting: LAWMA has demonstrated an appropriate method for accounting for diversions associated with the operation of the change of water rights. The initial accounting form is attached as **Exhibit G**. LAWMA shall integrate its accounting under

this Decree with the accounting for the 02CW181 Decree, and shall include in such accounting, at minimum, the following data, tracked on a daily basis: (i) measured diversion at the Lamar Canal headgate, (ii) measured diversion at the alternate point of diversion approved by the W-1836 Decree, (iii) measured diversion of Lamar Canal Company's direct flow water rights, (iv) measured diversion of Lamar Canal Company's Article II Water from John Martin Reservoir, (v) number of Lamar Canal Shares and number of Granada Shares delivered to the West Farm Gravel Pit and the measured delivery of direct flow sources (excluding Lamar Article II Water unless restorage of Lamar Article II Water is approved under paragraphs 14.3.3 and 48.6 of this Decree) to those shares, (vi) the amount and location of Historical Return Flows owed based on deliveries of Lamar Canal Shares and Granada Shares to the West Farm Gravel Pit, (vii) the amount and location of measured deliveries to replace the Historical Return Flows owed based on deliveries of Lamar Canal Shares and Granada Shares to the West Farm Gravel Pit pursuant to paragraph 14.3.2 of this Decree, (viii) number of Lamar Canal Shares and number of Granada Irrigation Company shares delivered at each augmentation station, (ix) the portion of the measured delivery at each augmentation station that falls into each of the following categories: the decree in Case No. 02CW181, this Decree, LAWMA's Rule 14 Plan, LAWMA's Rule 10 Compact Compliance Plan, any other Rule 14 Plan, any other Rule 10 Plan and any other deliveries, (x) the total amount of water physically and legally available for diversion by the XY Canal quantified at the Granada Stream Gauge (xi) the amount of water physically and legally available for diversion by the XY 2.0 cfs, (xii) consumptive use credits delivered to the Lamar Canal Shares and the Granada Shares at each augmentation station and the consumptive use credits for the XY 2.0 cfs; (xiii) cumulative total of farm headgate deliveries to the Lamar Canal Shares, tracked alongside the volumetric limits provided in paragraph 15 of this Decree; (xiv) cumulative total of farm headgate deliveries to the Granada Shares, tracked alongside the volumetric limits provided in paragraph 16 of this Decree; (xv) cumulative total of river headgate deliveries to the XY 2.0 cfs, tracked alongside the volumetric limits provided in paragraph 17 of this Decree; (xvi) amounts of transportation losses assessed in accordance with paragraph 45; (xvii) Arkansas River call by priority and location; (xviii) the amount of Granada Winter Return Flows and the amount of XY Winter Return Flows that must be replaced before May 31; and (xix) Granada Winter Return Flows and XY Winter Return Flows replacement deliveries by location and water rights source.

LAWMA shall file with the Division Engineer, on a monthly basis, all accounting records required by this Decree. LAWMA may modify its accounting forms at the reasonable request of or as approved by the Division Engineer provided that LAWMA shall provide written notice to opposers of the proposed amendments to the accounting form no less than 35 days before they are approved by the Division Engineer. The accounting forms shall always include, at minimum, the information required by this Decree and included on **Exhibit G**.

45. Transportation losses: When water available under the 15CW3067 Water Rights is transported in the Arkansas River or its tributaries for any of the purposes adjudicated by this Decree, the Division Engineer or his designated representative, when determining the amount of water available for use by LAWMA, shall assess reasonable losses resulting from such transportation in the same manner as for other water users using the stream for carriage.

46. No precedent: There was no trial in this matter and no issues were litigated. The Findings of Fact, Conclusions of Law, and Decree of the Water Court were completed as the result of substantial discussions, negotiations and compromises by, between and among LAWMA and the several objectors pertaining to all parts of the findings, conclusions, and decree and are based on the specific characteristics of the irrigation ditches and water rights that are the subject of this Decree, including the historical use and operation of those ditches and water rights. The parties hereto specifically understand and agree, and the Court finds and concludes the following:

46.1 The acquiescence of the parties to a stipulated decree under the specific factual and legal circumstances of this contested matter and upon the numerous and interrelated compromises reached by the parties shall never give rise to any argument, claim, defense or theory of acquiescence, waiver, bar, merger, *stare decisis*, *res judicata*, estoppel, laches, or otherwise, nor to any engineering, administrative or judicial practice or precedent, by or against any of the parties hereto in any other matter, case or dispute, nor shall testimony concerning such acquiescence of any party to a stipulated decree herein be allowed in any other matter, case or dispute.

46.2 This Findings of Fact, Conclusions of Law, and Decree of the Water Court shall not have the effect of precedent or preclusion on any factual or legal issue in any other matter.

46.3 The parties hereto reserve the right to propose or to challenge any legal or factual position in any other change of water rights, plan for augmentation or other matter filed in this or any other court without limitation by these findings, conclusions, and decree.

47. General retained jurisdiction: In accordance with § 37-92-304(6), C.R.S., the portions of this Decree authorizing the change of water rights will be subject to reconsideration by the Water Judge on the question of injury to vested rights of others that may result from operation of the change of water rights, including but not limited to injury resulting from changes in historical patterns of calls or return flows or from ineffective dry-up of the Historically Irrigated Lands, for a period of fifteen years from the date of this Decree. However, all findings of fact, conclusions of law and rulings of this Court quantifying the historical consumptive use of the 15CW3067 Water Rights changed by this Decree are

final and not subject to reconsideration. *Farmers Reservoir & Irrigation Co. v. Consol. Mut. Water Co.*, 33 P.3d 799, 805 (Colo. 2001) ("[H]istoric consumptive use determinations are not susceptible to redetermination under the retained jurisdiction provision."). Pursuant to § 37-92-304(6), C.R.S., the five-year period of retained jurisdiction may be extended upon further decision by the Water Judge that the nonoccurrence of injury has not been conclusively established.

48. Perpetual retained jurisdiction: In addition to the general retained jurisdiction described in paragraph 47 above, the Court specifically retains perpetual jurisdiction over the following matters:

48.1 To review any disputed proposed addition of an augmentation station pursuant to paragraph 15.3 above.

48.2 To consider any petition to extend the Compliance Period filed pursuant to paragraph 22.1 above.

48.3 To resolve any timely-filed objection to a Revegetated Parcel(s) Report pursuant to paragraph 19.3 above.

48.4 To review the modification, termination or expiration of the 1980 Operating Plan, the Offset Account Resolution, or the Offset Account Crediting Agreement, and the effect the modification, termination or expiration may have on the change of water rights decreed herein.

48.5 To review any changes in the H-I Model, changes to the methodology for determining Compact compliance under the Arkansas River Use Rules, changes in the methodology for determining Compact compliance pursuant to agreements between Colorado and Kansas that are approved by the Colorado State Engineer, the Kansas Chief Engineer, and ARCA, changes in the methodology for determining Compact compliance pursuant to final determinations under the dispute resolution provisions of the decree in Kansas v. Colorado, No. 105, Original or otherwise, or changes that may be ordered by the United States Supreme Court pursuant to its retained jurisdiction in Kansas v. Colorado, or in further proceedings in Kansas v. Colorado or any other original jurisdiction action involving the Compact to protect the rights of the State of Kansas under the Compact, which changes lead any party herein to seek modification of this Decree with respect to such change. If the conflict between such change and this Decree is indisputable, LAWMA shall voluntarily file a motion to amend this Decree as required by the change. Otherwise, the party seeking such modification shall have the burden of establishing a *prima facie* case that such amendment is required by the change or is otherwise necessary to prevent injury to the vested rights of Colorado water users

or to prevent a Compact violation. Such jurisdiction must be invoked within three years of the time of the change described in this paragraph 48.5. The period for invoking such jurisdiction may be extended beyond three years upon motion by any party before the close of the three-year period, and upon conclusion by the Court that non-injury or Compact compliance has not been conclusively established.

48.6 Consistent with paragraph 14.3.3 above, to consider whether ARCA's action with respect to a request by LAWMA to re-store, in the West Farm Gravel Pit, water that was stored in John Martin Reservoir in the Lamar Canal Company's Article II Account requires any further or different terms and conditions in this Decree with respect to such re-storage.

49. Procedure for general retained jurisdiction: Any party seeking to invoke the retained jurisdiction of the Court pursuant to paragraph 47 shall file a petition with the Court under the caption and case number of this Decree and shall serve a copy of the petition on the counsel of record for all parties to the case and ARCA. The party who files such a petition must plead sufficient facts which, if proved, meet its burden of going forward to show that injury has occurred or is likely to occur based on operational experience involving the change of water rights decreed herein. If the petition alleges such facts, the Court will conduct additional proceedings. In such additional proceedings, the petitioner has the burden of going forward with sufficient evidence that injury has occurred or is likely to occur because the existing decree is inadequate to preclude or remedy injury. If the petitioner meets its burden of going forward, the burden of establishing non-injury and the existence of adequate provisions in the existing decree to preclude and remedy injury rests upon LAWMA. Following presentation of the parties' evidence, the Court will make findings of fact and conclusions of law on the issues of non-injury and, if appropriate, amend the decree for the purpose of precluding and remedying injury. If the Court finds that insufficient operational experience exists to permit it to consider the question of injury or to conclusively establish non-injury, it will extend the period of retained jurisdiction by an additional specified period in the amended decree pursuant to C.R.S. § 37–92–304(6).

50. Administration of the Historically Irrigated Lands: The Historically Irrigated Lands will be administered in accordance with the Administration of Parcels Claimed for Augmentation Credit Agreement between the State of Colorado and the State of Kansas dated September 30, 2005, as such agreement may be amended.

51. Use of structures: Nothing in this Decree creates or enlarges, or is to be construed as creating or enlarging, any right of LAWMA to utilize land or structures owned by parties other than LAWMA. LAWMA may utilize existing water diversion, carriage, and storage structures only to the extent it has acquired the right to use such structures from the appropriate entities by purchase or other means.

52. Filing with Water Clerk: It is ordered that this Decree be filed with the Water Clerk, and that it become effective upon such filing.

53. Filing with State and Division Engineers: It is further ordered that a copy of this Decree be filed with the Division Engineer for Water Division 2 and the State Engineer.

DATED: February 25, 2019

BY THE COURT:

LARRY C. SCHWARTZ, WATER JUDGE
WATER DIVISION 2

DATE FILED: February 22, 2019 4:55 PM

Attachment 1 to Order 2015CV3067

R 47 W | R 46 W | R 46 W | R 45 W | R 45 W | R 44 W | R 44 W | R 43 W

T 21 S | T 22 S | T 23 S

Arkansas River @ Lamar, CO

Lamar Canal Headgate

Lamar Canal Measurement Flume

Lamar West Farm Augmentation Station

Lamar Light & Power Return Flow

Center Farm Augmentation Station

Arkansas River near Granada, CO

Granada West Augmentation Station

Granada East Augmentation Station

Legend

- Arkansas River Gaging Stations
- Lamar Canal Headgate
- Lamar Canal Features
- Lamar Canal
- Granada Lateral
- West Farm Augmentation Station
- Center Farm Augmentation Station
- Granada East & West Augmentation Stations
- Higbee West Farm Historically Irrigated Acreage
- DJC-Koehn Farm Historically Irrigated Acreage
- Grasmick Lamar Farm Historically Irrigated Acreage
- Farms where Lamar Canal Shares were used

0 0.75 1.5 3

Miles

N W E S

Hendrix Wai Engineering, Inc.

Job No. L101

File: Exhibit A1 Decree.mxd

Date: 01/31/17

Prepared For: LAWMA

Exhibit A1

Parcels Historically Irrigated with the Lamar Canal Shares

Copyright © 2013 National Geographic Society, i-cubed

R 45 W

R 44 W

T 22 S

T 23 S

22453621
22453602
22453615
22453605
22443105
22443101
22443102
22443111
22443205
22443218
22443211
22443201
22443204
22443203
22443217
22453403
22453404
22453415
22453407
22453417
22453406
22453416
22453405
22453613
22453614
22453608
22443103
22443109
23450301
23440502
23440503
23440412
23440420
23440512
23440401
23440504
23440408
23440423

Attachment to Order - 2015CW3067

Legend

Dry-Up Parcels

0 1,000 2,000 4,000

Scale in Feet

N W E S

Hendrix Wai Engineering, Inc.

Job No. L7501

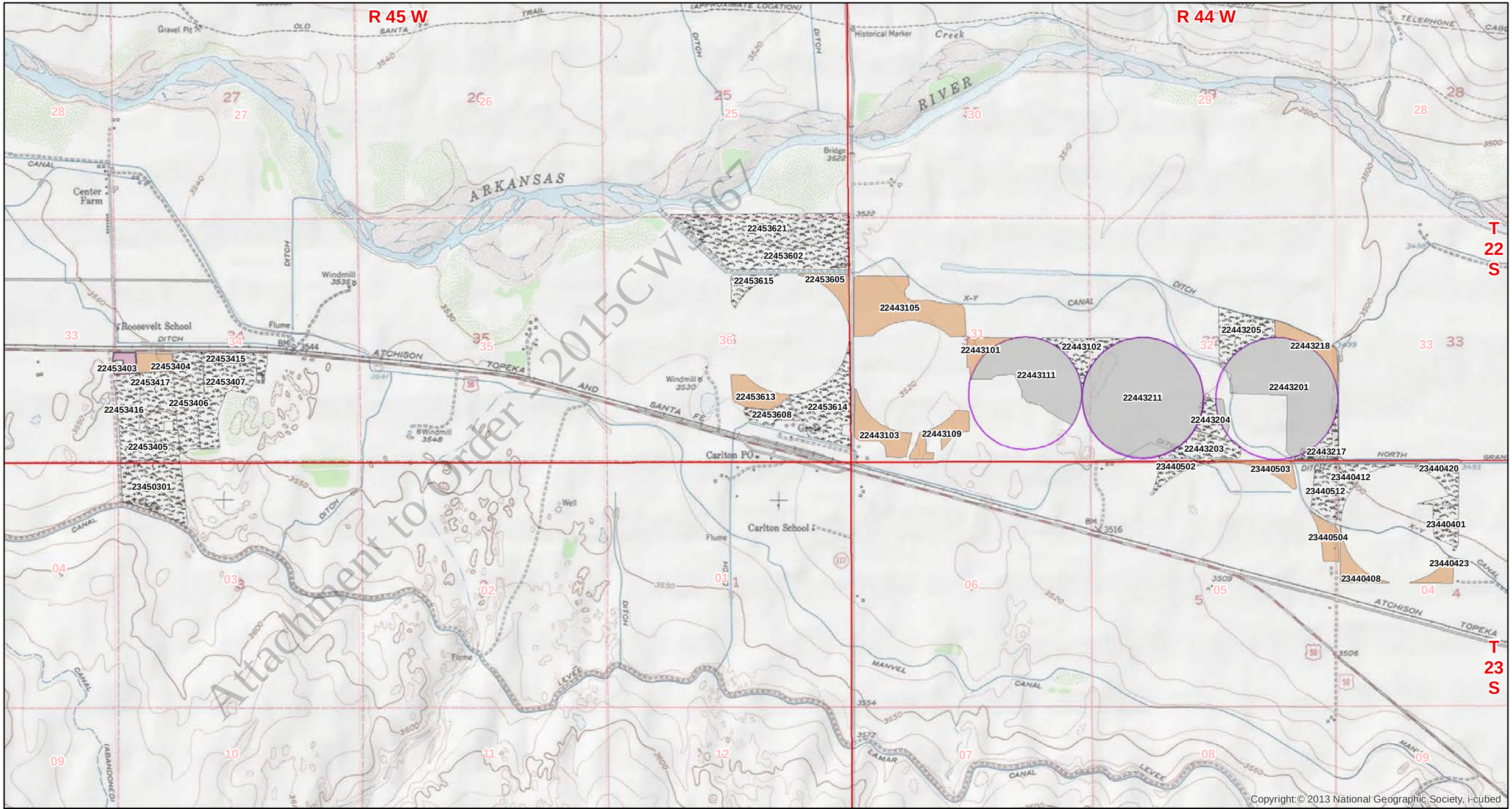
File: Exhibit A2 Decree.mxd

Date: 01/08/19

Prepared For: LAWMA

Exhibit A2

15CW3067 Dry-Up Parcels Lamar Canal



Attachment to Order - 2015CW3067

Copyright:© 2013 National Geographic Society, i-cubed

Legend

- Phase I - Developed Non-Ag Use
- Phase I - Established Groundcover
- Phase II - Irrigated Farming
- Phase II - Not Established
- Center Pivot Sprinkler

0 1,000 2,000 4,000

Scale in Feet

N W E S

Hendrix Wai Engineering, Inc.

Job No. L7501

File: Exhibit A3 Decree.mxd

Date: 01/07/2019

Prepared For: LAWMA

Exhibit A3

Revegetation Status of 15CW3067 Dry-Up Parcels Lamar Canal

Exhibit A3
Revegetation Status of Lamar Canal Dry-Up Parcels

Parcel No.	Acres	Dev'd - Non Ag Use (acres)	Irrigated Farming (acres)	Est'd Dryland Farming (acres)	Established Ground Cover (acres)	Not Established (acres)	If Irrigated Farming, WDID #(s) of sources of irrigation water	If Irrigated Farming, well permit #(s) of well(s) that supply irrigation water	If Irrigated Farming, case #(s) of augmentation plan(s) of sources of irrigation water
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
22443101	7.6	0.0	0.0	0.0	0.0	7.6			
22443102	15.2	0.0	0.0	0.0	15.2	0.0			
22443103	16.3	0.0	0.0	0.0	0.0	16.3			
22443105	46.7	0.0	0.0	0.0	0.0	46.7			
22443109	11.7	0.0	0.0	0.0	0.0	11.7			
22443111	56.7	0.0	56.7	0.0	0.0	0.0	6705543, 6705545, 6705546	3124-F, 3642-F, 15620-R	14CW3004, 02CW181
22443201	84.2	0.0	84.2	0.0	0.0	0.0	6705543, 6705545, 6705546	3124-F, 3642-F, 15620-R	14CW3004, 02Cw181
22443203	15.7	0.0	0.0	0.0	15.7	0.0			
22443204	7.6	0.0	0.0	0.0	7.6	0.0			
22443205	20.6	0.0	0.0	0.0	20.6	0.0			
22443211	122.1	0.0	122.1	0.0	0.0	0.0	6705543, 6705545, 6705546	3124-F, 3642-F, 15620-R	14CW3004, 02CW181
22443217	8.7	0.0	0.0	0.0	8.7	0.0			
22443218	11.3	0.0	0.0	0.0	0.0	11.3			
22453403	4.5	4.5	0.0	0.0	0.0	0.0			
22453404	7.2	0.0	0.0	0.0	0.0	7.2			
22453405	18.4	0.0	0.0	0.0	18.4	0.0			
22453406	23.5	0.0	0.0	0.0	23.5	0.0			
22453407	28.3	0.0	0.0	0.0	28.3	0.0			
22453415	11.6	0.0	0.0	0.0	11.6	0.0			
22453416	14.0	0.0	0.0	0.0	14.0	0.0			
22453417	21.2	0.0	0.0	0.0	21.2	0.0			
22453602	38.5	0.0	0.0	0.0	38.5	0.0			
22453605	8.5	0.0	0.0	0.0	0.0	8.5			
22453608	8.1	0.0	0.0	0.0	8.1	0.0			
22453613	12.6	0.0	0.0	0.0	0.0	12.6			
22453614	33.9	0.0	0.0	0.0	33.9	0.0			
22453615	6.8	0.0	0.0	0.0	6.8	0.0			
22453621	51.4	0.0	0.0	0.0	51.4	0.0			
23440401	10.2	0.0	0.0	0.0	10.2	0.0			
23440408	8.4	0.0	0.0	0.0	0.0	8.4			
23440412	9.7	0.0	0.0	0.0	9.7	0.0			
23440420	11.1	0.0	0.0	0.0	11.1	0.0			
23440423	5.3	0.0	0.0	0.0	0.0	5.3			
23440502	7.3	0.0	0.0	0.0	7.3	0.0			
23440503	8.2	0.0	0.0	0.0	0.0	8.2			
23440504	7.9	0.0	0.0	0.0	0.0	7.9			
23440512	13.4	0.0	0.0	0.0	13.4	0.0			
23450301	35.4	0.0	0.0	0.0	35.4	0.0			
Total	830.0	4.5	263.1	0.0	410.6	151.8			

Note: The source(s) irrigation water for parcels classified as Irrigated Farming may change from time to time.

Attachment to Order - 2015CW3067

R 44 W

R 43 W

T 22 S

T 23 S

DATE FILED: February 22, 2019 4:55 PM

Lamar Canal

Granada Lateral

Granada

Koen

Wolf

Flume

Dams

Siphon

Windmill & Sewage Disposal Plant

Water Tank

Pumping Sta

Windmill 3479

Windmill 3462

Well 3493

Well 3491

BM 3484

BM 3481

Attachment to Order - 2015CW3067

Legend

- Arkansas River Gaging Stations
- Lamar Canal
- Granada Lateral
- Granada East & West Augmentation Stations
- Farms where Granada Shares were used
- Grasmick Granada Farm Historically Irrigated Acreage
- Gass Farm Historically Irrigated Acreage

0 1,000 2,000 4,000

Scale in Feet

N W E S

Hendrix Wai Engineering, Inc.

Job No.	L101
File:	Exhibit B1 Decree.mxd
Date:	01/31/17
Prepared For:	LAWMA

Exhibit B1

Parcels Historically Irrigated with the Granada Shares

R 44 W

R 43 W

T 22 S

T 23 S

23440307
23440309
23440320
23440301
23440203
23440204
23440103
23440313
23440314
23440302
23440211
23440324
23440214
23440206
23440303
23440304
23440207
23440108
23440105
23440106
23440111
23440325
23440216
23440318
23440215
23440315
23440209
23440119
23440323
23440213
23440212
23440113
23440110
23441018
23441014
23440208
23441003
23441102
23441103
23441005
23441101
23441105
23441107
23441007
23441015
23441004
23441113
23441112
23441109
23441118

Attachment to Order - 15CW3067

Legend

Dry-Up Parcels

0 1,000 2,000 4,000

Scale in Feet

N W E S

Hendrix Wai Engineering, Inc.

Job No. L7501

File: Exhibit B2 Decree.mxd

Date: 01/08/19

Prepared For: LAWMA

Exhibit B2

15CW3067 Dry-Up Parcels
Granada Lateral

R 44 W

R 43 W

T 22 S

T 23 S

23440307 23440309 23440320 23440301 23440203 23440204 23440103 23440324 23440313 23440314 23440303 23440304 23440302 23440206 23440211 23440108 23440105 23440207 23440214 23440106 23440111 23440325 23440215 23440216 23440318 23440315 23440209 23440119 23440323 23440213 23440212 23440113 23440110 23441014 23441018 23441003 23440208 23441102 23441103 23441005 23441101 23441007 23441015 23441004 23441105 23441107 23441113 23441109 23441112 23441118

Well 3493 Well 3491 Windmill 3479 Bridge CANAL RIVER Windmill 3462 Windmill 3458 Flume Windmill & Sewage Disposal Plant Siphon Granada (BM 3484) Koen Wolf Dams Water Tank Pumping Sta Well

NORTH GRANADA DITCH NORTH GRANADA DITCH X-Y CANAL ATCHISON TOPEKA AND SANTA FE MANVEL CANAL LAMAR CANAL DITCH LEVEE HOLD-O-COM SOUTH GRANADA ATCHISON

Attachment to Order - 2015CW3067

Copyright:© 2013 National Geographic Society, i-cubed

Legend

- Phase I - Established Groundcover
- Phase II - Not Established

0 1,000 2,000 4,000

Scale in Feet

N W E S

Hendrix Wai Engineering, Inc.

Job No. L7501

File: Exhibit B-3 Decree.mxd

Date: 01/07/2019

Prepared For: LAWMA

Exhibit B3

Revegetation Status of 15CW3067 Dry-Up Parcels Granada Lateral

Exhibit B3
Revegetation Status of Granada Lateral Dry-Up Parcels

Parcel No.	Acres	Dev'd - Non Ag Use (acres)	Irrigated Farming (acres)	Est'd Dryland Farming (acres)	Established Ground Cover (acres)	Not Established (acres)	If Irrigated Farming, WDID #(s) of sources of irrigation water	If Irrigated Farming, well permit #(s) of well(s) that supply irrigation water	If Irrigated Farming, case #(s) of augmentation plan(s) for sources of irrigation water
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
23440103	22.9	0.0	0.0	0.0	22.9	0.0			
23440105	9.1	0.0	0.0	0.0	9.1	0.0			
23440106	9.7	0.0	0.0	0.0	0.0	9.7			
23440108	7.9	0.0	0.0	0.0	0.0	7.9			
23440110	5.2	0.0	0.0	0.0	5.2	0.0			
23440111	27.5	0.0	0.0	0.0	27.5	0.0			
23440113	8.3	0.0	0.0	0.0	8.3	0.0			
23440119	9.0	0.0	0.0	0.0	0.0	9.0			
23440203	18.2	0.0	0.0	0.0	0.0	18.2			
23440204	15.1	0.0	0.0	0.0	15.1	0.0			
23440206	17.8	0.0	0.0	0.0	0.0	17.8			
23440207	31.8	0.0	0.0	0.0	0.0	31.8			
23440208	13.0	0.0	0.0	0.0	0.0	13.0			
23440209	41.4	0.0	0.0	0.0	0.0	41.4			
23440211	7.7	0.0	0.0	0.0	0.0	7.7			
23440212	11.3	0.0	0.0	0.0	11.3	0.0			
23440213	16.4	0.0	0.0	0.0	0.0	16.4			
23440214	21.8	0.0	0.0	0.0	0.0	21.8			
23440215	28.2	0.0	0.0	0.0	0.0	28.2			
23440216	35.4	0.0	0.0	0.0	0.0	35.4			
23440301	9.4	0.0	0.0	0.0	0.0	9.4			
23440302	8.4	0.0	0.0	0.0	0.0	8.4			
23440303	7.6	0.0	0.0	0.0	0.0	7.6			
23440304	8.6	0.0	0.0	0.0	0.0	8.6			
23440307	8.6	0.0	0.0	0.0	0.0	8.6			
23440309	8.1	0.0	0.0	0.0	0.0	8.1			
23440313	6.3	0.0	0.0	0.0	6.3	0.0			
23440314	6.9	0.0	0.0	0.0	0.0	6.9			
23440315	5.2	0.0	0.0	0.0	0.0	5.2			
23440318	18.8	0.0	0.0	0.0	18.8	0.0			
23440320	7.7	0.0	0.0	0.0	0.0	7.7			
23440323	5.7	0.0	0.0	0.0	5.7	0.0			
23440324	14.8	0.0	0.0	0.0	0.0	14.8			
23440325	7.1	0.0	0.0	0.0	0.0	7.1			
23441003	8.9	0.0	0.0	0.0	8.9	0.0			
23441004	8.4	0.0	0.0	0.0	8.4	0.0			
23441005	6.9	0.0	0.0	0.0	0.0	6.9			
23441007	21.9	0.0	0.0	0.0	0.0	21.9			
23441014	5.9	0.0	0.0	0.0	0.0	5.9			
23441015	26.1	0.0	0.0	0.0	26.1	0.0			
23441018	24.1	0.0	0.0	0.0	24.1	0.0			
23441101	20.1	0.0	0.0	0.0	0.0	20.1			
23441102	41.1	0.0	0.0	0.0	0.0	41.1			
23441103	47.3	0.0	0.0	0.0	0.0	47.3			
23441105	17.6	0.0	0.0	0.0	17.6	0.0			
23441107	29.4	0.0	0.0	0.0	0.0	29.4			
23441109	15.6	0.0	0.0	0.0	0.0	15.6			
23441112	8.1	0.0	0.0	0.0	8.1	0.0			
23441113	12.8	0.0	0.0	0.0	0.0	12.8			
23441118	6.0	0.0	0.0	0.0	0.0	6.0			
Total	781.2	0.0	0.0	0.0	223.5	557.8			

Attachment to Order 2015CW3067

DATE FILED: February 22, 2019 4:55 PM

Attachment to Order - 2014CW3067

R 45 W | R 44 W | R 43 W | R 42 W

T 22 S | T 23 S

Former X-Y Canal Headgate

Arkansas River near Granada, CO

Bristol | Warwick | Hartman | Parrish | Goodale | Center Farm | Carlton | Grote | Koen | Granada | Barton | Amity | Camp Amache | Water Tank | Verhoeff Reservoir | Gravel Pit

AMITY LEVEE | Centennial CANAL | Boggs Creek | DITCH | DEADMAN LATERAL | CHENOWETH FORK EAST DITCH | SWEDE OLD LATERAL | RAILROAD | BUFFALO | NORTH GRANADA CANAL | X-Y CANAL | SANTA FE TRAIL | ARKANSAS | HOLLY | SISSON | Wolf Creek | Arroyo | LAMAR CANAL

Copyright © 2013 National Geographic Society, i-cubed

Legend

- Arkansas River Gaging Stations
- Former X-Y Canal Headgate
- X-Y Canal
- Farms where XY 2.0 cfs was used
- McMillan Farm Historically Irrigated Acreage
- Grasmick XY Farm Historically Irrigated Acreage

0 0.5 1 2 Miles

N W E S

Hendrix Wai Engineering, Inc.

Job No.	L101
File:	Exhibit C1 Decree.mxd
Date:	12/28/15
Prepared For:	LAWMA

Exhibit C1

Parcels Historically Irrigated with the X-Y 2.0 cfs

R 44 W

R 43 W

T 22 S

T 23 S

23440121

23440102

23430712

Granada (BM 3484)

Koen

Wolf Creek

Flume

Windmill 3462

Windmill 3458

Windmill 3479

Windmill 3491

Windmill 3493

Sewage Disposal Plant

Siphon

Water Tank

Pumping Sta

Dams

Well

BM 3511

BM 3481X

RIVER

CANAL

DITCH

LEVEE

GRANADA

NORTH

SOUTH

X-Y

MANVEL

LAMAR

ATCHISON TOPEKA AND SANTA FE

BUFFALO

Attachment to Order - 15CW3067

Legend

Dry-Up Parcels

0 1,000 2,000 4,000

Scale in Feet

N W E S

Hendrix Wai Engineering, Inc.

Job No. L7501

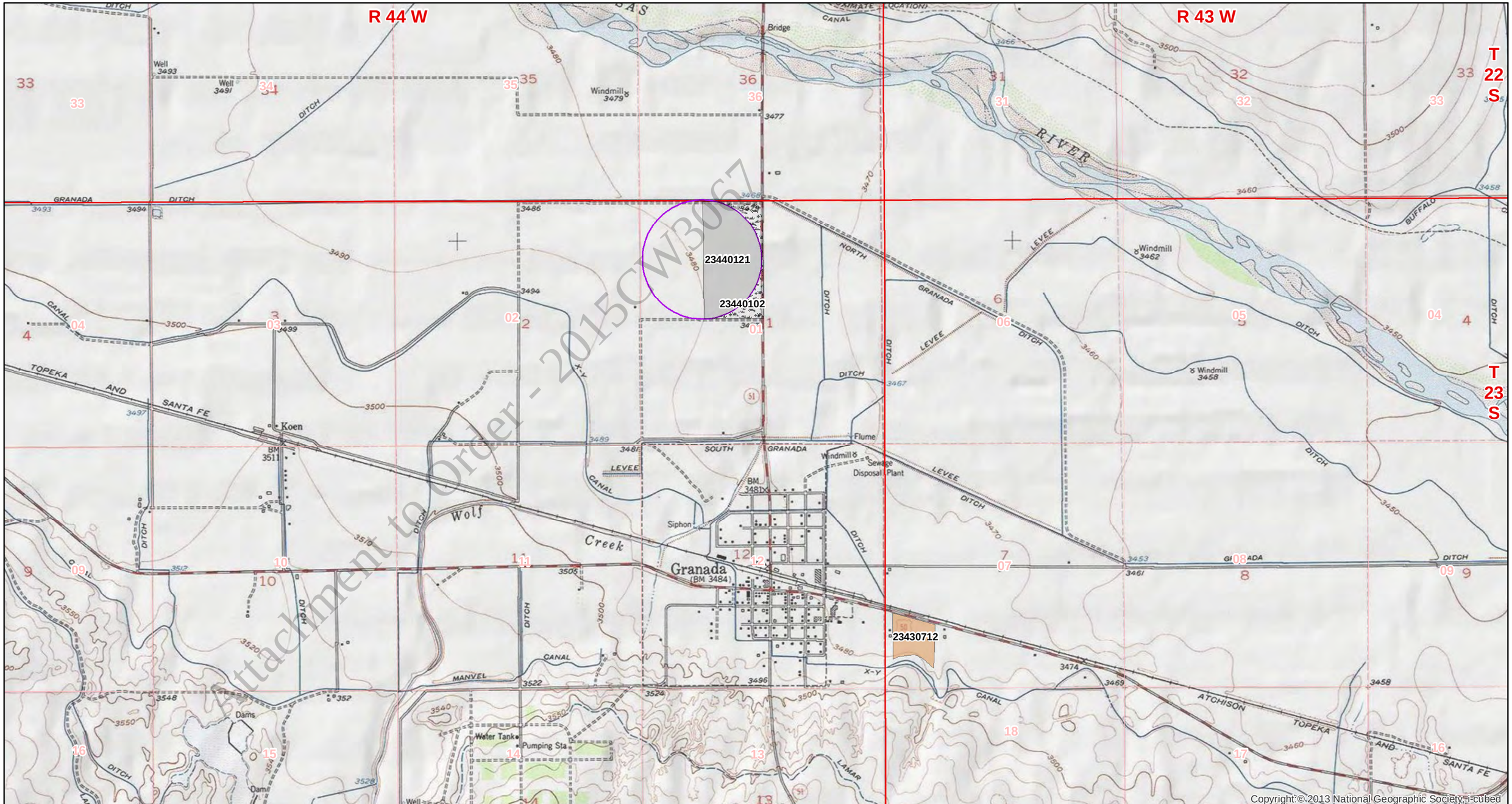
File: Exhibit C2 Decree.mxd

Date: 01/26/17

Prepared For: LAWMA

Exhibit C2

15CW3067 Dry-Up Parcels X-Y Canal



Attachment to Order - 15CW3067

Copyright © 2013 National Geographic Society, i-cubed

Legend

- Phase I - Established Groundcover
- Phase II - Not Established
- Phase II - Irrigated Farming
- Center Pivot Sprinkler

0 1,000 2,000 4,000

Scale in Feet

N W E S

Hendrix Wai Engineering, Inc.

Job No. L7501

File: Exhibit C3 Decree.mxd

Date: 01/07/2019

Prepared For: LAWMA

Exhibit C3

Revegetation Status of 15CW3067 Dry-Up Parcels X-Y Canal

Exhibit C3
Revegetation Status of X-Y Canal Dry-Up Parcels

Parcel No.	Acres	Dev'd - Non Ag Use (acres)	Irrigated Farming (acres)	Est'd Dryland Farming (acres)	Established Ground Cover (acres)	Not Established (acres)	If Irrigated Farming, WDID #(s) of sources of irrigation water	If Irrigated Farming, well permit #(s) of well(s) that supply irrigation water	If Irrigated Farming, case #(s) of augmentation plan(s) for sources of irrigation water
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
23430712	17.7	0.0	0.0	0.0	0.0	17.7			
23440102	16.9	0.0	0.0	0.0	16.9	0.0			
23440121	58.1	0.0	58.1	0.0	0.0	0.0	6705477	12876-R-R	02CW181, 14CW3004
Total:	92.8	0.0	58.1	0.0	16.9	17.7			

Note: The source(s) of irrigation water for parcels classified as Irrigated Farming may change from time to time.

Attachment to Order - 2015CW3067

DATE FILED: February 22, 2019 4:55 PM

R 46 W

Arkansas River @ Lamar, CO

Lamar West Farm Augmentation Station

Lamar Canal Measurement Flume

Lamar Light & Power Return Flow

Lamar Canal

T 22 S

T 23 S

Copyright:© 2013 National Geographic Society, i-cubed

Legend

- Lamar Canal Features
- Arkansas River Gaging Stations
- West Farm Augmentation Station
- Lamar Canal
- West Farm Gravel Pit

0 1,000 2,000 4,000

Scale in Feet

N W E S

Hendrix Wai Engineering, Inc.

Job No.	L101
File:	Exhibit D.mxd
Date:	03/15/2018
Prepared For:	LAWMA

Exhibit D

West Farm Gravel Pit Storage

Hendrix Wai Engineering, Inc.
Water Resources, Water Rights and GIS/Computer Modeling

EXHIBIT E

P.O. Box 4487
Parker, CO 80134

Telephone: (720) 930-4360
E-Mail: Randy@Hendrix-Wai.com

To: Richard Mehren – Moses, Wittemyer, Harrison & Woodruff, P.C.
Jennifer DiLalla – Moses, Wittemyer, Harrison & Woodruff, P.C.
William Davidson – Moses, Wittemyer, Harrison & Woodruff, P.C.

From: Randy L. Hendrix

Date: September 22, 2017

Subject: Measurement of the X-Y Canal Water Right at the Arkansas River near Granada, CO Streamflow Gage – 15CW3067

Attachment to Order - 15CW3067

The diversion dam for the X-Y Canal headgate is no longer a functional diversion structure. Therefore, the yield of LAWMA's X-Y Rights will be measured using the USGS streamflow gage Arkansas River near Granada, CO (07134180). This stream gage is located approximately one mile downstream from the Buffalo Headgate. The following description applies to days when Kansas Offset Account Water and Kansas Article II water is not being delivered to the Stateline. The replacement water available to LAWMA's X-Y Rights may be measured using the following 3 steps on a daily basis:

1. Available diversion is limited to the measured flow at the Granada stream gage minus any deliveries to the Stateline minus 5 cfs. The 5 cfs reduction is to account for the small amount of gain between the Buffalo Canal Headgate and the Granada stream gage. This measurement accounts for the stream gain in the reach from the Lamar Canal Headgate to the Buffalo Canal Headgate that is available for diversion by the X-Y Canal since the measured flow at the Granada stream gage already reflects the diversions by the senior water rights of the Buffalo Canal and the Hyde Ditch. The 5 cfs gain was derived from inspection of the Granada stream gage during periods the Buffalo Canal was sweeping the river in dry years. An example of a Stateline delivery would be LAWMA's Lamar Canal shares delivered to the river at the Center Farm augmentation station.
2. Available diversion is further limited by the estimated physical flow at the XY Headgate minus any deliveries to the Stateline. During most days, the calculation in this step will be greater than the available flow calculated in step 1 because a portion of the available flow calculated in this step is gain necessary to satisfy the Buffalo Canal. However, the flow in this step will be the controlling flow during periods when the stream gain between the X-Y Canal headgate and the Buffalo Canal Headgate exceeds the demands of the Buffalo Canal. The flow at the XY Diversion Dam is estimated as 0.79 x (Buffalo Diversions + Granada Gage). This relationship was determined by a regression analysis of the Carlton Gage versus the Total of the Buffalo Diversions + Granada Gage. The Carlton Gage is located just downstream from the old X-Y Canal headgate.
3. The minimum of the available flow determined in steps 1 and 2 is further limited by LAWMA's water right amount of 2 cfs and the monthly, annual, and 20-year volumetric limitations.

Historically, estimating the yield of the XY water right has been difficult when Kansas is releasing water from John Martin Reservoir and LAWMA has worked with the Division Engineers office to try to refine the procedure. Based on the recent agreement between Colorado and Kansas to govern the releases from the Offset Account it appears that the XY deliveries to the Stateline would be included in the 6-day antecedent flow calculations. Therefore, when Kansas makes a reservoir release, the XY yield will be estimated with appropriate limitations at the Stateline and the Granada gage as described in Paragraphs 3 and 5 of the "AGREEMENT CONCERNING THE OFFSET ACCOUNT IN JOHN MARTIN RESERVOIR FOR COLORADO PUMPING, DETERMINATION OF CREDITS FOR DELIVERY OF WATER RELEASED FOR COLORADO PUMPING, AND RELATED MATTERS". It would also appear that if the flow at the stateline is above the "Muskingham Routed Flow", this flow should be considered an increase in antecedent flow and a portion of this flow is attributable to the XY water right.[1]

Attachment to Order - 2015CW3067

[1] Reference from Exhibit H of LAWMA's Case No. 02CW181

EXHIBIT F

I. Revegetation Category Criteria

DATE FILED: February 22, 2019 4:55 PM

A Dry-Up Parcel must meet the following criteria to be classified within the following Revegetation Categories:

a. **Irrigated Farming**: The Dry-Up Parcel is irrigated with a source of water described in paragraph 20.2 of this Decree.

b. **Developed Non-Ag Use**: The Dry-Up Parcel has been developed with buildings, grain storage facilities, railways or railroad facilities, oil or gas facilities, wind power generation facilities, power transmission facilities, pump houses, recharge facilities, augmentation stations, feed yards, roads, reservoirs, drains, impervious surfaces, or other facilities or structures that will adequately control weeds and/or erosion of the soil caused by wind; or the Dry-Up Parcel has been developed for a non-agricultural use that is allowed under applicable land-use regulations but that precludes establishing groundcover or dry-land farming on the Dry-Up Parcel, and weeds and/or erosion of the soil caused by wind are adequately controlled in a manner consistent with state and local law.

c. **Established Groundcover**: The Dry-Up Parcel meets the criteria for Class VI or Class VII of the Groundcover Classification Schedule in section III below, with weeds adequately controlled in a manner consistent with state and local law; or groundcover has been established on the Dry-Up Parcel as far as can be reasonably expected and weeds and/or erosion of the soil caused by wind are adequately controlled in a manner consistent with state and local law.

d. **Established Dry-Land Farming**:

1. Definition: Dry-land Farming means the establishment and maintenance of dry-land farming practices with weeds adequately controlled and with soil erosion from wind controlled in a manner consistent with state and local law. Dry-land farming practices include No-Till Dry-Land Farming and Minimum-Tillage Dry-Land Farming, as those terms are defined below.

i. No-Till Dry-Land Farming means a system of planting seeds into untilled soil by opening a narrow slot, trench or band, of sufficient width and depth to obtain proper seed coverage. Because no soil tillage is utilized, a farmer must rely on herbicides to control the weeds. Both contact and residual herbicides may be used. Periodic fallowing and crop rotation may be used to stabilize the crop yields and allow the soil to rest.

Attachment to Order - 2015CV3087

ii. Minimum-Tillage Dry-Land Farming means management of farming operations which seeks to minimize impacts from tilling through the use of a sweep plow, strip-till, or similar technology. Additionally, a farmer may rely on herbicides to control weeds. Both contact and residual herbicides may be used. Periodic fallowing and crop rotation may be used to stabilize the crop yields and allow the soil to rest.

2. Criteria for classification as Established Dry-Land Farming in an Annual Revegetation Status Report: The Dry-Up Parcel has been planted to a dry-land crop or is in a fallow period following a dry-land crop; the crop was planted and farmed without irrigation water, such that it is dependent solely upon precipitation to meet crop water requirements; if other dry-land farming in the region is producing crops, the farm also is producing a dry-land crop with weeds adequately controlled and with soil erosion from wind controlled in a manner consistent with state and local law; and minimum crop residue after harvest of the dry-land crop is as described below, and the crop residue is left on the Dry-Up Parcel until the Dry-Up Parcel is prepared for the next rotation of planting; provided, however, that this requirement for crop residue does not prevent a farmer from controlling weeds by mechanical tillage of the Dry-Up Parcel or using other acceptable methods of weed control that do not disturb the residue on the surface. For grain crops, such as winter wheat or milo, minimum crop residue must be at least thirty percent (30%), determined by the step-point method. For hay or forage crops, crop stubble must measure at least five inches, with row spacing no more than thirty inches.

3. Additional criteria for classification as Established Dry-Land Farming in a Revegetated Parcel(s) Report: In order to be classified as Established Dry-Land Farming in a Revegetated Parcel(s) Report, a Dry-Up Parcel must meet the following criteria in addition to the criteria listed above: The Dry-Up Parcel has been classified as Established Dry-Land Farming in accordance with the criteria in section II.d.2 above for three full crop rotation cycles (one cycle equals two years crop production and one year fallow with appropriate stubble and weed control, for a total of three years).

e. **Not Established**: The Dry-Up Parcel does not meet the criteria to be classified as Irrigated Farming, Developed Non-Ag Use, Established Groundcover, or Established Dry-Land Farming.

f. **Confirmed Revegetated**: The Dry-Up Parcel is the subject of a Revegetated Parcel(s) Report that has been filed and accepted under paragraph 19.3 of this Decree.

Attachment to Order - 2015CV3067

II. Groundcover Classification Schedule

a. **CLASS I**: Full seeding and irrigation needed, either first seeding or reapplication of seeding. Desired plants scarce or absent.

b. **CLASS II**: Seeding and irrigation completed. Stand undetermined. Usually this will occur at the beginning of the second growing season following seeding.

c. **CLASS III**: Stand is variable. Part of the field has an adequate stand and part does not. Plants may be juvenile plants to well-developed mature plants. More than 10% of field with an inadequate stand on areas exceeding one acre in size. Plant frequency of desirable plant on deficient areas is less than 10%. Such deficient areas will require reseeding.

d. **CLASS IV-A**: Stand is inadequate; frequency is less than 10% but plants are fairly well distributed over field. Field may need reseeding.

e. **CLASS IV-B**: Stand is inadequate; frequency is between 10% to 15%. Plants are uniformly distributed over the field. No further seeding then recommended as the stand is expected to develop.

g. **CLASS V**: Stand appears adequate, but root system is undeveloped. There are 10% to 15% or more desired plants per count. Good potential for stand establishment. Generally found after the first growing season but possibly the second growing season.

h. **CLASS VI**: Stand adequate. Plants well rooted. Desirable plant frequency range 15% to 20%; no deficient areas larger than one acre in size over 90% of the field. This may occur following second growing season but more likely after the third growing season and beyond.

i. **CLASS VII**: Stand adequate. Plants well rooted with vigorous top growth. Desirable Plant frequencies are 20% to 30% or more over 90% of the field. No deficient areas larger than one acre in size. Generally occurring the third growing season and beyond.

III. Annual Revegetation Status Report

In addition to the information required by Paragraph 21 of this Decree, each Annual Revegetation Status Report must include the following information:

a. For each Dry-Up Parcel not classified as Not Established, whether the Dry-Up Parcel is being dry-land farmed or established in groundcover.

Attachment to Order - 2015CV3067

b. For each Dry-Up Parcel classified as Not Established and not dry-land farmed during the preceding year, the efforts undertaken in the preceding year to establish groundcover on the dried-up acreage, including without limitation the seeding rate, type and composition of blend by percentage and date planted, information about herbicides or pesticides applied, and information about efforts to control erosion of the soil caused by wind.

c. For each Dry-Up Parcel not classified as Confirmed Revegetated, Irrigated Farming, or Developed Non-Ag Use and not dry-land farmed during the preceding year, a classification of the Dry-Up Parcel under the Groundcover Classification Schedule in section II above, including whether groundcover has been established on the Dry-Up Parcel as far as can reasonably be expected.

d. For each Dry-Up Parcel not classified as Confirmed Revegetated that was dry-land farmed during the preceding year, the efforts undertaken in the preceding year to convert the Farm to dry-land Farming, including information about tilling practices, the planting and fallowing rotation, the crops planted, and the acres fallowed; information about herbicides or pesticides applied; information about efforts to control erosion of the soil caused by wind; information about the amount of crops harvested or the number of animal units grazing the land; and information about the amount of crops planted and harvested by other dry-land farmers in the area during the preceding year;

e. For each Dry-Up Parcel not classified as Confirmed Revegetated that was dry-land farmed during the preceding year, whether the crop is a grain crop or a hay/forage crop. If the crop is a grain crop, the percentage crop residue determined using the step-point method, and if the crop is a hay/forage crop, the stubble height in inches and the row spacing in inches.

f. The approximate annual precipitation that fell on the Phase II Land, which may be estimated based on the average of published local weather station data.

g. Any factors that had a negative impact on efforts to establish groundcover on or dry-land farm the Phase II Land.

h. Whether water was used to assist in establishing groundcover or converting to dry-land farming, and if water was so used, the source of the water, the amount applied, and the method of application.

i. A comparison of the current conditions of the Dry-Up Parcels included in the Annual Revegetation Status Report to their past conditions as reported in previous Annual Revegetation Status Reports.

Attachment to Order - 2015CV3067

j. A map: (i) depicting the then current status of the Phase II Land; and (ii) identifying the source of irrigation water for any parcel of the Phase II Land classified as Irrigated Farming.

Attachment to Order - 2015CW3067

EXHIBIT G

PRELIMINARY - PROVIDED SEPTEMBER 11, 2018
TABLE 1
LAWMA's REPLACEMENT SOURCES FROM X-Y AND MANVEL DIRECT FLOW WATER RIGHTS
(values in cfs unless otherwise noted)

Month: September **Year: 2018**

DATE FILED: February 22, 2019 4:55 PM

Attachment to Order 15CW3067

Day	Flow at Lamar Gage	Hyde Div	Buffalo Div	Flow at Granada Gage	Flow at Stateline (Coolidge + Frontier)	Gain Lamar to Granada	Gain Lamar to Stateline	LAWMA's Delivery to Reaches Above Buffalo	LAWMA's Delivery to Reaches Below Buffalo	Winter Return Flows above the Buffalo	Sisson & Stubbs Delivery to Stateline	Kansas JMR Delivery @ Stateline	Stateline Flow in Excess of Kansas Delivery	Unused Native Flow at Lamar R.G.	Granada Gage: LAWMA's Divertable Water	Granada Gage: Total Avail Under X-Y Right	Granada Gage: Total Avail 02CW181 X-Y	Granada Gage: Total Avail 15CW3067 X-Y	Granada Gage: Total Avail Under Manvel Right	Granada Gage: Total Avail Under Graham Right	Unused Native Flow
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
1	121.0	11.0	64.3	128.0	196.6	82.3	150.9	27.40	6.55	0.00	2.25	Yes	128.0	No	128.0	69.0	67.0	2.0	25.2	16.5	17.3
2	121.0	10.8	64.4	129.0	203.5	83.2	157.7	28.03	6.01	0.00	2.25	Yes	129.0	No	129.0	69.0	67.0	2.0	0.0	16.5	43.5
3	122.0	10.7	64.6	133.0	241.9	86.3	195.2	27.44	6.30	0.00	2.25	Yes	133.0	No	133.0	69.0	67.0	2.0	0.0	16.5	47.5
4	115.0	11.4	65.1	139.0	324.9	100.4	286.3	25.83	6.91	0.00	2.25	Yes	139.0	No	139.0	45.1	43.8	1.3	0.0	16.5	77.4
5	36.6	12.5	64.3	123.0	300.5	163.2	340.7	22.42	5.05	0.00	2.25	Yes	123.0	No	123.0	0.0	0.0	0.0	0.0	16.5	106.5
6	26.9	16.1	62.0	95.2	257.0	146.3	308.1	18.65	4.80	0.00	2.25	Yes	95.2	No	95.2	0.0	0.0	0.0	0.0	16.5	78.7
7	24.5	22.0	61.4	90.8	244.0	149.7	302.9	21.07	5.61	0.00	2.25	No	90.8	No	85.8	0.0	0.0	0.0	0.0	16.5	69.3
8	17.8	20.0	61.0	85.6	232.0	148.8	295.2	24.04	6.83	0.00	2.25	No	85.6	No	80.6	0.0	0.0	0.0	0.0	16.5	64.1
9	16.7	16.4	60.6	82.8	222.0	143.1	282.3	24.51	8.70	0.00	2.25	No	82.8	No	77.8	0.0	0.0	0.0	0.0	16.5	61.3
10	20.5	14.3	60.0	79.0	221.0	132.9	274.9	24.78	11.53	0.00	2.25	No	79.0	No	74.0	0.0	0.0	0.0	0.0	16.5	57.5
11	20.9	16.2	59.7	76.9	218.0	131.9	273.0	24.05	8.77	0.00	2.25	No	76.9	No	71.9	0.0	0.0	0.0	0.0	16.5	55.4
12	19.9	13.8	59.6	75.5	208.0	129.0	261.5	24.02	4.70	0.00	2.25	No	75.5	No	70.5	0.0	0.0	0.0	0.0	16.5	54.0
13	19.5	10.5	59.2	72.0	192.0	122.3	242.3	24.00	5.43	0.00	2.25	No	72.0	No	67.0	0.0	0.0	0.0	0.0	16.5	50.5
14	18.6	10.4	59.0	70.0	177.0	120.8	227.8	22.91	5.23	0.00	2.25	No	70.0	No	65.0	0.0	0.0	0.0	0.0	16.5	48.5
15	17.1	10.5	58.4	66.7	175.0	118.6	226.9	23.61	3.65	0.00	2.25	No	66.7	No	61.7	0.0	0.0	0.0	0.0	16.5	45.2
16	16.3	11.0	58.4	64.8	172.0	117.9	225.1	23.34	2.35	0.00	2.25	No	64.8	No	59.8	0.0	0.0	0.0	0.0	16.5	43.3
17	16.4	11.0	63.1	59.5	155.0	117.2	212.7	22.80	2.35	0.00	2.25	No	59.5	No	54.5	0.0	0.0	0.0	0.0	16.5	38.0
18	16.0	10.8	65.9	55.0	147.0	115.7	207.7	20.78	2.50	0.00	2.25	No	0.0	No	50.0	0.0	0.0	0.0	0.0	16.5	33.5
19	15.5	11.6	65.6	52.8	146.0	114.5	207.7	18.38	2.71	0.00	2.25	No	0.0	No	47.8	0.0	0.0	0.0	0.0	16.5	31.3
20	15.5	11.2	65.0	49.2	150.0	109.9	210.7	8.65	5.51	0.00	2.25	No	0.0	No	44.2	0.0	0.0	0.0	0.0	16.5	27.7
21	15.6	11.6	64.1	43.9	147.0	104.0	207.1	6.29	3.94	0.00	2.25	No	0.0	No	38.9	0.0	0.0	0.0	0.0	16.5	22.4
22	16.2	12.0	63.6	41.4	143.0	100.7	202.3	9.51	5.77	0.00	2.25	No	0.0	No	36.4	0.0	0.0	0.0	0.0	16.5	19.9
23	16.4	12.3	64.2	42.6	152.0	102.8	212.2	10.29	9.86	0.00	2.25	No	0.0	No	37.6	0.0	0.0	0.0	0.0	16.5	21.1
24	15.3	11.7	64.0	40.7	150.0	101.1	210.4	9.02	9.02	0.00	2.25	No	0.0	No	35.7	0.0	0.0	0.0	0.0	16.5	19.2
25	16.2	11.4	63.5	38.2	147.0	96.9	205.7	9.77	6.56	0.00	2.25	No	0.0	No	33.2	0.0	0.0	0.0	0.0	16.5	16.7
26	16.8	11.7	63.5	38.1	147.0	96.5	205.4	10.07	6.66	0.00	2.25	No	0.0	No	33.1	0.0	0.0	0.0	0.0	16.5	16.6
27	28.5	12.8	63.9	40.4	141.0	88.6	189.2	11.51	6.79	0.00	2.25	No	0.0	No	35.4	0.0	0.0	0.0	0.0	16.5	18.9
28	17.6	12.8	64.6	42.6	138.0	102.4	197.8	14.33	6.79	0.00	2.25	No	0.0	No	37.6	0.0	0.0	0.0	0.0	16.5	21.1
29	26.8	11.5	64.6	44.5	142.0	93.9	191.4	14.71	4.44	0.00	2.25	No	0.0	No	39.5	0.0	0.0	0.0	0.0	16.5	23.0
30	15.1	10.8	64.8	43.8	141.0	104.3	201.5	16.83	6.06	0.00	2.25	No	0.0	No	38.8	0.0	0.0	0.0	0.0	16.5	22.3
31																					
Monthly Average (cfs)																					
	32.7	12.7	62.7	71.5	187.7	114.2	230.4	18.97	5.91	0.00	2.25			---	67.5	8.4	8.2	0.2	0.8	16.5	41.7
Total (ac-ft)																					
	1,948.2	754.9	3,733.6	4,252.6	11,169.9	6,793.0	13,710.2	1,128.7	351.8	0.0	134.1			---	4,014.6	500.0	485.5	14.5	50.0	980.4	2,484.2
LAWMA CU CREDITS (ac-ft)											88.0					314.5	305.4	9.7	29.2		

Days With Unused Native Flow	0	Days Graham Ditch in Priority	30
Percentage of Month Call on John Martin to Lamar Canal	100%	% of Month Graham In Priority	100%
		Percentage of Month Call on River	0%

15CW3067 X-Y Winter Return Flow Obligation (Delivered during April and/or May) **0** ac-ft

Notes:
1) All Values are demonstrative and not an actual representation of actual September 2018 accounting
2) 15CW3067 X-Y Winter Return Flows will be tracked on the previous year's monthly river headgate diversions and delivered out of the monthly CU credits in April and/or May. In other source such as CU water in the gravel pit will be noted.

Column Explanations:
1) Day of the current month of accounting.

LAWMA's REPLACEMENT SOURCES FROM X-Y AND MANVEL DIRECT FLOW WATER RIGHTS
(values in cfs unless otherwise noted)

Month: September **Year: 2018**

Day	Flow at Lamar Gage	Hyde Div	Buffalo Div	Flow at Granada Gage	Flow at Stateline (Coolidge + Frontier)	Gain Lamar to Granada	Gain Lamar to Stateline	LAWMA's Delivery to Reaches Above Buffalo	LAWMA's Delivery to Reaches Below Buffalo	Winter Return Flows above the Buffalo	Sisson & Stubbs Delivery to Stateline	Kansas JMR Delivery @ Stateline	Stateline Flow in Excess of Kansas Delivery	Unused Native Flow at Lamar R.G.	**Granada Gage** LAWMA's Divertable Water	Total Avail Under X-Y Right	Total Avail 02CW181 X-Y	Total Avail 15CW3067 X-Y	Total Avail Under Manvel Right	Total Avail Under Graham Right	Unused Native Flow
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)

2) Arkansas River at Lamar, CO streamflow gage obtained from USGS data imported onto the Streamflows tab
3) Hyde Ditch river headgate diversion obtained from CDWR data imported onto the Streamflows tab
4) Buffalo Canal river headgate diversions obtained from CDWR data imported onto the Streamflows tab
5) Arkansas River near Granada, CO streamflow gage obtained from USGS data imported onto the Streamflows tab
6) Stateline stream flow (Arkansas River near Coolidge, KS + Frontier Ditch diversions) obtained from USGS data imported onto the Streamflows tab
7) Column 5 + Column 4 + Column 3 - Column 2
8) Column 6 + Column 4 + Column 3 - Column 2
9) Total flow from West Farm and Center Farm Augmentation stations - West Farm and Center Farm Rule 10 deliveries - Return flows owed to Stateline
10) Total flow from Granada West farm and Granada East Augmentation stations - Granada West and Granada East Rule 10 deliveries - Return flows owed to Stateline
11) Winter Return flows owed to Stateline above Buffalo Canal (Table 5 column 27)
12) Sisson & Stubbs Ditch estimated at 134.1 acre-feet per month of diversions and 88 acre-feet per month consumptive use credits.
13) Kansas John Martin Reservoir releases at the Stateline (Yes / No)
14) Arkansas River near Granada, CO streamflow greater than the release rate of Kansas John Martin Reservoir water after a 2 day lag.
15) Unused Native flow at the Arkansas River at Lamar, CO streamflow gage greater than 20 cfs (Yes / No)
16) If Column 13 = Yes then Column 14.
If Column 13 = No then maximum of Column 5 - 5 cfs - Column 11, 79% of Columns 4 and 5 - Column 9
17) Minimum of Column 16 and 69 cfs; daily totals are then limited to the maximum amount of XY Call on the river in acre-feet.
18) Column 17 x 67/69
19) Column 17 x 2/69
20) Minimum of (Column 16 - Column 17) and 54 cfs; daily totals are then limited to a maximum monthly amount of 150 acre-feet or amount determined less than that by LAWMA.
21) Minimum of (Column 16 - Column 17 - Column 20) and monthly rate defined in the Control Table for the Graham APOD wells.
22) Column 16 - Column 17 - Column 20 - Column 21

Attachment to Order - 15CW3067

PRELIMINARY - PROVIDED SEPTEMBER 11, 2018
TABLE 5
LAWMA'S REPLACEMENT SOURCES FROM LAMAR CANAL & GRANADA IRRIGATION COMPANY DITCH

Month: September **Year:** 2018

LAMAR / GIC SHARES DELIVERED

Day (1)	Lamar Canal Diversions: Total Diversions (cfs) (2)	Rotation (Yes / No) (3)	DF Diversions (LAMCANCO + LLPRETCO) (cfs) (4)	Lamar Canal Article II Diversions (cfs) (5)	West Farm Gravel Pit CU Water (cfs) (6)	GP Aggregates - Free River Water (cfs) (7)	Manvel Canal Article II Diversions (cfs) (8)
1	106.3		106.3				
2	106.4		106.4				
3	107.1		107.1				
4	101.9		101.9				
5	96.4		96.4				
6	86.5		86.5				
7	97.9		97.9				
8	105.6		105.6				
9	107.8		107.8				
10	108.4		108.4				
11	103.8		103.8				
12	105.7		105.7				
13	107.3		107.3				
14	99.5		99.5				
15	106.6		106.6				
16	105.1		104.1				1.0
17	105.5		104.5				1.0
18	85.2		84.2				1.0
19	78.7		78.7				
20	49.1		49.1				
21	51.0		51.0				
22	61.4		61.4				
23	62.6		62.6				
24	57.5		57.5				
25	59.6		59.6				
26	60.2		60.2				
27	73.3		73.3				
28	74.2		74.2				
29	84.7		84.7				
30	76.1		76.1				
31							
cfsd	2,631.4		2,628.4	0.0	0.0	0.0	3.0
ac-ft	5,219.3		5,213.3	0.0	0.0	0.0	6.0
MONTHLY CU FACTOR							
CU CREDITS (ac-ft)							

Day (1)	West Farm: Total Flow (cfs) (9)	02CW181 to River (cfs) (10)	Manvel Canal Article II Diversions (cfs) (11)	15CW3067 Lamar Shares (12)	15CW306 7 to River (cfs) (13)	(Rule 6) LAWMA's Rule 14 Plan (cfs) (14)	LAWMA Rule 10 (cfs) (15)	Non-LAWMA Rule 14 Plan (cfs) (16)	Non-LAWMA Rule 10 (cfs) (17)	Other (cfs) (18)
1	11.11	8.93		103.19	0.45		0.92			0.00
2	11.72	9.41		106.69	0.53		0.97			0.00
3	11.00	8.83		110.16	0.46		0.91			0.00
4	10.16	8.23		70.27	0.27		0.84			0.00
5	10.25	8.42		21.88	0.17		0.85			0.00
6	9.91	6.58		897.00	2.51		0.82			0.00
7	10.38	6.89		897.00	2.63		0.86			0.00
8	10.57	7.02		897.00	2.68		0.88			0.00
9	10.83	7.18		897.00	2.75		0.90			0.00
10	11.83	7.85		897.00	3.00		0.98			0.00
11	12.36	8.21		897.00	3.14		1.02			0.00
12	12.42	8.24		897.00	3.15		1.03			0.00
13	12.38	8.21		897.00	3.14		1.02			0.00
14	12.20	8.10		897.00	3.10		1.01			0.00
15	12.19	8.09		897.00	3.09		1.01			0.00
16	12.25	9.09	0.88	96.11	0.46		1.01			0.00
17	11.99	7.32	0.89	897.00	2.80		0.99			0.00
18	11.89	7.27	0.86	897.00	2.78		0.98			0.00
19	10.37	6.88		897.00	2.63		0.86			0.00
20	4.72	3.13		897.00	1.20		0.39			0.00
21	3.11	2.07		897.00	0.79		0.26			0.00
22	4.75	3.15		897.00	1.20		0.39			0.00
23	5.15	3.42		897.00	1.31		0.43			0.00
24	4.89	3.24		897.00	1.24		0.40			0.00
25	4.96	3.29		897.00	1.26		0.41			0.00
26	4.92	3.27		897.00	1.25		0.41			0.00
27	3.85	2.55		897.00	0.98		0.32			0.00
28	7.17	4.76		897.00	1.82		0.59			0.00
29	7.85	5.21		897.00	1.99		0.65			0.00
30	7.96	5.28		897.00	2.02		0.66			0.00
31										
cfsd	275.1	190.1	2.6		54.8	0.0	22.8	0.0	0.0	0.0
ac-ft	545.8	377.1	5.2		108.7	0.0	45.2	0.0	0.0	0.0
MONTHLY CU FACTOR		0.583	0.583		0.712					
CU CREDITS (ac-ft)		219.8	219.8		77.4					

Day (1)	West Farm Gravel Pit: 15CW3067 Lamar Shares (19)	Maximum Allowable FHG to Gravel Pit (cfs) (20)	15CW3067 CU to Grav. Pit (cfs) (21)	15CW3067 Return Flow to River at West Farm Aug St. (cfs) (22)
1	793.81	3.23	2.00	0.81
2	790.31	3.22	2.00	0.81
3	786.84	3.23	2.00	0.81
4	826.73	3.22	2.00	0.81
5	875.12	3.23	2.00	0.81
6	0.00	0.00		0.00
7	0.00	0.00		0.00
8	0.00	0.00		0.00
9	0.00	0.00		0.00
10	0.00	0.00		0.00
11	0.00	0.00		0.00
12	0.00	0.00		0.00
13	0.00	0.00		0.00
14	0.00	0.00		0.00
15	0.00	0.00		0.00
16	800.89	3.19	2.00	0.81
17	0.00	0.00		0.00
18	0.00	0.00		0.00
19	0.00	0.00		0.00
20	0.00	0.00		0.00
21	0.00	0.00		0.00
22	0.00	0.00		0.00
23	0.00	0.00		0.00
24	0.00	0.00		0.00
25	0.00	0.00		0.00
26	0.00	0.00		0.00
27	0.00	0.00		0.00
28	0.00	0.00		0.00
29	0.00	0.00		0.00
30	0.00	0.00		0.00
31				
cfsd			12.0	4.9
ac-ft			23.8	9.6

Day (1)	Center Farm: Total Flow (cfs) (23)	02CW181 to River (cfs) (24)	15CW3067 Lamar Shares (25)	15CW3067 to River (cfs) (26)	(Rule 6) LAWMA's Rule 14 Plan (cfs) (27)	LAWMA Rule 10 (cfs) (28)	Non-LAWMA Rule 14 Plan (cfs) (29)	Non-LAWMA Rule 10 (cfs) (30)	Other (cfs) (31)
1	18.76	17.21	0.00	0.00		1.55			0.00
2	18.84	17.28	0.00	0.00		1.56			0.00
3	18.91	17.35	0.00	0.00		1.57			0.00
4	18.01	16.51	0.00	0.00		1.49			0.00
5	14.20	13.02	0.00	0.00		1.18			0.00
6	10.43	9.56	0.00	0.00		0.86			0.00
7	12.59	11.55	0.00	0.00		1.04			0.00
8	15.64	14.34	0.00	0.00		1.29			0.00
9	15.89	14.58	0.00	0.00		1.32			0.00
10	15.18	13.92	0.00	0.00		1.26			0.00
11	13.85	12.71	0.00	0.00		1.15			0.00
12	13.77	12.63	0.00	0.00		1.14			0.00
13	13.79	12.65	0.00	0.00		1.14			0.00
14	12.78	11.72	0.00	0.00		1.06			0.00
15	13.55	12.43	0.00	0.00		1.12			0.00
16	13.20	12.11	0.00	0.00		1.09			0.00
17	12.86	11.80	0.00	0.00		1.06			0.00
18	10.77	9.87	0.00	0.00		0.89			0.00
19	9.68	8.87	0.00	0.00		0.80			0.00
20	4.71	4.32	0.00	0.00		0.39			0.00
21	3.74	3.43	0.00	0.00		0.31			0.00
22	5.62	5.15	0.00	0.00		0.47			0.00
23	6.06	5.56	0.00	0.00		0.50			0.00
24	4.95	4.54	0.00	0.00		0.41			0.00
25	5.69	5.22	0.00	0.00		0.47			0.00
26	6.05	5.55	0.00	0.00		0.50			0.00
27	8.70	7.98	0.00	0.00		0.72			0.00
28	8.46	7.76	0.00	0.00		0.70			0.00
29	8.18	7.51	0.00	0.00		0.68			0.00
30	10.39	9.53	0.00	0.00		0.86			0.00
31									
cfsd	345.2	316.7		0.0	0.0	28.6	0.0	0.0	0.0
ac-ft	684.8	628.1		0.0	0.0	56.7	0.0	0.0	0.0
MONTHLY CU FACTOR		0.583		0.712					
CU CREDITS (ac-ft)		366.2		0.0					

Day (1)	Granada West: Total Flow (cfs) (32)	02CW181 to River (cfs) (33)	15CW3067 GIC Equivalent Lamar Shares (34)	15CW3067 to River (cfs) (35)	(Rule 6) LAWMA's Rule 14 Plan (cfs) (36)	LAWMA Rule 10 (cfs) (37)	Non-LAWMA Rule 14 Plan (cfs) (38)	Non-LAWMA Rule 10 (cfs) (39)	Other (cfs) (40)
1	6.96	0.00	1312.76	5.52		1.4			0.00
2	6.41	0.00	1312.76	5.09		1.3			0.00
3	6.44	0.00	1312.76	5.12		1.3			0.00
4	6.52	0.00	1312.76	5.17		1.3			0.00
5	5.14	0.00	1312.76	4.08		1.1			0.00
6	5.13	0.00	1312.76	4.07		1.1			0.00
7	5.20	0.00	1312.76	4.13		1.1			0.00
8	7.50	0.00	1312.76	5.96		1.5			0.00
9	9.70	0.00	1312.76	7.70		2.0			0.00
10	13.11	0.00	1312.76	10.41		2.7			0.00
11	9.99	0.00	1312.76	7.93		2.1			0.00
12	4.49	0.00	1312.76	3.57		0.9			0.00
13	4.27	0.00	1312.76	3.39		0.9			0.00
14	4.51	0.00	1312.76	3.58		0.9			0.00
15	3.92	0.00	1312.76	3.11		0.8			0.00
16	2.82	0.00	1312.76	2.24		0.6			0.00
17	2.47	0.00	1312.76	1.96		0.5			0.00
18	2.35	0.00	1312.76	1.87		0.5			0.00
19	2.00	0.00	1312.76	1.59		0.4			0.00
20	5.58	0.00	1312.76	4.43		1.2			0.00
21	4.96	0.00	1312.76	3.94		1.0			0.00
22	7.26	0.00	1312.76	5.77		1.5			0.00
23	12.42	0.00	1312.76	9.86		2.6			0.00
24	11.37	0.00	1312.76	9.02		2.3			0.00
25	8.26	0.00	1312.76	6.56		1.7			0.00
26	8.39	0.00	1312.76	6.66		1.7			0.00
27	8.56	0.00	1312.76	6.79		1.8			0.00
28	8.55	0.00	1312.76	6.79		1.8			0.00
29	5.59	0.00	1312.76	4.44		1.2			0.00
30	7.63	0.00	1312.76	6.06		1.6			0.00
31									
cfsd	197.5	0.0		156.8	0.0	40.7	0.0	0.0	0.0
ac-ft	391.7	0.0		311.0	0.0	80.7	0.0	0.0	0.0
MONTHLY CU FACTOR		0.583		0.479					
CU CREDITS (ac-ft)		0.0		0.0					

Day (1)	Granada East: Total Flow (cfs) (41)	02CW181 to River (cfs) (42)	15CW306 7 GIC Equivalent Lamar Shares (43)	15CW306 7 to River (cfs) (44)	(Rule 6) LAWMA's Rule 14 Plan (cfs) (45)	LAWMA Rule 10 (cfs) (46)	Non-LAWMA Rule 14 Plan (cfs) (47)	Non-LAWMA Rule 10 (cfs) (48)	Other (cfs) (49)
1	1.30	0.00	1312.76	1.03		0.3			0.00
2	1.16	0.00	1312.76	0.92		0.2			0.00
3	1.49	0.00	1312.76	1.18		0.3			0.00
4	2.18	0.00	1312.76	1.73		0.5			0.00
5	1.23	0.00	1312.76	0.98		0.3			0.00
6	0.91	0.00	1312.76	0.72		0.2			0.00
7	1.87	0.00	1312.76	1.49		0.4			0.00
8	1.10	0.00	1312.76	0.88		0.2			0.00
9	1.26	0.00	1312.76	1.00		0.3			0.00
10	1.42	0.00	1312.76	1.13		0.3			0.00
11	1.07	0.00	1312.76	0.85		0.2			0.00
12	1.43	0.00	1312.76	1.13		0.3			0.00
13	2.58	0.00	1312.76	2.04		0.5			0.00
14	2.08	0.00	1312.76	1.65		0.4			0.00
15	0.68	0.00	1312.76	0.54		0.1			0.00
16	0.14	0.00	1312.76	0.11		0.0			0.00
17	0.49	0.00	1312.76	0.39		0.1			0.00
18	0.80	0.00	1312.76	0.64		0.2			0.00
19	1.42	0.00	1312.76	1.12		0.3			0.00
20	1.36	0.00	1312.76	1.08		0.3			0.00
21	0.00	0.00	1312.76	0.00		0.0			0.00
22	0.00	0.00	1312.76	0.00		0.0			0.00
23	0.00	0.00	1312.76	0.00		0.0			0.00
24	0.00	0.00	1312.76	0.00		0.0			0.00
25	0.00	0.00	1312.76	0.00		0.0			0.00
26	0.00	0.00	1312.76	0.00		0.0			0.00
27	0.00	0.00	1312.76	0.00		0.0			0.00
28	0.00	0.00	1312.76	0.00		0.0			0.00
29	0.00	0.00	1312.76	0.00		0.0			0.00
30	0.00	0.00	1312.76	0.00		0.0			0.00
31									
cfsd	26.0	0.0		20.6	0.0	5.4	0.0	0.0	0.0
ac-ft	51.5	0.0		40.9	0.0	10.6	0.0	0.0	0.0
MONTHLY CU FACTOR		0.583		0.479					
CU CREDITS (ac-ft)		0.0		0.0					

			WINTER RETURN FLOW DELIVERY	WINTER RETURN FLOW DELIVERY
Day (1)	Flow (cfs) (50)	Flow (cfs) (51)		
1	0.0	0.0		
2	0.0	0.0		
3	0.0	0.0		
4	0.0	0.0		
5	0.0	0.0		
6	0.0	0.0		
7	0.0	0.0		
8	0.0	0.0		
9	0.0	0.0		
10	0.0	0.0		
11	0.0	0.0		
12	0.0	0.0		
13	0.0	0.0		
14	0.0	0.0		
15	0.0	0.0		
16	0.0	0.0		
17	0.0	0.0		
18	0.0	0.0		
19	0.0	0.0		
20	0.0	0.0		
21	0.0	0.0		
22	0.0	0.0		
23	0.0	0.0		
24	0.0	0.0		
25	0.0	0.0		
26	0.0	0.0		
27	0.0	0.0		
28	0.0	0.0		
29	0.0	0.0		
30	0.0	0.0		
31				
cfsd	0.0	0.0		
ac-ft	0.0	0.0		

Rule 10 return flow obligation above the Buffalo Canal river headgate **101.9** ac-ft (- value is credit, + value is deficit)
Rule 10 return flow obligation below the Buffalo Canal river headgate **91.4** ac-ft (- value is credit, + value is deficit)
Total Rule 10 return flow obligation if there is no Buffalo Canal call **No** **101.9** ac-ft (- value is credit, + value is deficit)
Wilger Farms CU delivery for Rule 10 Compliance
Rule 10 return flow obligation above the Buffalo Canal river headgate **5.1** ac-ft (- value is credit, + value is deficit)
Rule 10 return flow obligation below the Buffalo Canal river headgate **3.7** ac-ft (- value is credit, + value is deficit)

Stateline winter return flow obligation (9.3% of Lamar Canal non-Rule 10 deliveries) **0** ac-ft (- value is credit, + value is deficit)
15CW3067 Granada Winter Return Flows Obligation **0** ac-ft

Note:
1) All Values are demonstrative and not an actual representation of actual September 2018 accounting
2) 15CW3067 Granada Winter Return Flows will be tracked on the previous year's monthly farm headgate diversions and delivered out of the monthly CU credits in April and/or May. Any other source such as CU water in Gravel Pit will be noted.

Column Explanations:
1 Day of the current month of accounting.
2 Sum of Lamar Canal River headgate gage and Lamar Power Plant outflow gage obtained from CDWR data imported onto the Streamflows tab
3 Lamar Canal Rotation status as determined by the Lamar Canal Board
4 Column 2 - Sum (Columns 5-7)
5 Lamar Canal Article 2 releases - Transit Loss
6 Fully Consumable water delivered to Lamar Canal headgate (this would include fully consumable water purchased from CS-U, Consumptive Use water from LAWMA future decreed change of water rights).
7 Portion of measured diversion of free river diversion at Lamar Canal headgate to West Farm Gravel pit approved in advance in writing by the DE in accordance with Appendix J-2 of the Special Master's January 2008 Fifth and Final Report in KS v. CO.
8 Manvel Canal Article 2 releases - Transit Loss
9 West Farm augmentation station flow obtained from CDWR data imported onto the Streamflows tab
10 City of Lamar + Colorado Beef Shares as shown on Control tab / (Shares to augmentation + Gravel Pit Return Flow Shares)*(Column 8 - Column 12 - Column 10)
11 Column 7 * (1 - Column 8 / Column 2)
12 Number of 15CW3067 Lamar Canal Shares through the aug. station.
13 Column 9 - Sum (Columns 10, 11, 15, 18)
14 Portion of Measured delivery at the aug. station that is LAWMA Rule 6 water for LAWMA's Rule 14 plan.
15 West Farm Rule 10 obligation based on the Rule 10 return flow obligation above the Buffalo Canal river headgate, this will include Lamar Canal Shareholder's portion of their Lamar Canal shares needed to replace Rule 10 Return Flows.
16 Portion of Measured delivery at the aug. station that is Non-LAWMA Rule 14 delivery (not used at this time).
17 Portion of Measured delivery at the aug. station that is Non-LAWMA Rule 10 (not used at this time).
18 Portion of Measured delivery at the aug. station not classified (not used at this time).
19 Number of 15CW3067 Lamar Canal Shares through to the West Farm Gravel Pit.
20 Maximum Allowable Farm Headgate delivery of direct flow water only to the West Farm Gravel Pit calculated as (column 19 / 26127 * column 4)
21 Fully Consumable water under 15CW3067 right delivered to the West Farm gravel pit
22 Portion of measured Return Flows owed by the 15CW3067 right based on the Consumable use delivery to the gravel pit and the Monthly CU factor delivered through the West Farm Augmentation Station.
23 Center Farm Augmentation station diversions obtained from CDWR data imported onto the Streamflows tab
24 (Center Farm Augmentation station diversions - Rule 10 obligation) * (Colorado Parks & Wildlife Shares)
25 Number of 15CW3067 Lamar Canal Shares through the aug. station.
26 Center Farm Rule 10 obligation based on the Rule 10 return flow obligation above the Buffalo Canal river headgate, this will include Lamar Canal Shareholder's portion of their Lamar Canal shares needed to replace Rule 10 Return Flows.
27 Portion of Measured delivery at the aug. station that is LAWMA Rule 6 water for LAWMA's Rule 14 plan (not used at this time).
28 Center Farm Rule 10 obligation based on the Rule 10 return flow obligation above the Buffalo Canal river headgate, this will include Lamar Canal Shareholder's portion of their Lamar Canal shares needed to replace Rule 10 Return Flows.
29 Portion of Measured delivery at the aug. station that is Non-LAWMA Rule 14 delivery (not used at this time).
30 Portion of Measured delivery at the aug. station that is Non-LAWMA Rule 10 (not used at this time).
31 Portion of Measured delivery at the aug. station not classified (not used at this time).
32 Granada West Augmentation station diversions obtained from CDWR data imported onto the Streamflows tab
33 (Granada West Farm Augmentation station diversions - Rule 10 obligation) * 02CW181 Shares / (02CW181 Shares + 15CW3067 GIC shares)
34 All 2625.51 GIC Equivalent Lamar Shares are taken from the same lateral off of the GIC lateral and are split between the two aug. stations.
35 Granada West Farm Augmentation station diversions - 02CW181 obligation to river - Rule 10 obligation
36 Portion of Measured delivery at the aug. station that is LAWMA Rule 6 water for LAWMA's Rule 14 plan (not used at this time).
37 Granada West Farm Rule 10 obligation based on the Rule 10 return flow obligation below the Buffalo Canal river headgate, this will include Lamar Canal Shareholder's portion of their Lamar Canal shares needed to replace Rule 10 Return Flows.
38 Portion of Measured delivery at the aug. station that is Non-LAWMA Rule 14 delivery (not used at this time).
39 Portion of Measured delivery at the aug. station that is Non-LAWMA Rule 10 (not used at this time).
40 Portion of Measured delivery at the aug. station not classified (not used at this time).
41 Granada East Augmentation station diversions obtained from CDWR data imported onto the Streamflows tab
42 (Granada East Farm Augmentation station diversions - Rule 10 obligation) * 02CW181 Shares / (02CW181 Shares + 15CW3067 GIC shares)
43 All 2625.51 GIC Equivalent Lamar Shares are taken from the same lateral off of the GIC lateral and are split between the two aug. stations.
44 Granada East Farm Augmentation station diversions - 02CW181 obligation to river - Rule 10 obligation
45 Portion of Measured delivery at the aug. station that is LAWMA Rule 6 water for LAWMA's Rule 14 plan (not used at this time).
46 Granada East Farm Rule 10 obligation based on the Rule 10 return flow obligation below the Buffalo Canal river headgate, this will include Lamar Canal Shareholder's portion of their Lamar Canal shares needed to replace Rule 10 Return Flows.
47 Portion of Measured delivery at the aug. station that is Non-LAWMA Rule 14 delivery (not used at this time).
48 Portion of Measured delivery at the aug. station that is Non-LAWMA Rule 10 (not used at this time).
49 Portion of Measured delivery at the aug. station not classified (not used at this time).
50 Water designated under the Lamar Canal shares and Lamar Article 2 deliveries in Case No. 02CW181 from the West Farm and Center Farm Augmentation Station (9.3% total)
51 Water designated under the Lamar Canal shares and Lamar Article 2 deliveries in Case No. 02CW181 from the Granada West Farm and Granada East Farm Augmentation Station (9.3% total)

Attachment to Order 2018CW3067

PRELIMINARY - PROVIDED SEPTEMBER 11, 2018
TABLE 10
LAWMA'S MONTHLY AND ANNUAL VOLUMETRIC LIMITS

Month: September **Year: 2018**

Day	March	April	May	June	July	August	September	October	November	Annual Maximum Volumetric Limit
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
02CW181 Highland Canal (River Headgate Diversions)										
Monthly Maximum Volumetric Limits	0	1,445	1,854	2,172	2,369	2,570	1,996	1,142	0	12,257
Diversions	0	1,445	957	116	342	1,276	627		0	4,764
							20 Year Annual Volumetric Limit			136,120
							20-Year Annual Volumetric Limit / 20			6,806
10CW85 Highland Canal (River Headgate Diversions)										
Monthly Maximum Volumetric Limits	0	71	91	107	116	126	98	56	0	602
Diversions	0	71	47	6	17	63	31		0	234
							20 Year Annual Volumetric Limit			6,243
							20-Year Annual Volumetric Limit / 20			312
Fort Lyon Canal Shares (Farm Headgate Deliveries)										
Monthly Maximum Volumetric Limits	1,597	2,156	2,868	3,561	3,854	3,909	2,588	2,095	1,652	20,029
Diversions	155	362	434	507	445	450	450			2,802
							10 Year Annual Volumetric Limit			140,234
							10-Year Annual Volumetric Limit / 10			14,023
02CW181 Keesee Ditch (River Headgate Diversions)										
Monthly Maximum Volumetric Limits	0	431	445	431	445	445	431	445	0	2,503
Diversions	0	0	397	402	344	402	402		0	1,946
							20 Year Annual Volumetric Limit			37,282
							20-Year Annual Volumetric Limit / 20			1,864
05CW52 Keesee Ditch (River Headgate Diversions)										
Monthly Maximum Volumetric Limits	0	431	445	431	445	445	431	445	0	2,503
Diversions	0	0	397	402	344	402	402		0	1,946
							20 Year Annual Volumetric Limit			37,282
							20-Year Annual Volumetric Limit / 20			1,864
02CW181 Fort Bent Canal (Farm Turnout Deliveries)										
Monthly Maximum Volumetric Limits	0	683	678	765	868	952	644	541	0	2,950
Diversions	0	82	79	98	126	57	57		0	500
							20 Year Annual Volumetric Limit			46,506
							20-Year Annual Volumetric Limit / 20			2,325
10CW85 Fort Bent Canal (Farm Turnout Deliveries)										
Monthly Maximum Volumetric Limits	0	55	54	61	69	76	51	43	0	235
Diversions	0	25	25	30	39	18	18		0	155
							20 Year Annual Volumetric Limit			3,735
							20-Year Annual Volumetric Limit / 20			187
T-1 Shares - Fort Bent Canal (Farm Turnout Deliveries)										
Monthly Maximum Volumetric Limits	0	105	104	118	134	147	99	83	0	454
Diversions	0	29	28	34	44	20	20			175
							20 Year Annual Volumetric Limit			7,157
							20-Year Annual Volumetric Limit / 20			358
02CW181 Lamar Canal (Farm Turnout Deliveries) shares through the West Farm, Center Farm, Granada West and Granada East augmentation stations										
Monthly Maximum Volumetric Limits	0	2,884	2,823	3,748	3,783	3,111	2,476	2,107	0	14,100
Diversions	0	1,312	1,105	1,654	1,576	1,164	909		0	7,720
							20 Year Annual Volumetric Limit			200,280
							20-Year Annual Volumetric Limit / 20			10,014
15CW3067 Lamar Canal (Farm Turnout Deliveries) shares through the West Farm, and Center Farm augmentation stations										
Monthly Maximum Volumetric Limits	0	340	333	442	446	367	292	249	0	1,959
Diversions	0	203	165	248	224	224	142		0	2,612
							64 Year Annual Volumetric Limit			69,799
							64 Year Annual Volumetric Limit / 64			1,091
15CW3067 GIC Ditch (Farm Turnout Deliveries) shares through the Granada West and Granada East augmentation stations										
Monthly Maximum Volumetric Limits	0	996	975	1,294	1,307	1,074	855	728	0	5,733
Diversions	0	593	484	725	655	655	352		0	755
							64 Year Annual Volumetric Limit			204,300
							64-Year Annual Volumetric Limit / 64			3,192
02CW181 X-Y Canal (River Headgate Diversions) 67 cfs										
Monthly Maximum Volumetric Limits	0	1,402	2,107	2,606	1,554	2,194	1,855	1,429	0	9,231
Diversions	0	1,129	1,834	461	486	486	486		0	4,881
							20 Year Annual Volumetric Limit			108,227
							20-Year Annual Volumetric Limit / 20			5,411
15CW3067 X-Y Canal (River Headgate Diversions) 2 cfs										
Monthly Maximum Volumetric Limits	0	50	63	77	71	70	55	48	0	329
Diversions	0	34	55	14	14	14	14		0	146
							44 Year Annual Volumetric Limit			5,995
							44-Year Annual Volumetric Limit / 44			136
02CW181 Manvel Canal (River Headgate Diversions)										
Monthly Maximum Volumetric Limits	0	150	150	150	150	150	150	150	0	750
Diversions	0	150	150	150	150	50	50		0	700

Note:
a) Ft Bent water rights acquired by LAWMA will use the factors for each ditch in Case No. 02CW181 until water rights have been changed in water court.
b) Fort Lyon Canal shares acquired in March 2017 will have 10-year volumetric limits pending water court approval.
c) Long-term monthly volumetric limits for the Highland, Keesee, 15CW3067 Lamar, 15CW3067 GIC, and 15CW3067 are included in the integrated accounting.

Attachment to Order - 2015CW3067

PRELIMINARY - PROVIDED SEPTEMBER 11, 2018
TABLE 11
LAWMA'S DAILY CONSUMPTIVE USE DELIVERIES
(values in cfs unless otherwise noted)

Month: September **Year:** 2018

	Highland Canal		Keesee Ditch		Ft Bent Ditch			Lamar Canal									Manvel	X-Y Irrigating Ditch		Sisson	Stubbs
Day	02CW181	10CW85	02CW181	05CW52	02CW181	10CW85	17CW3068	02CW181 WF	15CW3067 WF	15CW3067 WFGP	02CW181 CF	15CW3067 CF	02CW181 GW	15CW3067 GW	02CW181 GE	15CW3067 GE	02CW181	02CW181	15CW3067	10CW85	02CW181
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
1	14.20	0.70	4.39	4.39	4.64	1.15	1.63	5.20	0.32	2.00	10.03	0.00	0.00	2.58	0.00	0.49	14.70	42.14	1.34	0.74	0.74
2	13.15	0.65	4.39	4.39	4.63	1.14	1.63	5.49	0.38	2.00	10.07	0.00	0.00	2.37	0.00	0.43	0.00	42.14	1.34	0.74	0.74
3	12.49	0.61	4.39	4.39	4.65	1.15	1.63	5.15	0.33	2.00	10.11	0.00	0.00	2.39	0.00	0.56	0.00	42.14	1.34	0.74	0.74
4	21.07	1.03	4.39	4.39	3.00	0.74	1.05	4.80	0.19	2.00	9.63	0.00	0.00	2.41	0.00	0.82	0.00	27.53	0.88	0.74	0.74
5	22.88	1.12	4.39	4.39	0.08	0.02	0.03	4.91	0.12	2.00	7.59	0.00	0.00	1.90	0.00	0.46	0.00	0.00	0.00	0.74	0.74
6	22.88	1.12	4.39	4.39	0.08	0.02	0.03	3.83	1.79	0.00	5.57	0.00	0.00	1.90	0.00	0.34	0.00	0.00	0.00	0.74	0.74
7	22.88	1.12	4.39	4.39	0.00	0.00	0.00	4.02	1.88	0.00	6.73	0.00	0.00	1.93	0.00	0.70	0.00	0.00	0.00	0.74	0.74
8	22.88	1.12	4.39	4.39	0.00	0.00	0.00	4.09	1.91	0.00	8.36	0.00	0.00	2.78	0.00	0.41	0.00	0.00	0.00	0.74	0.74
9	22.88	1.12	4.39	4.39	0.00	0.00	0.00	4.19	1.95	0.00	8.50	0.00	0.00	3.59	0.00	0.47	0.00	0.00	0.00	0.74	0.74
10	22.88	1.12	4.39	4.39	0.00	0.00	0.00	4.58	2.14	0.00	8.12	0.00	0.00	4.86	0.00	0.53	0.00	0.00	0.00	0.74	0.74
11	18.97	0.93	4.39	4.39	0.00	0.00	0.00	4.78	2.23	0.00	7.41	0.00	0.00	3.70	0.00	0.40	0.00	0.00	0.00	0.74	0.74
12	15.35	0.75	4.39	4.39	0.00	0.00	0.00	4.81	2.24	0.00	7.36	0.00	0.00	1.66	0.00	0.53	0.00	0.00	0.00	0.74	0.74
13	12.96	0.64	4.39	4.39	0.00	0.00	0.00	4.79	2.23	0.00	7.37	0.00	0.00	1.58	0.00	0.96	0.00	0.00	0.00	0.74	0.74
14	10.77	0.53	4.39	4.39	0.00	0.00	0.00	4.72	2.20	0.00	6.83	0.00	0.00	1.67	0.00	0.78	0.00	0.00	0.00	0.74	0.74
15	9.21	0.45	4.39	4.39	0.00	0.00	0.00	4.72	2.20	0.00	7.25	0.00	0.00	1.45	0.00	0.26	0.00	0.00	0.00	0.74	0.74
16	8.05	0.39	4.39	4.39	0.00	0.00	0.00	5.30	0.32	2.00	7.06	0.00	0.00	1.04	0.00	0.05	0.00	0.00	0.00	0.74	0.74
17	6.87	0.34	4.39	4.39	0.00	0.00	0.00	4.27	1.99	0.00	6.88	0.00	0.00	0.91	0.00	0.18	0.00	0.00	0.00	0.74	0.74
18	5.97	0.29	4.39	4.39	0.09	0.02	0.03	4.24	1.98	0.00	5.76	0.00	0.00	0.87	0.00	0.30	0.00	0.00	0.00	0.74	0.74
19	5.06	0.25	4.39	4.39	0.22	0.05	0.08	4.01	1.87	0.00	5.17	0.00	0.00	0.74	0.00	0.53	0.00	0.00	0.00	0.74	0.74
20	4.50	0.22	4.39	4.39	0.22	0.05	0.08	1.83	0.85	0.00	2.52	0.00	0.00	2.07	0.00	0.51	0.00	0.00	0.00	0.74	0.74
21	3.56	0.18	4.39	4.39	0.22	0.05	0.08	1.20	0.56	0.00	2.00	0.00	0.00	1.84	0.00	0.00	0.00	0.00	0.00	0.74	0.74
22	2.68	0.13	4.39	4.39	0.21	0.05	0.07	1.84	0.86	0.00	3.01	0.00	0.00	2.69	0.00	0.00	0.00	0.00	0.00	0.74	0.74
23	2.26	0.11	4.39	4.39	0.21	0.05	0.07	1.99	0.93	0.00	3.24	0.00	0.00	4.60	0.00	0.00	0.00	0.00	0.00	0.74	0.74
24	1.97	0.10	4.39	4.39	0.22	0.05	0.08	1.89	0.88	0.00	2.65	0.00	0.00	4.21	0.00	0.00	0.00	0.00	0.00	0.74	0.74
25	1.72	0.08	4.39	4.39	0.22	0.05	0.08	1.92	0.90	0.00	3.04	0.00	0.00	3.06	0.00	0.00	0.00	0.00	0.00	0.74	0.74
26	1.54	0.08	4.39	4.39	0.21	0.05	0.07	1.90	0.89	0.00	3.24	0.00	0.00	3.11	0.00	0.00	0.00	0.00	0.00	0.74	0.74
27	1.50	0.07	4.39	4.39	0.20	0.05	0.07	1.49	0.69	0.00	4.65	0.00	0.00	3.17	0.00	0.00	0.00	0.00	0.00	0.74	0.74
28	1.38	0.07	4.39	4.39	0.00	0.00	0.00	2.77	1.29	0.00	4.52	0.00	0.00	3.17	0.00	0.00	0.00	0.00	0.00	0.74	0.74
29	1.33	0.07	4.39	4.39	0.00	0.00	0.00	3.04	1.42	0.00	4.38	0.00	0.00	2.07	0.00	0.00	0.00	0.00	0.00	0.74	0.74
30	1.21	0.06	4.39	4.39	0.00	0.00	0.00	3.08	1.44	0.00	5.56	0.00	0.00	2.83	0.00	0.00	0.00	0.00	0.00	0.74	0.74
31																					
cfsd	315.04	15.46	131.74	131.60	19.08	4.71	6.71	110.83	39.00	12.00	184.61	0.00	0.00	73.16	0.00	9.72	14.70	153.96	4.90	22.18	22.18
ac-ft	624.9	30.7	261.3	261.0	37.8	9.3	13.3	219.8	77.4	23.8	366.2	0.0	0.0	145.1	0.0	19.3	29.2	305.4	9.7	44.0	44.0

Note:
a) Columns 13 & 14 include a transit loss of 2.57% to the Arkansas River from the Granada West augmentation station.
b) Columns 15 & 16 include a transit loss of 1.57% to the Arkansas River from the Granada East augmentation station.
c) Winter Return Flows owed to the stateline for 15CW3067 GIC and XY are included as a portion of columns 15, 17, and 20

Attachment to Order - 15CW3067

TABLE 11 (continued)
LAWMA'S DAILY RETURN FLOWS FROM CONSUMPTIVE USE DELIVERIES
(values in cfs unless otherwise noted)

	Highland Canal		Keesee Ditch		Ft Bent Ditch			Lamar Canal									Manvel	X-Y Irrigating Ditch		Sisson	Stubbs
Day	02CW181	10CW85	02CW181	05CW52	02CW181	10CW85	17CW3068	02CW181 WF	15CW3067 WF	15CW3067 WFGP	02CW181 CF	15CW3067 CF	02CW181 GW	15CW3067 GW	02CW181 GE	15CW3067 GE	02CW181	02CW181	15CW3067	10CW85	02CW181
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)	(17)	(18)	(19)	(20)	(21)	(22)
1	4.57	0.21	2.36	2.36	2.37	1.04	0.83	3.72	0.13	0.81	7.18	0.00	0.00	2.88	0.00	0.54	10.51	24.86	0.66	0.39	0.39
2	4.24	0.20	2.36	2.36	2.36	1.04	0.83	3.92	0.15	0.81	7.20	0.00	0.00	2.65	0.00	0.48	0.00	24.86	0.66	0.39	0.39
3	4.02	0.19	2.36	2.36	2.37	1.04	0.83	3.68	0.13	0.81	7.23	0.00	0.00	2.67	0.00	0.61	0.00	24.86	0.66	0.39	0.39
4	6.78	0.31	2.36	2.36	1.53	0.67	0.54	3.43	0.08	0.81	6.89	0.00	0.00	2.70	0.00	0.90	0.00	16.24	0.43	0.39	0.39
5	7.37	0.34	2.36	2.36	0.04	0.02	0.01	3.51	0.05	0.81	5.43	0.00	0.00	2.12	0.00	0.51	0.00	0.00	0.00	0.39	0.39
6	7.37	0.34	2.36	2.36	0.04	0.02	0.01	2.74	0.72	0.00	3.99	0.00	0.00	2.12	0.00	0.38	0.00	0.00	0.00	0.39	0.39
7	7.37	0.34	2.36	2.36	0.00	0.00	0.00	2.87	0.76	0.00	4.82	0.00	0.00	2.15	0.00	0.77	0.00	0.00	0.00	0.39	0.39
8	7.37	0.34	2.36	2.36	0.00	0.00	0.00	2.93	0.77	0.00	5.98	0.00	0.00	3.10	0.00	0.46	0.00	0.00	0.00	0.39	0.39
9	7.37	0.34	2.36	2.36	0.00	0.00	0.00	3.00	0.79	0.00	6.08	0.00	0.00	4.01	0.00	0.52	0.00	0.00	0.00	0.39	0.39
10	7.37	0.34	2.36	2.36	0.00	0.00	0.00	3.27	0.86	0.00	5.81	0.00	0.00	5.42	0.00	0.59	0.00	0.00	0.00	0.39	0.39
11	6.11	0.28	2.36	2.36	0.00	0.00	0.00	3.42	0.90	0.00	5.30	0.00	0.00	4.13	0.00	0.44	0.00	0.00	0.00	0.39	0.39
12	4.94	0.23	2.36	2.36	0.00	0.00	0.00	3.44	0.91	0.00	5.27	0.00	0.00	1.86	0.00	0.59	0.00	0.00	0.00	0.39	0.39
13	4.17	0.19	2.36	2.36	0.00	0.00	0.00	3.42	0.90	0.00	5.27	0.00	0.00	1.77	0.00	1.07	0.00	0.00	0.00	0.39	0.39
14	3.47	0.16	2.36	2.36	0.00	0.00	0.00	3.38	0.89	0.00	4.89	0.00	0.00	1.86	0.00	0.86	0.00	0.00	0.00	0.39	0.39
15	2.96	0.14	2.36	2.36	0.00	0.00	0.00	3.37	0.89	0.00	5.18	0.00	0.00	1.62	0.00	0.28	0.00	0.00	0.00	0.39	0.39
16	2.59	0.12	2.36	2.36	0.00	0.00	0.00	3.79	0.13	0.81	5.05	0.00	0.00	1.17	0.00	0.06	0.00	0.00	0.00	0.39	0.39
17	2.21	0.10	2.36	2.36	0.00	0.00	0.00	3.05	0.81	0.00	4.92	0.00	0.00	1.02	0.00	0.20	0.00	0.00	0.00	0.39	0.39
18	1.92	0.09	2.36	2.36	0.05	0.02	0.02	3.03	0.80	0.00	4.12	0.00	0.00	0.97	0.00	0.33	0.00	0.00	0.00	0.39	0.39
19	1.63	0.08	2.36	2.36	0.11	0.05	0.04	2.87	0.76	0.00	3.70	0.00	0.00	0.83	0.00	0.59	0.00	0.00	0.00	0.39	0.39
20	1.45	0.07	2.36	2.36	0.11	0.05	0.04	1.31	0.34	0.00	1.80	0.00	0.00	2.31	0.00	0.56	0.00	0.00	0.00	0.39	0.39
21	1.15	0.05	2.36	2.36	0.11	0.05	0.04	0.86	0.23	0.00	1.43	0.00	0.00	2.05	0.00	0.00	0.00	0.00	0.00	0.39	0.39
22	0.86	0.04	2.36	2.36	0.11	0.05	0.04	1.31	0.35	0.00	2.15	0.00	0.00	3.00	0.00	0.00	0.00	0.00	0.00	0.39	0.39
23	0.73	0.03	2.36	2.36	0.11	0.05	0.04	1.43	0.38	0.00	2.32	0.00	0.00	5.14	0.00	0.00	0.00	0.00	0.00	0.39	0.39
24	0.64	0.03	2.36	2.36	0.11	0.05	0.04	1.35	0.36	0.00	1.89	0.00	0.00	4.70	0.00	0.00	0.00	0.00	0.00	0.39	0.39
25	0.55	0.03	2.36	2.36	0.11	0.05	0.04	1.37	0.36	0.00	2.18	0.00	0.00	3.42	0.00	0.00	0.00	0.00	0.00	0.39	0.39
26	0.50	0.02	2.36	2.36	0.11	0.05	0.04	1.36	0.36	0.00	2.31	0.00	0.00	3.47	0.00	0.00	0.00	0.00	0.00	0.39	0.39
27	0.48	0.02	2.36	2.36	0.10	0.04	0.04	1.06	0.28	0.00	3.33	0.00	0.00	3.54	0.00	0.00	0.00	0.00	0.00	0.39	0.39
28	0.45	0.02	2.36	2.36	0.00	0.00	0.00	1.98	0.52	0.00	3.24	0.00	0.00	3.54	0.00	0.00	0.00	0.00	0.00	0.39	0.39
29	0.43	0.02	2.36	2.36	0.00	0.00	0.00	2.17	0.57	0.00	3.13	0.00	0.00	2.31	0.00	0.00	0.00	0.00	0.00	0.39	0.39
30	0.39	0.02	2.36	2.36	0.00	0.00	0.00	2.20	0.58	0.00	3.97	0.00	0.00	3.16	0.00	0.00	0.00	0.00	0.00	0.39	0.39
31																					
cfsd	101.44	4.70	70.88	70.88	9.74	4.28	3.43	79.27	15.78	4.85	132.05	0.00	0.00	81.68	0.00	10.74	10.51	90.81	2.40	11.63	11.63
ac-ft	201.2	9.3	140.6	140.6	19.3	8.5	6.8	157.2	31.3	9.6	261.9	0.0	0.0	162.0	0.0	21.3	20.9	180.1	4.8	23.1	23.1

Note:
a) Totals in Columns 13 & 15 accounts for 9.3% delivery through augmentation station for winter return flow deliveries in April and May as part of Case No. 02CW181.
b) Totals in Columns 14 & 16 accounts for the winter return flow deliveries as required for the GIC shares in Case No. 15CW3067 in April and May.
c) Location of historical Return Flows delivered in columns 10, 11 (see Table 5 Column 19),and 13 for 15CW3067 are owed to HI model reaches 15 and 16.
d) Location of historical Return Flows delivered in columns 15 and 17 for 15CW3067 are owed to HI model reach 17.
d) Location of historical Return Flows delivered in column 20 for 15CW3067 are owed to HI model reach 17.

Attachment to Order - 15CW3067

PRELIMINARY - PROVIDED SEPTEMBER 11, 2018
TABLE 12
LAWMA's WATER REPLACEMENT SOURCES
(Values in Acre-Feet)

Month: September **Plan Year: 2018**

Row	Source	Reach 7	Reach 8	Reach 9	Reach 10	Reach 11	Reach 12	Reach 13	Reach 14	Reach 15	Reach 16	Reach 17	Reach 18	Total
1	Fry-Ark Project Water	**6.37**	**7.92**	**17.00**	**9.14**	**10.57**	**5.55**	**7.77**	**5.91**	0.00	0.00	0.00	0.00	**70.23**
4	Misc below JMR	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
5	02CW181 Highland CU Direct Flow to In-State	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
6	10CW85 Highland CU Direct Flow to In-State	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
7	Highland unconsumed TL Credits	0.00	0.00	0.00	**70.16**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**70.16**
8	Offset Account TL Credits on CU Deliveries to Stateline	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
9	02CW181 Keesee Direct Flow CU	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
10	05CW52 Keesee Direct Flow CU	0.00	0.00	0.00	0.00	**261.00**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**261.00**
11	02CW181 Fort Bent Ditch Shares @ Aug Station	0.00	0.00	0.00	0.00	0.00	0.00	**37.84**	0.00	0.00	0.00	0.00	0.00	**37.84**
12	10CW85 Fort Bent Ditch Shares @ Aug Station	0.00	0.00	0.00	0.00	0.00	0.00	**9.33**	0.00	0.00	0.00	0.00	0.00	**9.33**
14	02CW181 Lamar Canal Shares at Lamar Canal West Farm Turnout	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**219.85**	0.00	0.00	0.00	0.00	**219.85**
15	15CW3067 Lamar Canal Shares at Lamar Canal West Farm Turnout	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**77.39**	0.00	0.00	0.00	0.00	**77.39**
16	02CW181 Lamar Canal Shares at Lamar Canal Center Farm Turnout	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**366.18**	0.00	0.00	0.00	**366.18**
17	15CW3067 Lamar Canal Shares at Lamar Canal Center Farm Turnout	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	**0.00**
18	02CW181 Lamar Canal Shares atGIC Granada West Aug Station (includes TL to Arkansas River)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	**0.00**
19	15CW3067 Lamar Canal Shares at GIC Granada West Aug Station (includes TL to Arkansas River)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	**0.00**
20	02CW181 Lamar Canal Shares at GIC Granada East Aug Station (includes TL to Arkansas River)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	**0.00**
21	15CW3067 Lamar Canal Shares at GIC Granada East Aug Station (includes TL to Arkansas River)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	**0.00**
22	Manvel Account Water at West Farm Turnout	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**
23	02CW181 Manvel Ditch Direct Flow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**29.20**	0.00	0.00	0.00	**29.20**
24	02CW181 X-Y Ditch Direct Flow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**305.40**	0.00	0.00	**305.40**
25	15CW3067 X-Y Ditch Direct Flow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**9.70**	0.00	0.00	**9.70**
26	02CW181 Stubbs Ditch Direct Flow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**44.00**	**44.00**
27	10CW85 Sisson Ditch Direct Flow	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**44.00**	**44.00**
28	Offset Account Stateline Credit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
29	Release from Meredith	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**
30	Release of Consumable Water from West Farm Gravel Pit	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**
31	Excess City of Lamar Credits	0.00	0.00	0.00	0.00	0.00	0.00	0.00	**0.00**	0.00	0.00	0.00	0.00	**0.00**
32	Sub-Total	0.00	15.04	0.00	77.75	281.42	32.17	67.99	297.24	395.38	315.10	0.00	88.00	**1,570.10**
	SECWCD Structures													
33	Portion for Augmentation Plan / SWSP	2.32	6.37	32.62	21.12	0.74	0.00	1.05	17.56	0.00	0.00	0.00	0.00	**81.78**
34	Portion for Rule 14 Plan	4.05	1.55	-15.62	-11.98	9.83	5.55	6.72	-11.65	0.00	0.00	0.00	0.00	**-11.55**
	Non-SECWCD Structures													
35	Portion for Augmentation Plan / SWSP	0.00	0.00	0.80	0.00	2.21	410.38	214.78	44.21	71.21	64.59	88.30	669.48	**1,565.98**
36	Portion for Rule 14 Plan	0.00	15.04	-0.80	77.75	279.21	-378.21	-146.79	253.03	324.17	250.51	-88.30	-581.48	**4.12**

Attachment to Order - 15CW3067

Table 13
Arkansas River H-I Model Reaches (Approximate Mileage Distance)

	Reach 7	Upper Terminus	131 mile		Lower Terminus	108 mi	
Date	locationWdid	locationStructure	locationWdidStreamMile	priorityWdid	priorityStructure	priorityAdminNo	priorityDate	Percent call
9/1/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/2/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/3/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/4/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/5/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/6/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/7/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/8/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/9/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/10/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/11/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/12/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/13/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/14/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/15/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/16/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/17/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/18/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/19/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/20/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/21/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/22/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/23/2018	6700607	AMITY CANAL	48.6	6700607	AMITY CANAL	13566.00000	1887-02-21	100
9/24/2018	6700607	AMITY CANAL / LAMAR CANAL	48.6 / 40.3	6700607	AMITY CANAL / LAMAR CANAL	13566.00000 / 13457.00000	1887-02-21 / 1886-11-04	100
9/25/2018	6700614	LAMAR CANAL	40.3	6700614	LAMAR CANAL	13457.00000	1886-11-04	100
9/26/2018	6700614	LAMAR CANAL	40.3	6700614	LAMAR CANAL	13457.00000	1886-11-04	100
9/27/2018	6700614	LAMAR CANAL	40.3	6700614	LAMAR CANAL	13457.00000	1886-11-04	100
9/28/2018	6700614	LAMAR CANAL	40.3	6700614	LAMAR CANAL	13457.00000	1886-11-04	100
9/29/2018	6700614	LAMAR CANAL	40.3	6700614	LAMAR CANAL	13457.00000	1886-11-04	100
9/30/2018	6700614	LAMAR CANAL	40.3	6700614	LAMAR CANAL	13457.00000	1886-11-04	100

Note: Similar format is used for Reaches 8 through 18.

Attachment to Order 15CW3067

PRELIMINARY - PROVIDED SEPTEMBER 11, 2018
CONTROL DATA FOR CALCULATING LAWMA CREDITS FOR SELECTED WATER SOURCES

Parameters for Table 1

Projected diversion rates:				
Month	X-Y	Manvel	Graham	
April	69.0	54.0	16.5	
May	69.0	54.0	18.2	
June	69.0	54.0	16.9	
July	69.0	54.0	19.7	
August	69.0	54.0	15.0	
September	69.0	54.0	12.4	
October	69.0	54.0	11.7	
Nov - Mar	0.0	0.0	0.0	

(PARAMETERS WHICH ARE PRELIMINARY ARE IN RED)

Parameters for Table 5
Lamar Canals Shares

Owner	Case	Aug Station	Shares	
City of Lamar	02CW181	Center Farm	50	
DOW	02CW181	Center Farm	4297	
LAWMA Lamar	15CW3067	West Farm / West Farm GP	897	
Lamar Rule 10		WF,CF,GE,GW		Varies based on next months return flow obligation
Other			0	
LAWMA GIC	15CW3067	Granada East / West	2625.51	750.5 GIC Shares (Lamar Shares Equivalent = GIC shares x 10,600 / 3,030)
Colo. Beef	02CW181	West Farm	2297.09	
Total			10166.60	
		Canal Rotation	No	

LAWMA

Parameters for Table 6
Fort Bent Ditch Shares through LAWMA Augmentation Station

LAWMA	02CW181	462
LAWMA	10CW85	144
LAWMA	T-1 Trade	162.5
City of Lamar Return Flow Obligation		1064.2
City of Lamar Augmentation		0
Total		1832.7
LAWMA only Ft Bent Shares		768.5

City of Lamar		April	May	June	July	August	September	October	November	December	January	February	March
Idler Shares % for RFO:	1880.6	24.9%	26.0%	26.0%	25.4%	29.5%	40.0%	53.5%	0.0%	0.0%	0.0%	0.0%	0.0%
City of Lamar RFO		752.2											
City of Lamar Augmentation		0											
Days in Month		30	31	30	31	31	30	31	30	31	31	28	31

Decreed Consumptive Use Factors

Case No.	Ditch												
02CW181	Fort Bent	66.2%	66.2%	66.2%	66.2%	66.2%	66.2%	66.2%	0.0%	0.0%	0.0%	0.0%	0.0%
02CW181	Lamar	58.3%	58.3%	58.3%	58.3%	58.3%	58.3%	58.3%	0.0%	0.0%	0.0%	0.0%	0.0%
02CW181	Manvel	58.3%	58.3%	58.3%	58.3%	58.3%	58.3%	58.3%	0.0%	0.0%	0.0%	0.0%	0.0%
02CW181	X-Y	62.9%	62.9%	62.9%	62.9%	62.9%	62.9%	62.9%	0.0%	0.0%	0.0%	0.0%	0.0%
02CW181	Stubbs	65.6%	65.6%	65.6%	65.6%	65.6%	65.6%	65.6%	0.0%	0.0%	0.0%	0.0%	0.0%
10CW85	Fort Bent	65.2%	62.2%	64.8%	65.0%	61.6%	52.4%	44.2%	0.0%	0.0%	0.0%	0.0%	0.0%
10CW85	Sisson	65.6%	65.6%	65.6%	65.6%	65.6%	65.6%	65.6%	0.0%	0.0%	0.0%	0.0%	0.0%
02CW181	Keesee	75.0%	77.0%	73.0%	74.0%	70.0%	65.0%	57.5%	0.0%	0.0%	0.0%	0.0%	0.0%
05CW52	Keesee	75.0%	77.0%	73.0%	74.0%	70.0%	65.0%	57.5%	0.0%	0.0%	0.0%	0.0%	0.0%
02CW181	Highland	61.6%	67.6%	75.2%	79.1%	80.7%	67.8%	35.6%	0.0%	0.0%	0.0%	0.0%	0.0%
10CW85	Highland	62.1%	68.3%	76.3%	80.4%	81.9%	69.6%	38.7%	0.0%	0.0%	0.0%	0.0%	0.0%
15CW3067	Lamar	79.9%	80.2%	81.4%	80.4%	76.5%	71.2%	65.9%	0.0%	0.0%	0.0%	0.0%	0.0%
15CW3067	GIC	63.0%	63.8%	67.3%	66.1%	59.0%	47.9%	34.2%	0.0%	0.0%	0.0%	0.0%	0.0%
15CW3067	XY	72.6%	74.5%	75.8%	73.0%	74.0%	67.1%	59.2%	0.0%	0.0%	0.0%	0.0%	0.0%

Attachment to Order - 2015CW3067

09/01/2018
10/1/2018

	ARKLASCO USGS 07124000	PURLASCO USGS 07128500	ARKJMRCO USGS 07130500	ARKLAMCO USGS 07133000	ARKGRACO USGS 07134180	FRODITKS USGS 07137000	ARKCOOKS USGS 07137500	PURHILCO CDWR	HILCANCO CDWR	FLYCANCO CDWR	FTBDITCO CDWR	AMYCANCO CDWR	FTBAUGCO CDWR	LAMCANCO CDWR	HYDDITCO CDWR	LLPRETCO CDWR	LAWAUGCO CDWR	CEFAUGCO CDWR	GICAGWCO CDWR	GICAGECO CDWR	BUFDITCO CDWR	LAMCANCO CDWR Total	Stateline USGS Total
	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge	Discharge		
9/1/2018	27.40	22.50	536.00	121.00	128.00	28.60	168.00	17.48	0.00	113.88	52.86	238.48	11.67	106.27	10.97		11.11	18.76	6.96	1.30	64.29	106.2708	196.6
9/2/2018	27.40	20.00	535.00	121.00	129.00	29.50	174.00	14.92	0.00	112.75	52.90	237.15	11.63	106.44	10.75		11.72	18.84	6.41	1.16	64.42	106.4375	203.5
9/3/2018	32.00	19.10	536.00	122.00	133.00	30.90	211.00	13.81	0.00	123.80	52.90	238.71	11.68	107.11	10.74		11.00	18.91	6.44	1.49	64.56	107.1146	241.9
9/4/2018	31.50	19.40	467.00	115.00	139.00	21.90	303.00	13.10	0.00	122.02	52.77	235.54	7.53	101.86	11.38		10.16	18.01	6.52	2.18	65.06	101.8579	324.9
9/5/2018	29.80	17.60	414.00	36.60	123.00	14.50	286.00	22.07	0.00	147.04	52.47	231.67	0.19	96.41	12.48		10.25	14.20	5.14	1.23	64.32	96.41	300.5
9/6/2018	30.50	43.90	425.00	26.90	95.20	0.00	257.00	48.59	0.00	142.70	52.10	233.96	0.19	86.45	16.08		9.91	10.43	5.13	0.91	61.96	86.45417	257
9/7/2018	31.30	98.50	435.00	24.50	90.80	0.00	244.00	185.30	0.00	161.40	48.44	234.38	0.36	97.91	21.95		10.38	12.59	5.20	1.87	61.41	97.91292	244
9/8/2018	48.80	142.00	433.00	17.80	85.60	0.00	232.00	147.11	0.00	166.20	43.90	234.98	5.21	105.55	20.02		10.57	15.64	7.50	1.10	60.96	105.5521	232
9/9/2018	96.90	62.20	433.00	16.70	82.80	0.00	222.00	59.10	0.00	166.01	45.09	233.63	7.14	107.83	16.37		10.83	15.89	9.70	1.26	60.60	107.8333	222
9/10/2018	51.90	47.60	426.00	20.50	79.00	0.00	221.00	34.35	0.00	166.33	40.63	232.88	5.59	108.39	14.34		11.83	15.18	13.11	1.42	60.04	108.3854	221
9/11/2018	42.60	29.20	421.00	20.90	76.90	0.00	218.00	25.65	0.00	154.02	34.00	232.77	0.84	103.75	16.23		12.36	13.85	9.99	1.07	59.68	103.75	218
9/12/2018	30.60	23.60	421.00	19.90	75.50	0.00	208.00	19.87	0.00	143.30	33.96	232.40	0.65	105.69	13.82		12.42	13.77	4.49	1.43	59.56	105.6875	208
9/13/2018	27.80	21.70	417.00	19.50	72.00	0.00	192.00	16.08	0.00	126.11	33.98	231.75	0.62	107.32	10.54		12.38	13.79	4.27	2.58	59.24	107.3217	192
9/14/2018	26.10	16.70	421.00	18.60	70.00	0.00	177.00	13.58	0.00	139.06	33.99	234.46	0.60	99.51	10.40		12.20	12.78	4.51	2.08	58.97	99.50542	177
9/15/2018	23.80	14.00	425.00	17.10	66.70	0.00	175.00	11.26	0.00	128.38	33.96	233.02	0.62	106.58	10.54		12.19	13.55	3.92	0.68	58.43	106.5833	175
9/16/2018	23.70	12.10	424.00	16.30	64.80	0.00	172.00	9.66	0.00	127.38	34.00	233.44	0.55	105.07	10.95		12.25	13.20	2.82	0.14	58.43	105.0729	172
9/17/2018	22.70	11.00	421.00	16.40	59.50	0.00	155.00	8.44	0.00	120.75	34.01	237.52	0.55	105.47	10.98		11.99	12.86	2.47	0.49	63.11	105.4688	155
9/18/2018	22.50	9.65	419.00	16.00	55.00	0.00	147.00	7.21	0.00	112.96	35.88	257.27	0.55	85.23	10.77		11.89	10.77	2.35	0.80	65.89	85.2275	147
9/19/2018	22.00	8.17	353.00	15.50	52.80	0.00	146.00	6.26	0.00	119.04	38.11	249.32	0.55	78.65	11.57		10.37	9.68	2.00	1.42	65.59	78.65208	146
9/20/2018	22.30	7.49	371.00	15.50	49.20	0.00	150.00	5.31	0.00	138.64	38.10	233.30	0.55	49.11	11.16		4.72	4.71	5.58	1.36	65.03	49.11083	150
9/21/2018	22.30	6.85	410.00	15.60	43.90	0.00	147.00	4.72	0.00	152.76	38.10	271.54	0.55	50.99	11.57		3.11	3.74	4.96	0.00	64.14	50.99458	147
9/22/2018	31.20	6.02	414.00	16.20	41.40	0.00	143.00	3.74	0.00	158.44	38.10	267.19	0.52	61.44	11.98		4.75	5.62	7.26	0.00	63.55	61.44125	143
9/23/2018	33.80	5.15	412.00	16.40	42.60	0.00	152.00	2.81	0.00	159.98	38.10	270.56	0.52	62.62	12.34		5.15	6.06	12.42	0.00	64.25	62.62042	152
9/24/2018	24.40	4.29	411.00	15.30	40.70	0.00	150.00	2.37	0.00	159.05	38.10	271.40	0.55	57.52	11.67		4.89	4.95	11.37	0.00	64.00	57.51917	150
9/25/2018	24.20	3.72	412.00	16.20	38.20	0.00	147.00	2.07	0.00	161.42	38.10	269.68	0.55	59.64	11.43		4.96	5.69	8.26	0.00	63.45	59.63875	147
9/26/2018	24.60	3.34	339.00	16.80	38.10	0.00	147.00	1.80	0.00	162.06	38.10	241.59	0.53	60.21	11.69		4.92	6.05	8.39	0.00	63.52	60.20917	147
9/27/2018	24.20	3.31	285.00	28.50	40.40	0.00	141.00	1.62	0.00	176.30	38.10	140.14	0.49	73.32	12.77		3.85	8.70	8.56	0.00	63.90	73.32208	141
9/28/2018	22.90	3.41	145.00	17.60	42.60	0.00	138.00	1.57	0.00	184.44	38.10	108.79	0.49	74.16	12.76		7.17	8.46	8.55	0.00	64.63	74.15667	138
9/29/2018	26.00	3.47	70.40	26.80	44.50	0.00	142.00	1.45	0.00	190.82	37.85	0.01	8.52	84.74	11.54		7.85	8.18	5.59	0.00	64.62	84.74292	142
9/30/2018	23.40	4.40	69.60	15.10	43.80	0.00	141.00	1.41	0.00	183.28	37.44	0.00	16.37	76.11	10.81		7.96	10.39	7.63	0.00	64.76	76.1075	141
10/1/2018	24.20	4.46	69.40	14.80	40.80	0.00	141.00															0	141
	27.4	8.92	495	118	128	28.6	165.00	17.5	0	114	52.9	238	11.7	106	11		11.1	18.8	6.96	1.3	64.3		
												6567.503333										2631.361	
												13026.6										5219.3	
																						1084.285	
																						2150.7	

Attachment to Order - 2019CV30357

Table 13
SUMMARY OF LAWMA's 15CW3067 LAMAR CANAL WATER RIGHTS LIMITATIONS
(values in acre-feet unless noted)

	Lamar			Consumptive Use			April			May			June		
	Max Annual FHG Delivery 1,959		Max Cum. 64 yr Water Del 69,799	Max 1st Year CU 1458.0		Max 64 yr CU Credits 54,724	Max Monthly FHG Delivery 340		Max Cum 20 yr FHG Del 3,486	Max Monthly FHG Delivery 333		Max Cum 20 yr FHG Del 4,204	Max Monthly FHG Delivery 442		Max Cum 20 yr FHG Del 5,189
	Average Annual Del 1,091			Average Annual CU 855			Avg Monthly Del 174			Avg Monthly Del 210			Avg Monthly Del 259		
Year	FHG Del	Proj. FHG Del	Cumulative Water Del for 64 years	CU Del	Proj. CU Del	Cumulative CU Del for 64 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
2019	1,959		69,799	1,458		54,724	340		3,486	333		4,204	442		5,189
2020		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2021		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2022		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2023		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2024		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2025		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2026		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2027		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2028		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2029		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2030		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2031		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2032		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2033		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2034		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2035		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2036		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2037		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2038		1,077	69,799		845	54,724		165.6	3,486		203.7	4,204		249.8	5,189
2039		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2040		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2041		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2042		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2043		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2044		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2045		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2046		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2047		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2048		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2049		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2050		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2051		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2052		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2053		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2054		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2055		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2056		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2057		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2058		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2059		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2060		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2061		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2062		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2063		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2064		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2065		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2066		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2067		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2068		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2069		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2070		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2071		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2072		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2073		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2074		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2075		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2076		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2077		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2078		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2079		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2080		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2081		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
2082		1,077	69,799		845	54,724		165.6	3,312		203.7	4,075		249.8	4,997
Average	1,959	1,077		1,458	845		340	166		333	204		442	250	

Note: 2019 Annual and Monthly Data is the maximum allowed in the first year.

Attachment 10 Order 2015 CW3067

Table 13 (continued)
SUMMARY OF LAWMA's 15CW3067 LAMAR CANAL WATER RIGHTS LIMITATIONS
(values in acre-feet unless noted)

	July			August			September			October		
	Max Monthly FHG Delivery 446		Max Cum 20 yr FHG Del 5,647	Max Monthly FHG Delivery 367		Max Cum 20 yr FHG Del 4,337	Max Monthly FHG Delivery 292		Max Cum 20 yr FHG Del 3,806	Max Monthly FHG Delivery 249		Max Cum 20 yr FHG Del 2,981
	Avg Monthly Del		282	Avg Monthly Del		217	Avg Monthly Del		190	Avg Monthly Del		149
Year	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years
(1)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
2019	446		5,647	367		4,337	292		3,806	249		2,981
2020		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2021		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2022		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2023		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2024		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2025		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2026		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2027		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2028		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2029		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2030		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2031		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2032		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2033		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2034		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2035		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2036		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2037		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2038		273.7	5,647		208.9	4,337		184.9	3,806		143.8	2,981
2039		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2040		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2041		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2042		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2043		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2044		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2045		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2046		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2047		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2048		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2049		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2050		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2051		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2052		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2053		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2054		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2055		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2056		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2057		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2058		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2059		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2060		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2061		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2062		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2063		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2064		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2065		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2066		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2067		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2068		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2069		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2070		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2071		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2072		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2073		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2074		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2075		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2076		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2077		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2078		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2079		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2080		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2081		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
2082		273.7	5,475		208.9	4,179		184.9	3,699		143.8	2,876
Average	446	274		367	209		292	185		249	144	

Attachment to Order 2015CW3067

Table 14
SUMMARY OF LAWMA's 15CW3067 GIC DITCH WATER RIGHTS LIMITATIONS
(values in acre-feet unless noted)

	Lamar			Consumptive Use			April			May			June		
	Max Annual FHG Delivery 5,733		Max Cum. 64 yr Water Del 204,300	Max 1st Year CU 2092.2		Max 64 yr CU Credits 98,802	Max Monthly FHG Delivery 996		Max Cum 20 yr FHG Del 10,203	Max Monthly FHG Delivery 975		Max Cum 20 yr FHG Del 12,306	Max Monthly FHG Delivery 1,294		Max Cum 20 yr FHG Del 15,187
	Average Annual Del		3,192	Average Annual CU		1,544	Avg Monthly Del		510	Avg Monthly Del		615	Avg Monthly Del		759
Year	FHG Del	Proj. FHG Del	Cumulative Water Del for 64 years	CU Del	Proj. CU Del	Cumulative CU Del for 64 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
2019	5,733		204,300	2,092		98,802	996		10,203	975		12,306	1,294		15,187
2020		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2021		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2022		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2023		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2024		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2025		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2026		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2027		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2028		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2029		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2030		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2031		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2032		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2033		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2034		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2035		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2036		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2037		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2038		3,152	204,300		1,535	98,802		484.6	10,203		596.4	12,306		731.2	15,187
2039		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2040		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2041		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2042		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2043		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2044		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2045		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2046		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2047		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2048		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2049		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2050		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2051		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2052		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2053		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2054		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2055		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2056		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2057		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2058		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2059		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2060		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2061		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2062		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2063		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2064		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2065		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2066		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2067		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2068		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2069		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2070		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2071		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2072		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2073		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2074		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2075		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2076		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2077		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2078		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2079		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2080		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2081		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
2082		3,152	204,300		1,535	98,802		484.6	9,692		596.4	11,927		731.2	14,624
Average	5,733	3,152		2,092	1,535		996	485		975	596		1,294	731	

Note: 2019 Annual and Monthly Data is the maximum allowed in the first year.

Attachment 2 Order 15CW3067

Table 14 (continued)
SUMMARY OF LAWMA's 15CW3067 GIC DITCH WATER RIGHTS LIMITATIONS
(values in acre-feet unless noted)

	July			August			September			October		
	Max Monthly FHG Delivery 1,307		Max Cum 20 yr FHG Del 16,528	Max Monthly FHG Delivery 1,074		Max Cum 20 yr FHG Del 12,696	Max Monthly FHG Delivery 855		Max Cum 20 yr FHG Del 11,139	Max Monthly FHG Delivery 728		Max Cum 20 yr FHG Del 8,726
	Avg Monthly Del		826	Avg Monthly Del		635	Avg Monthly Del		557	Avg Monthly Del		436
Year	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years	FHG Delivery	Proj. FHG Del	Cum Water Del for 20 years
(1)	(17)	(18)	(19)	(20)	(21)	(22)	(23)	(24)	(25)	(26)	(27)	(28)
2019	1,307		16,528	1,074		12,696	855		11,139	728		8,726
2020		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2021		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2022		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2023		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2024		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2025		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2026		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2027		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2028		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2029		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2030		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2031		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2032		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2033		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2034		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2035		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2036		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2037		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2038		801.1	16,528		611.7	12,696		541.3	11,139		420.9	8,726
2039		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2040		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2041		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2042		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2043		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2044		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2045		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2046		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2047		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2048		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2049		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2050		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2051		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2052		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2053		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2054		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2055		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2056		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2057		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2058		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2059		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2060		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2061		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2062		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2063		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2064		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2065		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2066		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2067		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2068		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2069		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2070		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2071		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2072		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2073		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2074		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2075		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2076		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2077		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2078		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2079		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2080		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2081		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
2082		801.1	16,022		611.7	12,234		541.3	10,825		420.9	8,419
Average	1,307	801		1,074	612		855	541		728	421	

Attachment to Order 2015CW3067

Table 17
SUMMARY OF LAWMA's 15CW3067 X-Y IRRIGATING DITCH WATER RIGHTS LIMITATIONS
(values in acre-feet unless noted)

	X-Y			Consumptive Use									
	Max Annual rhg Delivery 329		Max Cum. 44 yr Water Del 5,995	Max 1st Year CU 213.6		Max 44 yr CU Credits 3,946	Maximum Monthly River Headgate Delivery						
	Average Annual Del		94	Average Annual CU		62	April	May	June	July	August	September	October
							50	63	77	71	70	55	48
Year	rhg Del	Proj. rhg Del	Cumulative Water Del for 64 years	CU Del	Proj. CU Del	Cumulative CU Del for 64 years							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
2019	329		5,995	214		3,946							
2020		132	5,995		87	3,946							
2021		132	5,995		87	3,946							
2022		132	5,995		87	3,946							
2023		132	5,995		87	3,946							
2024		132	5,995		87	3,946							
2025		132	5,995		87	3,946							
2026		132	5,995		87	3,946							
2027		132	5,995		87	3,946							
2028		132	5,995		87	3,946							
2029		132	5,995		87	3,946							
2030		132	5,995		87	3,946							
2031		132	5,995		87	3,946							
2032		132	5,995		87	3,946							
2033		132	5,995		87	3,946							
2034		132	5,995		87	3,946							
2035		132	5,995		87	3,946							
2036		132	5,995		87	3,946							
2037		132	5,995		87	3,946							
2038		132	5,995		87	3,946							
2039		132	5,995		87	3,946							
2040		132	5,995		87	3,946							
2041		132	5,995		87	3,946							
2042		132	5,995		87	3,946							
2043		132	5,995		87	3,946							
2044		132	5,995		87	3,946							
2045		132	5,995		87	3,946							
2046		132	5,995		87	3,946							
2047		132	5,995		87	3,946							
2048		132	5,995		87	3,946							
2049		132	5,995		87	3,946							
2050		132	5,995		87	3,946							
2051		132	5,995		87	3,946							
2052		132	5,995		87	3,946							
2053		132	5,995		87	3,946							
2054		132	5,995		87	3,946							
2055		132	5,995		87	3,946							
2056		132	5,995		87	3,946							
2057		132	5,995		87	3,946							
2058		132	5,995		87	3,946							
2059		132	5,995		87	3,946							
2060		132	5,995		87	3,946							
2061		132	5,995		87	3,946							
2062		132	5,995		87	3,946							
Average	329	132		214	87		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!

Note: 2019 Annual is the maximum allowed in the first year.

Attachment 10 Order - 2015CW3067

EXHIBIT B

R 53 W | R 52 W | R 51 W | R 50 W

T 21 S

T 22 S

T 23 S

ARF125CO

ARF125CO Direct Delivery Location

ARF126CO

ARF126CO Direct Delivery Location

ARF145CO

ARF145CO Direct Delivery Location

ARF049CO

ARF049CO Direct Delivery Location

Reach 11

Reach 10

Reach 9

Reach 8

Hasty

Las Animas

Las Animas-Bent County Airport

Mulberry Rd

County Road LL

County Road KK.5

County Road KK

County Road JJ

County Road FF.5

County Road GG

County Road EE.5

County Road EE

County Road DD

Trail Rd

Santa Fe Trl

US Highway 50

Fort Lyon Canal

Arkansas River

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community

Legend

- Direct Delivery Locations
- Direct Delivery Augmentation Stations
- Fort Lyon Canal
- Arkansas River
- Gageby and Horse Creeks
- John Martin Reservoir
- H-I Model Reach

0 0.75 1.5 3

Miles

N W E S

Hendrix Wai Engineering, Inc.

Job No.	L7507
File:	Exhibit B.mxd
Date:	07/13/18
Prepared For:	LAWMA/C-S-U

Exhibit B

General Location Map

C-S-U Allocation Direct Delivery Locations

LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION
P. O. Box 1161
Lamar, Colorado 81052
(719) 336-9696 (719) 336-2422 FAX
lawma@cminet.net

EXHIBIT C

A & B Farm, LLC
1405 South 9th
Lamar, CO 81052

June 10, 2019

NOTICE OF SPECIAL MEETING

TO MEMBERS AND SHAREHOLDERS OF THE LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION:

At the request of the Colorado Water Conservation Board ("CWCB"), a majority of the Board of Directors of the Lower Arkansas Water Management Association ("LAWMA") have called for a special meeting of the members and shareholders that will be held on **Friday, June 21, 2019 at LAWMA's office, 310 South 6th Street in Lamar, Colorado at 10:00 a.m.**

The purpose of the special meeting is: (1) to provide the members and shareholders with the opportunity to review the details of the West Farm Gravel Pit ("WFGP") reservoir project and the proposed CWCB funding for LAWMA's purchase of the WFGP; (2) to disclose potential conflicts of interest related to the WFGP project; (3) to give the members and shareholders the opportunity to specifically approve the Board of Directors entering into loan and/or grant contract(s) with the CWCB in the combined amount of $4,640,950 for LAWMA's purchase of the WFGP; (4) to give the members and shareholders the opportunity to approve, in concept, the required share assessment levels necessary to cover LAWMA's CWCB loan repayment obligations and other expenses for the duration of the proposed CWCB loan; and (5) to conduct such other business as may come before the meeting.

Details of the West Farm Gravel Pit purchase.

On July 16, 2018, LAWMA entered into a Lease-Purchase Agreement with GP Aggregates, LLC ("GP"), to purchase the first 500 acre-feet of storage capacity in the WFGP. On the same day, LAWMA signed a binding term sheet with GP, to purchase the remaining usable storage capacity in the WFGP. The WFGP is a fully-operational lined gravel pit reservoir with an estimated usable storage capacity of approximately 1,638 acre-feet. LAWMA recently obtained a Water Court decree in Case No. 15CW3067 that approves storage of LAWMA's changed Lamar Canal water rights (approximately 2,399 acre-feet of consumptive use credits per year) in the WFGP. The cost for the entire usable storage capacity in the WFGP is $4,959,000. To finance the purchase of the WFGP, LAWMA applied for a Water Project Loan from the CWCB in the maximum amount of

$4,640,950 (this amount includes financing the CWCB's 1% loan service charge), and a Water Plan Grant in the maximum amount of $1,000,000. LAWMA would reduce its loan request by the amount of any grant funds it receives to maintain a total request for CWCB loan and grant funds of $4,640,950.

LAWMA submitted its grant and loan applications to the CWCB on February 1, 2019. On May 7, 2019, CWCB staff requested additional time to review LAMWA's applications before making a recommendation to the CWCB Board. At its meeting in May 2019, the CWCB set aside $1,000,000 in Water Plan Grant funds under the storage and supply grant category while the CWCB staff continues its review of LAWMA's loan and grant applications. The CWCB staff plans on making its recommendation to the CWCB Board on LAWMA's loan and grant applications in time for the CWCB to act on the applications at its meeting on July 17 and 18, 2019. LAWMA has also engaged an appraiser to estimate the fair market value of the WFGP. The appraisal will be completed on or before July 12, 2019.

LAWMA prepared a Feasibility Study dated February 1, 2019 in support of its CWCB loan and grant applications. The purpose of the Feasibility Study was to evaluate the costs and benefits of purchasing the WFGP and to determine whether the WFGP project is one that could be successfully completed by LAWMA. As part of the Feasibility Study, LAWMA developed an operations model of its augmentation operations using historical data over a 67-year study period (1950 – 2017). LAWMA used the operations model to compare the yield of a LAWMA common share without use of the WFGP storage, to the yield of a LAWMA common share with the use of the WFGP storage. The operations model showed that by adding the WFGP storage to LAWMA's augmentation operations, the long-term average allocation to a LAWMA common share over the 67-year study period increased from 72% to 85%. This is a substantial increase in the amount of water available for LAWMA shareholders.

The operations model also showed that adding the WFGP to LAWMA's augmentation operations would significantly benefit those operations during dry years. For example, without use of the WFGP, the operations model showed that there would have been 23 years during the 67-year study period when LAWMA would have made a minimum allocation of 40% to a LAWMA common share. In contrast, with the use of the WFGP, there were only 8 years during the study period where LAWMA would have made a minimum allocation of 40% to a LAWMA common share. According to the operations model, adding the WFGP to LAWMA's augmentation operations reduced the percentage of minimum allocation years from 34% to 12% of the study period.

Conflicts of interest and shareholders with a connection to the WFGP.

The WFGP is owned by GP. William Grasmick, LAWMA's President, is an investor in GP. As a LAWMA Board member with a financial interest in the transaction, Mr. Grasmick has a conflict of interest with the WFGP project. Mr. Grasmick disclosed his conflict of interest to the rest of the LAWMA Board of Directors at the outset of the discussions between LAWMA and GP for LAWMA's potential purchase of the WFGP. Since disclosing his conflict of interest, Mr. Grasmick has recused himself from all LAWMA Board discussions and negotiations related to the WFGP project. To LAWMA's knowledge, Mr. Grasmick is the only Board member with a conflict of interest related to the WFGP.

LAWMA is also aware that the following shareholders have a connection to the WFGP project for the reasons listed:

1. GP Aggregates, LLC – Owner of the WFGP.
2. GP Irrigated Farms, LLC – A wholly owned subsidiary of Syracuse Dairy, LLC, which is a partial owner of GP.
3. Arkansas River Farms, LLC – Has overlapping managers and/or members with companies owning an interest in GP.
4. Natures Alternative Farms, LLC - Has overlapping managers and/or members with companies owning an interest in GP.

The shareholders listed above do not have a conflict of interest with the WFGP, but they do have some connection to the WFGP. To increase transparency, the Board of Directors has decided to notify the members and shareholders of these connections certain shareholders have to the WFGP project. Despite having some connection to the WFGP, the above-listed shareholders are entitled to vote at the special meeting on all matters related to the WFGP.

Financial impact of the WFGP.

LAWMA shareholders should consider the following information to understand the actual financial impact of purchasing the WFGP. To finance a CWCB loan without receiving any grant funds, LAWMA has estimated that it will need to increase share assessments by 2024 to approximately $44.14, an increase of $4.64 from the 2019 share assessment. Assessments will need to remain at that level until 2030, at which time they will be reduced as LAWMA's other existing CWCB debt is retired. By 2035, projected share assessments are anticipated to be back down to $39.82. Of course, these projected share assessment levels would be reduced if LAWMA is successful in obtaining an award of CWCB grant fund; and may change for other reasons.

The projected share assessments are after accounting for reimbursement payments from Colorado Springs Utilities ("CS-U") to LAWMA under the July 16, 2018 Water Sharing Agreement between LAWMA and CS-U. In total, CS-U will reimburse LAWMA approximately $1,750,000 for the purchase of 500 acre-feet of storage in the WFGP. Based on the terms of the Water Sharing Agreement, CS-U will make annual lease payments of $125,000 to LAWMA until LAWMA is able to obtain a final unappealable decree changing the use of a portion of its Fort Lyon Canal Company shares. Once a final unappealable decree is obtained by LAWMA, CS-U will make a final reimbursement payment to LAWMA, as calculated under the terms of the Water Sharing Agreement. LAWMA estimates that it will receive the final reimbursement payment from CS-U in 2023 in the amount of approximately $1,500,000. To ease the financial burden on LAWMA's shareholders, LAWMA proposed in its Feasibility Study to apply the final reimbursement payment from CS-U to the outstanding principal balance on the CWCB loan and to then restructure the loan over a new 30-year term with the same interest rate. Doing so would reduce the annual payments LAWMA is required to make on the CWCB loan and, in turn, reduce the required share assessments necessary to finance the loan. The proposed restructuring would extend the duration of the loan term to 2053.

As with LAWMA's existing CWCB loans, the CWCB may require LAWMA to obtain commitments from its members that require them to agree to cease pumping if CWCB loan payments are not made in accordance with the loan agreement and requiring them to comply with

the State Engineer's rules and regulations governing the measurement and use of groundwater in the Arkansas River Basin. This requirement has been addressed in the past in LAWMA's membership form that all members are required to sign. Any new member will be required to sign a membership form that contains the above-stated commitments.

The Board of Directors is very aware of the economic challenges facing individual members. With those concerns in mind, the Board of Directors believes that the benefits of acquiring the WFGP - an increase in the average yield of a LAWMA common share from 72% to 85% and increased security in dry years - is in LAWMA's best interest and can be acquired at an acceptable price with CWCB financing. Thus, the disinterested members of the Board of Directors recommend that the members and shareholders vote to approve (1) the Board entering into loan and/or grant contract(s) with the CWCB to purchase the WFGP, and (2) the share assessments, in concept, necessary to make the required payments on the CWCB financing obtained.

Please call the office at (719) 336-9696 if you have any questions.

_____
Bob Wilger, Vice-President

If you are unable to attend the meeting in person, please complete and return this proxy.

PROXY

I hereby designate _____ or the Secretary of the Lower Arkansas Water Management Association as my proxy to act for me at the special meeting of members and shareholders to be held June 21, 2019, including any adjourned and rescheduled meeting.

_____
Signature

_____
Member or Shareholder (please print name)

EXHIBIT D

Purchase Of West Farm Gravel Pit Storage – Phase 1 Cell

Hendrix Wai Engineering, Inc.

&

Moses, Wittemyer, Harrison and Woodruff, P.C.

- **LAWMA has contracted with GP Aggregates, LLC, to purchase the entire Phase I storage cell of the West Farm Gravel Pit Complex for $4.595 million.**

    - **The Phase 1 storage cell, which has a total usable capacity of approximately 1,638 acre-feet, includes the 500 acre-feet of storage capacity for which CS-U will reimburse LAWMA in the amount of $1.75 million.**

    - **The purchase of the remaining storage (1,138 acre-feet) for $2.845 million will be paid for by LAWMA.**

- **The purchase will include the inlet and outlet facilities and carriage in the Lamar Canal to deliver water into the pit.**

- **To finance the purchase, in February of 2018 LAWMA will apply for a loan from the Colorado Water Conservation Board and will also apply for grant funds available through the Colorado Water Plan.**

- **Closing will likely take place during the summer of 2019.**

- **The LAWMA Board estimates that until LAWMA completes the water court change case for LAWMA's FLCC share water, share assessments will need to be increased by $3.50 per LAWMA common share to finance the purchase of the storage pit.**

- **The share assessment increase would be made in two increments - a proposed increase of $1.50 per LAWMA common share for 2019 and then a proposed additional increase of $2.00 per LAWMA common share beginning in 2020 (for a total increase of $3.50 per share).**

- **Once LAWMA completes the water court change case for LAWMA's FLCC share water, the share assessments will need to be increased again in the range of another $0.50 to $1.50 per LAWMA common share (for a total overall increase of $4.00 to $5.00 per share) to finance the purchase of the storage pit.**

Benefits to LAWMA from Gravel Pit Storage

- **West Farm Gravel Pit storage will benefit LAWMA in the following ways:**

    - **It will provide an additional means of meeting LAWMA's replacement obligations to in-state water rights, particularly at the beginning and end of the irrigation season.**

    - **It will allow LAWMA maximize the use of its water supplies by providing a place for LAWMA to store LAWMA's consumable water that is in excess of LAWMA's replacement obligations for use at a later time.**

    - **Without storage, LAWMA's excess consumable water would be left in the river for use by other in-state water users or Kansas with no benefit to LAWMA.**

    - **Having replacement water in storage allows LAWMA to allocate more replacement water to our members because water in storage is firm water. Therefore, storage will allow LAWMA to increase the allocation to LAWMA common shares, particularly in dry years.**

LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION
P. O. Box 1161
Lamar, Colorado 81052
(719) 336-9696 (719) 336-2422 FAX
lawma@cminet.net

EXHIBIT E

Bent County
P. O. Box 350
Las Animas, CO 81054

October 27, 2018

NOTICE OF ANNUAL MEETING

TO MEMBERS AND SHAREHOLDERS OF THE LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION:

The annual meeting of the Lower Arkansas Water Management Association ("LAWMA") will be held **Friday, November 16, 2018**. The meeting will be held **at LAWMA's office, 310 South 6th Street** in Lamar, Colorado at **10:00 a.m.**

The purpose of the meeting is: (1) to vote on share assessments for the year; (2) to elect three Directors to the Board of Directors for three-year terms; and (3) to conduct such other business as may come before the meeting.

Please call the office at (719) 336-9696 if you have any questions.

William J. Grasmick, President

If you are unable to attend the meeting in person, please complete and return this proxy.

✂----------

PROXY

I hereby designate _____ or the Secretary of the Lower Arkansas Water Management Association as my proxy to act for me at the meeting of members to be held November 16, 2018, including any adjourned and rescheduled meeting.

_____
Signature

_____
Member or Shareholder (please print name)

Lower Arkansas Water Management Association
2018 Annual Meeting

November 16, 2018

Register

Name	Representing	e-mail
Dry Dart	self	35g.ican37@gmail.com
Dale Stewart	Tri Oak Foods	Dale.Stewart@trioak.com
Bill Broyles	P.E./CWL	/
Dan Richards	Self	-
Richard Mehren	MWH/LAWMA	rmehren@mwhw.com
Don Higbee	LAWMA/Self	lawma@cminet.net
Bill Grasmick	Self	
Virginia Suman		tattybug@yahoo.com
Randy Hendrix	Hendrix Wai Eng.	randy@hendrix-wai.com
Ayrton Hendrix	Hendrix Wai Eng.	ayrton@hendrix-wai.com
Bob Wilger		
Eric Thyne		pmdgeek@hotmail
Jan Burke	Tri-State G&T	dburke@tristateg1.org
Fred Heckman		fredcaryol@hotmail
Norman Reynolds		normanarend@gmail.com
Glenn Dalrymple	Self	SAVage7153@gmail.com
Don Seifert		
Kalsoum Abdoli	Colorado Springs Utilities	kabdoli@csu.org
Earl Wilkinson	" "	ewilkinson@csu.org
Ross Strebeck	GP Irrigated	rossd5y@hotmail.com

PLEASE SIGN IN HERE

Lower Arkansas Water Management Association
2018 Annual Meeting

November 16, 2018

Register

Name	Representing	e-mail
Rena Brand	CPW	rena.brand@state.co.us
Dan Kirmer	CPW	daniel.kirmer@state.co.us
Wallas May		
Wesley Webb		
Ben Peterson		
Ruby Ilg		maryvalleyfarm@gmail.com

PLEASE SIGN IN HERE

Purchase Of West Farm Gravel Pit Storage – Phase 1 Cell

Hendrix Wai Engineering, Inc.

&

Moses, Wittemyer, Harrison and Woodruff, P.C.

- **LAWMA has contracted with GP Aggregates, LLC, to purchase the entire Phase I storage cell of the West Farm Gravel Pit Complex for $4.595 million.**

    - **The Phase 1 storage cell, which has a total usable capacity of approximately 1,638 acre-feet, includes the 500 acre-feet of storage capacity for which CS-U will reimburse LAWMA in the amount of $1.75 million.**

    - **The purchase of the remaining storage (1,138 acre-feet) for $2.845 million will be paid for by LAWMA.**

- **The purchase will include the inlet and outlet facilities and carriage in the Lamar Canal to deliver water into the pit.**

- **To finance the purchase, in February of 2018 LAWMA will apply for a loan from the Colorado Water Conservation Board and will also apply for grant funds available through the Colorado Water Plan.**

- **Closing will likely take place during the summer of 2019.**

- **The LAWMA Board estimates that until LAWMA completes the water court change case for LAWMA's FLCC share water, share assessments will need to be increased by $3.50 per LAWMA common share to finance the purchase of the storage pit.**

- **The share assessment increase would be made in two increments - a proposed increase of $1.50 per LAWMA common share for 2019 and then a proposed additional increase of $2.00 per LAWMA common share beginning in 2020 (for a total increase of $3.50 per share).**

- **Once LAWMA completes the water court change case for LAWMA's FLCC share water, the share assessments will need to be increased again in the range of another $0.50 to $1.50 per LAWMA common share (for a total overall increase of $4.00 to $5.00 per share) to finance the purchase of the storage pit.**

Benefits to LAWMA from Gravel Pit Storage

- **West Farm Gravel Pit storage will benefit LAWMA in the following ways:**

    - **It will provide an additional means of meeting LAWMA's replacement obligations to in-state water rights, particularly at the beginning and end of the irrigation season.**

    - **It will allow LAWMA maximize the use of its water supplies by providing a place for LAWMA to store LAWMA's consumable water that is in excess of LAWMA's replacement obligations for use at a later time.**

    - **Without storage, LAWMA's excess consumable water would be left in the river for use by other in-state water users or Kansas with no benefit to LAWMA.**

    - **Having replacement water in storage allows LAWMA to allocate more replacement water to our members because water in storage is firm water. Therefore, storage will allow LAWMA to increase the allocation to LAWMA common shares, particularly in dry years.**

Water Sharing with Colorado Springs Utilities

Hendrix Wai Engineering, Inc.

&

Moses, Wittemyer, Harrison and Woodruff, P.C.

- **CS-U has acquired 2,500 LAWMA common shares, and CS-U and LAWMA have entered into a "Water Sharing Agreement" to provide for LAWMA's delivery of water to those shares.**
- **CS-U will only take delivery of the annual allocation to its 2,500 LAWMA common shares in 5 of every 10 consecutive years. These are "CS-U Allocation Years."**
- **In the CS-U Allocation Years, CS-U will be entitled to the annual allocation to its 2,500 LAWMA common shares, as that allocation is set by the LAWMA Board for all common shares.**
- **In the 5 out of every 10 consecutive years that are not CS-U Allocation Years, LAWMA will keep, for the use of its members other than CS-U, the water that otherwise would have been used for the allocation to CS-U's LAWMA shares.**
- **LAWMA will "fund" the allocation to CS-U's LAWMA shares with water available in rotation to 3,303 of LAWMA's 6,080 FLCC shares.**
- **LAWMA's delivery of water to CS-U will involve no change in the approved time, place, or manner of FLCC's deliveries to LAWMA's FLCC shares.**
- **CS-U will notify LAWMA by February 1 of each year whether CS-U will take its LAWMA allocation that year.**

- **After taking delivery of the allocation to its 2,500 LAWMA common shares, CS-U will seek to exchange the water up to Pueblo Reservoir and into the CS-U municipal system.**
- **If CS-U requests delivery of its allocation and the Division Engineer determines that no exchange potential exists, LAWMA will keep the water for the benefit of LAWMA members other than CS-U.**
- **CS-U currently is reimbursing LAWMA for the lease of 500 acre-feet of storage in the West Farm Gravel Pit, which LAWMA uses to increase the yield to all LAWMA commons shares.**
- **Upon entry of a final decree in the water court case that LAWMA will bring to change the use of its FLCC share water, CS-U will reimburse LAWMA for the purchase of 500 acre-feet of storage in the West Farm Gravel Pit, which LAWMA will continue to use to increase the yield to all LAWMA common shares.**
- **CS-U and Arkansas River Farms will pay all of LAWMA's costs for bringing the water court case to change the use of LAWMA's FLCC share water.**
- **CS-U also has reimbursed LAWMA for its legal and engineering costs and expenses for negotiating the Water Sharing Agreement and obtaining the FLCC's approval of LAWMA's and CS-U's proposed operations.**

The Water-Sharing Agreement's Tangible Benefit to LAWMA

- **In the 5 out of 10 years that are not CS-U Allocation Years, LAWMA's use of the water will increase the allocation to all other LAWMA members' common shares by approximately 10%.**

    - **For a well pumping for irrigation purposes under LAWMA's augmentation plan in an average allocation year, that increase will mean approximately 0.2 additional acre-feet of pumping per common share.**

    - **For a sole-source well pumping within LAWMA's Rule 14 plan in an average allocation year, the increase in allocation will mean approximately 0.3 additional acre-feet of pumping per common share.**

LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION

Minutes of the Annual Stockholders Meeting

November 16, 2018

DRAFT***

The forty-sixth Annual Meeting of the Lower Arkansas Water Management Association was held on November 16, 2018 at 10:00 A.M. at the LAWMA office in Lamar, Colorado.

President William Grasmick called the meeting to order and then asked for a report from a credentials committee consisting of members Ron Peterson and Donald Seufer. The Committee reported that there were already members present or present by proxy representing 18340.3 votes and thus a quorum was present and indicated that they would report the exact attendance numbers later in the meeting.

The President called on the Secretary to introduce the Board of Directors and guests in attendance. Guests included LAWMA engineers Ayrton and Randy Hendrix and LAWMA attorney Richard Mehren. He noted attendance by Rena Brand and Dan Kirmer of Colorado Parks and Wildlife.

The minutes of the last annual meeting were read and upon motion and second were approved as read.

Randy Hendrix presented his engineering report detailing the water operations of LAWMA for the 2018 plan year and reported that it was a good year. He reviewed scenarios for the allocation for 2019 and spoke of the benefits of several proposed trades. He reported on engineering and accounting issues for the year and various water court cases. He distributed a handout concerning the water sharing program and detailed the benefits for the members. He answered several questions from the members. Stockholder Dallas May asked several questions regarding revegetation issues.

Richard Mehren presented a detailed legal report for the year and touched on several topics of interest to the membership. He reported on Compact compliance, several water court matters currently pending or planned to be filed, trades that were in progress, the LAWMA Rule 10 Plan, and reduction of water available under LAWMA's water rights due to revegetation issues. He gave a detailed presentation and passed out a handout detailing the contract for the purchase of the West Farm gravel pit storage phase one cell along with a detailed analysis of the cost per share, and the plan to apply for a loan and grant from the CWCB in February. Stockholder Dallas May asked several questions regarding the purchase and loan and grant application.

The Treasurer gave a financial report for the year and reported that the Directors recommendation to the members is that the share assessment be increased by $1.50 per common share. A motion was made and seconded to approve the financial report and to set the share assessment at $39.50 per common share - ($ 98.75 per preferred share) for 2019. The motion carried by voice vote with no opposition.

President Grasmick explained that there were three expiring positions on the LAWMA Board of Directors this year and called on a Nominating Committee of Directors Broyles and Seufer for a report. Director Seufer reported that current Directors Don Higbee, Bill Broyles, and Greg Spitzer were willing to serve again and recommended them for reelection to the Board. The President called for other nominations from the floor. Stockholder Riley May was nominated from the floor.

Seeing no other nominations, the President appointed an election committee of Ron Peterson, Bob Wilger, and Norman Arends to count the ballots. While waiting for the results, the President called for any further questions for the Board or the attorney or engineers.

The election committee reported that the three new Directors elected for three-year terms were Don Higbee, Bill Broyles, and Greg Spitzer.

The Credentials Committee reported that the final attendance figures were 54 members present or present by proxy representing 23,066.9 votes.*

There being no further business before the members, the meeting was adjourned at 11:25 A.M.

* A mistake in addition was discovered later and the report was corrected to read 53 members present or present by proxy representing 22,642.9 votes.

_____
Signature

_____
Date

Purchase Of West Farm Gravel Pit Storage – Phase 1 Cell

Hendrix Wai Engineering, Inc.

&

Moses, Wittemyer, Harrison and Woodruff, P.C.

- **LAWMA has contracted with GP Aggregates, LLC, to purchase the entire Phase I storage cell of the West Farm Gravel Pit Complex for $4.595 million.**

    - **The Phase 1 storage cell, which has a total usable capacity of approximately 1,638 acre-feet, includes the 500 acre-feet of storage capacity for which CS-U will reimburse LAWMA in the amount of $1.75 million.**

    - **The purchase of the remaining storage (1,138 acre-feet) for $2.845 million will be paid for by LAWMA.**

- **The purchase will include the inlet and outlet facilities and carriage in the Lamar Canal to deliver water into the pit.**

- **To finance the purchase, in February of 2018 LAWMA will apply for a loan from the Colorado Water Conservation Board and will also apply for grant funds available through the Colorado Water Plan.**

- **Closing will likely take place during the summer of 2019.**

- **The LAWMA Board estimates that until LAWMA completes the water court change case for LAWMA's FLCC share water, share assessments will need to be increased by $3.50 per LAWMA common share to finance the purchase of the storage pit.**

- **The share assessment increase would be made in two increments - a proposed increase of $1.50 per LAWMA common share for 2019 and then a proposed additional increase of $2.00 per LAWMA common share beginning in 2020 (for a total increase of $3.50 per share).**

- **Once LAWMA completes the water court change case for LAWMA's FLCC share water, the share assessments will need to be increased again in the range of another $0.50 to $1.50 per LAWMA common share (for a total overall increase of $4.00 to $5.00 per share) to finance the purchase of the storage pit.**

Benefits to LAWMA from Gravel Pit Storage

- **West Farm Gravel Pit storage will benefit LAWMA in the following ways:**

    - **It will provide an additional means of meeting LAWMA's replacement obligations to in-state water rights, particularly at the beginning and end of the irrigation season.**

    - **It will allow LAWMA maximize the use of its water supplies by providing a place for LAWMA to store LAWMA's consumable water that is in excess of LAWMA's replacement obligations for use at a later time.**

    - **Without storage, LAWMA's excess consumable water would be left in the river for use by other in-state water users or Kansas with no benefit to LAWMA.**

    - **Having replacement water in storage allows LAWMA to allocate more replacement water to our members because water in storage is firm water. Therefore, storage will allow LAWMA to increase the allocation to LAWMA common shares, particularly in dry years.**

EXHIBIT A

Letters of Matching and/or Pending 3rd Party Commitments

WATER SHARING AGREEMENT
BY AND BETWEEN
THE LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION
AND
THE CITY OF COLORADO SPRINGS, ACTING BY AND THROUGH ITS ENTERPRISE, COLORADO SPRINGS UTILITIES

This **WATER SHARING AGREEMENT** (the "Agreement") is made and entered into effective the **16th** day of July, 2018, by and between the **LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION**, a Colorado Nonprofit Corporation ("LAWMA"), and the **CITY OF COLORADO SPRINGS**, Colorado, a home rule City and municipal corporation, acting by and through its Enterprise, **COLORADO SPRINGS UTILITIES** ("CS-U"). LAWMA and CS-U are sometimes referred to herein, individually, as a "Party," and collectively, as the "Parties."

RECITALS

WHEREAS, LAWMA is a Colorado Nonprofit Corporation organized for, among other things, delivering augmentation and replacement water to irrigators in the Lower Arkansas River Valley;

WHEREAS, in December, 2017, the LAWMA shareholders amended their Articles of Incorporation to confirm LAWMA's authority to directly deliver fully-consumable water to structures on the Arkansas River, including directly delivering water decreed for municipal and industrial purposes;

WHEREAS, CS-U is a four-service public municipal utility that provides, among other things, municipal and industrial water service to the City of Colorado Springs, Colorado ("Colorado Springs"), and several other communities within the vicinity of Colorado Springs;

WHEREAS, on March 16, 2017, LAWMA and Arkansas River Farms, LLC, a Colorado Limited Liability Company ("ARF"), entered into a Second Amended and Restated Water Rights Exchange Agreement and Reimbursement Agreement (the "Trade Agreement");

WHEREAS, pursuant to the Trade Agreement, LAWMA issued 6,080 shares of LAWMA common stock to ARF in exchange for 6,080 shares of stock in the Fort Lyon Canal Company (the "6,080 Fort Lyon Shares");

WHEREAS, pursuant to the Trade Agreement, LAWMA agreed to initiate a change of water rights proceeding in the Water Court for Water Division 2 to add augmentation and replacement uses to the decreed uses of the 6,080 Fort Lyon Shares and 1,429 additional shares of stock in the Fort Lyon Company that LAWMA intends to acquire from ARF in 2018 (the "ARF/LAWMA Change Case"), and to initiate and pursue certain additional administrative proceedings, including a substitute water supply plan and/or interruptible water supply plan, for ARF's benefit (the "ARF/LAWMA Administrative Proceedings");

WHEREAS, pursuant to the Trade Agreement, ARF agreed to reimburse LAWMA for its reasonable costs and expenses, including its reasonable legal and engineering costs and expenses, for the ARF/LAWMA Change Case and the ARF/LAWMA Administrative Proceedings;

WHEREAS, the 6,080 Fort Lyon Shares have historically been used for irrigation in Bent County, Prowers County, and Otero County, Colorado;

WHEREAS, on December 20, 2016, the Board of Directors of the Fort Lyon Canal Company issued an Amended Decision authorizing LAWMA to pursue the ARF/LAWMA Change Case and the ARF/LAWMA Administrative Proceedings on certain terms and conditions (the "ARF/LAWMA Fort Lyon Approval");

WHEREAS, on July 11, 2018, CS-U and ARF executed a Contract for Purchase of Lower Arkansas Water Management Association Stock pursuant to which, provided certain contingencies are satisfied or waived, CS-U will, in July, 2018, close on the purchase of 2,500 of the 6,080 LAWMA Shares (the "2,500 LAWMA Shares"), which are represented by LAWMA Share Certificates Nos. 786 and 826. The share certificate numbers of the 6,080 Fort Lyon Shares, as delivered by ARF and as reissued to LAWMA, are shown in **Exhibit A**;

WHEREAS, each year, the LAWMA Board of Directors allocates a certain amount of fully-consumable water to each share of LAWMA common stock under the procedures set forth in LAWMA's Bylaws and Articles of Incorporation (individually, an "Annual Allocation" and collectively, the "Annual Allocations");

WHEREAS, the Parties desire to use the 2,500 LAWMA Shares to implement an Alternative Transfer Method ("ATM") pursuant to which CS-U will, in five out of every ten consecutive years, forgo the Annual Allocation to each of its 2,500 LAWMA Shares ("CS-U's Forgone Allocations") in exchange for, in the other five out of every ten consecutive years, the direct delivery from LAWMA of fully-consumable water decreed for municipal and industrial uses in CS-U's existing and future service area in an amount equal to the Annual Allocation to each of CS-U's 2,500 LAWMA Shares ("CS-U's Allocation");

WHEREAS, based on independent investigations and analyses, CS-U believes that in the years CS-U takes delivery of CS-U's Allocation from LAWMA, CS-U's Allocation will average 2,050 acre-feet of water, although CS-U acknowledges that the amount of water ultimately delivered is subject to hydrological variability and the LAWMA Board of Directors' discretion to determine the Annual Allocations;

WHEREAS, on February 22, 2018, the Parties entered into a Non-Binding Term Sheet concerning this ATM, entitled Colorado Springs Utilities/LAWMA Water-Sharing Agreement (the "Non-Binding Term Sheet"), that set forth some of the basic operating principles of the ATM;

WHEREAS, pursuant to the Non-Binding Term Sheet, the Parties intend that CS-U will take direct delivery of CS-U's Allocation at the locations on the mainstem of the Arkansas River above John Martin Dam where one or more of ARF's augmentation stations on the Fort Lyon Canal are capable of delivering water (the "Direct Delivery Locations"). The Direct Delivery Locations are shown on the map attached hereto as **Exhibit B**;

WHEREAS, pursuant to the Non-Binding Term Sheet, the Parties intend that CS-U's Allocation will be fully consumable and decreed, or otherwise authorized, for municipal and industrial uses in CS-U's existing or future service area;

WHEREAS, to implement the ATM, LAWMA and ARF must obtain a 1041 Permit from Bent County that authorizes LAWMA to change the use of certain of the 6,080 Fort Lyon Shares to include municipal and industrial uses within CS-U's existing and future service area ("Contingency No. 1");

WHEREAS, to implement the ATM, LAWMA must apply to the Board of Directors of the Fort Lyon Canal Company to approve a change of the type and place of use of a sufficient number of the 6,080 Fort Lyon Shares ("Designated Fort Lyon Shares") to deliver CS-U's Allocation for municipal and industrial uses in CS-U's existing and future service area and to authorize CS-U to exchange CS-U's Allocation to Lake Meredith and/or Pueblo Reservoir ("Contingency No. 2");

WHEREAS, to implement the ATM, LAWMA must contract for acquisition of the following "Dedicated Storage and Carriage Capacity" in the West Farm gravel pit reservoir under the Lamar Canal: (1) 500 acre-feet of dedicated, active, and useable storage capacity, (2) sufficient dedicated capacity in the inlet to the reservoir (including carriage in the Lamar Canal), and (3) sufficient dedicated capacity in the outlet of the reservoir (including pumping of water from the reservoir into the outlet canal), and CS-U must agree to reimburse LAWMA for the expense of this acquisition ("Contingency No. 3");

WHEREAS, to implement the ATM, LAWMA must include an additional claim in the ARF/LAWMA Change Case to add municipal and industrial uses in CS-U's existing and future service area to the decreed uses of the Designated Fort Lyon Shares ("Contingency No. 4");

WHEREAS, to implement the ATM, CS-U, with LAWMA's cooperation, must apply to the Water Court for Water Division 2 for an appropriative right of exchange to exchange CS-U's Allocation from the Direct Delivery Locations to Lake Meredith and/or Pueblo Reservoir ("Contingency No. 5");

WHEREAS, to implement the ATM, LAWMA and CS-U must enter into a binding agreement setting forth the operating principles of the ATM ("Contingency No. 6");

WHEREAS, to implement the ATM, the LAWMA Board of Directors must approve the operation of the ATM under the procedures set forth in LAWMA's Articles of Incorporation and Bylaws ("Contingency No. 7");

WHEREAS, Contingencies No. 1 through No. 7 must be satisfied or addressed before CS-U closes on the purchase of the 2,500 LAWMA Shares;

WHEREAS, on April 3, 2018, ARF and LAWMA jointly obtained a 1041 Permit from Bent County, Colorado, permitting the cessation of agriculture on the lands in Bent County, Colorado, that were historically irrigated by certain of the 6,080 Fort Lyon Shares, and authorizing LAWMA to change the use of the Designated Fort Lyon Shares to include municipal and industrial uses (the "Bent County 1041 Permit"), which satisfied Contingency No. 1;

WHEREAS, on May 5, 2018, LAWMA applied to the Fort Lyon Canal Company to obtain further approval from the Fort Lyon Canal Company to allow LAWMA to include a claim in the ARF/LAWMA Change Case to add municipal and industrial uses in CS-U's existing and future service area to the decreed uses of the Designated Fort Lyon Shares and to authorize the exchange of the water derived from such shares from the Direct Delivery Locations to Lake Meredith and/or Pueblo Reservoir (the "Further Fort Lyon Approval Application");

WHEREAS, the Fort Lyon Canal Company will convene a board meeting or hearing during 2018 to consider the Further Fort Lyon Approval Application, and the Parties anticipate that the Fort Lyon Canal Company will issue a decision on the Further Fort Lyon Approval Application thereafter;

WHEREAS, if the Fort Lyon Canal Company approves the Further Fort Lyon Application on terms and conditions acceptable to the Parties, such approval (the "Further Fort Lyon Approval") will satisfy Contingency No. 2;

WHEREAS, on July 16, 2018, LAWMA contracted with GP Aggregates, LLC, for the lease and subsequent purchase of the Dedicated Storage and Carriage Capacity, which partially satisfies Contingency No. 3;

WHEREAS, by this Agreement, the Parties wish to address by contract what will occur if Contingency No. 2 is not satisfied, and how Contingencies No. 3 through No. 5 will be satisfied; and wish to satisfy Contingencies No. 6 and No. 7, so that CS-U may close on the purchase of the 2,500 LAWMA Shares (the "ARF/CS-U Closing"), and the Parties may establish the ATM; and

WHEREAS, by the Agreement, the Parties further wish to provide flexibility so that the operating principles of the ATM may be revised, improved, and/or amended for the mutual benefit of the Parties as they gain experience from operating the ATM.

NOW THEREFORE, for good consideration, the receipt and sufficiency of which is acknowledged, the Parties agree as follows:

TERMS AND CONDITIONS

The Recitals set forth above are hereby incorporated into the terms and conditions of the Agreement set forth below.

1. Effective Date. This Agreement shall become effective on the day that CS-U closes on the purchase of the 2,500 LAWMA Shares (the "Effective Date"). In the event that CS-U does not close on the purchase of the 2,500 LAWMA Shares, for whatever reason, this Agreement shall be null and void, and the Parties shall have no further obligations to each other.

2. Further Fort Lyon Approval. The Parties agree that if the Fort Lyon Canal Company fails or refuses to approve the Further Fort Lyon Approval Application; fails or refuses to issue the Further Fort Lyon Approval; issues the Further Fort Lyon Approval with terms and conditions that either Party deems unacceptable; or otherwise fails or refuses to authorize

LAWMA to directly deliver water to CS-U as contemplated by this Agreement, the Parties will work cooperatively to find an alternative method and/or source of water to operate the ATM contemplated by this Agreement for CS-U's Changed Uses, as CS-U's Changed Uses are defined below (an "Alternative ATM"). Accordingly, the Parties agree that if any of the above-stated conditions occur, they will pursue the following steps:

2.1 The Parties will, at CS-U's expense, jointly investigate the legal and engineering feasibility of any Alternative ATM proposed by CS-U, including but not limited to the following: (1) the delivery of water attributable to CS-U's Allocation in a manner consistent with the ARF/LAWMA Fort Lyon Approval, such as by augmenting well pumping; (2) the delivery of water attributable to CS-U's Allocation through delivery to CS-U of a portion of the fully consumable water available to LAWMA's Highland Canal water rights changed in Case Nos. 02CW181 or 10CW85, whether such delivery occurs under LAWMA's plan for augmentation, under an interruptible water supply agreement, or otherwise; and (3) changing the type and place of use of such Highland Canal water rights to include direct use by CS-U.

2.2 If the Parties reasonably conclude that one or more of the proposed Alternative ATMs (1) is/are consistent with state and federal law; (2) is/are authorized by the Arkansas River Preservation Principles, the Arkansas River Compact, and LAWMA's Articles of Incorporation and Bylaws; and (3) will have no adverse impact on LAWMA and/or its members and shareholders, then CS-U may, pursuant to the provisions of LAWMA's Articles of Incorporation and Bylaws, request LAWMA's approval for the delivery of CS-U's Allocation pursuant to any such Alternative ATM.

2.3 CS-U must reimburse LAWMA for any additional costs, fees and/or expenses reasonably incurred for LAWMA to evaluate and implement any Alternative ATM, including any administrative, legal, and engineering fees or expenses, or other out-of-pocket costs to obtain the required approval of the LAWMA Board; to obtain any necessary court, administrative, or other governmental approvals, such as court decrees, 1041 permits or SWSPs; and to effectuate such Alternative ATM, such as costs of dry-up or revegetation ("Alternative ATM Costs"). Before the Parties pursue the development of any Alternative ATM pursuant to this Section 2, the Parties will enter into a reimbursement agreement to provide for CS-U's payment of the Alternative ATM Costs to LAWMA.

2.4 In the event that the Parties are unable to identify or otherwise implement an Alternative ATM, or CS-U concludes, in its sole discretion, that, for any reason, it does not want to attempt to implement and/or operate an Alternative ATM, CS-U may invoke the termination provisions under Section 33 of this Agreement.

ARF/LAWMA CHANGE CASE PROCEEDING

3. ARF/LAWMA Change Case. Within 180 days of the Further Fort Lyon Approval in a form that is acceptable to the Parties, LAWMA shall initiate the ARF/LAWMA Change

Case. In addition to the claims that LAWMA is obligated to pursue by the Trade Agreement, LAWMA shall include a claim for the benefit of CS-U to change the decreed use of the Designated Fort Lyon Shares to include use, reuse, successive use and use to extinction, directly, after storage or by exchange, for all beneficial uses, including, without limitation, municipal, industrial, domestic, agricultural, industrial, commercial, irrigation, stock watering, fire protection, recreation, in-reservoir fish and wildlife preservation and propagation, recharge of aquifers, exchange purposes, replacement of historical return flows, replacement of depletions resulting from the use of water from other sources, relinquishment pursuant to Section 37-90-137(9)(b), C.R.S., and all augmentation purposes ("CS-U's Changed Uses").

3.1 Upon entry of a decree approving a change of use of the Designated Fort Lyon Shares for CS-U's Changed Uses, the yield to the Designated Fort Lyon Shares will be sufficient to allow LAWMA to directly deliver to CS-U, at one or more of the Direct Delivery Locations, the volume of fully consumable water necessary to supply Annual Allocations to the 2,500 LAWMA Shares.

3.2 The Designated Fort Lyon Shares do not include any of the 6,080 Fort Lyon Shares that have been used historically below John Martin Dam or outside of Bent County.

3.3 Before circulating to any Opposer or tendering to the Water Court any proposed or final decree in the ARF/LAWMA Change Case, LAWMA shall first provide CS-U with the opportunity to review and comment on a final draft of any such decree. LAWMA agrees that it will not circulate to any Opposer or tender to the Water Court any proposed or final decree that is not acceptable to CS-U, and LAWMA agrees that it will pursue the ARF/LAWMA Change Case through trial and appeal to achieve a final decree that is acceptable to CS-U; provided that CS-U shall not deem unacceptable any proposed or final decree in the ARF/LAWMA Change Case that a municipal utility would conclude reasonably and practically permits use of the Designated Fort Lyon Shares for CS-U's Changed Uses in CS-U's existing and future service area.

3.4 Before entering into any stipulation with any Opposer in the ARF/LAWMA Change Case, LAWMA shall first provide CS-U with the opportunity to review and comment on a final draft of any such stipulation. LAWMA agrees that it will not enter into any stipulation that is not acceptable to CS-U, and LAWMA agrees that it will pursue the ARF/LAWMA Change Case through trial and appeal if it cannot reach stipulations with all Opposers to the ARF/LAWMA Change Case that are acceptable to CS-U; provided that CS-U shall not deem unacceptable any stipulation that a municipal utility would conclude reasonably and practically permits use of the Designated Fort Lyon Shares for CS-U's Changed Uses in CS-U's existing and future service area.

3.5 While the ARF/LAWMA Change Case is pending before the Water Referee, the Parties shall meet, by phone or in person, at least quarterly to discuss the ARF/LAWMA Change Case. While the ARF/LAWMA Change Case is pending

before the Water Judge, the Parties shall meet, by phone or in person, at least monthly to discuss the ARF/LAWMA Change Case.

3.6 CS-U may file a Statement of Opposition in Support of the ARF/LAWMA Change Case, and participate in any trial and/or appeal in support of the ARF/LAWMA Change Case.

3.7 The ARF/LAWMA Change Case, including any final decree or proposed decrees, and stipulations therein, shall be consistent with the Further Fort Lyon Approval, the Bent County 1041 Permit, the Arkansas River Preservation Principles, and the Arkansas River Compact.

4. SWSP Application. Within a reasonable time after the ARF/LAWMA Change Case has been filed, LAWMA shall initiate and file a substitute water supply plan ("SWSP") with the Division Engineer for Water Division 2, under Section 37-92-308, C.R.S., to temporarily add CS-U's Changed Uses in CS-U's existing service area to the approved uses of the Designated Fort Lyon Shares. For the purposes of this Agreement, the first April 1 after the SWSP is approved by the Division Engineer, is the "Operations Start Date."

4.1 The SWSP shall be used by LAMWA to support the operation of the ATM while the ARF/LAWMA Change Case is pending.

4.2 LAWMA shall pursue the SWSP on terms and conditions that are identical, or as close as reasonably possible, to the terms and conditions sought in the ARF/LAWMA Change Case for CS-U's Changed Uses.

5. Reimbursement for ARF/LAWMA Change Case and SWSP. CS-U shall reimburse LAWMA for the costs and expenses of the ARF/LAWMA Change Case and the SWSP as follows:

5.1 CS-U will reimburse LAWMA for one-half of its reasonable costs, fees, and expenses for the ARF/LAWMA Change Case ("CS-U's Costs and Expenses for the Change Case"); and ARF will reimburse LAWMA for the other one-half of its reasonable costs, fees and expenses for the ARF/LAWMA Change Case. CS-U will not reimburse LAWMA for any of the costs, fees, and expenses, including the legal and engineering costs and expenses, of the ARF/LAWMA Administrative Proceedings. Before LAWMA executes this Agreement, LAWMA and ARF shall execute an amendment to the Trade Agreement to reflect the above understanding.

5.2 CS-U's Costs and Expenses for the Change Case shall be limited to only those costs, fees, and expenses necessary to prepare, initiate, and prosecute the ARF/LAWMA Change Case, including any trial and appeal, and shall include reasonable attorneys' fees, engineering expenses, and administrative expenses.

5.3 CS-U shall reimburse LAWMA for all reasonable costs and expenses, including reasonable legal and engineering costs and expenses, for the SWSP ("CS-U's Costs and Expenses for the SWSP").

5.4 CS-U's Costs and Expenses for the SWSP shall be limited to only those costs and expenses necessary to prepare, initiate, and prosecute the SWSP, including any hearing and appeal, and shall include reasonable attorneys' fees, engineering expenses, and administrative expenses.

5.5 Before beginning any work on the ARF/LAWMA Change Case or the SWSP, LAWMA shall submit a good-faith budget to CS-U detailing CS-U's projected costs and expenses for the ARF/LAWMA Change Case and the SWSP during the remainder of that budgetary year (the first of which runs through December 31 of the first year of this Agreement) and during the upcoming budgetary year (which runs from January 1 through December 31 of the second year of this Agreement) (the "First- and Second-Year Budgets"). By October 1 of the second year of this Agreement, and each October 1 thereafter while the ARF/LAWMA Change Case remains pending, LAWMA shall submit a good-faith budget to CS-U detailing CS-U's projected costs and expenses for the ARF/LAWMA Change Case and the SWSP during the next upcoming budgetary year (which runs from January 1 through December 31 of the third year of this Agreement, and each January 1 through December 31 thereafter) (the "Budget"). During the first and second years of this Agreement, CS-U shall include the First- and Second-Year Budget in its annual requests for appropriations, as necessary; and thereafter, CS-U shall include the Budget in its annual request for appropriations, as necessary. The Parties shall meet and confer each year once LAWMA has incurred CS-U's Costs and Expenses for the Change Case and/or CS-U's Costs and Expenses for the SWSP totaling one-half of the First- and Second-Year Budget or of the Budget to discuss supplemental budgeting, if necessary.

5.6 LAWMA shall invoice CS-U in writing by the 15th of every month for CS-U's Costs and Expenses for the Change Case and for CS-U's Costs and Expenses for the SWSP (the "Change and SWSP Invoice"). The Change and SWSP Invoice shall include a description of each cost and expense incurred by LAWMA, including, without limitation, a description of the times, activities, and billing rates of each attorney or engineer who performed work on behalf of LAWMA.

5.7 CS-U shall remit payment to LAWMA for each Change and SWSP Invoice within ninety (90) days of receipt of the Change and SWSP Invoice.

5.8 In the event that CS-U disputes any costs and/or expenses in the Change and SWSP Invoice, CS-U may invoke the dispute resolution procedures under this Agreement.

6. Termination of the Water Court Proceedings. If, at any time during the pendency of the ARF/LAWMA Change Case, it becomes apparent to CS-U that LAWMA will not be able to obtain a decree approving CS-U's Changed Uses that will be satisfactory to CS-U, or the Parties have irreconcilable differences about the direction or prosecution of the ARF/LAWMA Change Case, CS-U, at CS-U's sole discretion, may direct LAWMA to dismiss CS-U's Changed Uses, with prejudice, from the ARF/LAWMA Change Case application, and invoke the termination procedures under this Agreement. In this event, CS-U shall not be responsible for any costs and expenses incurred by LAWMA for the

ARF/LAWMA Change Case (or the SWSP) after the date on which CS-U's Changed Uses are dismissed with prejudice from the ARF/LAWMA Change Case application ("CS-U Dismissal Date"), or for other payments that would accrue under this Agreement after the CS-U Dismissal Date, such as payments to LAWMA for the Dedicated Storage and Carriage Capacity.

EXCHANGE CASE APPLICATION

7. Exchange Case Application. Any time after the Effective Date, CS-U may apply to the Water Court for Water Division 2 for an appropriative right of exchange to exchange CS-U's Allocation from the Direct Delivery Locations to Lake Meredith and/or Pueblo Reservoir (the "Exchange Case Application").

7.1 CS-U shall be solely responsible for the direction and prosecution of the Exchange Case Application, as well as the costs and expenses of the Exchange Case Application.

7.2 LAWMA agrees that the Exchange Case Application may include additional claims to exchange to Lake Meredith and/or Pueblo Reservoir other Temporary Use Agreement Waters that can be made available at the Direct Delivery Locations or other locations in the Lower Arkansas River Valley, under a procedure analogous to the one set forth in the Findings of Fact, Conclusions of Law, Judgment and Decree entered in Case No. 2005CW96, Water Division 2.

7.3 The Exchange Case Application, including any decree and stipulations therein, shall be consistent with the Further Fort Lyon Approval, the Bent County 1041 Permit, and the Arkansas River Compact.

7.4 LAWMA agrees that it will not oppose the Exchange Case Application, except as necessary to ensure compliance with the terms and conditions of this Agreement, and LAWMA will reasonably cooperate with CS-U to pursue the Exchange Case Application, if requested.

7.5 While the Exchange Case Application is pending, CS-U shall seek administrative approvals or substitute water supply plans under Section 37-92-308, C.R.S., to exchange CS-U's Allocation from the Direct Delivery Locations to Lake Meredith and/or Pueblo Reservoir.

8. Joint Application. LAWMA agrees that, if requested by CS-U, LAWMA will participate as a joint applicant in the Exchange Case Application. In this event, the Exchange Case Application shall also include a claim for an appropriative right of exchange to exchange CS-U's Forgone Allocations from the Direct Delivery Locations to Lake Meredith and/or Pueblo Reservoir.

8.1 In the event that LAWMA participates as a co-applicant, CS-U shall reimburse LAWMA for all reasonable costs and expenses, including reasonable legal and

engineering costs and expenses, incurred by LAWMA in the Exchange Case Application ("CS-U's Costs and Expenses for the Exchange Case Application").

8.2 CS-U's Costs and Expenses for the Exchange Case Application shall be limited to only those costs and expenses necessary to prepare, initiate, and prosecute the Exchange Case Application, including any trial and appeal; and shall include reasonable attorneys' fees and engineering expenses.

8.3 Before beginning any work on the Exchange Case Application, LAWMA shall submit a good-faith budget to CS-U detailing LAWMA's projected costs and expenses for the Exchange Case Application during the remainder of that budgetary year (the first of which runs through December 31 of the first year of this Agreement) and during the upcoming budgetary year (which runs from January 1 through December 31 of the second year of this Agreement) (the "First- and Second-Year Exchange Budgets"). By October 1 of the second year of this Agreement, and each October 1 thereafter while the Exchange Case Application remains pending, LAWMA shall submit a good-faith budget to CS-U detailing LAWMA's projected costs and expenses for the Exchange Case Application during the next upcoming budgetary year (which runs from January 1 through December 31 of the third year of this Agreement, and each January 1 through December 31 thereafter) (the "Exchange Budget"). During the first and second years of this Agreement, CS-U shall include the First- and Second-Year Exchange Budget in its annual request for appropriations, as necessary; and thereafter, CS-U shall include the Exchange Budget in its annual request for appropriations, as necessary. The Parties shall meet and confer each year once LAWMA has incurred costs and expenses totaling one-half of the First- and Second-Year Exchange Budget or of the Exchange Budget to discuss supplemental budgeting and appropriation, if necessary.

8.4 LAWMA shall invoice CS-U in writing by the 15th of each month for CS-U's Costs and Expenses for the Exchange Case Application (the "Exchange Invoice"). The Exchange Invoice shall include a description of each cost and expense incurred by LAWMA, including, without limitation, a description of the times, activities, and billing rates of each attorney or engineer who performed work on behalf of LAWMA.

8.5 CS-U shall remit payment to LAWMA for the Exchange Invoice within ninety (90) days of receipt of the Exchange Invoice.

8.6 In the event that CS-U disputes any costs and/or expenses in the Exchange Invoice, CS-U may invoke the dispute resolution procedures under this Agreement.

PAYMENT FOR DEDICATED STORAGE AND CARRIAGE CAPACITY

9. Purchase. As set forth in the Recitals, above, LAWMA has contracted with GP Aggregates, LLC ("GP"), to use the Dedicated Storage and Carriage Capacity during the pendency of the ARF/LAWMA Change Case, as well as for an option to purchase the

Dedicated Storage and Carriage Capacity from GP. LAWMA's and GP's "Agreement for Lease and Subsequent Purchase and Sale of Water Storage and Carriage Capacity" is referred to herein as the "LAWMA/GP Agreement." A copy of the executed LAWMA/GP Agreement is attached as **Exhibit C**.

10. Payment. CS-U will pay LAWMA for the cost of using and ultimately purchasing the Dedicated Storage and Carriage Capacity, the principal purchase price of which is $1.75 million ("Storage Purchase Price"). As described more fully below, such payment will comprise annual payments of $125,000 to LAWMA while the ARF/LAWMA Change Case is pending ("Annual Storage Payment") and a final payment to LAWMA for that portion of the Storage Purchase Price that remains unpaid as of the date that LAWMA has obtained a final, unappealable water court decree in the ARF/LAWMA Change Case or has implemented an Alternative ATM ("Final Storage Payment").

10.1 As a condition of the LAWMA/GP Agreement, LAWMA paid $2,941 to GP as an Earnest Money Deposit for purchase of the Dedicated Storage and Carriage Capacity. LAWMA shall include the Earnest Money Deposit as a Reimbursable Expense under the next Monthly Invoice that LAWMA submits to CS-U under the Reimbursement Agreement between the Parties dated June 26, 2018 ("Initial Reimbursement Agreement"), and CS-U shall reimburse LAWMA for its payment of the Earnest Money Deposit in accordance with the terms and conditions of the Initial Reimbursement Agreement.

10.2 Funds sufficient to cover the Storage Purchase Price will be held in CS-U's Restricted Cash general ledger Account No. 100-000000-134010-1006 'Restr Cash – LAWMA Escrow', as reported on the CS-U Statements of Net Position ("Escrow Account") and will only be released to LAWMA when LAWMA has obtained a final, unappealable water court decree in the ARF/LAWMA Change Case or has implemented an Alternative ATM.

10.3 CS-U shall fund the Escrow Account in the amount of $1.75 million upon the ARF/CS-U closing. The funds held in the Escrow Account shall not be used by CS-U for any purpose other than making the Final Storage Payment in accordance with the terms and conditions of this Section 10.

10.4 Beginning on the Effective Date, and continuing until entry of a final, unappealable water court decree in the ARF/LAWMA Change Case or implementation of an Alternative ATM, CS-U shall make the Annual Storage Payments to LAWMA in the amount of $125,000.00, as follows:

10.4.1 On the Effective Date, CS-U shall pay LAWMA $125,000, in immediately available funds, as reimbursement for LAWMA's first annual lease payment to GP, in the amount of the Annual Storage Payment, for use of the Dedicated Storage and Carriage Capacity ("LAWMA Lease Payment").

10.4.2 During the pendency of LAWMA's lease of the Dedicated Storage and Carriage Capacity under the LAWMA/GP Agreement ("LAWMA Lease

Period"), the following terms and conditions will apply to CS-U's payment to LAWMA of the Annual Storage Payments.

i. Under the LAWMA/GP Agreement, LAWMA's Lease Payment is due annually on the date that is twenty-eight days before the anniversary of the effective date of that agreement ("Annual Lease Payment Date"). No earlier than forty-two days in advance of the Annual Lease Payment Date, LAWMA shall deliver to CS-U a written invoice for the Annual Storage Payment ("Annual Storage Payment Invoice"). CS-U shall deliver the Annual Storage Payment to LAWMA within twenty-eight days of receiving such invoice.

ii. LAWMA shall make the LAWMA Lease Payments to GP, which will apply such payments, both principal and interest, to the Storage Purchase Price in accordance with the Purchase Price Amortization Schedule attached to the LAWMA/GP Agreement as Schedule 2.4 ("GP Amortization Schedule") and attached hereto as **Exhibit D**. CS-U shall hold in the Escrow Account the amount shown in the "Ending Balance" column of the GP Amortization Schedule (where "Month 1" on the GP Amortization Schedule corresponds to one month after the Effective Date of this Agreement). Escrow Funds in excess of the amount shown in the "Ending Balance" column of the GP Amortization Schedule will be released back to CS-U on a monthly basis.

10.4.3 As of the date of termination of the LAWMA Lease Period ("LAWMA Lease Termination Date"), the GP Amortization Schedule no longer will apply to the Storage Purchase Price, which as of that date will be the "Purchase Price Balance" described in paragraph 2.4.3 of the LAWMA/GP Agreement. Within 7 days of the LAWMA Lease Termination Date, LAWMA will deliver to CS-U the following: (1) written notice of said termination and the amount of the Purchase Price Balance; and (2) a new amortization schedule ("LAWMA Loan Amortization Schedule") based on the terms of the loan LAWMA will have secured for payment of the Purchase Price Balance to GP. Any loan LAWMA secures for payment of the Purchase Price Balance to GP will be for a term of not more than 30 years and will not be an interest-only loan, and LAWMA will not defer any payments on the loan without CS-U's prior consent. The LAWMA Loan Amortization Schedule will be substituted as a new **Exhibit D** to this Agreement without the need for amendment of this Agreement. As of the LAWMA Lease Termination Date, and continuing until entry of a final, unappealable water court decree in the ARF/LAWMA Change Case or implementation of an Alternative ATM, CS-U shall hold in the Escrow Account the payoff amount shown on the LAWMA Loan Amortization Schedule ("LAWMA Loan Balance"). Escrow Account funds in excess of the LAWMA Loan Balance will be released back to CS-U. The period between the LAWMA Lease Termination Date and the date of entry of a

final, unappealable water court decree in the ARF/LAWMA Change Case or implementation of an Alternative ATM is referred to herein as the "LAWMA Loan-Carry Period."

10.4.4 During the LAWMA Loan-Carry Period, CS-U shall continue to make the Annual Storage Payments to LAWMA on the Annual Lease Payment Date. No earlier than forty-two days in advance of the Annual Lease Payment Date, LAWMA shall deliver to CS-U the Annual Storage Payment Invoice. CS-U shall deliver the Annual Storage Payment to LAWMA within twenty-eight (28) days of receiving such invoice.

10.4.5 Upon entry of a final, unappealable water court decree in the ARF/LAWMA Change Case or implementation of an Alternative ATM, and upon CS-U's delivery to LAWMA of the Final Storage Payment as described in Section 10.5 below, CS-U's obligation for Annual Storage Payments shall cease.

10.5 CS-U shall pay LAWMA the Final Storage Payment once LAWMA has obtained a final, unappealable water court decree in the ARF/LAWMA Change Case or implemented an Alternative ATM. CS-U's obligation to make the Final Storage Payment to LAWMA is conditioned upon LAWMA's delivery to GP of the "LAWMA Exercise Notice" required by the LAWMA/GP Agreement for LAWMA to purchase the Dedicated Storage and Carriage Capacity, and such payment shall not be released to LAWMA if, for whatever reason, LAWMA does not intend to purchase the Dedicated Storage and Carriage Capacity or this Agreement is terminated prior to when LAWMA has obtained a final, unappealable water court decree in the ARF/LAWMA Change Case or implemented an Alternative ATM.

10.6 Once LAWMA has obtained a final, unappealable water court decree in the ARF/LAWMA Change Case or implemented an Alternative ATM, LAWMA shall provide notice of same to CS-U. Such notice shall include documentation demonstrating that LAWMA has obtained a final, unappealable water court decree in the ARF/LAWMA Change Case or implemented an Alternative ATM; that LAWMA has delivered the LAWMA Exercise Notice to GP as required by the LAWMA/GP Agreement for LAWMA to purchase the Dedicated Storage and Carriage Capacity; and that LAWMA either has purchased or intends to purchase the Dedicated Storage and Carriage Capacity. Such notice shall also include an invoice for the remaining balance of the Storage Purchase Price, as of the date on which CS-U will deliver to LAWMA the Final Storage Payment ("Final Payment Invoice"). CS-U shall deliver the Final Payment to LAWMA, in immediately available funds, within twenty-eight days of receiving the Final Payment Invoice.

10.7 Any time prior to providing CS-U with notice that it has obtained a final, unappealable water court decree in the ARF/LAWMA Change Case or implemented an Alternative ATM, LAWMA shall have the right to request that CS-U provide LAWMA with documentation demonstrating that the Escrow

Account balance is equal to (i) during the LAWMA Lease Period, the amount shown in the Ending Balance column for the relevant month of the GP Amortization Schedule; or (ii) during the LAWMA Loan-Carry Period, the LAWMA Loan Balance. CS-U shall provide said documentation within twenty-eight (28) days of receiving notice of LAWMA's request.

10.8 CS-U shall include a budget for the Annual Storage Payment in its annual request for appropriations.

11. Reimbursement for Expenses Associated with Loan Acquisition.

11.1 CS-U shall reimburse LAWMA for all reasonable costs and expenses, including reasonable legal, engineering, and administrative costs and expenses, incurred by LAWMA in securing any loan necessary for LAWMA to proceed to closing under the LAWMA/GP Agreement ("Storage Loan") before LAWMA has obtained a final, unappealable water court decree in the ARF/LAWMA Change Case or implemented an Alternative ATM ("CS-U's Costs and Expenses for the Storage Loan Application").

11.2 CS-U's Costs and Expenses for the Storage Loan Application shall be limited to only those costs and expenses necessary for LAWMA to prepare application materials for and pursue to closing the Storage Loan, and shall include reasonable attorneys' fees, engineering expenses, and administrative expenses. CS-U's Costs and Expenses for the Storage Loan Application expressly exclude LAWMA's costs and expenses necessary for LAWMA to prepare application materials for and pursue to closing any loan or portion thereof pertaining to LAWMA's acquisition of storage and carriage capacity over and above the Dedicated Storage and Carriage Capacity ("Additional Storage Loan"). In the event that LAWMA seeks to combine its application materials for the Storage Loan and any Additional Storage Loan ("Combined Storage Loan"), CS-U's Costs and Expenses for the Storage Loan Application will equal 29.4% of LAWMA's costs and expenses necessary for LAWMA to prepare the application materials for and pursue to closing the Combined Storage Loan, which amount represents the ratio of the Dedicated Storage Capacity to the total storage capacity of the Phase 1 Storage Cell described in the LAWMA/GP Agreement.

11.3 LAWMA shall invoice CS-U in writing by the 15th of each month for CS-U's Costs and Expenses for the Storage Loan Application (the "Storage Loan Application Invoice"). The Storage Loan Application Invoice shall include a description of each cost and expense incurred by LAWMA, including without limitation a description of the times, activities, and billing rates of each attorney or engineer who performed work on behalf of LAWMA.

11.4 CS-U shall remit payment to LAWMA for the Storage Loan Application Invoice within ninety (90) days of receipt of such invoice.

11.5 In the event that CS-U disputes any costs and/or expenses in the Storage Loan Application Invoice, CS-U may invoke the dispute resolution procedures under this Agreement.

12. Payment for Short-Term Excess Capacity Accounts in Pueblo Reservoir. Should the Further Fort Lyon Approval and/or the decree entered in the ARF/LAWMA Change Case require LAWMA and/or CS-U to acquire short-term excess capacity ("STEC") accounts in Pueblo Reservoir as a condition of LAWMA's direct delivery of water at the Direct Delivery Locations for CS-U's Changed Uses ("STEC Requirement"), CS-U shall pay the annual cost of such STEC accounts. At CS-U's request, and following issuance of any Further Fort Lyon Approval that includes the STEC Requirement, LAWMA shall apply to the Fort Lyon Canal Company for approval of LAWMA's direct delivery of water at the Direct Delivery Locations for CS-U's Changed Uses with no STEC Requirement. LAWMA's third-party legal, engineering, and administrative tasks associated with any such additional application to and/or proceedings before the Fort Lyon Canal Company will be considered Reimbursable Expenses under the Initial Reimbursement Agreement.

13. Future Deliveries. The Parties contemplate that they may seek, upon their mutual agreement, to amend the terms and conditions of this Agreement for LAWMA to deliver CS-U's Allocation in Lake Meredith or in another manner mutually acceptable to the Parties. In that event, LAWMA agrees that it will work cooperatively with CS-U to obtain all necessary approvals for such delivery, including, without limitation, approval of the Fort Lyon Canal Company.

13.1 If the Parties enter into such a future amendment of this Agreement, the Parties will negotiate a mutually acceptable solution to address the water deficit to LAWMA in Allocation Years when CS-U takes such delivery and the Dedicated Storage and Carriage Capacity is insufficient to cover any such deficit LAWMA may incur as a result of its operations under the Agreement. LAWMA acknowledges that the Storage Payment is, in part, consideration for the possibility of future deliveries of CS-U's Allocation to CS-U in Lake Meredith or otherwise; and that, in the event that CS-U ultimately takes deliveries of CS-U's Allocation in Lake Meredith or in another manner, LAWMA will use the Dedicated Storage and Carriage Capacity, in part, to offset, to the extent possible, any such deficit incurred as a result of its operations under this Agreement.

OPERATING PRINCIPLES

14. ATM. The Parties acknowledge and agree that this Agreement is intended to create and give rise to an Alternative Transfer Method, as defined in Colorado's State Water Plan.

15. Start Date. The Parties shall operate the ATM beginning on the Operations Start Date.

16. LAWMA Board to Determine Allocations. For each plan year (April 1 through March 31), the LAWMA Board of Directors determines the Annual Allocation of water to each share of LAWMA common stock. The Annual Allocation is given as a percentage, with an allocation of 100% equivalent to one acre-foot of fully consumable water to each share of

LAWMA common stock. The Annual Allocation to common stock is variable, and shall be made in the sole discretion of LAWMA's Board of Directors based on hydrological conditions, the anticipated yield of LAWMA's water rights, and other considerations; provided, however, that an equal volume of fully-consumable water is allocated to each share of common stock.

17. CS-U's Allocations. Beginning on the Operations Start Date, in five out of each ten consecutive plan years, LAWMA will make CS-U's Allocation available to CS-U at the Direct Delivery Locations following measurement at one or more of the ARF Augmentation Stations. For the purposes of this Agreement, any year in which CS-U takes delivery of CS-U's Allocation will be referred to as an "Allocation Year," or, in the plural, as the "Allocation Years" and any year that CS-U forgoes allocations will be referred to as a "Non-Allocation Year," or in the plural, as the "Non-Allocation Years."

17.1 In Allocation Years, LAWMA will make CS-U's Allocation available to CS-U at the Direct Delivery Locations beginning on April 1.

17.2 CS-U's Allocation shall be fully consumable and decreed, or otherwise authorized, for CS-U's Changed Uses.

17.3 CS-U's Allocation shall qualify as a Temporary Use Agreement Water, as defined in the Findings of Fact, Conclusions of Law, Judgment and Decree entered in Case No. 2005CW96, Water Division 2.

17.4 CS-U, at its sole discretion, will be entitled to use, reuse, and successively use to extinction CS-U's Allocation, or store CS-U's Allocation for such use later; provided, however, that any such reuse, successive use, or storage for such purposes will be pursuant to a water court decree or administrative approval, obtained by CS-U and not by LAWMA, quantifying the amount, time, and location of return flows available to CS-U following its first use of CS-U's Allocation.

17.5 CS-U shall take dominion and control of CS-U's Allocation, or any fraction thereof, at the Direct Delivery Locations. CS-U will bear any evaporation, seepage, or transit losses occurring after CS-U's Allocation, or any fraction thereof, has been delivered to the Direct Delivery Locations.

17.6 LAWMA shall use reasonable efforts to deliver CS-U's Allocation, or fractions thereof, to the Direct Delivery Locations at times that exchange potential usable by CS-U exists into Lake Meredith and/or Pueblo Reservoir. However, the foregoing notwithstanding, CS-U acknowledges that making CS-U's Allocation available at one or more of the Direct Delivery Locations will satisfy LAWMA's delivery obligation under the Agreement, regardless of whether CS-U subsequently is able to make use of CS-U's Allocation in any given plan year.

17.7 CS-U shall be responsible for the exchange of CS-U's Allocation to Lake Meredith and/or Pueblo Reservoir, and any subsequent exchange of CS-U's Allocation under CS-U's senior Colorado Canal Exchanges, the Decree in Case No. 2005CW96, or otherwise.

18. CS-U's Forgone Allocations. In Non-Allocation Years, CS-U's Forgone Allocations will be available to LAWMA's shareholders as provided for by Colorado law and LAWMA's Bylaws and Articles of Incorporation; and upon any terms and conditions imposed by the SWSP and/or any decree entered in the ARF/LAWMA Change Case with respect to LAWMA's use of the Dedicated Fort Lyon Shares.

18.1 The actual beneficial use of any water attributable to CS-U's Forgone Allocations shall be by LAWMA's shareholders pursuant to the terms and conditions of LAWMA's water rights or other authorizations from the State and Division Engineers and LAWMA's Bylaws and Articles of Incorporation.

18.2 LAWMA shall bear all costs and losses, including all costs of administration, associated with use of water attributable to CS-U's Forgone Allocations. CS-U, however, shall be responsible for payment of all assessments on the 2,500 LAWMA Shares levied by the LAWMA Board of Directors as part of assessments on LAWMA common stock.

19. Allocation Years. CS-U, at its discretion, shall be entitled to choose which five out of any ten consecutive years it will take delivery of CS-U's Allocation from LAWMA; provided that LAWMA may request that CS-U forgo delivery of water in any one drought year during any ten consecutive years.

19.1 For the purposes of this Agreement, a drought year shall be deemed to occur if both of the following happen: measured inflow to John Martin Reservoir during November through January prior to the start of the plan year is less than 15,000 acre-feet of water, and the February 1 NRCS Arkansas River Basin snowpack report is less than 70% of median.

19.2 The obligation that CS-U forgo delivery of CS-U's Allocation in a year that would otherwise be an Allocation Year, but for drought, shall only apply once in any given ten consecutive years.

19.3 If the obligation to forgo delivery of CS-U's Allocation in a year that would otherwise be an Allocation Year, but for drought, makes it so that CS-U was only able to take delivery of CS-U's Allocation in four of the ten previous years, then CS-U shall be able to take delivery of CS-U's Allocation in any six of the next consecutive ten years.

20. Exchange of CS-U's Allocation. The exchange of CS-U's Allocation from the Direct Delivery Locations to Colorado Springs' municipal system shall be the sole responsibility of CS-U. Any exchange shall be subject to the terms and conditions of the Further Fort Lyon Approval, as well as the Division 2 Water Court, or the Colorado Division of Water Resources.

21. Annual Operations Meetings. The Parties shall meet at least annually to review and refine the operations of the ATM. For the purposes of these meetings, the Parties acknowledge that they intend: (1) the ATM shall not create an unmitigated burden on LAWMA during Allocation Years; and (2) they will cooperate to enable CS-U to exchange all, or as much

as possible, of CS-U's Allocation into Lake Meredith and/or Pueblo Reservoir; and the Parties agree to work cooperatively to amend the Agreement as necessary to achieve these ends.

22. Designated Fort Lyon Shares. LAWMA shall not transfer to any third party, or otherwise alienate, any of the Designated Fort Lyon Shares subject to CS-U's Changed Uses, unless and until CS-U has certified in writing that LAWMA has adequate decreed water rights or other permanent sources of water to otherwise satisfy LAWMA's obligations under this Agreement. Further, upon completion of the ARF/LAWMA Change Case, LAWMA shall not seek to subsequently change the use of any of the Designated Fort Lyon Shares subject to CS-U's Changed Uses, without CS-U's express written permission, or unless and until CS-U has certified in writing that LAWMA has adequate decreed water rights or other permanent sources of water to otherwise satisfy LAWMA's obligations under this Agreement. CS-U shall not unreasonably withhold any certification or permission required by this Section.

23. 1041 Permits and Other Necessary Approvals. CS-U, and not LAWMA, will have the obligation of obtaining any 1041 permits or other approvals necessary for CS-U's operations under the Agreement in Allocation Years, such as 1041 permits required by any county or any authorizations required to exchange CS-U's Allocation from the Direct Delivery Locations into Lake Meredith and /or Pueblo Reservoir, and/or required under the Decree entered in Case No. 2005CW96. LAWMA, however, shall reasonably cooperate with CS-U to help CS-U obtain any 1041 permits or other necessary approvals. The Parties acknowledge that, if for whatever reason, CS-U is not able to obtain these 1041 permits or other necessary approvals, CS-U reserves the right to invoke the termination procedures under this Agreement.

24. Cooperation. The Parties shall take any and all action under state law, including requesting administration by the State Engineer and/or Division Engineer for Water Division No. 2, and initiating and completing Water Court proceedings, as may be necessary to fully operate this Agreement, including the ATM. The Parties shall retain all available remedies in law and equity necessary to prevent injury to each Party's respective water rights. Except as specifically set forth in this Agreement, either Party may participate in any water court proceeding in order to protect its water rights.

25. Bent County 1041 Permit Compliance. Pursuant to the Bent County 1041 Permit, LAWMA and ARF are jointly responsible to ensure compliance with the Dry-Up Reclamation Certification Process terms and conditions of the Bent County 1041 Permit. In the event that LAWMA and/or ARF fail to comply with their individual or joint responsibilities under the terms and conditions of the Bent County 1041 Permit, or in the event that Bent County deems the Bent County 1041 Permit non-compliant for any reason, CS-U may elect to invoke the termination procedures under this Agreement.

26. Fort Lyon Approval Compliance. In the event that LAWMA fails to comply with any obligations that the Further Fort Lyon Approval imposes solely upon LAWMA, CS-U may elect to invoke the termination procedures under this Agreement.

APPROVAL OF THE LAWMA BOARD OF DIRECTORS

27. No Injury. In accordance with the LAWMA Bylaws, Article VII, Section 6, the LAWMA Board of Directors finds and warrants that CS-U's use of CS-U's Allocation under this Agreement, including the ATM, will not injure LAWMA, other LAWMA members, LAWMA's water rights and other replacement sources, or the integrity or administrability of LAWMA's water rights or plan for augmentation, including LAWMA's Rule 10 Plan and its Rule 14 Plan. By executing this Agreement, the LAWMA Board of Directors acknowledges approval of this Agreement, and finds that CS-U's use of CS-U's Allocation under this Agreement, including the ATM, will not injure LAWMA, other LAWMA members, LAWMA's water rights, or LAWMA's plan for augmentation, its Rule 10 Plan, or its Rule 14 Plan. Further, by executing the Agreement, the LAWMA Board of Directors acknowledges that it has adopted a resolution finding that the transfer of the 2,500 LAWMA Shares from ARF to CS-U will not injure LAWMA, other LAWMA members, LAWMA's water rights, or LAWMA's plan for augmentation, its Rule 10 Plan, or its Rule 14 Plan, and authorizing the transfer of the 2,500 LAWMA Shares from ARF to CS-U.

28. No Undue Burden. In accordance with the LAWMA Bylaws, Article VII, Section 6, the LAWMA Board of Directors finds and warrants that this Agreement, including the ATM, will not violate the terms of any LAWMA water court decree or any administrative order governing the use and administration of LAWMA's water rights, augmentation plan, Rule 10 Plan, or Rule 14 Plan, and will not result in an undue administrative burden on LAWMA, including with respect to accounting. Further, the LAWMA Board of Directors acknowledges that, contingent upon entry of a decree approving a change of use of the Designated Fort Lyon Shares so that they may be used for CS-U's Changed Uses and/or administrative approval of a temporary change of use of the Designated Fort Lyon Shares so that they may be used for CS-U's Changed Uses, the transfer of the 2,500 LAWMA Shares from ARF to CS-U will not violate the terms of any LAWMA water court decree or any administrative order governing the use and administration of LAWMA's water rights, augmentation plan, Rule 10 Plan, or Rule 14 Plan, and will not result in an undue administrative burden on LAWMA, including with respect to accounting.

29. Adequate Water Rights. In accordance with the LAWMA Articles of Incorporation, Article V, Paragraph A, the LAWMA Board of Directors finds and warrants that the LAWMA Board of Directors has determined and documented that the corporation owns or controls sufficient water rights, or other sources of fully-consumable water, to meet LAWMA's delivery operations under this Agreement.

30. Bylaws and Articles. The LAWMA Board of Directors finds and warrants that it is a duly-formed and validly-existing non-profit corporation under the laws of the State of Colorado, and that this Agreement, including the ATM and the transfer of the 2,500 LAWMA Shares from ARF to CS-U, is authorized by and complies with LAWMA's Bylaws and Articles of Incorporation.

ENFORCEMENT AND TERMINATION

31. This Agreement is intended to be perpetual, and may be terminated only for cause as described herein, or upon mutual agreement of the Parties.

32. Breach. It is specifically understood that, by executing this Agreement, each Party commits itself to perform pursuant to the terms and conditions contained herein and that the failure of any Party to fulfill any obligation set forth herein shall constitute a breach of this Agreement. The Parties agree that this Agreement may be enforced in law or in equity for specific performance, injunctive, or other appropriate relief, as may be available according to the laws and statutes of the State of Colorado.

32.1 Any Party shall be excused from performing its obligations under this Agreement during the time and to the extent that it is prevented from performing by a cause beyond its control, including, but not limited to, any incidence of fire, flood, or strike; acts of God; acts of the Government (except the Parties hereto); war or civil disorder; violence or the threat thereof; severe weather; commandeering of material, products, plants, or facilities by the federal, state, or local government (except the Parties hereto); or national fuel shortage, when satisfactory evidence of such cause is presented to the other Parties, and provided further, that such nonperformance is beyond the reasonable control of, and is not due to the fault or negligence of, the Party not performing.

33. Termination by CS-U. It is specifically understood and acknowledged by the Parties that as part of this Agreement, including the ATM, CS-U expects and intends to receive allocations of water that are actually and physically usable for municipal and industrial purposes in CS-U's existing and future service area. If, for whatever reason, including, but not limited to, the breach of this Agreement by LAWMA, the inability or failure to obtain decrees in the ARF/LAWMA Change Case and/or the Exchange Case Application, or the inability or failure to obtain 1041 permits from any county, CS-U shall have cause to terminate this Agreement and all payments that have not yet accrued under this Agreement, and the use of the 2,500 LAWMA Shares shall revert to their original use as a source of augmentation and/or replacement water every year (*i.e.*, in ten out of every ten years).

33.1 In the event of such termination, each of the 2,500 LAWMA shares shall be treated as any other share of LAWMA common stock, and shall be entitled to an annual allocation the same as any other share of LAWMA common stock, regardless of the outcome of the ARF/LAWMA Change Case.

33.2 In the event of such termination, water available to CS-U's LAWMA Shares will be delivered to the Arkansas River, in accordance with LAWMA's Bylaws, for the use of a LAWMA member that is CS-U's lessee or successor in interest in ownership of the LAWMA Shares; provided, however, that any such use must be for augmentation or replacement of depletions attributable to structures included in LAWMA's decreed plan for augmentation or approved Rule 14 Plan or Rule 10 Plan, or for the LAWMA member's use after direct delivery as approved by the LAWMA Board of Directors.

33.3 In the event of such termination, the LAWMA Board of Directors will not unreasonably refuse to approve the sale or lease of the 2,500 LAWMA Shares to a third-party for uses authorized by the LAWMA Bylaws.

33.4 In the event of such termination, CS-U shall be responsible for any and all payments that have accrued and are owing under the terms and conditions of this Agreement prior to such termination, and LAWMA will not be obligated to repay any payments made under the terms and conditions of this Agreement, including any Annual Storage Payment for the Dedicated Storage and Carriage Capacity.

34. Dispute Resolution. Before a Party commences any action for enforcement of this Agreement, or in the event the Parties cannot agree on a course of action, the Parties shall make a good-faith effort to resolve their differences in the manner outlined below:

34.1 The Parties shall first attempt to resolve any dispute by direct negotiations within 30 days of the notice. If the Parties are unable to resolve the dispute, the aggrieved Party shall issue formal written notice of the dispute to the other Party.

34.2 The Parties shall hold a meeting attended by persons with decision-making authority regarding the dispute to attempt in good faith to negotiate a resolution. The meeting shall be held promptly, but in no event later than fourteen (14) calendar days after an initial written notice of the dispute by one of the Parties to the other. Such meeting shall not be deemed to reduce or eliminate the obligations and liabilities of the Parties or be deemed a waiver by a Party of any remedies to which such Party would otherwise be entitled, unless otherwise agreed to by the Parties in writing.

34.3 If, within fourteen (14) calendar days after such meeting, the Parties have not succeeded in negotiating a resolution of the dispute, they agree to submit the dispute to non-binding mediation and to bear equally the costs of the mediation.

34.4 The Parties will jointly appoint a mutually acceptable mediator. If they fail to do so within ten (10) calendar days from the date described in Section 34.3, they shall each select a mediator. The two mediators will then appoint, within five (5) calendar days of their selection, a third mediator who shall, as the sole mediator, conduct mediation for the Parties.

34.5 The costs associated with appointing and paying the fees of the mediator shall be divided equally between the Parties.

34.6 The Parties will schedule the mediation for a date within thirty (30) calendar days after selection of the mediator(s). The Parties agree to participate in good faith in the mediation and negotiations related thereto for a period of thirty (30) calendar days after the mediation. The substantive and procedural law of the State of Colorado shall apply to the proceedings. If the Parties are not successful in resolving the dispute through mediation, then the Parties shall be free to seek other judicial relief.

34.7 If undue prejudice would be caused by delay, a Party may seek a preliminary injunction or other judicial relief if, in the judgment of that Party, such action is necessary to avoid irreparable damage or to preserve the status quo. Despite the initiation of such judicial proceedings, the Parties will continue to participate in good faith in the procedures specified in this Section.

MISCELLANEOUS

35. Indebtedness. No provision, covenant or agreement contained in this Agreement, nor any obligations herein imposed upon CS-U, shall constitute or create an indebtedness or debt of CS-U or Colorado Springs within the meaning of any Colorado constitutional provision or statutory limitation.

36. Subject to Annual Budget and Appropriation. In accordance with the Colorado Springs City Charter, performance of CS-U's obligations under this Agreement are expressly subject to appropriations of funds by the City Council. In the event funds are not appropriated in whole or in part sufficient for performance of CS-U's obligations under this Agreement, or appropriated funds may not be expended due to City Charter spending limitations, then this Agreement shall thereafter become null and void by operation of law, and CS-U shall thereafter have no liability for compensation or damages to LAWMA in excess of CS-U's authorized appropriation for this Agreement or the applicable spending limit, whichever is less. In such an event, LAWMA will not be obligated to repay any payments made under the terms and conditions of this Agreement, including, but not limited to, Annual Storage Payments for the Dedicated Storage and Carriage Capacity; and the LAWMA Board of Directors' approval of this Agreement and finding that CS-U's use of CS-U's Allocation under this Agreement, including the ATM, will not injure LAWMA, other LAWMA members, LAWMA's water rights, or LAWMA's plan for augmentation, its Rule 10 Plan, or its Rule 14 Plan, likewise will become null and void.

37. Assignment. Neither this Agreement, nor either Party's rights and obligations under this Agreement shall be assignable, except on mutual written agreement of the Parties.

38. No Partnership or Agency. Notwithstanding any language in this Agreement or any representation or warranty to the contrary, none of the Parties shall be deemed or constitute a partner, joint venturer or agent of the other Parties. Any actions taken by the Parties pursuant to this Agreement shall be deemed actions as an independent contractor of the other.

39. No Third-Party Beneficiary. It is expressly understood and agreed that enforcement of the terms and conditions of this Agreement and all rights of action relating to such enforcement shall be strictly reserved to the Parties. It is the express intention of the Parties that any person other than the Parties shall be deemed to be only an incidental beneficiary under this Agreement, including LAWMA's other members and shareholders.

40. No Franchise, Lease, or Use. It is expressly understood and agreed by the Parties that under this Agreement, CS-U neither intends to grant, nor has granted, to LAWMA any franchise, lease or right to use the property of CS-U and/or the City of Colorado Springs.

41. Governmental Immunity. Nothing in this Agreement or in any actions taken by the Parties pursuant to this Agreement shall be construed or interpreted as a waiver, express or implied, of any of the immunities, rights, benefits, protections or other provisions of the Colorado Governmental Immunity Act, Section 24-10-101, *et seq*., C.R.S., as from time to time may be amended.

42. Statutory Liability Protection. The Parties may rely on, and do not waive or intend to waive, the liability protections or any other rights, immunities, and protections provided by Section 37-87-104, C.R.S., as from time to time may be amended, or any other law, protection or limitation otherwise available to the Parties and their respective officers, agents, fiduciaries, representatives and employees.

43. Notices. Any notices or other communications required or permitted by this Agreement or by law to be served on, given to, or delivered to a Party by the other Party shall be in writing and shall be deemed duly served, given, or delivered when personally delivered to the Party to whom it is addressed; or, in lieu of such personal services, when received in the United States mail, first-class postage prepaid, and addressed to:

If to LAWMA:

Donald F. Higbee, Manager
Lower Arkansas Water Management Association
310 South 6th Street
P. O. Box 1161
Lamar, Colorado 81052
lawma@cminet.net

If to CS-U:

Courier Service Address:
Colorado Springs Utilities
ATTN: Chief Water Services Officer

121 S. Tejon St., 5th Floor
Colorado Springs, CO 80903

United States Postal Service Address:
Colorado Springs Utilities
ATTN: Chief Water Services Officer

P. O. Box 1103
Colorado Springs, CO 80947-0950

City Attorney's Office - Utilities Division

Courier Service Address:
City Attorney's Office - Utilities Division
30 S. Nevada Ave, Suite 501
Colorado Springs, CO 80903

United States Postal Service Address:
City Attorney's Office - Utilities Division
P. O. Box 1575, Mail Code 510
Colorado Springs, CO 80901-1575

Any Party may change its address for the purpose of this Section by giving written notice of such change to the other Party in the manner provided in this Section.

44. Headings. The headings and captions in this Agreement are intended solely for the convenience of reference and shall be given no effect in the construction or interpretation of this Agreement.

45. Controlling Law and Venue. This Agreement shall be construed in accordance with the laws of the State of Colorado (without reference to conflicts of laws) and to the extent necessary to recognize the legal organization of CS-U, the Colorado Springs City Charter, Colorado Springs City Code, City ordinances and resolutions, and City rules and regulations. In the event of litigation, this Agreement shall be enforceable by or against the City of Colorado Springs on behalf of CS-U as provided in Colorado Springs City Code Section 12.1.108. In the event of any dispute over the terms and conditions of this Agreement, the exclusive venue and jurisdiction for any litigation arising hereunder shall be in the District Court of El Paso County, Colorado, and, if necessary for exclusive federal questions, the United States District Court for the District of Colorado.

46. No Waiver. No waiver of any of the provisions of this Agreement shall be deemed to constitute a waiver of any other of the provisions of this Agreement, nor shall such waiver constitute a continuing waiver unless otherwise expressly provided herein, nor shall the waiver of any default hereunder be deemed a waiver of any subsequent default hereunder.

47. Binding Contract. This Agreement shall inure to and be binding on the heirs, executors, administrators, successors, and assigns of the Parties.

48. Entire Contract. This Agreement constitutes the entire agreement between the Parties with respect to the subject matter hereof, and sets forth the rights, duties, and obligations of each to the other with respect to that subject matter as of this date. Any prior agreements, promises, negotiations, or representations with respect to the subject matter hereof but not expressly set forth in this Agreement are of no force and effect.

49. Contract Modification. This Agreement may not be amended, altered, or otherwise changed except by a written agreement between the Parties.

50. Severability. The invalidity or unenforceability of any portion or previous version of this Agreement shall not affect the validity or enforceability of any other portion or provision. Any invalid or unenforceable portion or provision shall be deemed severed from this Agreement and in such event the Parties shall negotiate in good faith to replace such invalidated provision in order to carry out the intent of the Parties in entering into this Agreement.

51. Counterpart Execution. This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the date first above written. By the signature of its representatives below, each Party affirms that it has taken all necessary action to authorize said representatives to execute this Agreement.

LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION

Robert Wilger, Vice-President

ATTEST:

Donald F. Higbee, Secretary

COLORADO SPRINGS UTILITIES

Earl Wilkinson
Chief Water Services Officer

APPROVED AS TO FORM:

Michael J. Gustafson
City Attorney, Utilities Division

STATE OF COLORADO)
ss.
COUNTY OF PROWERS)

The foregoing instrument was acknowledged before me this 14th day of July, 2018, by Robert Wilger, Vice-President, and Donald F. Higbee, Secretary, of the Lower Arkansas Water Management Association, a Colorado non-profit corporation.

Witness my hand and official seal.

My commission expires 12-20-2018.

ANGELA HIGBEE
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20074048402
MY COMMISSION EXPIRES DECEMBER 20, 2019

Angela Higbee
Notary Public

STATE OF COLORADO)
ss.
COUNTY OF EL PASO)

The foregoing instrument was acknowledged before me this _____ day of _____, 2018, by Earl Wilkinson, Chief Water Services Officer, Colorado Springs Utilities, an enterprise of the City of Colorado Springs, Colorado, a home rule City and municipal corporation.

Witness my hand and official seal.

My commission expires _____.

_____
Notary Public

51. Counterpart Execution. This Agreement may be executed in counterparts, each of which shall be deemed an original, and all of which together shall constitute one and the same instrument.

IN WITNESS WHEREOF, the Parties have executed this Agreement on the date first above written. By the signature of its representatives below, each Party affirms that it has taken all necessary action to authorize said representatives to execute this Agreement.

LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION

Robert Wilger, Vice-President

ATTEST:

Donald F. Higbee, Secretary

COLORADO SPRINGS UTILITIES

Earl Wilkinson
Chief Water Services Officer

APPROVED AS TO FORM:

Michael J. Gustafson
City Attorney, Utilities Division

STATE OF COLORADO)
ss.
COUNTY OF PROWERS)

The foregoing instrument was acknowledged before me this _____ day of _____, 2018, by Robert Wilger, Vice-President, and Donald F. Higbee, Secretary, of the Lower Arkansas Water Management Association, a Colorado non-profit corporation.

Witness my hand and official seal.

My commission expires _____.

_____
Notary Public

STATE OF COLORADO)
ss.
COUNTY OF EL PASO)

The foregoing instrument was acknowledged before me this 16th day of July, 2018, by Earl Wilkinson, Chief Water Services Officer, Colorado Springs Utilities, an enterprise of the City of Colorado Springs, Colorado, a home rule City and municipal corporation.

Witness my hand and official seal.

My commission expires September 2, 2018.

Kelly O. Gurule
Notary Public

EXHIBIT A

LAWMA Certificate #	ARF Certificate #	Shares	Historical place of use	LAWMA delivery location
10658	10575	144	Coen Farm SW4 of 26 & E2 27-22-48	Farm 53 (Graveyard Creek) Aug Station at Headgate 181
10664	10475	204	Farm 1 NW4 25, NE4 26-22-51, Bent County	Farm 27 (Gageby Creek) Aug Station at Headgate 126
10665	10476	144	Farm 2 SE4 23-22-51, Bent County	Farm 27 (Gageby Creek) Aug Station at Headgate 126
10666	10488	82	Farm 3 Lots 6 & 7 Holbrook Subdivision, Otero County	Farm 60 recharge site
10668	10516	188	Farm 13 N2SE4 29-22-52, Bent County	Horse Creek Aug Station at Headgate 49 D
10671	10506	144	Farm 19 E2E2 17-22-51, Bent County	Horse Creek Aug Station at Headgate 49 D
10672	10507	144	Farm 19 W2E2 17-22-51, Bent County	Horse Creek Aug Station at Headgate 49 D
10673	10438	162	Farm 21 N2SE4 20-22-51, Bent County	Horse Creek Aug Station at Headgate 49 D
10675	10477	101	Farm 22 NE4 of SE4 31-22-51, Bent County	Horse Creek Aug Station at Headgate 49 D
10677	10483	245	Farm 23 S2 of SE4 31-22-51 (full description on back of certificate), Bent County	Horse Creek Aug Station at Headgate 49 D
10678	10505	322	Farm 25 W2NE4NW4 and SE4 11-22-48, Bent County	Farm 25 (Riverview Drain) Aug Station at Headgate 182
10679	10519	144	Farm 27 NE4 35-22-51, Bent County	Farm 27 (Gageby Creek) Aug Station at Headgate 126
10680	10520	216	Farm 27 NW4 26-22-51, Bent County	Farm 27 (Gageby Creek) Aug Station at Headgate 126
10681	10521	156	Farm 27 Lot 1 N2SE4 26-22-51, Bent County	Farm 27 (Gageby Creek) Aug Station at Headgate 126
10682	10522	144	Farm 27 SW4 26-22-51, Bent County	Farm 27 (Gageby Creek) Aug Station at Headgate 126
10683	10473	72	Farm 33 E2 except Lot 4 27-22-51, Bent County	Farm 36 (Gageby Creek) Aug Station at Headgate 125

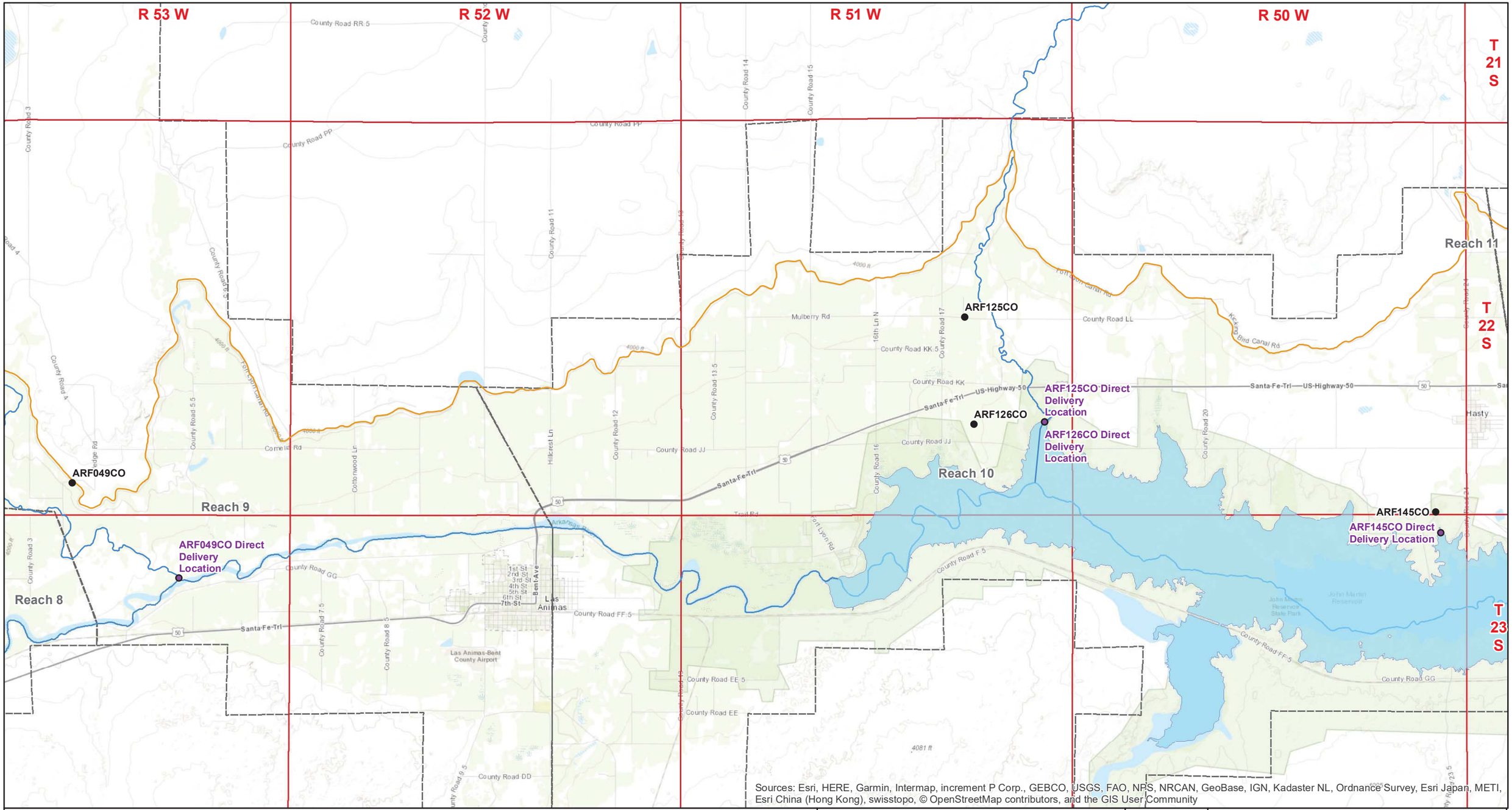
EXHIBIT A

10684	10474	32	Farm 33 Tract of land in 34-22-51, Bent County	Farm 36 (Gageby Creek) Aug Station at Headgate 125
10686	10469	205	Farm 36 SW4 14-22-51, Bent County	Farm 36 (Gageby Creek) Aug Station at Headgate 125
10687	10470	7	Farm 36 SW4 14-22-51, Bent County	Farm 36 (Gageby Creek) Aug Station at Headgate 125
10688	10537	144	Farm 37 NE4 and E 60 acres in SE4 10-22-48, Bent County	Headgate 145D
10689	10534	191	Farm 39N W2 12-22-49, Bent County	Farm 39 (Limestone Creek) Aug Station at Headgate 160
10691	10486	67	Farm 40 Lots 4, 5, 8 Holbrook Subdivision, Otero County	Farm 60 recharge site
10692	10452	79	Farm 41 SE4 24-22-50, Bent County	Headgate 145D
10694	10528	166	Farm 42 E2SW4 & W2SE4 & W2 NW4 28-22-48, Bent County	Farm 64 (McClave Drain) Aug Station at Headgate 166
10695	10498	170	Farm 53 SE4NW4 & S2SW4 & NW4SE4 & Lot 2 27-22-48 & N2NW4 34-22-48, Bent County	Farm 53 (Graveyard Creek) Aug Station at Headgate 181
10696	10471	80	Farm 54B SE4 19-22-49, Bent County	Prowers Arroyo at Headgate 151e
10697	10531	83	Farm 57 E2SW4 6-23-53, Bent County	Farm 60 recharge site
10698	10526	116	Farm 58 S2NE4 & SE4 18-22-49, Bent County	Headgate 145D
10700	10489	144	Farm 59 NW4SW4 & W2, Lot 2 28-22-51, Bent County	Horse Creek Aug Station at Headgate 49 D
10701	10453	21.16	Farm 60A in 14-23-54, Otero County	Farm 60 recharge site
10702	10454	27.96	Farm 60A in 14-23-54, Otero County	Farm 60 recharge site
10703	10455	27.96	Farm 60A in 14-23-54, Otero County	Farm 60 recharge site
10704	10456	27.96	Farm 60A in 14-23-54, Otero County	Farm 60 recharge site
10705	10457	27.96	Farm 60A in 14-23-54, Otero County	Farm 60 recharge site
10706	10538	399	Farm 61 190.1 acres in W2 of 23 & the NW4 of 26-22-52 (desc. on back of certificate), Bent County	Horse Creek Aug Station at Headgate 49 D
10708	10494	144	Farm 63 N2SE4 11-21-48 and SW4NW4 10-22-47, Prowers County	Farm 63 recharge site - headgate 230G
10709	10495	122	Farm 63 N2SE4 11-21-48 and SW4NW4 10-22-47, Prowers County	Farm 63 recharge site - headgate 230G

EXHIBIT A

10710	10496	144	Farm 63 N2SE4 11-21-48 and SW4NW4 10-22-47, Prowers County	Farm 63 recharge site - headgate 230
10711	10442	224	Farm 64 N2 of 32, NW4 33-22-48, Bent County	Farm 64 (McClave Drain) Aug Station at Headgate 166
10712	10458	144	Farm 65 SE4 25-22-49, Bent County	Farm 65 recharge site
10713	10492	72	Farm 127 W2SW4 19-22-48, Bent County	Farm 65 recharge site
10715	10560	50	Farm 132/133 SE4 36-22-50, Bent County	Farm 132/133 (Lateral 145) Aug Station at Headgate 145
10732	10463	133	Farm 132/133 SE4 36-22-50, Bent County	delivered at Farm 132/133 (Lateral 145) Aug Station at Headgate 145
10733	10463	82	Farm 132/133 SE4 36-22-50, Bent County	Farm 132/133 (Lateral 145) recharge site at Headgate 145
10736	10451	37	Farm 14, E2SW4 and lots 2, 3, and 4; and SE4NW4 19-22-49, Bent County	Prowers Arroyo at Headgate 151e
10734	10451	40	Farm 14, E2SW4 and lots 2, 3, and 4; and SE4NW4 19-22-49, Bent County	Headgate 145D
10735	10451	41	Farm 14, E2SW4 and lots 2, 3, and 4; and SE4NW4 19-22-49, Bent County	Headgate 145D
10737	10562	110	Farm 15, lots 2 and 3, E2NW4 and NE4SW4 31-22-49, Bent County	Farm 132/133 (Lateral 145) Aug Station at Headgate 145
10738	10562	109	Farm 15, lots 2 and 3, E2NW4 and NE4SW4 31-22-49, Bent County	Farm 132/133 (Lateral 145) recharge site at Headgate 145
49		**6080**	**Total (out of 6,080 shares acquired)**	

Rows shaded in blue are shares to be used for delivery of water to CS-U.
One share from certificate 10735 will be delivered to recharge and is not included in the CS-U operation.



Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, © OpenStreetMap contributors, and the GIS User Community

Legend

- Direct Delivery Locations
- Direct Delivery Augmentation Stations
- Fort Lyon Canal
- Arkansas River
- Gageby and Horse Creeks
- John Martin Reservoir
- H-I Model Reach

0 0.75 1.5 3

Miles

N W E S

Hendrix Wai Engineering, Inc.

Job No.	L7507
File:	Exhibit B.mxd
Date:	07/13/18
Prepared For:	LAWMA/C-S-U

Exhibit B

General Location Map

C-S-U Allocation Direct Delivery Locations

EXHIBIT C

AGREEMENT FOR LEASE AND SUBSEQUENT PURCHASE AND SALE OF WATER STORAGE AND CARRIAGE CAPACITY

This Agreement for Lease and Subsequent Purchase and Sale of Water Storage and Carriage Capacity ("Agreement"), effective as of July 16th, 2018 (the "Effective Date"), is between **GP AGGREGATES, LLC** ("GP"), a Colorado limited liability company whose address is 7991 Shaffer Parkway, Suite 200, Littleton, Colorado 80127, and **LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION** ("LAWMA"), a Colorado non-profit corporation whose address is P.O. Box 1161, Lamar, Colorado 81052 (each a "Party" and together the "Parties").

RECITALS

A. GP is the fee owner of the West Farm, on which is located an aggregate mining site known as the "West Farm Pit," located in part of the N ½ of Section 33 and part of the SE ¼ of Section 28, T. 22 S., R. 46 W., of the 6th P.M., Prowers County, Colorado, as more particularly described on the attached **Exhibit A-1**. The location of the West Farm Pit is also described herein as the "Property."

B. GP has excavated a portion of the West Farm Pit and installed a slurry wall to create a water storage cell which is referred to as Phase 1 ("Phase 1 Storage Cell"). The Phase 1 Storage Cell has an estimated storage capacity, including in situate storage, of at least 1,700 acre feet. The location of the Phase 1 Storage Cell is depicted on the attached **Exhibit B**.

C. GP has constructed and installed certain infrastructure in the West Farm Pit, including an unlined inlet canal which diverts water from the Lamar Canal and over a concrete spillway into the Phase 1 Storage Cell at a maximum rate of approximately 28 c.f.s. (the "Phase 1 Inlet Canal"); and two pumps in the Phase 1 Storage Cell that discharge water at a maximum combined rate of approximately 22 c.f.s. (the "Phase 1 Pumps"). The Phase 1 Storage Cell, the Phase 1 Inlet Canal, and the Phase 1 Pumps are collectively referred to herein as the "Phase 1 Storage Facilities."

D. The Phase 1 Pumps discharge to an unlined, open ditch (the "Outlet Channel") which delivers water into the Arkansas River. The Outlet Channel is located on the West Farm and certain property adjacent to the West Farm (the "Adjacent Property" as described on attached **Exhibit A-2**) for which GP holds an easement granted by GP Irrigated Farms, LLC, permitting the use and operation of the Outlet Channel (the "GP Irrigated Easement"). The GP Irrigated Easement is described in a Water Conveyance Easement Agreement dated January 15, 2015 (the "GP Irrigated Easement Agreement").

E. A portion of the Phase I Inlet Canal crosses the Adjacent Property for which GP holds the GP Irrigated Easement permitting the use and operation of the Phase I Inlet Canal.

F. There exists an unimproved private road on the West Farm that runs in a north-south direction through the approximate centerline of Section 33, T. 22 S., R. 46 W., 6th P.M., and that provides access from County Road HH.5 to the Phase 1 Storage Facilities (the "Access Road").

G. The locations of the Phase 1 Storage Cell (labeled as the "Phase One Reservoir"), Phase 1 Inlet Canal (labeled as the "Inlet Channel"), Outlet Channel, and Access Road (labeled as the "Access Drive") are all generally depicted on the attached **Exhibit B**.

H. GP and the Lamar Canal Company entered into an agreement dated June 14, 2017, allowing GP to carry foreign water in the Lamar Canal for delivery to the West Farm Pit ("GP Carriage Agreement").

I. LAWMA and the City of Colorado Springs, acting by and through its Enterprise Colorado Springs Utilities ("CS-U"), entered into a water-sharing agreement dated July 13, 2018 ("CS-U Agreement"), that requires LAWMA to acquire 500 acre feet of dedicated storage capacity and associated carriage capacity in the Phase 1 Storage Facilities and Outlet Channel.

J. LAWMA intends to file an application in Water Court for Water Division 2 to, among other things, change the use of certain shares in the Fort Lyon Canal Company owned by LAWMA so that they may be used in the CS-U water system (the "Water Court Application").

K. LAWMA desires to lease from GP, and GP desires to lease to LAWMA, the Leased Interests (as defined in paragraph 1.1 below); and GP further desires to assign to LAWMA, on a temporary basis, a portion of GP's right to carry foreign water in the Lamar Canal under the GP Carriage Agreement, and a portion of GP's right to use and operate the Phase 1 Inlet Canal and the Outlet Channel under the GP Irrigated Easement.

L. LAWMA and GP desire to establish the terms and conditions upon which LAWMA may elect to purchase from GP, and GP will sell to LAWMA, the Dedicated Storage Capacity and Dedicated Carriage Capacity, as defined below, along with a permanent easement in the Access Road, a permanent assignment of a portion of GP's right to carry water in the Lamar Canal under the GP Carriage Agreement, and a permanent assignment of a portion of GP's right to run water in the Phase 1 Inlet Canal and the Outlet Channel under the GP Irrigated Easement Agreement.

NOW, THEREFORE, for and in consideration of the Recitals, which are incorporated into and made a part of this Agreement, and for other good and value consideration as described below, the Parties agree as follows:

ARTICLE 1
AGREEMENT FOR LEASE AND TEMPORARY PARTIAL ASSIGNMENTS

1.1 Leased Interests. GP hereby leases the following property interests (the "Leased Interests") to LAWMA for the duration of the Lease Period pursuant to the terms and conditions of this Agreement ("Lease").

1.1.1 The Dedicated Storage Capacity and Dedicated Carriage Capacity, as defined below, for LAWMA's carriage and storage of water available to LAWMA's decreed water rights and other supplies of water that LAWMA may acquire from time to time.

1.1.1.1 The "Dedicated Storage Capacity" is the first 500 acre-feet of usable storage within the Phase 1 Storage Cell. The Dedicated Storage Capacity makes up

approximately 29.4% of the estimated capacity of the Phase 1 Storage Cell, including in situate storage.

1.1.1.2 The "Dedicated Carriage Capacity" is made up of (i) the Temporary Partial Carriage Assignment described in paragraph 1.3.1 below; and (ii) the Temporary Partial Easement Assignment described in paragraph 1.3.2 below; and (iii) the first 8.2 c.f.s. of carriage capacity in the Phase 1 Inlet Canal, which is approximately 29.4% of the carriage capacity of the Phase 1 Inlet Canal; and (iv) the first 6.5 c.f.s. of pumping capacity in the Phase 1 Pumps and carriage capacity in the Outlet Channel, which is approximately 29.4% of the pumping capacity of the Phase 1 Pumps.

1.1.2 A non-exclusive temporary easement in the Access Road, for LAWMA's reasonable use in accessing the Phase 1 Storage Facilities and the Outlet Channel during the Lease Period.

1.2 Lease Term. The term of the Lease will run for the period from the Effective Date to the earlier to occur of the following: (a) the third anniversary of the Effective Date (the "Initial Lease Termination Date"), (b) the date of the Closing described in paragraph 2.8 below, or (c) the date of GP's or LAWMA's termination of this Agreement in accordance with its terms ("Lease Period"). If the Lease is terminated as a result of GP's or LAWMA's termination of this Agreement in accordance with its terms, then LAWMA shall release any water stored by LAWMA in the Phase I Storage Facilities within 60 days of such termination or the water will be forfeited by LAWMA and deemed transferred to GP, and LAWMA shall deliver such documentation as reasonably required by GP to document such transfer.

1.3 Temporary Partial Assignments.

1.3.1 Having first obtained the written approval of the Lamar Canal Company in accordance with paragraph 13 of the GP Carriage Agreement, on a temporary basis and for the duration of the Lease Period, GP shall assign to LAWMA the following rights and shall delegate to LAWMA the following obligations under the GP Carriage Agreement ("Temporary Partial Carriage Assignment"):

1.3.1.1 The right to the first 8.8 c.f.s. of GP's 50 c.f.s. of Firm Capacity for carriage of foreign water in the Lamar Canal, as the term "Firm Capacity" is defined in paragraph 1.1.1 of the GP Carriage Agreement ("LAWMA's Firm Carriage Capacity"). The amount of LAWMA's Firm Carriage Capacity is the amount of LAWMA's Dedicated Carriage Capacity in the Phase 1 Inlet Canal plus ditch loss in the Lamar Canal plus lateral losses in the Phase 1 Inlet Canal. With LAWMA's prior written consent, GP may use LAWMA's Firm Carriage Capacity when it is not being used by LAWMA.

1.3.1.2 In addition to LAWMA's Firm Carriage Capacity and subject to GP's prior written consent, LAWMA may use up to an additional 21 c.f.s. of GP's Firm Capacity under the GP Carriage Agreement for carriage of foreign water in the Lamar Canal when GP is not using such Firm Capacity ("LAWMA's Excess Capacity"). LAWMA's Excess Capacity is the carrying capacity of the Phase 1 Inlet Canal plus ditch loss in the Lamar Canal, minus the amount of LAWMA's Firm Carriage Capacity.

1.3.1.3 The right to carry 1,000 acre-feet per year of the 10,000 acre-feet of foreign water per year that GP is entitled to carry in the Lamar Canal.

1.3.1.4 The obligation to pay to the Lamar Canal Company, or at GP's request, directly to GP, the Carriage Charges described in paragraph 2 of the GP Carriage Agreement attributable to LAWMA's use of LAWMA's Firm Carriage Capacity and LAWMA's Excess Capacity.

1.3.1.5 The right and obligation to make the Carriage Request described in paragraph 3 of the GP Carriage Agreement with respect to LAWMA's use of LAWMA's Firm Carriage Capacity and, subject to GP's prior consent, LAWMA's Excess Capacity.

1.3.1.6 The obligation to perform the accounting described in paragraph 10 of the GP Carriage Agreement with respect to LAWMA's use of LAWMA's Firm Carriage Capacity and LAWMA's Excess Capacity.

1.3.2 GP shall assign to LAWMA the following rights under paragraph 2 and paragraph 9 of the GP Irrigated Easement Agreement ("Temporary Partial Easement Assignment"):

1.3.2.1 The right to run the first 8.2 c.f.s. of water in the Phase 1 Inlet Canal as a Conveyance Structure under the GP Irrigated Easement.

1.3.2.2 The right to run the first 6.5 c.f.s. of water in the Outlet Channel as a Conveyance Structure under the GP Irrigated Easement.

1.4 Lease Payment. LAWMA shall pay GP annually for the Leased Interests and the Temporary Partial Assignments an annual Lease Payment of $125,000, which represents $250 per acre-foot of usable storage capacity leased to LAWMA hereunder ("Lease Payment"), as follows:

1.4.1 LAWMA shall pay the Lease Payment in advance for each "Lease Year," which is the twelve-month period that begins on the Effective Date for the first Lease Year and that begins on the anniversary of the Effective Date for each Lease Year thereafter.

1.4.2 LAWMA shall pay GP $125,000 on the date that is three business days after the Effective Date as the Lease Payment for the first Lease Year.

1.4.3 No later than twenty-eight days before each anniversary of the Effective Date during the Lease Period, LAWMA shall pay GP an additional Lease Payment of $125,000.

1.5 Pro-Rated Credit or Refund of Lease Payment at End of Lease Period. If the Lease Period ends before the Initial Termination Date or the end of the then-current Lease Year, the Parties shall calculate the percentage of the Lease Year that remains on the date of such termination ("Post-Lease Credit Factor"). For example, if the Effective Date is June 15, 2018, such that each subsequent Lease Year begins on June 15, and if the Closing occurs on August 5, 2019, the Post-Lease Credit Factor would be 86% (313/365 = 0.858); and with the same effective date, if the Closing occurs on May 30, 2019, the Post-Lease Credit Factor would be 4% (15/365

= 0.041). The Parties then shall multiply the Post-Lease Credit Factor by the Lease Payment to determine the "Post-Lease Credit" or the "Post-Lease Refund" due to LAWMA, as more fully described in paragraphs 1.5.1 and 1.5.2 below.

1.5.1 If the Lease Period ends by virtue of occurrence of Closing, GP shall apply the Post-Lease Credit to the Purchase Price described in paragraph 2.4 below, so that the Purchase Price is adjusted by the Post-Lease Credit. For example, if the Post-Lease Credit Factor were 86%, the Post-Lease Credit would be $107,500; and if the Post-Lease Credit Factor were 4%, the Post-Lease Credit would be $5,000.

1.5.2 If the Lease Period ends by virtue of GP's or LAWMA's termination of this Agreement in accordance with its terms, GP shall pay the Post-Lease Refund to LAWMA within twenty-eight days of the end of the Lease Period.

1.6 Operational Costs During Lease Period. During the Lease Period, LAWMA shall not be required to make payments in addition to the Lease Payments to compensate GP for the costs for GP's operation and maintenance of the Phase 1 Storage Facilities; rather, GP shall operate and maintain the Phase 1 Storage Facilities at GP's sole cost.

1.7 Accounting. On a daily basis during the Lease Period, GP shall record the volume of water delivered to storage in the Dedicated Storage Capacity, residing in storage in the Dedicated Storage Capacity, and pumped out of the Dedicated Storage Capacity into the Outlet Channel pursuant to this Agreement. GP shall deliver copies of such accounting records to LAWMA weekly, and LAWMA then shall account for its operations hereunder as part of LAWMA's normal monthly accounting submitted to the Office of the Division Engineer. LAWMA shall obtain any necessary authorizations, approvals, or permits required for its use of the Dedicated Storage Capacity. At the direction of the Division Engineer, GP shall modify or update the stage-area-capacity table for the Phase I Storage Cell to ensure that accounting is accurate for deliveries into and out of the Phase I Storage Cell.

1.8 Operation and Maintenance During Lease Period. GP, and not LAWMA, shall operate, maintain, and repair the Phase 1 Storage Facilities, the Access Road, and the Outlet Channel during the Lease Period, including without limitation performing all maintenance, repairs, and preventative measures required to maintain the Phase 1 Storage Facilities, the Access Road, and the Outlet Channel in good working order; and further including all reading and operation of gauges, meters, valves, and gates.

1.9 Delivery into and Release from Dedicated Storage Capacity. During the Lease Period, LAWMA shall coordinate with and direct the Lamar Canal Company with respect to deliveries into the Dedicated Storage Capacity. Should such deliveries require action by GP staff (e.g., opening a lateral headgate into the Phase 1 Storage Cell), LAWMA shall coordinate with and direct GP with respect to such deliveries. LAWMA also shall coordinate with and direct GP with respect to pumping of water from the Dedicated Storage Capacity into the Outlet Channel. The timing of deliveries to and releases from the Dedicated Storage Capacity will be at LAWMA's sole discretion; provided, however, that LAWMA's carriage of foreign water in the Lamar Canal for delivery to the Dedicated Storage Capacity pursuant to the Temporary Partial Carriage Assignment is subject to the terms and conditions of the GP Carriage Agreement.

LAWMA shall give GP at least twenty-four hours' advance written notice of LAWMA's requested release of water from the Dedicated Storage Capacity in accordance with paragraph 5.6 below ("LAWMA Release Notice"), and GP and LAWMA shall cooperate to ensure that deliveries to and releases from the Dedicated Storage Capacity are timely made.

1.10 Losses. To the extent that other water users, including GP, are storing water in the Phase I Storage Cell during the Lease Period, evaporative losses will be assessed on LAWMA's and the other water users' stored water pro-rata, based on each user's volume of water stored in the Phase I Storage Cell on a monthly basis.

1.11 Expiration. The Lease and the Temporary Partial Assignments described in this Section 1 will expire at the end of the Lease Period. After such expiration, the Parties will have no further rights or obligations under this Article 1 except that the Parties shall make all required payments that have accrued but have not yet been paid, and GP shall complete any requested releases of LAWMA's stored water from the Dedicated Storage Capacity and shall deliver to LAWMA all accounting documentation described in paragraph 1.7 above.

1.12 LAWMA Release, Indemnification, and Insurance. During the Lease Period, LAWMA agrees to provide the release and indemnification and to obtain and maintain such insurance as provided for under Section 11 and 12 of the Easement Deed and Agreement.

1.13 GP Release, Indemnification, and Insurance. During the Lease Period, GP agrees to provide the release and indemnification and to obtain and maintain such insurance as provided for under Sections 13 and 14 of the Easement Deed and Agreement.

ARTICLE 2
AGREEMENT FOR PURCHASE AND SALE AND PERMANENT PARTIAL ASSIGNMENTS

2.1 Pre-Condition to Agreement for Purchase and Sale and Permanent Partial Assignments. This Agreement for Purchase and Sale and Permanent Partial Assignments will be made effective only by LAWMA's written notice to GP ("LAWMA Exercise Notice") of LAWMA's intention to purchase the Easements and Permanent Partial Assignments (as defined below and hereinafter, collectively, the "Conveyed Interests"), which notice must be delivered on or before the date that is 45 days prior to the Initial Lease Termination Date unless GP agrees otherwise, in writing. In the LAWMA Exercise Notice, LAWMA shall include its desired date of Closing, which must be no sooner than the date that is 45 days after the LAWMA Exercise Notice and no later than the earlier to occur of (a) the last day of the Lease Period or (b) the date that is 45 days following the Final Decree Date (as defined in paragraph 2.7.2 below). If LAWMA fails to make timely delivery of the LAWMA Exercise Notice, then the Lease Period will end as of the Initial Lease Termination Date, this Article 2 will be null and void, and the Parties will have no rights or obligations hereunder.

2.2 Purchase and Sale. Subject to LAWMA's timely delivery of the LAWMA Exercise Notice, GP shall sell to LAWMA and LAWMA shall purchase from GP the easement interests provided for under the Easement Deed and Agreement attached as **Exhibit C** and

subject to the Permitted Exceptions (as defined in paragraph 2.5.4 below) (the "Easements") pursuant to the terms and conditions of this Agreement ("Purchase and Sale").

2.3 Permanent Partial Assignments. Subject to LAWMA's timely delivery of the LAWMA Exercise Notice, GP shall assign the following rights and delegate the following obligations to LAWMA on a permanent basis ("Permanent Partial Assignments"):

2.3.1 GP shall assign to LAWMA the rights and shall delegate to LAWMA the obligations under the GP Carriage Agreement attributable to LAWMA's use of LAWMA's Firm Carriage Capacity and LAWMA's Excess Capacity as provided for under the Partial Carriage Assignment and Assumption Agreement attached as **Exhibit D** (the "Permanent Partial Carriage Assignment"). As provided in the Permanent Partial Carriage Assignment, LAWMA shall thereafter be solely responsible for paying those Carriage Charges described in paragraph 2 of the GP Carriage Agreement that are attributable to LAWMA's use of LAWMA's Firm Carriage Capacity and LAWMA's Excess Capacity.

2.3.2 GP shall assign to LAWMA the rights under the GP Irrigated Easement Agreement as provided for under the Partial Easement Assignment Agreement attached as **Exhibit E** ("Permanent Partial Easement Assignment").

2.4 Purchase Price. The base price for the Conveyed Interests is $1,750,000.00 ("Base Purchase Price"), which amount GP shall adjust to match the "Ending Balance" shown on the Purchase Price Amortization Schedule attached hereto as Schedule 2.4 for the number of full months following the Effective Date that have elapsed as of the date of the Closing (such amount the "Adjusted Base Purchase Price"), which amount shall be further adjusted and payable at Closing as described below (as thus adjusted, the "Purchase Price"):

2.4.1 On the date that is three business days after the Effective Date, LAWMA shall pay GP $2,941.00 (the "Earnest Money Deposit"). GP shall apply the Earnest Money Deposit to the Adjusted Base Purchase Price at Closing.

2.4.2 GP shall apply the Post-Lease Credit, if any, to the Adjusted Base Purchase Price at Closing. No later than 14 days before Closing, LAWMA shall deliver to GP LAWMA's written calculation of the Post-Lease Credit, and GP shall give LAWMA GP's prompt confirmation of or requested correction to such calculation.

2.4.3 At Closing, LAWMA shall pay GP in cash or other immediately available funds the "Purchase Price Balance," which is the Adjusted Base Purchase Price minus the Earnest Money Deposit and as otherwise adjusted as provided for under this Agreement.

2.5 Title Review and Objections; Permitted Exceptions.

2.5.1 Within 21 days after the Effective Date, GP shall cause to be furnished to LAWMA an informational title commitment from The Guaranty Abstract Company, 312 S. Main Street, Lamar, CO, 81052, or such other title company as mutually agreed to by the Parties (the "Title Company"), for the Easements ("Initial Title Commitment"), along with copies of all documents referred to in the Initial Title Commitment and a certificate of taxes due ("Initial Title Documents").

2.5.2 After receipt of the Initial Title Commitment and Initial Title Documents, LAWMA will have a period of 21 days in which to review the Initial Title Commitment and Initial Title Documents ("Initial Title Examination Period"). During the Initial Title Examination Period, LAWMA may give GP written notice of LAWMA's objection to specified defects in title ("Initial Title Defect Notice"). Within 14 days after GP's receipt of the Initial Title Defect Notice, GP may, in GP's sole discretion, give LAWMA notice of those defects in the Initial Title Defect Notice which GP is willing to cure, if any ("Response Notice"). If LAWMA is dissatisfied with the Response Notice, LAWMA may, as its exclusive remedy, elect by written notice given to GP on or before the date that is 7 days after receipt of the Response Notice either (a) to accept the Initial Title Documents with resolution, if any, of LAWMA's objections as set forth in the Response Notice (or if no Response Notice is tendered, without any resolution of such objections) and without any reduction or abatement of the Purchase Price, or (b) to terminate this Agreement, in which event GP shall refund the Earnest Money Deposit and deliver the Post-Lease Refund, if any, to LAWMA within fourteen days of any termination pursuant to this paragraph. Upon receipt of GP's Response Notice, LAWMA will be deemed to have accepted any title exceptions included in the Initial Title Commitment if LAWMA does not deliver an Initial Title Defect Notice to GP within the Initial Title Examination Period. If LAWMA fails to give notice to terminate this Agreement on or before the end of the 7-day period provided for above, LAWMA shall be deemed to have elected to have approved the Initial Title Documents with resolution, if any, of LAWMA's objections as set forth in the Response Notice (or if no Response Notice is tendered, without any resolution of such objections).

2.5.3 No earlier than 30 days before Closing and no later than 15 days before Closing, GP shall cause the Title Company to deliver to LAWMA an updated title commitment for the Easements ("Updated Title Commitment"), along with copies of any documents referred to in the Updated Title Commitment that were not Initial Title Documents and along with a certificate of taxes due ("Updated Title Documents"). After receipt of the Updated Title Commitment and Updated Title Documents, LAWMA will have a period of 7 days to review the Updated Title Commitment and Updated Title Documents ("Final Title Examination Period"). During the Final Title Examination Period, LAWMA may give GP written notice of LAWMA's objection to specified defects in title ("Final Title Defect Notice"); provided, however, that LAWMA may not raise, in any Final Title Defect Notice, objections to title exceptions that were (a) included in the Initial Title Commitment and Initial Title Documents, or (b) caused or created by LAWMA. The Parties will resolve any objections raised in LAWMA's Final Title Defect Notice, in the same manner as provided for with respect to LAWMA's Initial Title Defect Notice under paragraph 2.5.2 above.

2.5.4 For purposes of this Agreement, the term "Permitted Exceptions" means:

2.5.4.1 All matters shown in the Title Documents, other than (i) those objections, if any, which GP has agreed to cure pursuant to the Response Notice under this paragraph 2.5; (ii) mechanics' liens and taxes due and payable with respect to the period preceding Closing, to the extent arising by, through or under LAWMA, and (iii) the standard exception pertaining to taxes, which is limited to taxes and assessments payable in the year in which the Closing occurs and subsequent taxes and assessments; and

2.5.4.2 All other matters caused by or agreed to by LAWMA.

2.6 Diligence Period; Diligence Documents.

2.6.1 Within 7 days of the Effective Date, GP shall deliver to LAWMA copies of all documents or reports in its possession and control affecting use and operation of or otherwise relating to the Phase 1 Storage Facilities, the Outlet Channel, and the Access Road, including but not limited to any engineering reports, site plats and plans, stage-area-capacity tables, and existing surveys, leases, carriage agreements, other agreements, permits, licenses, certificates, commitments, or applications filed with governmental agencies or permitting authorities ("Initial Diligence Documents").

2.6.2 Subject to the terms of this paragraph 2, from the Effective Date to and including the date that is 90 days thereafter ("Initial Diligence Period") LAWMA shall conduct whatever diligence investigations LAWMA deems necessary in connection with the Conveyed Interests and the Phase 1 Storage Facilities. During the Initial Diligence Period, and upon written notice to GP, LAWMA may terminate this Agreement for any reason in LAWMA's sole discretion in which case GP shall refund the Earnest Money Deposit and deliver the Post-Lease Refund, if any, to LAWMA within fourteen days of such termination pursuant to this paragraph.

2.6.3 Provided that the LAWMA Exercise Notice includes a request for updated diligence documents referencing this paragraph, then no earlier than 30 days before Closing and no later than 15 days before Closing, GP shall deliver to LAWMA documentation of any and all changes in or to the documents and information provided in the Initial Diligence Documents ("Updated Diligence Documents"). After receipt of the Updated Diligence Documents, LAWMA will have a period of 7 days to review the Updated Diligence Documents ("Final Diligence Period"). During the Final Diligence Period, LAWMA may give GP written notice of LAWMA's objection to elements of the Easements ("Final Objection Notice"); provided, however, that LAWMA may not raise, in any Final Objection Notice, objections to elements of the Easements that were (a) described in the Initial Diligence Documents or (b) caused or created by LAWMA. Upon receipt of a Final Objection Notice, GP will have a period of 3 business days to cure the objected-to elements of the Easements and to give LAWMA written notice of such cure, or to give LAWMA written notice of GP's inability to cure ("Final Objection Cure Period"). Upon receipt of GP's written notice of cure or inability to cure, LAWMA will have a period of 2 business days to accept such notice, in which case LAWMA will be deemed to have waived the objections raised in the Final Objection Notice; or to reject such notice and terminate this Agreement on the basis of LAWMA's objections to specified elements of the Easements in which case GP shall refund the Earnest Money Deposit and deliver the Post-Lease Refund, if any, to LAWMA within fourteen days of any termination pursuant to this paragraph.

2.6.4 During the Initial Diligence Period, LAWMA may have reasonable access to the Phase 1 Storage Facilities for the purpose of conducting due diligence inspections ("Inspections") subject to the following terms and conditions; provided, however, that in exercising such access, LAWMA shall not unreasonably interfere with GP's use and enjoyment of the Phase 1 Storage Facilities.

2.6.4.1 LAWMA shall not permit any mechanic's or materialmen's liens or any other liens to attach to the Phase 1 Storage Facilities or the property on which they are located by reason of the performance of any work or the purchase of any materials by LAWMA

or any other party in connection with any Inspections conducted by or for LAWMA. LAWMA shall give notice to GP a reasonable time prior to entry onto the Property and shall permit GP to have a representative present during all Inspections conducted at the Property.

2.6.4.2 LAWMA shall indemnify, defend, and hold harmless GP, together with GP's affiliates, parent and subsidiary entities, successors, assigns, partners, managers, members, employees, officers, directors, trustees, shareholders, counsel, representatives, and agents, from any expenses, damages and liabilities, including reasonable attorneys' fees, that GP may suffer or incur arising out of any claims for property damage or personal injury, or claims from materialmen or laborers, that arise solely from and are caused by LAWMA's Inspections. The provisions of this Section 2.6.4.2 will survive any termination of this Agreement.

2.6.4.3 Prior to accessing the Property for the purpose of Inspections hereunder, LAWMA shall provide evidence that LAWMA or its agent conducting such Inspections maintains a policy of commercial general liability insurance with a minimum limit of One Million Dollars ($1,000,000.00) per occurrence and Two Million Dollars ($2,000,000.00) annual aggregate, and that GP has been named as an additional insured under such policy.

2.7 LAWMA's Water Court Decree.

2.7.1 If LAWMA withdraws its Water Court Application, or the portions thereof relating to use of water by CS-U, prior to delivering its LAWMA Exercise Notice then LAWMA may terminate this Agreement by written notice to GP, in which case GP shall refund the Earnest Money Deposit and deliver the Post-Lease Refund, if any, to LAWMA within fourteen days of any termination pursuant to this paragraph.

2.7.2 If LAWMA obtains a final, unappealable decree that includes approval of all claims within the Water Court Application that relate to use of water by CS-U, then LAWMA shall provide its LAWMA Exercise Notice within ten days following the issuance of such decree (the "Final Decree Date"). If the final decree that LAWMA obtains does not include approval of all claims within the Water Court Application that relate to use of water by CS-U, then LAWMA may terminate this Agreement by written notice to GP, in which case GP shall refund the Earnest Money Deposit and deliver the Post-Lease Refund, if any, to LAWMA within fourteen days of any termination pursuant to this paragraph.

2.8 Closing of Purchase and Sale and Permanent Partial Assignments.

2.8.1 The closing of the Purchase and Sale and Permanent Partial Assignments described in this Article 2 ("Closing") will be held within 7 days of the date provided for in the LAWMA Exercise Notice, or on another date agreed to in writing by the Parties ("Closing Date"). The Closing will be held GP's offices at 7991 Shaffer Parkway, Suite 200, Littleton, Colorado 80127, or at another location agreed to in writing by the Parties.

2.8.2 At the Closing, the Parties shall make the following deliveries, each of which is a condition precedent to the others:

2.8.2.1 GP shall deliver or cause to be delivered to LAWMA an executed counterpart of the Easement Deed and Agreement attached as **Exhibit C** subject to the Permitted Exceptions.

2.8.2.2 GP shall deliver or cause to be delivered to LAWMA an executed counterpart of the Permanent Partial Carriage Assignment and Assumption Agreement attached as **Exhibit D**.

2.8.2.3 GP shall deliver or cause to be delivered to LAWMA a copy of the Lamar Canal Company's written approval of the Permanent Partial Carriage Assignment and Assumption Agreement.

2.8.2.4 GP shall deliver or cause to be delivered to LAWMA an executed counterpart of the Partial Easement Assignment Agreement attached as **Exhibit E**.

2.8.2.5 LAWMA shall deliver or cause to be delivered to GP the Purchase Price Balance.

2.8.2.6 LAWMA shall deliver or cause to be delivered to GP an executed counterpart of the Easement Deed and Agreement attached as **Exhibit C**.

2.8.2.7 LAWMA shall deliver or cause to be delivered to GP an executed counterpart of the Permanent Partial Carriage Assignment and Assumption Agreement attached as **Exhibit D**.

2.8.2.8 LAWMA shall deliver or cause to be delivered to GP an executed counterpart of the Partial Easement Assignment Agreement attached as **Exhibit E**.

2.8.2.9 LAWMA shall deliver or cause to be delivered to GP written notice of LAWMA's waiver or modification, if any, of specified Additional Conditions Precedent as described in paragraph 2.9 below.

2.8.2.10 The Parties shall each execute and deliver such documentation as reasonably required to consummate the Closing and as required by the Title Company to issue the Title Policy, as defined below.

2.8.3 Recording of Documents. After consummation of the deliveries described in paragraph 2.8.2 above, LAWMA will be entitled to record the fully-executed Easement Deed and Agreement, the fully-executed Permanent Partial Carriage Assignment and Assumption Agreement, and the fully-executed Permanent Partial Easement Assignment Agreement in the real property records of Prowers County. If required by the Title Company in connection with its issuance of the Title Policy (as defined below), the Title Company will be entitled to record the fully-executed Easement Deed and Agreement.

2.8.4 Issuance of Title Policy. At Closing, GP shall cause the Title Company, at GP's expense, to issue to LAWMA a title policy insuring LAWMA's interest in the Easements, subject only to the Permitted Exceptions ("Title Policy") with the GP Endorsements, as defined below, and, at LAWMA's expense, the LAWMA Endorsements, as defined below.

The Title Policy must insure marketable, insurable title to the Property in LAWMA in the amount of the Base Purchase Price. At or before the Closing, GP shall satisfy all requirements contained in the Title Commitment or in any update thereof that GP agreed to satisfy in its Response Notice or any updated Response Notice. GP, at GP's expense, shall cause the Title Company to issue any endorsements that GP undertakes in writing to cause to be issued at GP's expense prior to the Closing (collectively, the "GP Endorsements"). LAWMA, at LAWMA's expense, may elect for the Title Company to issue such other endorsements, if any, as LAWMA may determine and that are included in the final update of the Title Commitment issued by the Title Company (collectively, the "LAWMA Endorsements").

2.8.5 Operational Costs Post-Closing. As provided in the Easement Deed and Agreement, upon Closing, LAWMA shall thereafter pay for its share of GP's actual costs for GP's operation and maintenance of the Phase 1 Storage Facilities and Outlet Channel as follows:

2.8.5.1 Operating Costs.

2.8.5.1.1 GP's actual costs of operating the Phase 1 Pumps to deliver water out of the Dedicated Storage Capacity and into the Outlet Channel at LAWMA's direction ("Pumping Costs").

2.8.5.1.2 LAWMA's pro rata share of GP's actual costs incurred in the operation and maintenance of the Phase 1 Storage Facilities and Outlet Channel ("O&M Costs"). For purposes of determining LAWMA's pro rata share of O&M Costs, the Parties agree that LAWMA's pro rata share is equal to 29.4%.

2.8.5.2 Payment. GP shall invoice LAWMA monthly, in arrears, for any applicable Pumping Costs and LAWMA's pro rata share of any O&M Costs, and LAWMA shall pay such invoices within twenty-eight days of receipt.

2.8.6 Closing Costs. GP and LAWMA shall each pay one half of the recording and customary costs for the Closing.

2.9 Additional Conditions Precedent to Closing. Notwithstanding any other provision of this Agreement, the following are additional conditions precedent to LAWMA's obligation to close on the Purchase and Sale and Permanent Partial Assignments ("Additional Conditions Precedent").

2.9.1 All of GP's representations and warranties in paragraph 3.1 below were true and correct as of the dates specified therein.

2.9.2 GP has taken no action between the Effective Date and the Closing Date that materially and detrimentally has affected or will affect the use or value of the Phase 1 Storage Facilities, the Outlet Channel, or the Access Road.

2.9.3 There has been no third-party action or force majeure between the Effective Date and the Closing Date that materially and detrimentally has affected or will affect the use or value of the Phase 1 Storage Facilities, the Outlet Channel, or the Access Road.

2.9.4 GP has performed all covenants, agreements, and obligations required hereunder to be performed before or on the Closing Date.

2.9.5 If any of the Additional Conditions Precedent is not met to LAWMA's satisfaction, LAWMA in its sole discretion may waive the unmet Additional Condition(s) Precedent, agree to modify the unmet Additional Condition(s) Precedent, or terminate this Agreement. At Closing, LAWMA shall give GP written notice of any waiver or modification of specified Additional Conditions Precedent and GP shall refund the Earnest Money Deposit and deliver the Post-Lease Refund, if any, to LAWMA within fourteen days of any termination pursuant to this paragraph.

2.10 Casualty Damage. If, before Closing, any portion of the Phase 1 Storage Facilities is substantially damaged by fire, flood, or other casualty, LAWMA may elect either to terminate this Agreement by giving GP prompt written notice of such termination, or to continue to Closing despite such damage. If LAWMA elects to so terminate this Agreement, GP shall refund the Earnest Money Deposit and deliver the Post-Lease Refund, if any, to LAWMA within fourteen days of any termination pursuant to this paragraph.

ARTICLE 3
REPRESENTATIONS AND WARRANTIES

3.1 GP's Representations and Warranties: GP represents and warrants to LAWMA as follows:

3.1.1 As of the Effective Date and as of the Closing Date, GP is validly organized, in good standing, and authorized to do business in the State of Colorado.

3.1.2 As of the Effective Date and as of the Closing Date, execution and performance of this Agreement will not violate any agreement, obligation, permit, or order by which GP is bound, nor give rise to any claim by any third party.

3.1.3 As of the Effective Date and as of the Closing Date, GP has full right, power, and authority to perform its obligations hereunder.

3.1.4 As of the Effective Date, the undersigned is duly authorized to bind GP to the terms of this Agreement.

3.1.5 As of the Effective Date and as of the Closing Date, GP has no knowledge of any pending action or claim and has no knowledge of facts that might give rise to any action or claim affecting ownership or use of or vested rights with respect to the Phase 1 Storage Facilities, the Access Road, the Outlet Chanel, the GP Irrigated Easement, or the GP Carriage Agreement.

3.1.6 As of the Closing Date, GP has good and marketable title to the Phase 1 Storage Facilities, the Access Road, and the Outlet Channel.

3.1.7 As of the Effective Date and as of the Closing Date, the Phase 1 Storage Cell has a total storage capacity, including in situate storage, of approximately 1,700 acre-feet.

3.1.8 As of the Effective Date and as of the Closing Date, the Phase 1 Inlet Canal has a carriage capacity of approximately 28 c.f.s.

3.1.9 As of the Effective Date and as of the Closing Date, the Phase 1 Pumps can pump water from the Phase 1 Storage Cell at a maximum combined capacity of approximately 22 c.f.s.

3.1.10 As of the Effective Date and as of the Closing Date, the Outlet Channel has a carriage capacity of at least 22 c.f.s.

3.1.11 As of the Effective Date and as of the Closing Date, GP is and will be solely responsible for complying with any and all reclamation requirements associated with GP's mining of the West Farm Pit.

3.1.12 As of the Effective Date and as of the Closing Date, GP has excavated the Phase I Storage Cell in all material respects consistent with the requirements of the applicable mining permits, and the Phase I Storage Cell has been reclaimed consistent with such mining permits.

3.2 LAWMA's Representations and Warranties. LAWMA represents and warrants to GP as follows:

3.2.1 As of the Effective Date and as of the Closing Date, LAWMA is validly organized, in good standing, and authorized to do business in the State of Colorado.

3.2.2 As of the Effective Date and as of the Closing Date, execution and performance of this Agreement will not violate any agreement, obligation, permit, or order by which LAWMA is bound, nor give rise to any claim by any third party.

3.2.3 As of the Effective Date and as of the Closing Date, LAWMA has full right, power, and authority to perform its obligations hereunder.

3.2.4 As of the Effective Date, the undersigned is duly authorized to bind LAWMA to the terms of this Agreement.

ARTICLE 4
DEFAULT AND REMEDIES

4.1 LAWMA Default. If LAWMA is in default, then GP may elect to terminate this Agreement by written notice to LAWMA, in which case GP shall retain the Earnest Money Deposit; provided, however, that GP may not terminate the Agreement under this paragraph before having given LAWMA written notice of the default and a reasonable period of no less than 28 days to cure. The Parties agree that in the event of termination under this paragraph, the Earnest Money Deposit will be retained by GP as LIQUIDATED DAMAGES and not a penalty, and that the amount of such liquidated damages is fair and reasonable. GP expressly waives the remedies of specific performance and additional damages except as provided for in paragraph 4.4 below.

4.2 GP Default. If GP is in default, then LAWMA may elect to terminate this Agreement by written notice to GP; provided, however, that LAWMA may not terminate the Agreement under this paragraph before having given GP written notice of the default and a reasonable period of no less than 28 days to cure. GP shall refund the Earnest Money Deposit and deliver the Post-Lease Refund, if any, to LAWMA within fourteen days of any termination pursuant to this paragraph. LAWMA expressly waives the remedies of specific performance and additional damages.

4.3 Date and Effect of Termination. The date of termination pursuant to this Article 4 will be the date that the non-terminating Party receives the written notice of termination required hereunder. As of the date of such termination, the Parties will have no further rights or obligations hereunder.

4.4 Exclusive Remedies. The foregoing remedies are the exclusive remedies available to the Parties for default hereunder; provided, however, that GP's election to terminate this Agreement will not prohibit GP from making a claim against LAWMA for amounts otherwise due and payable to GP, but not to the Lamar Canal Company, for LAWMA's use of LAWMA's Firm Carriage Capacity or LAWMA's Excess Capacity.

ARTICLE 5
GENERAL PROVISIONS

5.1 Entire Agreement. This Agreement contains the entire agreement of the Parties, and neither Party has relied upon any fact, statement, or representation not expressly set forth herein. All prior and contemporaneous conversations, negotiations, verbal agreements, representations, covenants, and warranties concerning the subject matter hereof are merged into this Agreement.

5.2 Amendment. This Agreement may be amended in whole or in part only by written agreement authorized and executed by each of the Parties with the same formality as is this Agreement.

5.3 Counterparts. This Agreement may be executed in counterparts, each of which is to be deemed original, but all of which constitute one and the same agreement.

5.4 Joint Draft. The Parties drafted this Agreement jointly, with each having the advice of legal counsel and an equal opportunity to contribute to its content. Therefore, this Agreement is not to be construed for or against a Party on the basis of authorship.

5.5 Governing Law. This Agreement is governed by and to be construed in accordance with the laws of the State of Colorado.

5.6 Notices. With the exception of the LAWMA Release Notice, any notice required to be delivered under this Agreement must be in writing and sent by (a) certified mail, return receipt requested, (b) a recognized overnight delivery service with customer tracking capability, (c) hand delivery, or (d) email, provided the email notice is followed by one of the other delivery methods, to the following addresses:

If to GP:	Karl Nyquist 7991 Shaffer Pkwy, Suite 200 Littleton, CO 80127 karl@cacompanies.com
with a copy to:	Wayne F. Forman Brownstein Hyatt Farber Schreck, LLP 410 17th Street, Suite 2200 Denver, CO 80202 wforman@BHFS.com
If to LAWMA:	Donald F. Higbee, Manager Lower Arkansas Water Management Association 310 South 6th Street P.O. Box 1161 Lamar, Colorado 81052 lawma@cminet.net
with a copy to:	Richard J. Mehren Moses, Wittemyer, Harrison and Woodruff, P.C. P.O. Box 1440 Boulder, CO 80306-1440 rmehren@mwhw.com

The LAWMA Release Notice may be delivered by email, but if so delivered must be addressed to all of the following: Ron@ProwersAg.com; karl@cacompanies.com; lawma@cminet.net; bill@grasmickinc.com; or such other email addresses as GP may provide.

5.7 Assignment. Neither Party may assign any part of this Agreement without the prior written consent of the other Party.

5.8 No Third-Party Beneficiaries. There are no third-party beneficiaries to this Agreement.

5.9 No Brokers. No Brokers are involved in this transaction. GP and LAWMA each represent to the other that it has not caused any broker's, finder's or similar fee or commission to be due in connection with the transaction contemplated herein, and each of GP and LAWMA hereby agrees to indemnify and hold harmless the other from any claim, expense or cost (including court costs and attorneys' fees, whether suit be brought or not) resulting from any claim caused by or attributable to it for such fee or commission.

[signatures on following page]

Agreed to and executed as of the Effective Date.

GP AGGREGATES, LLC

By:_____
Karl Nyquist
Its Manager

LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION

By:_____
Robert J. Wilger
Its Vice President

ATTEST:

By:_____
Donald F. Higbee
Its Secretary

Agreed to and executed as of the Effective Date.

GP AGGREGATES, LLC

By:_____
Karl Nyquist
Its Manager

LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION

By:_____
Robert J. Wilger
Its Vice President

ATTEST:

By:_____
Donald F. Higbee
Its Secretary

Exhibit A-1
Legal Description of West Farm

A PARCEL OF LAND LOCATED IN THE NORTHEAST ¼ AND THE NORTHEAST ¼ OF THE NORTHWEST ¼ OF SECTION 33, AND THE SOUTH ½ OF THE SOUTHEAST ¼ OF SECTION 28, TOWNSHIP 22 SOUTH, RANGE 46 WEST OF THE SIXTH PRINCIPAL MERIDIAN, IN PROWERS COUNTY, COLORADO AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE POINT OF BEGINNING BEING THE NORTHEAST CORNER OF SECTION 33, TOWNSHIP 22 SOUTH, RANGE 46 WEST OF THE SIXTH PRINCIPAL MERIDIAN;

THENCE FOLLOWING THE EAST LINE OF SAID SECTION 33 S01°19'23"E, A DISTANCE OF 2389.37 FEET;

THENCE S50°40'01"W, A DISTANCE OF 256.23 FEET;

THENCE S87°42'04"W, A DISTANCE OF 2325.91 FEET;

THENCE N00°00'00"W, A DISTANCE OF 480.27 FEET;

THENCE ALONG A CURVE WITH A RADIUS OF 806.49 FEET AND LENGTH OF 1266.83 FEET, SAID CURVE HAVING A CHORD BEARING OF N45°00'00"W AND A CHORD LENGTH OF 1140.55 FEET;

THENCE N90°00'00"W FOLLOWING, A DISTANCE OF 328.25 FEET TO A POINT ON THE EAST BOUNDARY LINE OF A PARCEL OF LAND RESERVED FOR FUTURE COLORADO STATE HIGHWAY 50 REALIGNMENT;

THENCE FOLLOWING SAID EAST PARCEL BOUNDARY LINE N09°10'38"W A DISTANCE OF 858.25 FEET;

THENCE N88°15'32"E, A DISTANCE OF 1110.50 FEET;

THENCE N01°25'02"W, A DISTANCE OF 389.76 FEET TO THE NORTH ¼ CORNER OF SAID SECTION 33;

THENCE N00°30'38"W, A DISTANCE OF 966.48 FEET;

THENCE N88°25'35"E, A DISTANCE OF 2639.68 FEET TO A POINT ON THE EAST LINE OF SECTION 28, TOWNSHIP 22 SOUTH, RANGE 46 WEST OF THE SIXTH PRINCIPAL MERIDIAN;

THENCE FOLLOWING THE EAST LINE OF SAID SECTION 28 S00°29'53"E, A DISTANCE OF 951.60 FEET TO THE POINT OF BEGINNING. SAID PARCEL CONTAINS 232.78 ACRES MORE OR LESS.

BASIS OF BEARING
BASIS OF BEARING FOR THIS PERMIT BOUNDARY LEGAL DESCRIPTION BEING THE EAST LINE OF SECTION 33, TOWNSHIP 22 SOUTH, RANGE 46 WEST OF THE SIXTH PRINCIPAL MERIDIAN. SAID LINE HAVING A BEARING OF S11°19'23"E,
COUNTY OF PROWERS,
STATE OF COLORADO.

Exhibit A-2
Legal Description of Adjacent Property

The following property, LESS AND EXCEPT the real property described in Exhibit A-1 above.

Parcel No. 1:

Township 22 South, Range 44 West of the Sixth Principal Meridian
Section 31: SE¼
Section 32: SW¼; SW¼NE¼; SE¼, except a tract described in Warranty Deed recorded October 18, 1995 at Reception No. 470427

Township 23 South, Range 44 West of the Sixth Principal Meridian
Section 5: NE¼ & NW¼ lying North of U. S. Highway 50

Section 6: NE¼ lying North of U. S. Highway 50

And INCLUDING the following: Lot 1, Borderland Estates Subdivision Filing No. 3, said Subdivision being a part of the E½ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the W½ of Section 4 and the N½ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 4, 2007 at Reception No. 516414 of the Prowers County Clerk and Recorder records.

EXCEPT the following three descriptions:
1. Lots 1, 2, 3, 4, 5, 6, 7 and 8, Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.
2. Lots 1, 2 and 3, Borderland Estates Subdivision Filing No. 2, being a part of the SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian, according to the plat recorded December 14, 2006 at Reception No. 513232 of the Prowers County Clerk and Recorder records.
3. Lots 2, 3 and 4, Borderland Estates Subdivision Filing No. 3, being a part of E½ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of W½ Section 4 and N½ Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, according to the plat recorded December 4, 2007 at Reception No. 516414 of the Prowers County Clerk and Recorder records.

Township 23 South, Range 44 West of the Sixth Principal Meridian
Section 4: Tract 10, as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as Recorded March 5, 1927 in Book 2, Pages 45-61, Prowers County Records, said tract being situated in the NW¼, and more particularly described as follows: Beginning at a 2" iron pipe monument which bears S.0°02'W., 100.00 feet from the NW corner of Section 4, Township 23 South, Range 44 West; thence S.89°55'E., 2628.4 feet to a 2" iron pipe monument; thence S.0°03'W., 2004.5 feet to a 2" iron pipe monument; thence N.71°45'W., 121.1 feet to a point; thence N.51°00'W., 507.0 feet to a point; thence N.64°53'W., 796.0 feet to a point; thence N.81° 06'W., 129.8 feet to a point; thence S. 72°54'W., 129.0 feet to a point; thence S. 64°47'W., 213.0 feet to a point; thence N.83°28'W., 174.5 feet to a point; thence N.78°38'W., 795.5 feet to a 2" iron pipe monument; thence N.0°02'E., 1245.7 feet to the place of beginning.
Tract 11, as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as recorded March 5,1927 in Book 2, Pages 45-61, Prowers County records, said tract being situated in the NW¼, and more particularly described as follows: Beginning at a 4" iron pipe monument marking the West Quarter corner of Section 4, Township 23 South, Range 44 West; thence N.0°02'E., 1263.7 feet to a 2" iron pipe monument; thence S.78° 38'E., 796.0 feet to a point; thence S 83°28'E., 185.0 feet to a point; thence N.64°47'E., 222.0 feet to a point; thence N.72°54'E., 114.0 feet to a point; thence S.81°06'E., 113.0 feet to a point; thence S.64 °53'E., 785.0 feet to a point; thence S.51°00'E., 504.0 feet; thence S.71°45'E., 146.0 feet to a 2" iron pipe monument; thence S.73°26'E., 342.8 feet to a point; thence S.48°52'E., 617.8 feet to a 2" iron pipe monument; thence N.89°58'W., 794.1 feet to a point; thence N.89°57'W., 2628.0 feet to the place of beginning,
except a tract of land described as follows: Beginning at the center of said Section 4; thence N.89°57'W., 100 feet to a point; thence N.0°03'E., 535 feet, more or less, to a point on the South right of way line of the XY Canal; thence S.71°45'E., 103 feet, more or less, to a point, thence S.73°26'E., 342.8 feet to a point; thence S.48°52'E., 617.8 feet to the Southeast corner of said Tract 11; thence along the South line of said Tract 11 N.89°58'W., 794.1 feet to the point of beginning;
except a tract deeded to the County of Prowers recorded January 12, 1927 at Reception No. 149133,
and except a tract deeded to the X Y Ditch Company recorded November 11, 1889 in Book 15 at page 289, and all that part of the SW¼ lying North of the North right of way line of the Atchison, Topeka and Santa Fe Railroad,
except that tract deeded to Prowers County recorded in Book 187 at Page 303,
and except a tract deeded to Prowers County recorded in Book 264 at Page 86 in the Prowers County records.

And
All that part of the SW¼ of Section 4 lying North of the North right of way line of The Atchison, Topeka and Santa Fe Railroad, except that tract deeded to the County of Prowers, recorded February 8, 1928 in Book 187 at Page 303, under Reception No. 155414.

All of Tracts 15, 16, 16A in SW¼ of Section 3, Township 23 South, Range 44 West of the Sixth P.M. as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as recorded March 5, 1927 in Book 2, Pages 45-61, Prowers County records, said tracts being more particularly described as follows:
Tract 15, Beginning at a 2" iron pipe monument which bears S.0°03'E., 410.0 feet from the West Quarter corner of Sec 3, Twp 23S, Rge 44W; thence S.0°03'E., 1180.0 feet to a 2" iron pipe monument; thence S.74°48'E., 1454.3 feet to a point; thence N.0°20'E., 1849.4 feet to a 2" iron pipe monument; thence S.78°28'W., 1445.1 feet to the place of beginning.

Tract 16, Beginning at a 4" iron pipe monument marking the center of Sec 3, Twp 23S, Rge 44W; thence S.0°29'W., 1210.0 feet to a 1½" iron pipe monument; thence West 402.0 feet to a 1½" iron pipe monument; thence S.0°29'W., 872.0 feet to a point; thence West 148.0 feet to a point; thence S.0°29'W., 54.0 feet to a 2" iron pipe monument; thence N.74°48'W., 213.5 feet to a 2" iron pipe monument; thence S.15°12'W., 50.0 feet to a point; thence N.74°48'W., 483.8 feet to a point; thence N.0°20'E., 1849.4 feet to a 2" iron pipe monument; thence N.66°40'E., 113.0 feet to a point; thence N.45°33'E., 134.6 feet to a 2" iron pipe monument; thence N.89°20'E., 1043.8 feet to the place of beginning.

Tract 16A, Beginning at a 1½" iron pipe monument, which bears S.0°29'W., 1210.0 feet from the center of Sec 3, Twp 23S, Rge 44W; thence S.0°29'W., 1075.0 feet to a 2" iron pipe monument; thence N.74°48'W., 568.0 feet to a 2" iron pipe monument; thence N.0°29'E., 54.0 feet to a point; thence East 148.0 feet to a point; thence N.0°29'E., 872.0 feet to a 1½" iron pipe monument; thence East 402.0 feet to the place of beginning.

All of Tracts 31, 32, 33, as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as Recorded March 5, 1927 in Book 2, Pages 45-61, Prowers County records, said tract being situated in the SE¼ and S½NE¼ of Section 1 and the NE¼NE¼ of Section 12, Township 23 South, Range 44 West of the Sixth P.M., and more particularly described as follows:

Tract 31, Beginning at a 4" iron pipe monument marking the East Quarter corner of Sec 1, Twp 23S, Rge 44W; thence S.89°42'W., 2615.4 feet to a 2" iron pipe monument; thence N.0°05'E., 1318.8 feet to a 2" iron pipe monument; thence S.89°43'E., 2516.0 feet to a point; thence S.63°33'E., 110.8 feet to a 2" iron pipe monument; thence S.0°03'W., 1271.0 feet to the place of beginning.

Tract 32, Beginning at a 4" iron pipe monument marking the East quarter corner of Sec 1, Twp 23S, Rge 44W; thence S.0°03'W., 1320.0 feet to a 4" iron pipe monument; thence N.89°46'W., 2609.7 feet to a 2" iron pipe monument; thence N.0°12'W., 1322.8 feet to a 2" iron pipe monument; thence N.89°42'E., 2615.4 feet to the place of beginning.

Tract 33, Beginning at a 4" iron pipe monument marking the SE corner of Sec 1, Twp 23S, Rge 44W; thence South 198.7 feet to a 2" iron pipe monument; thence N.65°53'W., 491.7 feet to a 2" iron pipe monument; thence N.69°39'W., 176.0 feet to a point; thence N.80°44'W., 235.0 feet to a point; thence S.89°32'W., 475.0 feet to a point; thence N.89°41'W., 1201.0 feet to a 2" iron pipe monument; thence N.31°36'W., 156.5 feet to a 2" iron pipe monument; thence N.0°12'W., 1093.6 feet to a 2" iron pipe monument; thence S.89°46'E., 2609.7 feet to a 4" iron pipe monument; thence S.0°03' W., 1320.8 feet to the place of beginning.

EXCEPT a parcel in Tract 33 in the Southeast Quarter of Section 1, Township 23 South, Range 44 West of the Sixth P.M. described in Warranty Deed to Department of Transportation as recorded March 31, 2003 at Reception No. 499662.

All of Tracts 37, 38, 39, situate in S½NE¼, E½SE¼, SW¼SE¼ of Section 11, Township 23 South, Range 44 West of the Sixth P.M., as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as recorded March 5, 1927 in Book 2, Pages 45-61, Prowers County records, said tracts more particularly described as follows:

Tract 37, Beginning at a 4" iron pipe monument marking the East Quarter corner of Sec 11, Twp 23S, Rge 44W; thence S.89°08'W., 125.5 feet to a point; thence N.73°33'W., 100.6 feet to a 2" iron pipe monument; thence S.89°08'W., 2425.0 feet to a 2" iron pipe monument; thence N.0°25'W., 1194.7 feet to a 2" iron pipe monument; thence S.74°48'E., 2750.5 feet to a 2" iron pipe monument; thence S.0°04'E., 463.0 feet to the place of beginning.

Tract 38, Beginning at a 4" iron pipe monument marking the center of the SE¼ of Sec 11, Twp 23S, Rge 44W; thence N.0°31'W., 1292.0 feet to a 2" iron pipe monument; thence N.89°08'E., 1095.8 feet to a 2" iron pipe monument; thence S.72°34'E., 67.7 feet to a point; thence S.54°57'E., 69.0 feet to a point; thence S.48°47'E., 69.3 feet to a point; thence S.28°10'E., 102.1 feet to a 2" iron pipe monument; thence S.0°04'E., 1087.7 feet to a 4" iron pipe monument; thence S.88°52'W., 1306.3 feet to the place of beginning.

Tract 39, Beginning at a 4" iron pipe monument marking the center of the SE¼ of Sec 11, Twp 23S, Rge 44W; thence N.88°52'E., 1306.3 feet to a 4" iron pipe monument; thence S.0°04'E., 1346.0 feet to a 2" iron pipe monument; thence S.88°44'W., 2631.6 feet to a 2" iron pipe monument; thence N.0°24'W., 1352.0 feet to a 4" iron pipe monument; thence N.88°52'E., 1333.0 feet to the place of beginning.

All of Tracts 40, 40A, 41 situate in W½ of Section 11, Township 23 South, Range 44 West of the Sixth P.M. as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as recorded March 5, 1927 in Book 2, Page 45-61, Prowers County records, said tracts being more particularly described as follows:

Tract 40, Beginning at a 2" iron pipe monument which bears N.0°24'W. 30.0' from the South Quarter corner of Sec 11, Twp 23S, Rge 44W; thence S.88°47'W., 767.8 feet to a 1½" iron pipe monument; thence North 170.0 feet to a 1½" iron pipe monument; thence S.88°47'W., 1331.3 feet to a point; thence N.45°50'E, 204.0 feet to a 1½" iron pipe monument; thence N.44°10'W., 166.0 feet to a 1½" iron pipe monument; thence N.71°40'E., 176.5 feet to a point; thence N.28°15'E., 361.7 feet to a point; thence N.16°40'W., 639.5 feet to a point; thence N.41°35'W., 380.0 feet to a point; thence N.3°00'W., 892.5 feet to a point; thence N.88°56'E., 2194.7 feet to a 2" iron pipe monument; thence S.0°24'E., 259.00 feet to the place of beginning.

Tract 40A, Beginning at a 4" iron pipe monument marking the SW corner of Sec. 11, Twp 23S, Rge 44W; thence N.35°55'E., 467.4 feet to a point; thence N.71°40'E., 299.0 feet to a 1½" iron pipe monument; thence S.44°10'E., 166.0 feet to a 1½" iron pipe monument; thence S.45°50'W., 204.0 feet to a point; thence N.88°47'E., 1331.3 feet to a 1½"iron pipe monument; thence South 170.0 feet to a 1½" iron pipe monument; thence S. 88°47'W., 1434.2 feet to a 2" iron pipe monument; thence South 30.0 feet to a 2" iron pipe monument; thence S. 88°47'W., 425.0 feet to the place of beginning.

Tract 41, Beginning at a 2" iron pipe monument which bears N.0°25'W., 30.0 feet from the center of Sec. 11, Twp 23S, Rge 44W; thence S.88°56' W., 2197.3 feet to a point; thence N.3°00'W., 73.7 feet to a point; thence N.9°50'E., 841.2 feet to a point; thence N.34°15'E., 371.1 feet to a point; thence N.14°10' E., 508.2 feet to a 2" iron pipe monument; thence S.74°48'E., 1778.0 feet to a 2" iron pipe monument; thence S.0°25'E., 1194.7 feet to the place of beginning.

All in County of Prowers, State of Colorado.

Parcel No. 2:

Township 23 South, Range 44 West of the Sixth Principal Meridian
Section 1: NW¼ and 35 acres, more or less, lying South of the North Granada Lateral Drainage Ditch in the N½NE¼

All of **Tracts 28 and 29,** situate in the SW¼ of Section 1, Township 23 South, Range 44 West of the Sixth P.M. as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as recorded March 5, 1927 in Book 2, Page 45-61, Prowers County records, said tracts being more particularly described as follows:
Tract 28, Beginning at a 4" iron pipe monument marking the West Quarter corner of Sec 1, Twp 23S, Rge 44W, thence S.89°42'E., 1320.0 feet to a 4" iron pipe monument; thence S.89°42'E., 1290.6 feet to a 2" iron pipe monument; thence S.0°12'E., 1323.0 feet to a 2" iron pipe monument; thence N.89°46'W., 1292.2 feet to a 4" iron pipe monument; thence N.89°37'W., 1315.7 feet to a 4" iron pipe monument; thence N.0°18'W., 1323.2 feet to the place of beginning.
Tract 29, Beginning at a 4" iron pipe monument marking the center of the SW¼ of Sec 1, Twp 23S, Rge 44W; thence S.89°46'E., 1292.2 feet to a 2" iron pipe monument; thence S.0°12'E., 1228.1 feet to a 2" iron pipe monument; thence N.89°43'W., 2605.1 feet to a 2" iron pipe monument; thence N.0°18'W., 1230.0 feet to a 4" iron pipe monument; thence S.89°37'E., 1315.7 feet to the place of beginning.

Section 2: NE¼, LESS a tract described by a line drawn as follows: Beginning at the Center of said Section 2, running thence Easterly along the Quarter Section line between the NE¼ and SE¼ of said Section 2, 1038 feet, more or less, to the South boundary line of the right-of-way of the X-Y Canal; thence Northwesterly along the South boundary line of right-of-way of the X-Y Ditch to the Quarter Section line between the NE¼ and NW¼ of said Section 2, running thence Southerly along the Quarter Section line 476 feet, more or less, to the Place of Beginning; and EXCEPT a tract Deeded to the Granada Drainage District by Deed recorded August 25, 1926 in Book 156, Page 478 of the Prowers County Clerk and Recorder records.

Section 2: E½SE¼

AND
A tract of land in the NW¼SE¼ of said Section 2 lying East of the XY Canal and more particularly described as follows: Beginning at the Northeast corner of said NW¼SE¼ of said Section 2; thence South a distance of 1207 feet, more or less, to the East right-of-way line of the XY canal; thence in a Northwesterly direction along the East right-of-way line of said XY Canal to a point on the East-West center line of said Section 2; thence East along the said center line a distance of 222 feet, more or less, to the point of beginning;

Section 11: A tract of land in the NE¼NE¼ of said Section 11, more particularly described as follows: Beginning at the Northeast corner of said Section 11; thence South 0°4' East a distance of 1195.4 feet; thence South 71°3' West a distance of 162 feet; thence North 77°38' West a distance of 672 feet; thence North 66°41' West a distance of 113 feet; thence North 46°57' West a distance of 195 feet; thence North 40°9' West a distance of 161 feet; thence North 17°20' West a distance of 155 feet; thence North 1°45' East a distance of 641.8 feet to a point on the Section line between Sections 2 and 11; thence North 89°17' East a distance of 1183 feet along said Section line to the Place of Beginning; Being that part of Tract No. 27 lying East and North of the XY Canal, as shown by Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Page 45 to 61, inclusive, records of Prowers County, Colorado.

All of Tracts 13 and 14, as shown by Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Pages 45-61, inclusive, said tracts being situated in the NW¼ and the N½N½SW¼ of Section 3, Township 23 South, Range 44 West, being more particularly described as follows:
Tract 13: Beginning at a 4" iron pipe monument marking the West Quarter corner of Section 3, Township 23 South, Range 44 West; thence North 2546.0 feet to a 2" iron pipe monument; thence N.88°41'E., 1334.0 feet to a 2" iron pipe monument; thence S.0°05'W., 2674.0 feet to a 2" iron pipe monument; thence S.78°28'W., 1356.3 feet to a point; thence N.0°03'W., 369.2 feet to the Place of Beginning.
Tract 14: Beginning at a 2" iron pipe monument which bears S.0°17'W., 100.0 feet from the North Quarter corner of Section 3, Township 23 South, Range 44 West; thence S.0°17'W., 1605.0 feet to a 2" iron pipe monument; thence S.86°08'W., 115.0 feet to a point; thence S.45°33'W., 1485.0 feet to a point; thence S.66°40'W., 97.0 feet to a point; thence S.78°28'W., 72.0 feet to a 2" iron pipe monument; thence N.0°05'E., 2674.0 feet to a 2" iron pipe monument; thence N.88°41'E., 1340.0 feet to the Place of Beginning. ALSO Beginning at a 4" iron pipe monument marking the center of said Section 3; thence S.89°20'W., 1043.8 feet to a 2" iron pipe monument; thence N.45°33'E., 1339.0 feet to a point; thence N.86°08'E., 91.7 feet to a point; thence S.0°17'W., 931.5 feet to the Place of Beginning, EXCEPT the right-of-way of the XY Canal.

Tract 17 and that part of **Tract 18** lying in the NE¼ of Section 3, as shown by Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Pages 45-61, inclusive, more particularly described as follows:
Beginning at a point S.0°35'W., 100 feet from the Northeast corner of Section 3, Township 23 South, Range 44 West of the Sixth P.M.; thence S.88°41'W., 2674.9 feet to the North and South Quarter line of said Section; thence S.0°17'W., 1605.0 feet; thence S.70°22'E., 72 feet; thence S.50°36'E., 404 feet; thence S.32°35'E., 90 feet; thence S.16°58'E., 339 feet; thence S.27°58'E., 87 feet; thence S.68°13'E., 122 feet; thence S.81°29'E., 360 feet; thence S.47°14'E. 122 feet; thence S.28°23'E., 24 feet to the East and West center line of said Section 3; thence N.89°23'E., 186 feet to a 4 inch iron pipe marking the Southeast corner of the SW¼NE¼ of said Section 3; thence East to a 2 inch iron pipe marking the East Quarter corner of said Section 3; thence N.0°35'E., 2606.8 feet to the point of beginning.
Beginning at a 4 inch iron pipe marking the center of Section 3, Township 23 South, Range 44 West of the Sixth P.M.; thence N.0°17'E.,

931.5 feet to the South right-of-way line of the XY Ditch; thence S.70°22'E., 54.8 feet; thence S.50°36'E., 396.0 feet; thence S.32°35'E., 71.4 feet; thence S.16°58'E., 332.8 feet; thence S.27°58'E., 113.8 feet; thence S.68°13'E., 139.4 feet; thence S.81°29'E., 347.8 feet; thence S.47°14'E., 99.8 feet to the East and West center line of said Section 3; thence S.89°23'W., 1099 feet to the Point of Beginning center of said Section 3, containing all of the NE¼ of said Section 3,
EXCEPT those portions thereof which have been heretofore conveyed of record by prior owners for the drainage ditch along the North line of said Quarter Section and for the right-of-way of the XY Canal, and subject to the rights-of-way for public roads adjoining the premises.

All of Tracts 19 and 20, according to the Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Pages 45-61, inclusive, said tracts being situated in the SE¼ of Section 3 and the NE¼NE¼ of Section 10, Township 23 South, Range 44 West of the Sixth P.M., being more particularly described as follows:
Tract 19: Beginning at a 4" iron pipe monument marking the center of said Section 3, Township 23 South, Range 44 West; thence N.89°23'E., 1099.0 feet to a point; thence S.28°23'E., 401.0 feet to a point; thence S.20°06'E., 107.0 feet to a point; thence S.0°20'W., 2257.2 feet to a point; thence N.74°48'W., 173.5 feet to a point; thence N.15°12'E., 50.0 feet to a point; thence N.74°48'W., 1221.5 feet to a 2" iron pipe monument; thence N.0°29'E., 2285.0 feet to the place of beginning.
Tract 20: Beginning at a 1½" iron pipe monument which bears S.0°21'W., 691.0 feet from the East Quarter corner of Section 3, Township 23 South, Range 44 West; thence S.0°21'W., 636.5 feet to a 4" iron pipe monument; thence S.0°21'W., 1761.7 feet to a 2" iron pipe monument; thence N.74°48'W., 1376.0 feet to a point; thence N.0°20'E., 2257.2 feet to a point; thence S.20°06'E., 352.0 feet to a point; thence S.42°00'E., 132.0 feet to a point; thence S.73°58'E., 405.0 feet to a point; thence N.86°06'E., 112.0 feet to a point; thence N.65°55'E., 393.0 feet to a point; thence N.59°40'E., 303.0 feet to the place of beginning.

All of Tracts 42, 43 and 43A, according to the Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Pages 45-61, inclusive, said tracts situated in the NE¼ of Section 10 and the W½NW¼ of Section 11, Township 23 South, Range 44 West, being more particularly described as follows:
Tract 42: Beginning at a 2" iron pipe monument which bears North 30.0 feet from a point which bears N.89°35'E., 1340.3 feet from the SW corner of the SE¼ of the NE¼ of Section 10, Township 23 South, Range 44 West; thence S.89°35'W., 522.0 feet to a 2" iron pipe monument; thence N.74°55'W., 93.9 feet to a point; thence N.56°55'W., 142.8 feet to a point; thence N.44°59'W., 115.3 feet to a point; thence N.29°13'W., 118.2 feet to a point; thence N.14°05'W., 119.0 feet to a point; thence N.9°45'W., 1583.1 feet to a point; thence N.14°47'W., 111.8 feet to a point thence N.26°58'W., 139.1 feet to a point; thence N.44°14'W., 142.5 feet to a point; thence N.59°33'W., 142.3 feet to a 2" iron pipe monument; thence S.74°48'E., 2493.0 feet to a 2" iron pipe monument; thence S.14°10'W., 508.2 feet to a point; thence S.34°15'W., 371.1 feet to a point; thence S.9°50'W., 841.2 feet to a point; thence S.3°00'E., 73.7 feet to a point; thence S.88°56'W., 451.7 feet to the place of beginning.
Tract 43: Beginning at a 4" iron pipe monument marking the SE corner of the SW¼ of the NE¼ of Section 10, Township 23 South, Range 44 West; thence S.89°35'W., 980.0 feet to a 2" iron pipe monument; thence S.89°35'W., 180.5 feet to a 2" iron pipe monument; thence N.0°29'W., 1235.1 feet to a point; thence East 378.5 feet to a point; thence N.0°29'W., 231.3 feet to a point; thence N.89°45'E., 658.5 feet to a 2" iron pipe monument; thence N.0°32'W., 882.5 feet to a 2" iron pipe monument; thence S.56°05'E., 105.2 feet to a point; thence S.44°11'E., 122.2 feet to a point; thence S.27°07'E., 120.9 feet to a point; thence S.14°55'E., 103.9 feet to a point; thence S.9°43'E., 1583.7 feet to a point; thence S.14°28'E., 133.6 feet to a point; thence S.29°30'E., 133.6 feet to a point; thence S.45°09'E., 130.0 feet to a point; thence S.57°07'E., 155.6 feet to a 2" iron pipe monument; thence S.89°35'W., 700.0 feet to the place of beginning.
Tract 43A: Beginning at a 2" iron pipe monument which bears N.89°25'E., 2827.0 feet from the NW corner of the SW¼ of the NW¼ of Section 10, Township 23 South, Range 44 West; thence N.0°29'W., 139.3 feet to a point; thence East 378.5 feet to a point; thence S.0°29'E., 231.3 feet to a point; thence West 378.5 feet to a point; thence N.0°29'W., 92.0 feet to the place of beginning.

All of Tracts 46, 47 and 48B, as shown by the Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Pages 45-61, inclusive, said tracts situated in the W½SE¼, SW¼, SE¼NW¼ and the SW¼NE¼ of Section 10 and the NE¼NW¼ and the NW¼NE¼ of Section 15, Township 23 South, Range 44 West; being more particularly described as follows:
Tract 46: Beginning at a 2" iron pipe monument which bears S.89°35'W., 980.0 feet from the NE corner of the NW¼ of the SE¼ of Section 10, Township 23 South, Range 44 West; thence S.10°10'E., 946.0 feet to a point; thence S.4°55'E., 159.0 feet to a point; thence S.0°40'E., 1686.8 feet to a point; thence S.68°50'W., 483.0 feet to a point; thence S.80°52'W., 79.1 feet to a point; thence N.85°20'W., 86.7 feet to a point; thence N.65°10'W., 102.7 feet to a point; thence N.60°55'W., 584.0 feet to a point; thence N.43°05'E., 11.3 feet to a 2" iron pipe monument; thence N.43°05'E., 104.3 feet to a point; thence N.24°12'E., 221.0 feet to a point; thence N.63°15'E., 99.3 feet to a point; thence N.18°45'E., 85.7 feet to a point; thence N.1°15'W., 174.5 feet to a point; thence N.25°07'W., 245.0 feet to a point; thence N.43°32'W., 120.0 feet to a point; thence N.1°50'W., 222.2 feet to a point; thence N.9°20'E., 492.8 feet to a point; thence N.14°00'W., 92.5 feet to a point; thence N.2°45'W., 303.7 feet to a point; thence N.29°03'E., 270.4 feet to a point; thence N.2°50'E., 390.3 feet to a 2" iron pipe monument; thence N.89°35'E., 555.5 feet to a 2" iron pipe monument; thence N.89°35'E., 180.5 feet to the Place of Beginning.
Tract 47: Beginning at a 4" iron pipe monument marking the West Quarter corner of Section 10, Township 23 South, Range 44 West; thence N.89°35'E., 2282.5 feet to a 2" iron pipe monument; thence S.2°50' W., 390.3 feet to a point; Thence S.29°03'W., 270.4 feet to a point; thence S.2°45'E., 303.7 feet to a point; thence S.14°00'E., 92.5 feet to a point; thence S.9°20'W., 492.8 feet to a point; thence S.1°50'E., 222.2 feet to a point; thence S.43°32'E., 120.0 feet to a point; thence S.25°07'E., 245.0 feet to a point; thence S.1°15'E., 174.5 feet to a point; thence S18°45'W., 85.7 feet to a point; thence S.63°15'W., 99.3 feet to a point; thence S.24°12'W., 221.0 feet to a point; thence S.43°05'W., 104.3 feet to a 2" iron pipe monument; thence N.60°53'W., 335.7 feet to a point; thence N.19°52'W., 251.8 feet to a point; thence N.31°47'W., 118.4 feet to a point; thence N.54°54'W., 110.5 feet to a point; thence N.64°26'W., 208.5 feet to a point; thence N.75°22'W., 141.8 feet to a point; thence S.87°54'W., 335.6 feet to a point; thence N.66°58'W., 86.8 feet to a point; thence N.39°32'W., 339.1 feet to a point; thence N.16°18'W., 83.4 feet to a point; thence N.1°17'E., 235.7 feet to a point; thence N.15°13'W., 95.1 feet to a point, thence

N.45°06'W., 113.3 feet to a point; thence S.88°31'W., 115.3 feet to a point; thence S.54°34'W., 347.2 feet to a 2" iron pipe monument; thence North 1342.9 feet to the Place of Beginning.
Also Beginning at a 4" iron pipe monument marking the SW corner of said Section 10; thence North 1251.1 feet to a 2" iron pipe monument; thence N.55°42'E., 360.8 feet to a point; thence N.87°59'E., 84.0 feet to a point; thence S.45°39'E., 82.8 feet to a point; thence S.15°26'E., 84.3 feet to a point; thence S.1°09'W., 238.5 feet to a point; thence S.17°17'E., 93.6 feet to a point; thence S.40°05'E., 362.9 feet to a point; thence S.68°14'E., 100.2 feet to a point; thence N.87°58'E., 333.5 feet to a point; thence S.75°49'E., 129.7 feet to a point; thence S.64°39'E., 208.5 feet to a point; thence S.54°37'E., 98.0 feet to a point; thence S.30°52'E., 100.8 feet to a point; thence S.20°06'E., 268.9 feet to a point; thence S.61°05'E., 337.1 feet to a 2" iron pipe monument; thence S.89°48'W., 637.0 feet to a 4" iron pipe monument; thence S.89°48'W., 1343.0 feet to the Place of Beginning, EXCEPT the right-of-way of the Manvel Canal.
Tract 48B: Beginning at a 1½" iron pipe monument which bears N.89°35'E., 2579.0 feet from the West Quarter corner of Section 10, Township 23 South, Range 44 West; thence North 214.0 feet to a 1½" iron pipe monument; thence N.88°10'E., 258.0 feet to a 1½" iron pipe monument; thence S.0°29'E., 221.0 feet to a 2" iron pipe monument; thence S.89°35'W., 259.0 feet to the Place of Beginning.

All of Tracts 48, 48A, 49 and 49A, EXCEPT the West 20 acres, more or less, of Tract No. 48 which lies West of the Farm Lateral No. 2 of the Lamar Manvel Farm Lateral Distribution System, as shown by the Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Pages 45-61, inclusive, said tracts situated in the S½SW¼ of Section 3 and the NW¼ and the W½NE¼ of Section 10, all in Township 23 South, Range 44 West, being more particularly described as follows:
Tract 48: Beginning at a 4" iron pipe monument marking the West Quarter corner of Section 10, Township 23 South, Range 44 west; thence N.89°55'W., 302.5 feet to a 2" iron pipe monument; thence N.0°05'E., 530.0 feet to a point; thence N.29°00'W., 164.5 feet to a point; thence N.39°25'E., 187.7 feet to a point; thence N.20°40'W., 239.7 feet to a point; thence N.15°25'E., 285.0 feet to a 2" iron pipe monument; thence N.89°25'E., 271.5 feet to a 2" iron pipe monument; thence N.89°25'E., 2093.1 feet to a 2" iron pipe monument; thence S.0°05'W., 458.0 feet to a point; thence N.89°35'E., 738.3 feet to a 1½" iron pipe monument; thence S.0°29'E., 646.5 feet to a 1½" iron pipe monument; thence S.88°10'W., 258.0 feet to a 1½" iron pipe monument; thence South 214.0 feet to a 1½" iron pipe monument; thence S.89°35'W., 2579.0 feet to the Place of Beginning.
Tract 48A: Beginning at a 2" iron pipe monument which bears N.89°25'E., 2093.1 feet from the NW corner of the SW¼ of the NW¼ of Section 10, Township 23 South, Range 44 West; thence N.89°25'E., 733.9 feet to a 2" iron pipe monument; thence S.0°29'E., 459.6 feet to a 1½" pipe; thence S.89°35'W., 738.3 feet to a point; thence N.0°05'E., 458.0 feet to the Place of Beginning.
Tract 49: Beginning at a 2" iron pipe monument marking the NW corner of Section 10, Township 23 South, Range 44 West; thence N.0°03'W., 832.3 feet to a 2" iron pipe monument; thence S.74°48'E., 1872.1 feet to a 2" iron pipe monument; thence S.15°12'W., 40.0 feet to a 2" iron pipe monument; thence S.74°48'E., 1057.8 feet to a 2" iron pipe monument; thence S.0°29'E., 777.2 feet to a point; thence S.89°20'W., 683.7 feet to a point; thence S.1°33'E., 539.0 feet to a point; thence S.89°25'W., 60.9 feet to a 2" iron pipe monument; thence S.89°25' W., 2093.1 feet to a 2" iron pipe monument; thence N.0°02'W., 1320.0 feet to the Place of Beginning.
Tract 49A: Beginning at a 2" iron pipe monument which bears N.89°25'E., 2827.0 feet from the NW corner of the SW¼ of the NW¼ of Section 10, Township 23 South, Range 44 West; thence N.0°29'W., 539.5 feet to a point; thence S.89°20'W., 683.7 feet to a point; thence S.1°33'E., 539.0 feet to a point; thence N.89°25'E., 673.0 feet to the Place of Beginning.

All in the County of Prowers, State of Colorado

Parcel No. 3:
Lot 1 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.
And
Lot 4 of Borderland Estates Subdivision Filing No. 3, being a part of E½ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of W½ Section 4 and N½ Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 4, 2007 at Reception No. 516414 of the Prowers County Clerk and Recorder records.

Parcel No. 4:
Lot 2 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.
And
Lot 3 of Borderland Estates Subdivision Filing No. 3, said subdivision being a part of E½ Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of W½ Section 4 and N½ Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 4, 2007 at Reception No. 516414 of the Prowers County Clerk and Recorder records.

Parcel No. 5:
Lot 3 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.

Parcel No. 6:
Lot 4 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.

Parcel No. 7:
Lot 5 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, TOGETHER WITH a 15 foot access easement along the East and West lines of Lot 4 of said Subdivision, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.

And
Lot 3 of Borderland Estates Subdivision Filing No. 2, being a part of the SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the N½ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 14, 2006 at Reception No. 513232 of the Prowers County Clerk and Recorder records.

Parcel No. 8:
Lot 6 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, TOGETHER WITH a 15 foot access easement along the East and West lines of Lot 3 of said Subdivision, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.

And
Lot 1 of Borderland Estates Subdivision Filing No. 2, being a part of the SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 14, 2006 at Reception No. 513232 of the Prowers County Clerk and Recorder records.

Parcel No. 9:
Lot 7 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, TOGETHER WITH a 15 foot access easement along the East and West lines of Lot 2 of said Subdivision, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.
And
Lot 2, Borderland Estates Subdivision Filing #3, said Subdivision being a part of the E½ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the W½ of Section 4 and the N½ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 4, 2007 at Reception No. 516414 of the Prowers County Clerk and Recorder records.

Parcel No. 10:
Lot 8 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, TOGETHER WITH a 15 foot access easement along the East line of Lot 2 and the West line of Lot 1 of said Subdivision, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.

And
Lot 2 of Borderland Estates Subdivision Filing No. 2, being a part of the SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 14, 2006 at Reception No. 513232 of the Prowers County Clerk and Recorder records.

EXCEPTING from the above described tracts any portion lying within U.S. Highway No. 50, Colorado State Highway No. 385, and any portion lying within Quit Claim to Prowers County from Deed recorded January 12, 1927 in Book 187 at Page 289 as Reception No. 149133.

Exhibit B
Location of Phase 1 Storage Cell, Phase 1 Inlet Canal, Outlet Channel, and Access Road

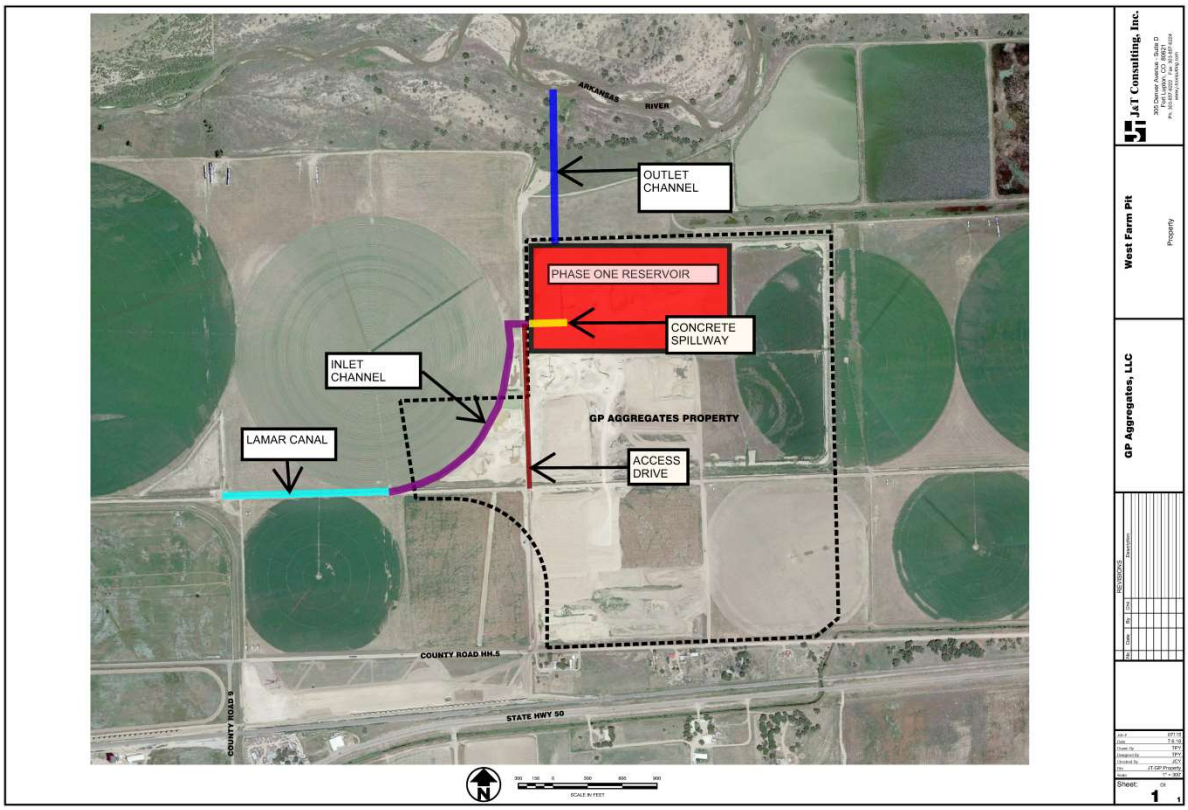


EXHIBIT C

When recorded, return to:

_____
_____
_____
_____

EASEMENT DEED AND AGREEMENT

THIS EASEMENT DEED AND AGREEMENT (this "Agreement"), dated _____, 20__, is by and between **GP AGGREGATES, LLC**, a Colorado limited liability company ("GP"), and **LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION**, a Colorado non-profit corporation ("LAWMA") (each a "Party" and together the "Parties").

RECITALS

A. GP is the fee owner of the West Farm, on which is located an aggregate mining site known as the "West Farm Pit," located in part of the N ½ of Section 33 and part of the SE ¼ of Section 28, T. 22 S., R. 46 W., of the 6th P.M., Prowers County, Colorado, as more particularly described on the attached Exhibit A-1.

B. GP has excavated a portion of the West Farm Pit and installed a slurry wall to create a water storage cell which is referred to as Phase 1 ("Phase 1 Storage Cell"). The Phase 1 Storage Cell has an estimated storage capacity, including in situate storage, of at least 1,700 acre feet. The location of the Phase 1 Storage Cell is depicted on the attached Exhibit B.

C. GP has constructed and installed certain infrastructure in the West Farm Pit, including an unlined inlet canal which diverts water from the Lamar Canal and over a concrete spillway into the Phase 1 Storage Cell at a maximum rate of approximately 28 c.f.s. (the "Phase 1 Inlet Canal"); and two pumps in the Phase 1 Storage Cell that discharge water at a maximum combined rate of approximately 22 c.f.s. (the "Phase 1 Pumps"). The Phase 1 Storage Cell, the Phase 1 Inlet Canal and the Phase 1 Pumps are collectively referred to herein as the "Phase 1 Storage Facilities."

D. The Phase 1 Pumps discharge to an unlined, open ditch (the "Outlet Channel") which delivers water into the Arkansas River. The Outlet Channel is located on the West Farm and certain property adjacent to the West Farm (the "Adjacent Property" as described on attached **Exhibit A-2**) for which GP holds an easement granted by GP Irrigated Farms, LLC, permitting the use and operation of the Outlet Channel (the "GP Irrigated Easement"). The GP Irrigated Easement is described in a Water Conveyance Easement Agreement dated January 15, 2015 (the "GP Irrigated Easement Agreement").

E. A portion of the Phase I Inlet Canal crosses the Adjacent Property for which GP holds the GP Irrigated Easement permitting the use and operation of the Phase I Inlet Canal.

F. There exists an unimproved private road on the West Farm that runs in a north-south direction through the approximate centerline of Section 33, T. 22 S., R. 46 W., 6th P.M., and that provides access from County Road HH.5 to the Phase 1 Storage Facilities (the "Access Road").

G. The locations of the Phase 1 Storage Cell, Phase 1 Inlet Canal, Outlet Channel, and Access Road are all generally depicted on the attached Exhibit B.

H. Under the Agreement for Lease and Subsequent Purchase and Sale of Water Storage and Carriage Capacity dated July ___, 2018, between GP and LAWMA (the "Water Storage Agreement"), GP has agreed to grant to LAWMA easements for use of the Phase 1 Storage Facilities, the Outlet Channel, and the Access Road for water storage and delivery under the terms of this Agreement.

AGREEMENT

NOW, THEREFORE, for good and valuable consideration the receipt and sufficiency of which are hereby admitted, the Parties agree as follows:

1. Grant of Easements.

(a) GP hereby grants perpetual exclusive easements unto LAWMA for the rights of use and rights to capacity more specifically described in paragraphs 2(a) and 2(b) below (collectively, the "Phase 1 Easements").

(b) GP hereby grants a perpetual non-exclusive easement unto LAWMA for the right of access to the Phase 1 Storage Facilities and the Outlet Channel, in connection with or to facilitate LAWMA's exercise of the Phase 1 Easements, consistent with the terms of this Agreement ("Facilities Access Easement").

(c) GP hereby grants to LAWMA a perpetual non-exclusive easement for the right of ingress and egress to the Phase 1 Storage Facilities and Outlet Channel over or across the Access Road (the "Access Road Easement").

(d) The Phase 1 Easements, Facilities Access Easement, and Access Road Easement are collectively referred to in this Agreement as the "Easements."

2. Use of Phase 1 Easements and Facilities Access Easements. LAWMA has the right to use the Phase 1 Easements and the Facilities Access Easement for the carriage, storage, and release of water owned or controlled by LAWMA, as follows:

(a) LAWMA has the right to the first 500 acre-feet of usable storage within the Phase 1 Storage Cell (the "Dedicated Storage Capacity"). The Dedicated Storage Capacity makes up approximately 29.4% of the estimated capacity of the Phase 1 Storage Cell, including in situate storage.

(b) LAWMA has the right to the first 8.2 c.f.s. of carriage capacity in the Phase 1 Inlet Canal, which is approximately 29.4% of the carriage capacity of the Phase 1 Inlet

Canal; and the first 6.5 c.f.s of pumping capacity in the Phase 1 Pumps and carriage capacity in the Outlet Channel, which is approximately 29.4% of the pumping capacity of the Phase 1 Pumps.

(c) LAWMA has the right, subject to Section 5 below, to access the Phase 1 Storage Facilities and the Outlet Channel for the purpose of exercising the Phase 1 Easements, including without limitation inspecting the Phase 1 Storage Facilities and the Outlet Channel to ensure that they are being operated and maintained in accordance with industry standards and the terms and conditions of this Agreement.

3. Use of Access Easement. LAWMA has the right to use the Access Road for LAWMA's reasonable use in accessing the Phase 1 Storage Facilities and Outlet Channel. The Parties shall share the cost of maintaining the Access Road based on their relative use of it. LAWMA may pave the Access Road at its own expense.

4. Accounting. On a daily basis, GP shall record the volume of water delivered to storage in the Dedicated Storage Capacity, residing in storage in the Dedicated Storage Capacity, and pumped out of the Dedicated Storage Capacity into the Outlet Channel pursuant to this Agreement. GP shall deliver copies of such accounting records to LAWMA weekly, and LAWMA then shall account for its operations hereunder as part of LAWMA's normal monthly accounting submitted to the Office of the Division Engineer. LAWMA shall obtain any necessary authorizations, approvals, or permits required for its use of the Dedicated Storage Capacity. At the direction of the Division Engineer, GP shall modify or update the stage-area-capacity table for the Phase I Storage Cell to ensure that accounting is accurate for deliveries into and out of the Phase I Storage Cell.

5. Operation and Maintenance. GP, and not LAWMA, shall operate, maintain, and repair the Phase 1 Storage Facilities, the Access Road, and the Outlet Channel, including without limitation performing all maintenance, repairs, and preventative measures required to maintain the Phase 1 Storage Facilities, the Access Road, and the Outlet Channel in good working order; and further including all reading and operation of gauges, meters, valves, and gates.

6. Operational Costs. LAWMA shall pay for its share of GP's actual costs incurred from and after the date of this Agreement for operation and maintenance of the Phase 1 Storage Facilities and Outlet Channel as follows:

(a) GP's actual electrical costs, without mark-up, of operating the Phase 1 Pumps to deliver water out of the Dedicated Storage Capacity and into the Outlet Channel at LAWMA's direction ("Pumping Costs").

(b) LAWMA's pro rata share of GP's actual costs incurred in the operation and maintenance of the Phase 1 Storage Facilities ("O&M Costs"). For purposes of determining LAWMA's pro rata share of O&M Costs, the Parties agree that LAWMA's pro rata share is equal to 29.4%. O&M Costs are defined as the following: (i) reasonable labor costs; (ii) reasonable water accounting and administrative costs; (iii) reasonable accounting and administrative costs other than water accounting; and (iv) reasonable rental and purchase costs of parts, supplies tools and equipment. The following are expressly excluded from O&M Costs:

taxes or assessments of any kind; the cost of capital improvements; depreciation; payments of mortgage and other non-operating debts of GP; the costs of repairs or other work to the extent GP is reimbursed by insurance or condemnation proceeds; or fines, interest, or penalties incurred by GP in connection with GP's operation and maintenance of the Phase 1 Storage Facilities, the Outlet Channel, or the Access Road.

(c) GP shall invoice LAWMA monthly, in arrears, for any applicable Pumping Costs and LAWMA's pro rata share of any O&M Costs, and LAWMA shall pay such invoices within twenty-eight days of receipt.

7. Delivery into and Release from Dedicated Storage Capacity. LAWMA shall coordinate with and direct the Lamar Canal Company with respect to deliveries into the Dedicated Storage Capacity. Should such deliveries require action by GP staff (e.g., opening a lateral headgate into the Phase 1 Storage Cell), LAWMA shall coordinate with and direct GP with respect to such deliveries. LAWMA also shall coordinate with and direct GP with respect to pumping of water from the Dedicated Storage Capacity into the Outlet Channel. The timing of deliveries to and releases from the Dedicated Storage Capacity will be at LAWMA's sole discretion; provided, however, that LAWMA's carriage of foreign water in the Lamar Canal for delivery to the Dedicated Storage Capacity will be pursuant to the Permanent Partial Assignment as provided in the Water Storage Agreement. LAWMA shall give GP at least twenty-four hours' advance written notice of LAWMA's requested release of water from the Dedicated Storage Capacity ("LAWMA Release Notice") in accordance with paragraph 15 below, and GP and LAWMA shall cooperate to ensure that deliveries to and releases from the Dedicated Storage Capacity are timely made.

8. Losses. To the extent that other water users, including GP, are storing water in the Phase I Storage Cell, evaporative losses will be assessed on LAWMA's and the other water users' stored water pro rata, based on each user's volume of water stored in the Phase I Storage Cell on a monthly basis.

9. No Interference. LAWMA shall exercise the Easements so as not to interfere with mining within the West Farm Pit and ongoing farming and other activities on the West Farm. Likewise, GP shall perform its obligations under this Agreement so as not to interfere with LAWMA's exercise of the Easements.

10. No Warranties or Representations. GP makes no warranties or representations, and instead disavows any such warranties or representations, regarding the condition of the Phase 1 Storage Facilities, Outlet Channel and Access Road, or the suitability of them for LAWMA's purposes. LAWMA accepts the Easements and their associated rights to use the Phase 1 Storage Facilities, Outlet Channel, and Access Road AS IS, WHERE IS, WITH ALL FAULTS AND AT LAWMA'S OWN RISK, without any such warranties or representations, express or implied. LAWMA assumes all risks related to the entry upon and use of the Easements, except risks arising from GP's negligence or willful or wanton misconduct.

11. LAWMA Release and Indemnity.

(a) LAWMA, on behalf of itself and its contractors, agents, employees, licensees, successors, and assigns, hereby indemnifies, releases, and holds harmless GP from any and all claims, damages, losses, liens, costs, liabilities, fines, and expenses (including reasonable attorneys' fees and court costs) for damage to or destruction of property, and death of or injury to any person, related to or arising from LAWMA's entry onto and exercise of the Easements, except to the extent such claims, damages, losses, liens, costs, liabilities, fines, and expenses arise from GP's negligence or willful or wanton misconduct.

(b) LAWMA indemnifies, releases, and holds harmless GP, its agents, and its successors and assigns from any and all claims, damages, and causes of action that arise out of and are caused by LAWMA's operations on the Easements and that are asserted by any of LAWMA's agents, employees, subcontractors, and contractors, or by persons exercising the Easements at the request of LAWMA.

12. LAWMA's Insurance. LAWMA shall obtain, keep in force, and maintain, and cause each of its contractors to obtain, keep in force, and maintain, at no cost to GP, commercial general liability, combined single limit, bodily injury and property damage and liability insurance (which insurance shall be primary and non-contributing) insuring LAWMA and GP, to the extent of LAWMA's liability, against all liability arising out of the exercise of the Easements (including LAWMA's contractual indemnity obligation hereunder) in an amount of not less than $2,000,000.00 per occurrence and $5,000,000.00 in the aggregate. In addition, LAWMA shall maintain and cause its contractors to maintain workers' compensation insurance in conformity with applicable state law and containing a waiver of subrogation provision in favor of GP. The foregoing policies must all be written by insurance companies authorized to do business in the State of Colorado and having AM BEST ratings of at least "A" and a financial rating of at least "V" or greater in the most current Best's Insurance reports available on the date that the party obtains or renews the insurance policy (or, if such report is no longer published, comparable financial quality of insurance company). LAWMA and its contractors shall provide GP, before the expiration of any certificates of coverage, up-to-date certificates of such coverage and subsequent renewals or replacement thereof evidencing the above-described insurance. Any insurance to be provided hereunder may be effected by a policy or policies of blanket insurance covering additional items or locations or insureds.

13. GP Release and Indemnity.

(a) GP, on behalf of itself and its contractors, agents, employees, licensees, successors, and assigns, hereby indemnifies, releases, and holds harmless LAWMA from any and all claims, damages, losses, liens, costs, liabilities, fines, and expenses (including reasonable attorneys' fees and court costs) for damage to or destruction of property, and death of or injury to any person, related to or arising from GP's operation and maintenance of the Phase 1 Storage Facilities, the Outlet Channel, and the Access Road, except to the extent such claims, damages, losses, liens, costs, liabilities, fines, and expenses arise from LAWMA's negligence or willful or wanton misconduct.

(b) GP indemnifies, releases, and holds harmless LAWMA, its agents, and its successors and assigns from any and all claims, damages, and causes of action that arise out of and are caused by GP's operation and maintenance of the Phase 1 Storage Facilities, the Outlet Channel, and the Access Road and that are asserted by any of GP's agents, employees, subcontractors, and contractors, or by persons operating the Phase 1 Storage Facilities, the Outlet Channel

14. GP's Insurance. GP shall obtain, keep in force, and maintain, and cause each of its contractors to obtain, keep in force, and maintain, at no cost to LAWMA, commercial general liability, combined single limit, bodily injury and property damage and liability insurance (which insurance shall be primary and non-contributing) insuring GP and LAWMA, to the extent of GP's liability, against all liability arising out of the operation and maintenance of the Phase 1 Storage Facilities, the Outlet Channel, and the Access Road (including GP's contractual indemnity obligation hereunder) in an amount of not less than $2,000,000.00 per occurrence and $5,000,000.00 in the aggregate. In addition, GP shall maintain and cause its contractors to maintain workers' compensation insurance in conformity with applicable state law and contain a waiver of subrogation provision in favor of LAWMA. GP also shall maintain property insurance in the amount of the replacement value of the Phase I Storage Facilities and the Outlet Channel. The foregoing policies must all be written by insurance companies authorized to do business in the State of Colorado and having AM BEST ratings of at least "A" and a financial rating of at least "V" or greater in the most current Best's Insurance reports available on the date that the party obtains or renews the insurance policy (or, if such report is no longer published, comparable financial quality of insurance company). GP and its contractors shall provide LAWMA, before the expiration of any certificates of coverage, up-to-date certificates of such coverage and subsequent renewals or replacement thereof evidencing the above-described insurance. Any insurance to be provided hereunder may be effected by a policy or policies of blanket insurance covering additional items or locations or insureds.

15. Notices. With the exception of the LAWMA Release Notice, any notice under this Agreement must be in writing and sent by (a) certified mail, return receipt requested, (b) a recognized overnight delivery service with customer tracking capability, (c) hand delivery, or (d) email, provided the email notice is followed by one of the other delivery methods, to the following addresses:

If to GP: Karl Nyquist
7991 Shaffer Pkwy, Suite 200
Littleton, CO 80127
karl@cacompanies.com

with a copy to: Wayne F. Forman
Brownstein Hyatt Farber Schreck, LLP
410 17th Street, Suite 2200
Denver, CO 80202
wforman@BHFS.com

If to LAWMA: Donald F. Higbee, Manager
Lower Arkansas Water Management Association
310 South 6th Street
P.O. Box 1161
Lamar, Colorado 81052
lawma@cminet.net

with a copy to: Richard J. Mehren
Moses, Wittemyer, Harrison and Woodruff, P.C.
P.O. Box 1440
Boulder, CO 80306-1440
rmehren@mwhw.com

The LAWMA Release Notice may be delivered by email, but if so delivered must be addressed to all of the following: Ron@ProwersAg.com; karl@cacompanies.com; lawma@cminet.net; bill@grasmickinc.com; or such other email address(es) as GP may provide.

16. Binding Effect. The Easements and the terms of this Agreement, with the burdens they impose, are binding upon and will run with the Phase 1 Storage Facilities, the Outlet Channel, and the Access Road forever; and will forever bind, inure to the benefit of, and be enforceable by the Parties and their respective agents, successors, or assigns.

17. Merger. This Agreement embodies the entire understanding and agreement between the Parties regarding the subject matter hereof, and supersedes any and all prior negotiations, understandings, or agreements regarding that subject matter for all matters arising from and after the date of this Agreement. All such prior negotiations, understandings, or agreements regarding the subject matter hereof are merged into this Agreement with respect to all matters arising from and after the date of this Agreement.

18. Counterparts. This Agreement may be executed by facsimile or electronic mail, in counterparts, each of which will be considered one and the same agreement enforceable against the Parties.

19. Governing Law and Venue. This Agreement will be governed by, construed, and enforced in accordance with the laws of Colorado. In the event of any litigation over this Agreement, venue will lie in Prowers County.

20. Enforcement Costs. In the event any Party or its representative, successor, or assign seeks to enforce its rights hereunder through litigation, arbitration, or administrative proceeding, the non-prevailing Party shall pay to the prevailing Party, as part of any judgment, order, or award, the prevailing Party's reasonable attorneys' fees and costs.

21. Interpretation. In construing this Agreement, any court, arbitrator, or administrative body is to give no consideration to the fact or presumption that one party has had a greater or lesser hand in drafting this Agreement than any other party.

Agreed to and accepted as of the first date written above.

GP AGGREGATES, LLC

By:_____
Karl Nyquist
Its Manager

STATE OF COLORADO)
) ss.
COUNTY OF DENVER)

SUBSCRIBED AND SWORN to before me this ____ day of _____, 20__, by Karl Nyquist, as Manager of GP Aggregates, LLC.

_____
Notary Public

My commission expires on: _____ (Seal)

LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION

By:_____
Robert J. Wilger
Its Vice President

ATTEST:

By:_____
Donald F. Higbee
Its Secretary

STATE OF COLORADO)
) ss.
COUNTY OF DENVER)

SUBSCRIBED AND SWORN to before me this ____ day of _____, 20__, by Robert J. Wilger as Vice President and Donald F. Higbee as Secretary of Lower Arkansas Water Management Association.

_____
Notary Public

My commission expires on: _____ (Seal)

Exhibit A-1 to Exhibit C
Legal Description of West Farm

A PARCEL OF LAND LOCATED IN THE NORTHEAST ¼ AND THE NORTHEAST ¼ OF THE NORTHWEST ¼ OF SECTION 33, AND THE SOUTH ½ OF THE SOUTHEAST ¼ OF SECTION 28, TOWNSHIP 22 SOUTH, RANGE 46 WEST OF THE SIXTH PRINCIPAL MERIDIAN, IN PROWERS COUNTY, COLORADO AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE POINT OF BEGINNING BEING THE NORTHEAST CORNER OF SECTION 33, TOWNSHIP 22 SOUTH, RANGE 46 WEST OF THE SIXTH PRINCIPAL MERIDIAN;

THENCE FOLLOWING THE EAST LINE OF SAID SECTION 33 S01°19'23"E, A DISTANCE OF 2389.37 FEET;

THENCE S50°40'01"W, A DISTANCE OF 256.23 FEET;

THENCE S87°42'04"W, A DISTANCE OF 2325.91 FEET;

THENCE N00°00'00"W, A DISTANCE OF 480.27 FEET;

THENCE ALONG A CURVE WITH A RADIUS OF 806.49 FEET AND LENGTH OF 1266.83 FEET, SAID CURVE HAVING A CHORD BEARING OF N45°00'00"W AND A CHORD LENGTH OF 1140.55 FEET;

THENCE N90°00'00"W FOLLOWING, A DISTANCE OF 328.25 FEET TO A POINT ON THE EAST BOUNDARY LINE OF A PARCEL OF LAND RESERVED FOR FUTURE COLORADO STATE HIGHWAY 50 REALIGNMENT;

THENCE FOLLOWING SAID EAST PARCEL BOUNDARY LINE N09°10'38"W A DISTANCE OF 858.25 FEET;

THENCE N88°15'32"E, A DISTANCE OF 1110.50 FEET;

THENCE N01°25'02"W, A DISTANCE OF 389.76 FEET TO THE NORTH ¼ CORNER OF SAID SECTION 33;

THENCE N00°30'38"W, A DISTANCE OF 966.48 FEET;

THENCE N88°25'35"E, A DISTANCE OF 2639.68 FEET TO A POINT ON THE EAST LINE OF SECTION 28, TOWNSHIP 22 SOUTH, RANGE 46 WEST OF THE SIXTH PRINCIPAL MERIDIAN;

THENCE FOLLOWING THE EAST LINE OF SAID SECTION 28 S00°29'53"E, A DISTANCE OF 951.60 FEET TO THE POINT OF BEGINNING. SAID PARCEL CONTAINS 232.78 ACRES MORE OR LESS.

BASIS OF BEARING
BASIS OF BEARING FOR THIS PERMIT BOUNDARY LEGAL DESCRIPTION BEING THE EAST LINE OF SECTION 33, TOWNSHIP 22 SOUTH, RANGE 46 WEST OF THE SIXTH PRINCIPAL MERIDIAN. SAID LINE HAVING A BEARING OF S11°19'23"E,
COUNTY OF PROWERS,
STATE OF COLORADO.

Exhibit A-2 to Exhibit C
Legal Description of Adjacent Property

The following property, LESS AND EXCEPT the real property describe in Exhibit A-1 above.

Parcel No. 1:

Township 22 South, Range 44 West of the Sixth Principal Meridian
Section 31: SE¼
Section 32: SW¼; SW¼NE¼; SE¼, except a tract described in Warranty Deed recorded October 18, 1995 at Reception No. 470427

Township 23 South, Range 44 West of the Sixth Principal Meridian
Section 5: NE¼ & NW¼ lying North of U. S. Highway 50

Section 6: NE¼ lying North of U. S. Highway 50

And INCLUDING the following: Lot 1, Borderland Estates Subdivision Filing No. 3, said Subdivision being a part of the E½ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the W½ of Section 4 and the N½ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 4, 2007 at Reception No. 516414 of the Prowers County Clerk and Recorder records.

EXCEPT the following three descriptions:
1. Lots 1, 2, 3, 4, 5, 6, 7 and 8, Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.
2. Lots 1, 2 and 3, Borderland Estates Subdivision Filing No. 2, being a part of the SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian, according to the plat recorded December 14, 2006 at Reception No. 513232 of the Prowers County Clerk and Recorder records.
3. Lots 2, 3 and 4, Borderland Estates Subdivision Filing No. 3, being a part of E½ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of W½ Section 4 and N½ Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, according to the plat recorded December 4, 2007 at Reception No. 516414 of the Prowers County Clerk and Recorder records.

Township 23 South, Range 44 West of the Sixth Principal Meridian
Section 4: Tract 10, as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as Recorded March 5, 1927 in Book 2, Pages 45-61, Prowers County Records, said tract being situated in the NW¼, and more particularly described as follows: Beginning at a 2" iron pipe monument which bears S.0°02'W., 100.00 feet from the NW corner of Section 4, Township 23 South, Range 44 West; thence S.89°55'E., 2628.4 feet to a 2" iron pipe monument; thence S.0°03'W., 2004.5 feet to a 2" iron pipe monument; thence N.71°45'W., 121.1 feet to a point; thence N.51°00'W., 507.0 feet to a point; thence N.64°53'W., 796.0 feet to a point; thence N.81° 06'W., 129.8 feet to a point; thence S. 72°54'W., 129.0 feet to a point; thence S. 64°47'W., 213.0 feet to a point; thence N.83°28'W., 174.5 feet to a point; thence N.78°38'W., 795.5 feet to a 2" iron pipe monument; thence N.0°02'E., 1245.7 feet to the place of beginning.
Tract 11, as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as recorded March 5,1927 in Book 2, Pages 45-61, Prowers County records, said tract being situated in the NW¼, and more particularly described as follows: Beginning at a 4" iron pipe monument marking the West Quarter corner of Section 4, Township 23 South, Range 44 West; thence N.0°02'E., 1263.7 feet to a 2" iron pipe monument; thence S.78° 38'E., 796.0 feet to a point; thence S 83°28'E., 185.0 feet to a point; thence N.64°47'E., 222.0 feet to a point; thence N.72°54'E., 114.0 feet to a point; thence S.81°06'E., 113.0 feet to a point; thence S.64 °53'E., 785.0 feet to a point; thence S.51°00'E., 504.0 feet; thence S.71°45'E., 146.0 feet to a 2" iron pipe monument; thence S.73°26'E., 342.8 feet to a point; thence S.48°52'E., 617.8 feet to a 2" iron pipe monument; thence N.89°58'W., 794.1 feet to a point; thence N.89°57'W., 2628.0 feet to the place of beginning,
except a tract of land described as follows: Beginning at the center of said Section 4; thence N.89°57'W., 100 feet to a point; thence N.0°03'E., 535 feet, more or less, to a point on the South right of way line of the XY Canal; thence S.71°45'E., 103 feet, more or less, to a point, thence S.73°26'E., 342.8 feet to a point; thence S.48°52'E., 617.8 feet to the Southeast corner of said Tract 11; thence along the South line of said Tract 11 N.89°58'W., 794.1 feet to the point of beginning;
except a tract deeded to the County of Prowers recorded January 12, 1927 at Reception No. 149133,
and **except** a tract deeded to the X Y Ditch Company recorded November 11, 1889 in Book 15 at page 289, and all that part of the SW¼ lying North of the North right of way line of the Atchison, Topeka and Santa Fe Railroad,
except that tract deeded to Prowers County recorded in Book 187 at Page 303,
and **except** a tract deeded to Prowers County recorded in Book 264 at Page 86 in the Prowers County records.

And
All that part of the SW¼ of Section 4 lying North of the North right of way line of The Atchison, Topeka and Santa Fe Railroad, except that tract deeded to the County of Prowers, recorded February 8, 1928 in Book 187 at Page 303, under Reception No. 155414.

All of Tracts 15, 16, 16A in SW¼ of Section 3, Township 23 South, Range 44 West of the Sixth P.M. as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as recorded March 5, 1927 in Book 2, Pages 45-61, Prowers County records, said tracts being more particularly described as follows:
Tract 15, Beginning at a 2" iron pipe monument which bears S.0°03'E., 410.0 feet from the West Quarter corner of Sec 3, Twp 23S, Rge 44W; thence S.0°03'E., 1180.0 feet to a 2" iron pipe monument; thence S.74°48'E., 1454.3 feet to a point; thence N.0°20'E., 1849.4 feet to a 2" iron pipe monument; thence S.78°28'W., 1445.1 feet to the place of beginning.

Tract 16, Beginning at a 4" iron pipe monument marking the center of Sec 3, Twp 23S, Rge 44W; thence S.0°29'W., 1210.0 feet to a 1½" iron pipe monument; thence West 402.0 feet to a 1½" iron pipe monument; thence S.0°29'W., 872.0 feet to a point; thence West 148.0 feet to a point; thence S.0°29'W., 54.0 feet to a 2" iron pipe monument; thence N.74°48'W., 213.5 feet to a 2" iron pipe monument; thence S.15°12'W., 50.0 feet to a point; thence N.74°48'W., 483.8 feet to a point; thence N.0°20'E., 1849.4 feet to a 2" iron pipe monument; thence N.66°40'E., 113.0 feet to a point; thence N.45°33'E., 134.6 feet to a 2" iron pipe monument; thence N.89°20'E., 1043.8 feet to the place of beginning.

Tract 16A, Beginning at a 1½" iron pipe monument, which bears S.0°29'W., 1210.0 feet from the center of Sec 3, Twp 23S, Rge 44W; thence S.0°29'W., 1075.0 feet to a 2" iron pipe monument; thence N.74°48'W., 568.0 feet to a 2" iron pipe monument; thence N.0°29'E., 54.0 feet to a point; thence East 148.0 feet to a point; thence N.0°29'E., 872.0 feet to a 1½" iron pipe monument; thence East 402.0 feet to the place of beginning.

All of Tracts 31, 32, 33, as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as Recorded March 5, 1927 in Book 2, Pages 45-61, Prowers County records, said tract being situated in the SE¼ and S½NE¼ of Section 1 and the NE¼NE¼ of Section 12, Township 23 South, Range 44 West of the Sixth P.M., and more particularly described as follows:

Tract 31, Beginning at a 4" iron pipe monument marking the East Quarter corner of Sec 1, Twp 23S, Rge 44W; thence S.89°42'W., 2615.4 feet to a 2" iron pipe monument; thence N.0°05'E., 1318.8 feet to a 2" iron pipe monument; thence S.89°43'E., 2516.0 feet to a point; thence S.63°33'E., 110.8 feet to a 2" iron pipe monument; thence S.0°03'W., 1271.0 feet to the place of beginning.

Tract 32, Beginning at a 4" iron pipe monument marking the East quarter corner of Sec 1, Twp 23S, Rge 44W; thence S.0°03'W., 1320.0 feet to a 4" iron pipe monument; thence N.89°46'W., 2609.7 feet to a 2" iron pipe monument; thence N.0°12'W., 1322.8 feet to a 2" iron pipe monument; thence N.89°42'E., 2615.4 feet to the place of beginning.

Tract 33, Beginning at a 4" iron pipe monument marking the SE corner of Sec 1, Twp 23S, Rge 44W; thence South 198.7 feet to a 2" iron pipe monument; thence N.65°53'W., 491.7 feet to a 2" iron pipe monument; thence N.69°39'W., 176.0 feet to a point; thence N.80°44'W., 235.0 feet to a point; thence S.89°32'W., 475.0 feet to a point; thence N.89°41'W., 1201.0 feet to a 2" iron pipe monument; thence N.31°36'W., 156.5 feet to a 2" iron pipe monument; thence N.0°12'W., 1093.6 feet to a 2" iron pipe monument; thence S.89°46'E., 2609.7 feet to a 4" iron pipe monument; thence S.0°03' W., 1320.8 feet to the place of beginning.

EXCEPT a parcel in Tract 33 in the Southeast Quarter of Section 1, Township 23 South, Range 44 West of the Sixth P.M. described in Warranty Deed to Department of Transportation as recorded March 31, 2003 at Reception No. 499662.

All of Tracts 37, 38, 39, situate in S½NE¼, E½SE¼, SW¼SE¼ of Section 11, Township 23 South, Range 44 West of the Sixth P.M., as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as recorded March 5, 1927 in Book 2, Pages 45-61, Prowers County records, said tracts more particularly described as follows:

Tract 37, Beginning at a 4" iron pipe monument marking the East Quarter corner of Sec 11, Twp 23S, Rge 44W; thence S.89°08'W., 125.5 feet to a point; thence N.73°33'W., 100.6 feet to a 2" iron pipe monument; thence S.89°08'W., 2425.0 feet to a 2" iron pipe monument; thence N.0°25'W., 1194.7 feet to a 2" iron pipe monument; thence S.74°48'E., 2750.5 feet to a 2" iron pipe monument; thence S.0°04'E., 463.0 feet to the place of beginning.

Tract 38, Beginning at a 4" iron pipe monument marking the center of the SE¼ of Sec 11, Twp 23S, Rge 44W; thence N.0°31'W., 1292.0 feet to a 2" iron pipe monument; thence N.89°08'E., 1095.8 feet to a 2" iron pipe monument; thence S.72°34'E., 67.7 feet to a point; thence S.54°57'E., 69.0 feet to a point; thence S.48°47'E., 69.3 feet to a point; thence S.28°10'E., 102.1 feet to a 2" iron pipe monument; thence S.0°04'E., 1087.7 feet to a 4" iron pipe monument; thence S.88°52'W., 1306.3 feet to the place of beginning.

Tract 39, Beginning at a 4" iron pipe monument marking the center of the SE¼ of Sec 11, Twp 23S, Rge 44W; thence N.88°52'E., 1306.3 feet to a 4" iron pipe monument; thence S.0°04'E., 1346.0 feet to a 2" iron pipe monument; thence S.88°44'W., 2631.6 feet to a 2" iron pipe monument; thence N.0°24'W., 1352.0 feet to a 4" iron pipe monument; thence N.88°52'E., 1333.0 feet to the place of beginning.

All of Tracts 40, 40A, 41 situate in W½ of Section 11, Township 23 South, Range 44 West of the Sixth P.M. as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as recorded March 5, 1927 in Book 2, Page 45-61, Prowers County records, said tracts being more particularly described as follows:

Tract 40, Beginning at a 2" iron pipe monument which bears N.0°24'W. 30.0' from the South Quarter corner of Sec 11, Twp 23S, Rge 44W; thence S.88°47'W., 767.8 feet to a 1½" iron pipe monument; thence North 170.0 feet to a 1½" iron pipe monument; thence S.88°47'W., 1331.3 feet to a point; thence N.45°50'E, 204.0 feet to a 1½" iron pipe monument; thence N.44°10'W., 166.0 feet to a 1½" iron pipe monument; thence N.71°40'E., 176.5 feet to a point; thence N.28°15'E., 361.7 feet to a point; thence N.16°40'W., 639.5 feet to a point; thence N.41°35'W., 380.0 feet to a point; thence N.3°00'W., 892.5 feet to a point; thence N.88°56'E., 2194.7 feet to a 2" iron pipe monument; thence S.0°24'E., 259.00 feet to the place of beginning.

Tract 40A, Beginning at a 4" iron pipe monument marking the SW corner of Sec. 11, Twp 23S, Rge 44W; thence N.35°55'E., 467.4 feet to a point; thence N.71°40'E., 299.0 feet to a 1½" iron pipe monument; thence S.44°10'E., 166.0 feet to a 1½" iron pipe monument; thence S.45°50'W., 204.0 feet to a point; thence N.88°47'E., 1331.3 feet to a 1½"iron pipe monument; thence South 170.0 feet to a 1½" iron pipe monument; thence S. 88°47'W., 1434.2 feet to a 2" iron pipe monument; thence South 30.0 feet to a 2" iron pipe monument; thence S. 88°47'W., 425.0 feet to the place of beginning.

Tract 41, Beginning at a 2" iron pipe monument which bears N.0°25'W., 30.0 feet from the center of Sec. 11, Twp 23S, Rge 44W; thence S.88°56' W., 2197.3 feet to a point; thence N.3°00'W., 73.7 feet to a point; thence N.9°50'E., 841.2 feet to a point; thence N.34°15'E., 371.1 feet to a point; thence N.14°10' E., 508.2 feet to a 2" iron pipe monument; thence S.74°48'E., 1778.0 feet to a 2" iron pipe monument; thence S.0°25'E., 1194.7 feet to the place of beginning.

All in County of Prowers, State of Colorado.

Parcel No. 2:

Township 23 South, Range 44 West of the Sixth Principal Meridian
Section 1: NW¼ and 35 acres, more or less, lying South of the North Granada Lateral Drainage Ditch in the N½NE¼

All of **Tracts 28 and 29,** situate in the SW¼ of Section 1, Township 23 South, Range 44 West of the Sixth P.M. as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as recorded March 5, 1927 in Book 2, Page 45-61, Prowers County records, said tracts being more particularly described as follows:
Tract 28, Beginning at a 4" iron pipe monument marking the West Quarter corner of Sec 1, Twp 23S, Rge 44W, thence S.89°42'E., 1320.0 feet to a 4" iron pipe monument; thence S.89°42'E., 1290.6 feet to a 2" iron pipe monument; thence S.0°12'E., 1323.0 feet to a 2" iron pipe monument; thence N.89°46'W., 1292.2 feet to a 4" iron pipe monument; thence N.89°37'W., 1315.7 feet to a 4" iron pipe monument; thence N.0°18'W., 1323.2 feet to the place of beginning.
Tract 29, Beginning at a 4" iron pipe monument marking the center of the SW¼ of Sec 1, Twp 23S, Rge 44W; thence S.89°46'E., 1292.2 feet to a 2" iron pipe monument; thence S.0°12'E., 1228.1 feet to a 2" iron pipe monument; thence N.89°43'W., 2605.1 feet to a 2" iron pipe monument; thence N.0°18'W., 1230.0 feet to a 4" iron pipe monument; thence S.89°37'E., 1315.7 feet to the place of beginning.

Section 2: NE¼, LESS a tract described by a line drawn as follows: Beginning at the Center of said Section 2, running thence Easterly along the Quarter Section line between the NE¼ and SE¼ of said Section 2, 1038 feet, more or less, to the South boundary line of the right-of-way of the X-Y Canal; thence Northwesterly along the South boundary line of right-of-way of the X-Y Ditch to the Quarter Section line between the NE¼ and NW¼ of said Section 2, running thence Southerly along the Quarter Section line 476 feet, more or less, to the Place of Beginning; and EXCEPT a tract Deeded to the Granada Drainage District by Deed recorded August 25, 1926 in Book 156, Page 478 of the Prowers County Clerk and Recorder records.

Section 2: E½SE¼

AND
A tract of land in the NW¼SE¼ of said Section 2 lying East of the XY Canal and more particularly described as follows: Beginning at the Northeast corner of said NW¼SE¼ of said Section 2; thence South a distance of 1207 feet, more or less, to the East right-of-way line of the XY canal; thence in a Northwesterly direction along the East right-of-way line of said XY Canal to a point on the East-West center line of said Section 2; thence East along the said center line a distance of 222 feet, more or less, to the point of beginning;

Section 11: A tract of land in the NE¼NE¼ of said Section 11, more particularly described as follows: Beginning at the Northeast corner of said Section 11; thence South 0°4' East a distance of 1195.4 feet; thence South 71°3' West a distance of 162 feet; thence North 77°38' West a distance of 672 feet; thence North 66°41' West a distance of 113 feet; thence North 46°57' West a distance of 195 feet; thence North 40°9' West a distance of 161 feet; thence North 17°20' West a distance of 155 feet; thence North 1°45' East a distance of 641.8 feet to a point on the Section line between Sections 2 and 11; thence North 89°17' East a distance of 1183 feet along said Section line to the Place of Beginning; Being that part of Tract No. 27 lying East and North of the XY Canal, as shown by Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Page 45 to 61, inclusive, records of Prowers County, Colorado.

All of Tracts 13 and 14, as shown by Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Pages 45-61, inclusive, said tracts being situated in the NW¼ and the N½N½SW¼ of Section 3, Township 23 South, Range 44 West, being more particularly described as follows:
Tract 13: Beginning at a 4" iron pipe monument marking the West Quarter corner of Section 3, Township 23 South, Range 44 West; thence North 2546.0 feet to a 2" iron pipe monument; thence N.88°41'E., 1334.0 feet to a 2" iron pipe monument; thence S.0°05'W., 2674.0 feet to a 2" iron pipe monument; thence S.78°28'W., 1356.3 feet to a point; thence N.0°03'W., 369.2 feet to the Place of Beginning.
Tract 14: Beginning at a 2" iron pipe monument which bears S.0°17'W., 100.0 feet from the North Quarter corner of Section 3, Township 23 South, Range 44 West; thence S.0°17'W., 1605.0 feet to a 2" iron pipe monument; thence S.86°08'W., 115.0 feet to a point; thence S.45°33'W., 1485.0 feet to a point; thence S.66°40'W., 97.0 feet to a point; thence S.78°28'W., 72.0 feet to a 2" iron pipe monument; thence N.0°05'E., 2674.0 feet to a 2" iron pipe monument; thence N.88°41'E., 1340.0 feet to the Place of Beginning. ALSO Beginning at a 4" iron pipe monument marking the center of said Section 3; thence S.89°20'W., 1043.8 feet to a 2" iron pipe monument; thence N.45°33'E., 1339.0 feet to a point; thence N.86°08'E., 91.7 feet to a point; thence S.0°17'W., 931.5 feet to the Place of Beginning, EXCEPT the right-of-way of the XY Canal.

Tract 17 and that part of **Tract 18** lying in the NE¼ of Section 3, as shown by Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Pages 45-61, inclusive, more particularly described as follows:
Beginning at a point S.0°35'W., 100 feet from the Northeast corner of Section 3, Township 23 South, Range 44 West of the Sixth P.M.; thence S.88°41'W., 2674.9 feet to the North and South Quarter line of said Section; thence S.0°17'W., 1605.0 feet; thence S.70°22'E., 72 feet; thence S.50°36'E., 404 feet; thence S.32°35'E., 90 feet; thence S.16°58'E., 339 feet; thence S.27°58'E., 87 feet; thence S.68°13'E., 122 feet; thence S.81°29'E., 360 feet; thence S.47°14'E. 122 feet; thence S.28°23'E., 24 feet to the East and West center line of said Section 3; thence N.89°23'E., 186 feet to a 4 inch iron pipe marking the Southeast corner of the SW¼NE¼ of said Section 3; thence East to a 2 inch iron pipe marking the East Quarter corner of said Section 3; thence N.0°35'E., 2606.8 feet to the point of beginning.
Beginning at a 4 inch iron pipe marking the center of Section 3, Township 23 South, Range 44 West of the Sixth P.M.; thence N.0°17'E.,

931.5 feet to the South right-of-way line of the XY Ditch; thence S.70°22'E., 54.8 feet; thence S.50°36'E., 396.0 feet; thence S.32°35'E., 71.4 feet; thence S.16°58'E., 332.8 feet; thence S.27°58'E., 113.8 feet; thence S.68°13'E., 139.4 feet; thence S.81°29'E., 347.8 feet; thence S.47°14'E., 99.8 feet to the East and West center line of said Section 3; thence S.89°23'W., 1099 feet to the Point of Beginning center of said Section 3, containing all of the NE¼ of said Section 3,
EXCEPT those portions thereof which have been heretofore conveyed of record by prior owners for the drainage ditch along the North line of said Quarter Section and for the right-of-way of the XY Canal, and subject to the rights-of-way for public roads adjoining the premises.

All of Tracts 19 and 20, according to the Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Pages 45-61, inclusive, said tracts being situated in the SE¼ of Section 3 and the NE¼NE¼ of Section 10, Township 23 South, Range 44 West of the Sixth P.M., being more particularly described as follows:
Tract 19: Beginning at a 4" iron pipe monument marking the center of said Section 3, Township 23 South, Range 44 West; thence N.89°23'E., 1099.0 feet to a point; thence S.28°23'E., 401.0 feet to a point; thence S.20°06'E., 107.0 feet to a point; thence S.0°20'W., 2257.2 feet to a point; thence N.74°48'W., 173.5 feet to a point; thence N.15°12'E., 50.0 feet to a point; thence N.74°48'W., 1221.5 feet to a 2" iron pipe monument; thence N.0°29'E., 2285.0 feet to the place of beginning.
Tract 20: Beginning at a 1½" iron pipe monument which bears S.0°21'W., 691.0 feet from the East Quarter corner of Section 3, Township 23 South, Range 44 West; thence S.0°21'W., 636.5 feet to a 4" iron pipe monument; thence S.0°21'W., 1761.7 feet to a 2" iron pipe monument; thence N.74°48'W., 1376.0 feet to a point; thence N.0°20'E., 2257.2 feet to a point; thence S.20°06'E., 352.0 feet to a point; thence S.42°00'E., 132.0 feet to a point; thence S.73°58'E., 405.0 feet to a point; thence N.86°06'E., 112.0 feet to a point; thence N.65°55'E., 393.0 feet to a point; thence N.59°40'E., 303.0 feet to the place of beginning.

All of Tracts 42, 43 and 43A, according to the Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Pages 45-61, inclusive, said tracts situated in the NE¼ of Section 10 and the W½NW¼ of Section 11, Township 23 South, Range 44 West, being more particularly described as follows:
Tract 42: Beginning at a 2" iron pipe monument which bears North 30.0 feet from a point which bears N.89°35'E., 1340.3 feet from the SW corner of the SE¼ of the NE¼ of Section 10, Township 23 South, Range 44 West; thence S.89°35'W., 522.0 feet to a 2" iron pipe monument; thence N.74°55'W., 93.9 feet to a point; thence N.56°55'W., 142.8 feet to a point; thence N.44°59'W., 115.3 feet to a point; thence N.29°13'W., 118.2 feet to a point; thence N.14°05'W., 119.0 feet to a point; thence N.9°45'W., 1583.1 feet to a point; thence N.14°47'W., 111.8 feet to a point thence N.26°58'W., 139.1 feet to a point; thence N.44°14'W., 142.5 feet to a point; thence N.59°33'W., 142.3 feet to a 2" iron pipe monument; thence S.74°48'E., 2493.0 feet to a 2" iron pipe monument; thence S.14°10'W., 508.2 feet to a point; thence S.34°15'W., 371.1 feet to a point; thence S.9°50'W., 841.2 feet to a point; thence S.3°00'E., 73.7 feet to a point; thence S.88°56'W., 451.7 feet to the place of beginning.
Tract 43: Beginning at a 4" iron pipe monument marking the SE corner of the SW¼ of the NE¼ of Section 10, Township 23 South, Range 44 West; thence S.89°35'W., 980.0 feet to a 2" iron pipe monument; thence S.89°35'W., 180.5 feet to a 2" iron pipe monument; thence N.0°29'W., 1235.1 feet to a point; thence East 378.5 feet to a point; thence N.0°29'W., 231.3 feet to a point; thence N.89°45'E., 658.5 feet to a 2" iron pipe monument; thence N.0°32'W., 882.5 feet to a 2" iron pipe monument; thence S.56°05'E., 105.2 feet to a point; thence S.44°11'E., 122.2 feet to a point; thence S.27°07'E., 120.9 feet to a point; thence S.14°55'E., 103.9 feet to a point; thence S.9°43'E., 1583.7 feet to a point; thence S.14°28'E., 133.6 feet to a point; thence S.29°30'E., 133.6 feet to a point; thence S.45°09'E., 130.0 feet to a point; thence S.57°07'E., 155.6 feet to a 2" iron pipe monument; thence S.89°35'W., 700.0 feet to the place of beginning.
Tract 43A: Beginning at a 2" iron pipe monument which bears N.89°25'E., 2827.0 feet from the NW corner of the SW¼ of the NW¼ of Section 10, Township 23 South, Range 44 West; thence N.0°29'W., 139.3 feet to a point; thence East 378.5 feet to a point; thence S.0°29'E., 231.3 feet to a point; thence West 378.5 feet to a point; thence N.0°29'W., 92.0 feet to the place of beginning.

All of Tracts 46, 47 and 48B, as shown by the Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Pages 45-61, inclusive, said tracts situated in the W½SE¼, SW¼, SE¼NW¼ and the SW¼NE¼ of Section 10 and the NE¼NW¼ and the NW¼NE¼ of Section 15, Township 23 South, Range 44 West; being more particularly described as follows:
Tract 46: Beginning at a 2" iron pipe monument which bears S.89°35'W., 980.0 feet from the NE corner of the NW¼ of the SE¼ of Section 10, Township 23 South, Range 44 West; thence S.10°10'E., 946.0 feet to a point; thence S.4°55'E., 159.0 feet to a point; thence S.0°40'E., 1686.8 feet to a point; thence S.68°50'W., 483.0 feet to a point; thence S.80°52'W., 79.1 feet to a point; thence N.85°20'W., 86.7 feet to a point; thence N.65°10'W., 102.7 feet to a point; thence N.60°55'W., 584.0 feet to a point; thence N.43°05'E., 11.3 feet to a 2" iron pipe monument; thence N.43°05'E., 104.3 feet to a point; thence N.24°12'E., 221.0 feet to a point; thence N.63°15'E., 99.3 feet to a point; thence N.18°45'E., 85.7 feet to a point; thence N.1°15'W., 174.5 feet to a point; thence N.25°07'W., 245.0 feet to a point; thence N.43°32'W., 120.0 feet to a point; thence N.1°50'W., 222.2 feet to a point; thence N.9°20'E., 492.8 feet to a point; thence N.14°00'W., 92.5 feet to a point; thence N.2°45'W., 303.7 feet to a point; thence N.29°03'E., 270.4 feet to a point; thence N.2°50'E., 390.3 feet to a 2" iron pipe monument; thence N.89°35'E., 555.5 feet to a 2" iron pipe monument; thence N.89°35'E., 180.5 feet to the Place of Beginning.
Tract 47: Beginning at a 4" iron pipe monument marking the West Quarter corner of Section 10, Township 23 South, Range 44 West; thence N.89°35'E., 2282.5 feet to a 2" iron pipe monument; thence S.2°50' W., 390.3 feet to a point; Thence S.29°03'W., 270.4 feet to a point; thence S.2°45'E., 303.7 feet to a point; thence S.14°00'E., 92.5 feet to a point; thence S.9°20'W., 492.8 feet to a point; thence S.1°50'E., 222.2 feet to a point; thence S.43°32'E., 120.0 feet to a point; thence S.25°07'E., 245.0 feet to a point; thence S.1°15'E., 174.5 feet to a point; thence S18°45'W., 85.7 feet to a point; thence S.63°15'W., 99.3 feet to a point; thence S.24°12'W., 221.0 feet to a point; thence S.43°05'W., 104.3 feet to a 2" iron pipe monument; thence N.60°53'W., 335.7 feet to a point; thence N.19°52'W., 251.8 feet to a point; thence N.31°47'W., 118.4 feet to a point; thence N.54°54'W., 110.5 feet to a point; thence N.64°26'W., 208.5 feet to a point; thence N.75°22'W., 141.8 feet to a point; thence S.87°54'W., 335.6 feet to a point; thence N.66°58'W., 86.8 feet to a point; thence N.39°32'W., 339.1 feet to a point; thence N.16°18'W., 83.4 feet to a point; thence N.1°17'E., 235.7 feet to a point; thence N.15°13'W., 95.1 feet to a point, thence

N.45°06'W., 113.3 feet to a point; thence S.88°31'W., 115.3 feet to a point; thence S.54°34'W., 347.2 feet to a 2" iron pipe monument; thence North 1342.9 feet to the Place of Beginning.
Also Beginning at a 4" iron pipe monument marking the SW corner of said Section 10; thence North 1251.1 feet to a 2" iron pipe monument; thence N.55°42'E., 360.8 feet to a point; thence N.87°59'E., 84.0 feet to a point; thence S.45°39'E., 82.8 feet to a point; thence S.15°26'E., 84.3 feet to a point; thence S.1°09'W., 238.5 feet to a point; thence S.17°17'E., 93.6 feet to a point; thence S.40°05'E., 362.9 feet to a point; thence S.68°14'E., 100.2 feet to a point; thence N.87°58'E., 333.5 feet to a point; thence S.75°49'E., 129.7 feet to a point; thence S.64°39'E., 208.5 feet to a point; thence S.54°37'E., 98.0 feet to a point; thence S.30°52'E., 100.8 feet to a point; thence S.20°06'E., 268.9 feet to a point; thence S.61°05'E., 337.1 feet to a 2" iron pipe monument; thence S.89°48'W., 637.0 feet to a 4" iron pipe monument; thence S.89°48'W., 1343.0 feet to the Place of Beginning, EXCEPT the right-of-way of the Manvel Canal.
Tract 48B: Beginning at a 1½" iron pipe monument which bears N.89°35'E., 2579.0 feet from the West Quarter corner of Section 10, Township 23 South, Range 44 West; thence North 214.0 feet to a 1½" iron pipe monument; thence N.88°10'E., 258.0 feet to a 1½" iron pipe monument; thence S.0°29'E., 221.0 feet to a 2" iron pipe monument; thence S.89°35'W., 259.0 feet to the Place of Beginning.

All of Tracts 48, 48A, 49 and 49A, EXCEPT the West 20 acres, more or less, of Tract No. 48 which lies West of the Farm Lateral No. 2 of the Lamar Manvel Farm Lateral Distribution System, as shown by the Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Pages 45-61, inclusive, said tracts situated in the S½SW¼ of Section 3 and the NW¼ and the W½NE¼ of Section 10, all in Township 23 South, Range 44 West, being more particularly described as follows:
Tract 48: Beginning at a 4" iron pipe monument marking the West Quarter corner of Section 10, Township 23 South, Range 44 west; thence N.89°55'W., 302.5 feet to a 2" iron pipe monument; thence N.0°05'E., 530.0 feet to a point; thence N.29°00'W., 164.5 feet to a point; thence N.39°25'E., 187.7 feet to a point; thence N.20°40'W., 239.7 feet to a point; thence N.15°25'E., 285.0 feet to a 2" iron pipe monument; thence N.89°25'E., 271.5 feet to a 2" iron pipe monument; thence N.89°25'E., 2093.1 feet to a 2" iron pipe monument; thence S.0°05'W., 458.0 feet to a point; thence N.89°35'E., 738.3 feet to a 1½" iron pipe monument; thence S.0°29'E., 646.5 feet to a 1½" iron pipe monument; thence S.88°10'W., 258.0 feet to a 1½" iron pipe monument; thence South 214.0 feet to a 1½" iron pipe monument; thence S.89°35'W., 2579.0 feet to the Place of Beginning.
Tract 48A: Beginning at a 2" iron pipe monument which bears N.89°25'E., 2093.1 feet from the NW corner of the SW¼ of the NW¼ of Section 10, Township 23 South, Range 44 West; thence N.89°25'E., 733.9 feet to a 2" iron pipe monument; thence S.0°29'E., 459.6 feet to a 1½" pipe; thence S.89°35'W., 738.3 feet to a point; thence N.0°05'E., 458.0 feet to the Place of Beginning.
Tract 49: Beginning at a 2" iron pipe monument marking the NW corner of Section 10, Township 23 South, Range 44 West; thence N.0°03'W., 832.3 feet to a 2" iron pipe monument; thence S.74°48'E., 1872.1 feet to a 2" iron pipe monument; thence S.15°12'W., 40.0 feet to a 2" iron pipe monument; thence S.74°48'E., 1057.8 feet to a 2" iron pipe monument; thence S.0°29'E., 777.2 feet to a point; thence S.89°20'W., 683.7 feet to a point; thence S.1°33'E., 539.0 feet to a point; thence S.89°25'W., 60.9 feet to a 2" iron pipe monument; thence S.89°25' W., 2093.1 feet to a 2" iron pipe monument; thence N.0°02'W., 1320.0 feet to the Place of Beginning.
Tract 49A: Beginning at a 2" iron pipe monument which bears N.89°25'E., 2827.0 feet from the NW corner of the SW¼ of the NW¼ of Section 10, Township 23 South, Range 44 West; thence N.0°29'W., 539.5 feet to a point; thence S.89°20'W., 683.7 feet to a point; thence S.1°33'E., 539.0 feet to a point; thence N.89°25'E., 673.0 feet to the Place of Beginning.

All in the County of Prowers, State of Colorado

Parcel No. 3:
Lot 1 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.
And
Lot 4 of Borderland Estates Subdivision Filing No. 3, being a part of E½ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of W½ Section 4 and N½ Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 4, 2007 at Reception No. 516414 of the Prowers County Clerk and Recorder records.

Parcel No. 4:
Lot 2 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.
And
Lot 3 of Borderland Estates Subdivision Filing No. 3, said subdivision being a part of E½ Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of W½ Section 4 and N½ Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 4, 2007 at Reception No. 516414 of the Prowers County Clerk and Recorder records.

Parcel No. 5:
Lot 3 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.

Parcel No. 6:
Lot 4 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.

Parcel No. 7:
Lot 5 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, TOGETHER WITH a 15 foot access easement along the East and West lines of Lot 4 of said Subdivision, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.

And
Lot 3 of Borderland Estates Subdivision Filing No. 2, being a part of the SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the N½ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 14, 2006 at Reception No. 513232 of the Prowers County Clerk and Recorder records.

Parcel No. 8:
Lot 6 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, TOGETHER WITH a 15 foot access easement along the East and West lines of Lot 3 of said Subdivision, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.

And
Lot 1 of Borderland Estates Subdivision Filing No. 2, being a part of the SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 14, 2006 at Reception No. 513232 of the Prowers County Clerk and Recorder records.

Parcel No. 9:
Lot 7 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, TOGETHER WITH a 15 foot access easement along the East and West lines of Lot 2 of said Subdivision, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.
And
Lot 2, Borderland Estates Subdivision Filing #3, said Subdivision being a part of the E½ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the W½ of Section 4 and the N½ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 4, 2007 at Reception No. 516414 of the Prowers County Clerk and Recorder records.

Parcel No. 10:
Lot 8 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, TOGETHER WITH a 15 foot access easement along the East line of Lot 2 and the West line of Lot 1 of said Subdivision, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.

And
Lot 2 of Borderland Estates Subdivision Filing No. 2, being a part of the SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 14, 2006 at Reception No. 513232 of the Prowers County Clerk and Recorder records.

EXCEPTING from the above described tracts any portion lying within U.S. Highway No. 50, Colorado State Highway No. 385, and any portion lying within Quit Claim to Prowers County from Deed recorded January 12, 1927 in Book 187 at Page 289 as Reception No. 149133.

Exhibit B to Exhibit C
Location of Phase 1 Storage Cell, Phase 1 Inlet Canal, Outlet Channel, and Access Road

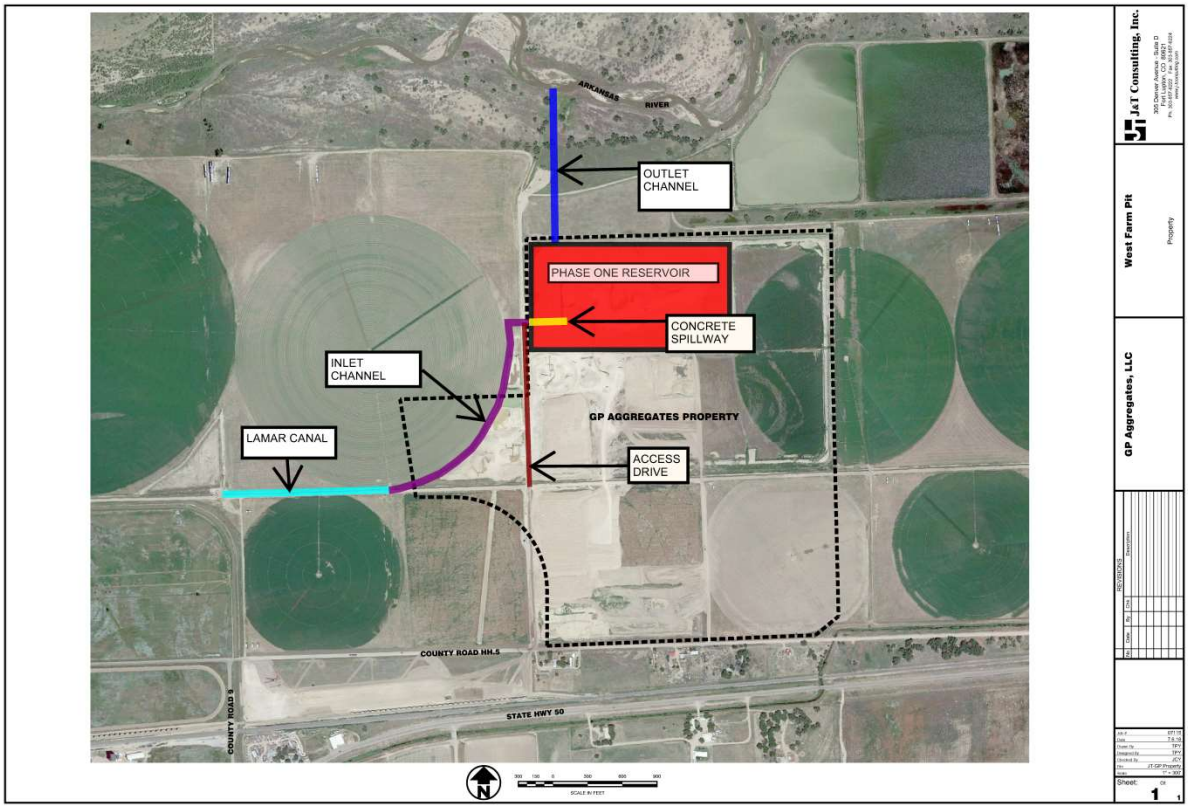


EXHIBIT D

PARTIAL ASSIGNMENT AND ASSUMPTION AGREEMENT

This Partial Assignment and Assumption Agreement ("Agreement") is by and between **GP AGGREGATES, LLC** ("GP"), a Colorado limited liability company whose address is 7991 Shaffer Parkway, Suite 200, Littleton, Colorado 80127, and **LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION** ("LAWMA"), a Colorado non-profit corporation whose address is P.O. Box 1161, Lamar, Colorado 81052 (each a "Party" and together the "Parties").

RECITALS

A. GP and LAWMA entered into an Agreement for Lease and Subsequent Purchase and Sale of Water Storage and Carriage Capacity ("Lease-Purchase Agreement") on July ____, 2018.

B. The Lease-Purchase Agreement pertains to LAWMA's use of 500 acre-feet of dedicated storage capacity in a gravel pit located on the West Farm ("West Farm Pit"), along with LAWMA's use of dedicated carriage capacity for delivery of water into and out of the West Farm Pit.

C. The Lease-Purchase Agreement obligates GP to assign to LAWMA certain of GP's rights under an agreement dated June 14, 2017, between GP and the Lamar Canal Company, allowing GP to carry foreign water in the Lamar Canal for delivery to the West Farm Pit ("GP Carriage Agreement"); and further obligates GP to delegate to LAWMA and obligates LAWMA to assume from GP certain of GP's obligations under the GP Carriage Agreement. A copy of the GP Carriage Agreement is attached as **Exhibit A**.

D. In fulfillment of certain of their respective obligations under the Lease-Purchase Agreement, GP and LAWMA wish to establish the terms upon which GP will assign to LAWMA GP's below-described rights under the GP Carriage Agreement; and GP will delegate to LAWMA, and LAWMA will assume from GP, GP's below-described obligations under the GP Carriage Agreement ("Partial Assignment and Assumption").

E. As required by paragraph 13 of the GP Carriage Agreement, the Lamar Canal Company has given its written consent to the Partial Assignment and Assumption.

NOW, THEREFORE, for and in consideration of the foregoing and other consideration, the receipt and sufficiency of which are hereby acknowledged, GP and LAWMA agree as follows:

1. Defined terms. Capitalized terms used but not otherwise defined in this Agreement take the meanings ascribed to them in the GP Carriage Agreement or the Lease-Purchase Agreement.

2. Rights assigned to LAWMA by GP. GP hereby transfers, assigns, and sets over to LAWMA the following rights of GP under the GP Carriage Agreement:

2.1 The right to use the first 8.8 cfs of GP's 50 cfs of Firm Capacity for carriage of foreign water in the Lamar Canal, as "Firm Capacity" is defined in paragraph 1.1.1 of the GP Carriage Agreement ("LAWMA's Firm Carriage Capacity"). With LAWMA's prior written consent and at GP's sole cost, GP may use LAWMA's Firm Carriage Capacity when it is not being used by LAWMA.

2.2 Subject to GP's prior written consent, the right to use up to an additional 21 cfs of GP's Firm Capacity when GP is not using such Firm Capacity ("LAWMA's Excess Carriage Capacity").

2.3 The right to carriage of 1,000 acre-feet per year of the 10,000 acre-feet of foreign water per year that GP is entitled to carry in the Lamar Canal.

2.4 The right to make the "Carriage Request," as described and defined in paragraph 3 of the GP Carriage Agreement, with respect to LAWMA's use of LAWMA's Firm Carriage Capacity or LAWMA's Excess Carriage Capacity.

3. Obligations delegated by GP and assumed by LAWMA. GP hereby delegates, transfers, and sets over to LAWMA, and LAWMA hereby assumes, the following obligations of GP under the GP Carriage Agreement:

3.1 The obligation to pay to the Lamar Canal Company the "Carriage Charges," as described and defined in paragraph 2 of the GP Carriage Agreement, attributable to LAWMA's use of LAWMA's Firm Carriage Capacity or LAWMA's Excess Carriage Capacity.

3.2 The obligation to make the Carriage Request with respect to LAWMA's use of LAWMA's Firm Carriage Capacity or LAWMA's Excess Carriage Capacity.

3.3 The obligation to perform the accounting described in paragraph 10 of the GP Carriage Agreement with respect to LAWMA's use of LAWMA's Firm Carriage Capacity or LAWMA's Excess Carriage Capacity.

4. Lamar Canal Company's consent. A copy of the Lamar Canal Company's written consent to this Partial Assignment and Assumption is attached as **Exhibit B**.

5. Notice. Any written notice, request, or other communication required or desired to be sent by one Party to the other Party will be deemed validly given if delivered by either electronic mail or United States mail, addressed as follows:

If to GP: Karl Nyquist
7991 Shaffer Pkwy, Suite 200
Littleton, CO 80127
karl@cacompanies.com

Wayne F. Forman
Brownstein Hyatt Farber Schreck, LLP
410 17th Street, Suite 2200
Denver, CO 80202
wforman@BHFS.com

If to LAWMA: Lower Arkansas Water Management Association
Donald F. Higbee, Manager
310 South 6th Street, P.O. Box 1161
Lamar, Colorado 81052
lawma@cminet.net

Richard J. Mehren
Moses, Wittemyer, Harrison and Woodruff, P.C.
2595 Canyon Blvd., Suite 300
Boulder, CO 80302
rmehren@mwhw.com

6. Execution. This Agreement may be executed in counterparts, each of which will be deemed an original and both of which, together, will be deemed to constitute one and the same document. Electronic or facsimile signatures will be binding and accepted as originals.

7. Successors and assigns. This Agreement, with all rights and obligations of GP and LAWMA hereunder, benefits and binds the Parties and will benefit and bind the Parties' successors and assigns; provided, however, that neither Party may assign its rights or delegate its obligations hereunder without the prior written consent of the other Party, which consent will not be unreasonably withheld.

8. Entire agreement. This Agreement, together with the Lease-Purchase Agreement, contains the entire understanding and agreement between the Parties with respect to the subject matter hereof, and all prior negotiations, agreements, and understandings, oral or written, are merged into and superseded by this Agreement and the Lease-Purchase Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date set forth below.

Signature page follows.

GP AGGREGATES, LLC

By:_____
Karl Nyquist
Its Manager

Date:_____

LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION

By:_____
Robert J. Wilger
Its Vice President

ATTEST:

By:_____
Donald F. Higbee
Its Secretary

Date:_____

CARRIAGE AGREEMENT BETWEEN GP AGGREGATES, LLC, AND LAMAR CANAL AND IRRIGATION COMPANY

THIS CARRIAGE AGREEMENT ("Agreement") is made and entered into this 14 day of June, 2017 ("Effective Date"), by and between GP Aggregates, LLC, a Colorado corporation ("GP"), and the Lamar Canal and Irrigation Company ("Canal Company"), a mutual ditch company organized under the laws of the State of Colorado, each a "Party" and collectively the "Parties."

RECITALS

WHEREAS, the Canal Company owns, manages, and controls the Lamar Canal and the right-of-way therefor, including all facilities and infrastructure necessary to operate the Canal (collectively, the "Canal"); and

WHEREAS, the Canal diverts water from the Arkansas River at its river headgate located west of Lamar, Colorado, in the SW ¼ of Section 25, Township 22 S., Range 47 W. of the 6th P.M. ("River Headgate"), and at an alternate point of diversion where the pipeline from the steam-electric generating plant of the City of Lamar, Colorado, discharges water from said plant into the Lamar Canal on the South bank of said Canal whence the Northwest corner of Section 31, T22S, R46W of the 6th P.M. bears North 10E44'26" East, 1,342.6 feet; and

WHEREAS, the Canal Company owns certain water rights originally decreed in the Adjudication of Priorities to the Use of Water for Irrigation in District Number 67, Bent County District Court, State of Colorado, dated July 1, 1985, including District 67 Priority No. 3, with an appropriation date of November 30, 1875, for 15.75 cfs; District 67 Priority No. 6-1/2, with an appropriation date of November 4, 1886, for 72.09 cfs; District 67 Priority No. 7-1/2, with an appropriation date of April 16, 1887, for 13.64 cfs; and District 67 Priority No. 13, with an appropriation date of July 16, 1890, Priority No. 13 for 184.27 cfs ("Canal Water Rights"); and

WHEREAS, pursuant to paragraph 25.G of the decree entered in Case No. 02CW181, the Canal also carries water available to the Article II Storage Account associated with the Manvel Canal water right owned by Lower Arkansas Water Management Association ("Manvel Article II Water"); and

WHEREAS, the Canal Company operates the Canal and the Canal Water Rights for the benefit of persons or entities owning or controlling shares of stock in the Canal Company, and carries the Manvel Article II Water for the benefit of Lower Arkansas Water Management Association; and

WHEREAS, GP desires to divert at the River Headgate and carry in the Canal water that is not derived from Canal Company shares ("Foreign Water"), in addition to water derived from its Canal Company shares, for delivery of said Foreign Water into a future gravel pit reservoir that will be located in the S ½ of the SE ¼ of Section 28 and in the NE ¼ and the NE ¼ of the NW ¼

of Section 33, Township 22 South, Range 46 West of the 6th P.M. in Prowers, County, Colorado ("Gravel Pit"); and

WHEREAS, GP will deliver the Foreign Water out of the Canal for storage in the Gravel Pit at the West Farm lateral ("Gravel Pit Delivery Point"); and

WHEREAS, at times, the Canal has carrying capacity in excess of the capacity needed for carriage and delivery of the Canal Water Rights and the Manvel Article II Water ("Excess Capacity"); and

WHEREAS, GP and the Canal Company desire to enter into this Agreement granting to GP a right to divert Foreign Water at the River Headgate and carry said water in and through the Canal to the Gravel Pit Delivery Point for delivery into the Gravel Pit, subject to the terms and conditions of this Agreement.

NOW, THEREFORE, in consideration of the premises and the mutual promises and covenants herein, the Parties agree as follows:

1. Right to Use Excess Capacity. Subject to the terms and conditions of this Agreement, GP may divert Foreign Water at the Headgate and use the Excess Capacity of the Canal to carry up to **10,000 acre-feet** of Foreign Water per year, as follows:

   1.1 *Irrigation Season.* Between April 1 and October 31 ("Irrigation Season"), GP may carry Foreign Water in the Canal as follows:

      1.1.1 Firm Capacity. GP will be entitled to the first **50 c.f.s.** of Excess Capacity available in the Canal, subject to any operational constraints imposed on GP's use of the River Headgate and/or the Canal by the Canal Company in its sole discretion, including but not limited to decisions by the Canal Company to operate the River Headgate and/or the Canal at less than the total available carrying capacity of the Canal for safety or maintenance reasons, and further subject to such operational constraints imposed upon the Canal Company by the Division of Water Resources ("Firm Capacity"). GP's Firm Capacity will take priority over any carriage rights that the Canal Company grants in the Canal after the Effective Date of this Agreement.

      1.1.2 If and When Capacity. To the extent GP has the need and ability to divert Foreign Water at the River Headgate and to carry such water in the Canal at rates in excess of the Firm Capacity, and to the extent Excess Capacity is available over and above the Firm Capacity, GP will be entitled to divert and carry Foreign Water in the Canal on an "if and when" basis upon the written consent and at the sole discretion of the Canal Company ("If and When Capacity"). GP's If and When Capacity will be subordinate to any Firm Capacity carriage rights that the Canal Company grants in the Canal after the Effective Date of this Agreement, but will take priority over any

If and When capacity carriage rights that the Canal Company grants in the Canal after the Effective Date of this Agreement.

1.2 *Non-irrigation Season.* Between November 1 and March 31 ("Non-Irrigation Season"), GP will be entitled to carry Foreign Water in the Canal on an "if and when" basis, upon the prior written consent and at the sole discretion of the Canal Company.

2. Carriage Charges: GP shall pay carriage charges to the Canal Company as follows:

2.1 *Irrigation Season*:

2.1.1 Water Payment. If the Foreign Water that GP is carrying in the Canal during Irrigation Season is legally available for use by the Canal Company, GP shall pay to the Canal Company a carriage fee in the form of water, in an amount equal to 5% of the Foreign Water measured at the Foreign Water Measurement Point described in paragraph 9 below ("Base Water Payment"), plus an additional 1% of such water to compensate the Canal Company for ditch losses on the Base Water Payment ("Water Payment Ditch Loss"). Ditch loss in the Canal amounts to approximately 1.27% per mile, over a Canal length of approximately 20.4 miles from the River Headgate, for total losses of 25.9%; that loss multiplied by the Base Water Payment amounts to approximately 1.3%. The Parties have agreed that an additional water payment of 1% is sufficient and appropriate to compensate the Canal Company for the Water Payment Ditch Loss; accordingly, GP's total Water Payment is **6%** of the Foreign Water diverted at the River Headgate and measured at the Measurement Flume ("Total Water Payment"). The same carriage fee will apply regardless of whether the Foreign Water is carried under GP's Firm Capacity or If and When Capacity hereunder. The Total Water Payment may be adjusted annually upon the written agreement of the Parties. Either Party shall notify the other Party in writing no later than December 31 of its request to seek an adjustment beginning on April 1 of the following year.

2.1.2 Money Payment. If the Foreign Water that GP is carrying in the Canal during Irrigation Season is not legally available for use by the Canal Company, GP shall pay the Canal Company a carriage fee of **$10 per acre-foot** of Foreign Water measured at the Foreign Water Measurement Point ("Irrigation Season Carriage Fee"). The same Irrigation Season Carriage Fee will apply regardless of whether the Foreign Water is carried under GP's Firm Capacity or If and When Capacity. The Irrigation Season Carriage Fee may be adjusted annually upon the written agreement of the Parties. Either Party shall notify the other Party in writing no later than December 31 of its request to seek an adjustment beginning on April 1 of the following year.

2.2 *Non-Irrigation Season*: GP shall pay the Canal Company a carriage fee of **$12.50 per acre-foot** of Foreign Water measured at the Foreign Water Measurement Point during the Non-Irrigation Season ("Non-Irrigation Season Carriage Fee"). The Non-Irrigation Season Carriage Fee is intended to compensate the Canal Company for additional operation and maintenance costs it will incur to run water in the Canal during the Non-Irrigation Season, when the Canal Company typically is not delivering water to its shareholders. The Non-Irrigation Season Carriage Fee may be adjusted annually upon the written agreement of the Parties. Either Party shall notify the other Party in writing no later than December 31 of its request to seek an adjustment beginning on April 1 of the following year.

3. Request for Carriage and Delivery of Foreign Water. At least 24 hours in advance of the time that GP desires to begin diverting water into the Canal at the River Headgate for carriage to the Gravel Pit Delivery Point, GP shall submit a written request to the Canal Company to begin diverting Foreign Water at the Headgate ("Carriage Request"). In the Carriage Request, which must be made by email or other writing to the Canal Company's Secretary, GP shall identify the following: (1) the source(s) of Foreign Water; (2) the requested rate of diversion and carriage of Foreign Water; (3) the requested duration of diversion and carriage of Foreign Water ("Carriage Run"); (4) whether the source(s) of Foreign Water is/are legally available for Canal Company use; and (5) the type of and amount of the applicable carriage charge pursuant to paragraph 2 above. The Canal Company shall, as soon as possible after receiving the Carriage Request, determine the amount of Excess Capacity available to GP consistent with the terms of this Agreement, and shall accept, accept with modifications, or deny the Carriage Request in a confirmation that must be made by email or other writing to GP's contact identified in paragraph 18 below.

4. Operation of the Canal. The Canal Company is and will remain solely responsible for all Canal management decisions, including without limitation all decisions as to when GP's Foreign Water may be carried in the Canal. The Canal Company is and will remain responsible for the day-to-day operation of the Canal and the River Headgate. GP is and will remain responsible for the day-to-day operation of the measuring device to be installed at the Foreign Water Measurement Point, and for all infrastructure needed to deliver the Foreign Water from the Canal to the Gravel Pit Delivery Point. GP shall bear any transit loss on the Foreign Water from the point of diversion at the River Headgate to the Foreign Water Measurement Point. The Canal Company and GP agree to coordinate with each other as needed regarding the short-term and long-term use of the Excess Capacity available to GP under the terms of this Agreement.

5. Ownership of Foreign Water Not Delivered to Delivery Point. Any Foreign Water in excess of the Total Water Payment remaining in the Canal at points down-ditch of the Gravel Pit Delivery Point will be deemed relinquished to the Canal Company.

6. Right to Construct Diversion Structures. GP shall have the right to install, construct, and maintain, at its sole cost and expense, any diversion structures or measuring devices ("Structures") needed to divert GP's Foreign Water from the Canal at the Gravel Pit Delivery Point. The Parties shall agree in advance upon the location and size of any new

Structures, which will be subject to the approval of the Board of Directors of the Canal Company. Installation and construction of the Structures may begin only after the Canal Company approves in writing the plans, specifications, and schedule for the construction of any part of the Structures that may or will affect the flow of water or banks of the Canal, and such approval will not be unreasonably withheld. Construction and installation of the Structures must be performed so as not to interfere with the diversion, carriage, and delivery of water through the Canal during the Irrigation Season, unless otherwise approved in writing by the Canal Company. Any Structure installed in the Canal by GP will remain the property of GP, and GP shall be solely responsible for the repair, maintenance and replacement of said Structure. GP, at its sole cost and expense, shall remove any Structure installed by GP and return the Canal to its pre-existing condition if this Agreement is terminated for any reason and if such removal is requested by the Canal Company.

7. Reimbursement of Canal Company Expenses. GP shall reimburse the Canal Company for all reasonable expenses, including without limitation expenses for work by the Canal Company's legal and/or engineering consultants, associated with (i) the Canal Company's negotiation, review, drafting, and execution of this Agreement; and (ii) the Canal Company's review of plans related to construction and installation of the Structures ("Reimbursable Expenses"). GP shall make payment to the Canal Company for the Reimbursable Expenses within thirty days of receiving the Canal Company's invoice for same. In any invoice for Reimbursable Expenses, the Canal Company shall include a brief description of each expense for which reimbursement is claimed, including without limitation the hourly rate for and time billed by each of the Canal Company's attorneys and/or engineering consultants; provided, however, that the Canal Company is not obligated to and will not include privileged and/or confidential information in such descriptions.

8. Enlargement of the Canal. If the Canal Company subsequently enters into any agreement(s) with third parties to enlarge the capacity of the Canal and/or the River Headgate, the Canal Company shall offer GP the opportunity to participate in any such enlargement project. The terms of any such enlargement project will be the subject of a separate agreement(s) between the Parties. This Agreement confers no right on GP to enlarge the Canal unilaterally.

9. Water Delivery Measurement Point. The amount of Foreign Water diverted by GP will be measured by a measuring device that GP constructs at or near the Gravel Pit Delivery Point, at a location to be agreed upon by GP and the Canal Company before the measuring device is installed ("Foreign Water Measurement Point"). Upon the Canal Company's request, GP shall provide the Canal Company GP's records of measurement at the Gravel Pit Delivery Point.

10. Accounting. Each Party is and will continue to be responsible for its own accounting to State Water Officials for diversion and use of the Foreign Water hereunder.

    10.1 Within seven days of the end of each Carriage Run, GP shall report to the Canal Company, in writing, the volume of Foreign Water measured at the Foreign Water

Measurement Point during that Carriage Run, and the volume of the Total Water Payment, if any, made to the Canal Company for that Carriage Run.

10.2 The Canal Company shall use the reports described in paragraph 10.1 above to determine the Money Payments owed to the Canal Company pursuant to paragraphs 2.1.2 and 2.2 above and paragraph 11 below.

11. Payment of Carriage Charge. In the event the carriage charge is to be paid by a Money Payment, as described in paragraphs 2.1.2 and 2.2 above, the Canal Company shall invoice GP for such carriage charge by the 10th of each month for Carriage Runs in the previous month, and GP shall deliver such Money Payment to the Canal Company within 30 days of delivery of the Canal Company's invoice ("Due Date"). In the event the carriage charge is to be paid by a Water Payment, as described in paragraph 2.1.1 above, such carriage charges will be considered paid on an instantaneous basis when GP bypasses, past the Gravel Pit Delivery Point, Foreign Water in an amount equal to 6% of the amount of Foreign Water measured at the Foreign Water Measurement Point.

12. Non-Payment of Carriage Charge. If full payment of any carriage charge required to be made as a Money Payment is not received by the Canal Company by the Due Date, the Canal Company shall have the right to suspend carriage of water under this Agreement until such time as payment has been brought current or other arrangements satisfactory to the Canal Company are made and documented in a writing signed by both Parties. If an alternative payment agreement is not reached or if full payment is not received within 90 days of the Due Date, the Canal Company may terminate this Agreement without further notice to GP.

13. Transfer of Rights. Upon the prior written approval of the Canal Company, which will not be unreasonably withheld, the rights granted to GP herein may be conveyed, leased, or assigned by GP, in whole or in part, as part of GP's sale, lease, or assignment of storage capacity in the Gravel Pit. Other than as part of a sale, lease, or assignment by GP of storage capacity in the Gravel Pit, the rights granted to GP herein may not be conveyed, leased, or assigned to a third party without the prior written approval of the Canal Company, which may be granted or withheld in the Canal Company's sole discretion.

14. Indemnification. GP shall indemnify and hold the Canal Company harmless from and against (i) any damage that may be caused by GP as a result of the activities of GP under this Agreement; and (ii) any legal claims that may be brought against the Canal Company by third parties as a result of such activities.

15. No Adverse Possession. Acts by GP under this Agreement do not and will not constitute, and are not to be construed or claimed by GP as constituting, adverse possession of the Canal or other property of the Canal Company.

16. Complete Agreement. This Agreement represents the complete agreement of the Parties with respect to the subject matter hereof. No oral modification of this Agreement will be

effective, and any amendments or additions must be made in writing signed by both Parties.

17. Successors, Assigns, and Lessees. Subject to the terms and conditions of paragraph 13 above, this Agreement benefits and is binding on the Parties and their successors, assigns, and lessees.

18. Notice. Any notices, payments, or other communications relating to this Agreement must be in writing. All such notices, payments, and communications will be deemed to have been duly given on the date of service, if delivered and served personally on the recipient or if delivered by email; on the next business day after deposit for overnight delivery by a courier service such as Federal Express; or on the third business day after mailing, if mailed to the recipient by first-class mail, postage prepaid, and properly addressed as follows:

If to GP:
GP Aggregates, LLC
c/o Karl Nyquist
7991 Shaffer Pkwy, Suite 200
Littleton, CO 80127
karl@cacompanies.com

If to the Canal Company:
Lamar Canal and Irrigation Company
P.O. Box 287
Lamar, Colorado 81052
lawma@cminet.net

Persons and addresses to which notices, payments, and other communications are to be sent may be changed by written notice given pursuant to this paragraph 18.

19. Term of Agreement. The term of this Agreement is perpetual, unless the Agreement is terminated by the Canal Company pursuant to paragraph 12 above.

20. Canal Company Bylaws. GP's rights and operations hereunder are subject to the By-Laws of the Lamar Canal and Irrigation Company.

IN WITNESS WHEREOF, the Canal Company has, by the authority of its Board of Directors, caused this Agreement to be executed by its President and attested by its Secretary, and GP has, by its authority or those of its agents, caused this Agreement to be executed.

EFFECTIVE AS OF the date and year first written above.

[Signature Page Follows]

GP AGGREGATES, LLC

By _____ Manager
Name, Title

Attest

_____
Name

LAMAR CANAL AND IRRIGATION COMPANY

By _____ Vice President
Name, Title

Attest

_____
Name

15735040

Exhibit B

to Exhibit D

CONSENT TO TEMPORARY PARTIAL ASSIGNMENT AND ASSUMPTION AGREEMENT

GP Aggregates, LLC ("GP"), which holds that certain "Carriage Agreement Between GP Aggregates, LLC, and Lamar Canal and Irrigation Company" dated June 14, 2017 ("GP Carriage Agreement"), seeks the Canal Company's prior written consent to the attached proposed "Temporary Partial Assignment and Assumption Agreement" between GP and Lower Arkansas Water Management Association ("LAWMA"). Under the Temporary Partial Assignment and Assumption Agreement, GP will assign to LAWMA, on a temporary basis, certain of GP's rights under the GP Carriage Agreement; and GP will delegate to LAWMA, and LAWMA will assume from GP, on a temporary basis, certain of GP's obligations under the GP Carriage Agreement.

As required by paragraph 13 of the GP Carriage Agreement, the Canal Company hereby gives its written consent to the proposed Temporary Partial Assignment and Assumption Agreement.

LAMAR CANAL AND IRRIGATION COMPANY

By Donald F Higbee

Its Sec/Treas

Date 6/12/18

EXHIBIT E

PARTIAL ASSIGNMENT AGREEMENT

This Partial Assignment Agreement ("Agreement") is by and between **GP AGGREGATES, LLC** ("GP"), a Colorado limited liability company whose address is 7991 Shaffer Parkway, Suite 200, Littleton, Colorado 80127, and **LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION** ("LAWMA"), a Colorado non-profit corporation whose address is P.O. Box 1161, Lamar, Colorado 81052 (each a "Party" and together the "Parties").

RECITALS

F. GP and LAWMA entered into an Agreement for Lease and Subsequent Purchase and Sale of Water Storage and Carriage Capacity ("Lease-Purchase Agreement") on July ____, 2018.

G. The Lease-Purchase Agreement pertains to LAWMA's use of 500 acre-feet of dedicated storage capacity in a gravel pit located on the West Farm ("West Farm Pit"), along with LAWMA's use of dedicated carriage capacity for delivery of water into and out of the West Farm Pit.

H. The Lease-Purchase Agreement obligates GP to assign to LAWMA certain of GP's rights under a Water Conveyance Easement Agreement dated January 15, 2015, between GP and GP Irrigated Farms, LLC ("GP Irrigated Easement Agreement"), allowing GP to carry water across GP Irrigated Farms' property ("GP Irrigated Property") for delivery into and discharge out of the West Farm Pit. A copy of the GP Irrigated Easement Agreement is attached as **Exhibit A**.

I. In fulfillment of certain of their respective obligations under the Lease-Purchase Agreement, GP and LAWMA wish to establish the terms upon which GP will assign to LAWMA GP's below-described rights under the GP Irrigated Easement Agreement.

NOW, THEREFORE, for and in consideration of the foregoing and other consideration, the receipt and sufficiency of which are hereby acknowledged, GP and LAWMA agree as follows:

9. Defined terms. Capitalized terms used but not otherwise defined in this Agreement take the meanings ascribed to them in the GP Irrigated Easement Agreement or the Lease-Purchase Agreement.

10. Rights assigned by GP. GP hereby transfers, assigns, and sets over to LAWMA the following rights of GP under the GP Irrigated Easement Agreement:

    2.1 The right to run the first 8.2 cfs of water in the Phase 1 Inlet Canal as a Conveyance Structure.

    2.2 The right to run the first 6.5 cfs of water in the Outlet Channel as a Conveyance Structure.

2.3 All other rights granted to GP in paragraph 2 of the GP Irrigated Easement Agreement that pertain to the rights described in paragraphs 2.1 and 2.2 above, including without limitation the right to access and cross the GP Irrigated Property for the purpose of operating, using, and enjoying the Conveyance Structures as they presently exist and as they may be constructed in the future.

11. Notice. Any written notice, request, or other communication required or desired to be sent by one Party to the other Party will be deemed validly given if delivered by either electronic mail or United States mail, addressed as follows:

If to GP:

Karl Nyquist
7991 Shaffer Pkwy, Suite 200
Littleton, CO 80127
karl@cacompanies.com

Wayne F. Forman
Brownstein Hyatt Farber Schreck, LLP
410 17th Street, Suite 2200
Denver, CO 80202
wforman@BHFS.com

If to LAWMA:

Lower Arkansas Water Management Association
Donald F. Higbee, Manager
310 South 6th Street, P.O. Box 1161
Lamar, Colorado 81052
lawma@cminet.net

Richard J. Mehren
Moses, Wittemyer, Harrison and Woodruff, P.C.
2595 Canyon Blvd., Suite 300
Boulder, CO 80302
rmehren@mwhw.com

12. Execution. This Agreement may be executed in counterparts, each of which will be deemed an original and both of which, together, will be deemed to constitute one and the same document. Electronic or facsimile signatures will be binding and accepted as originals.

13. Successors and assigns. This Agreement, with all rights and obligations of GP and LAWMA hereunder, benefits and binds the Parties and will benefit and bind the Parties' successors and assigns; provided, however, that neither Party may assign its rights or delegate its obligations hereunder without the prior written consent of the other Party, which consent will not be unreasonably withheld.

14. Entire agreement. This Agreement, together with the Lease-Purchase Agreement, contains the entire understanding and agreement between the Parties with respect to the subject matter hereof, and all prior negotiations, agreements, and understandings, oral or written, are merged into and superseded by this Agreement and the Lease-Purchase Agreement.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the date set forth below.

GP AGGREGATES, LLC

By:_____
Karl Nyquist
Its Manager

Date:_____

LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION

By:_____
Robert J. Wilger
Its Vice President

ATTEST:

By:_____
Donald F. Higbee
Its Secretary

Date:_____

WHEN RECORDED RETURN TO:

_____
_____
_____

WATER CONVEYANCE EASEMENT AGREEMENT

This **WATER CONVEYANCE EASEMENT AGREEMENT** (this "Agreement") is made and entered into on this 15th day of JANUARY, 2015, by and between GP IRRIGATED FARMS, LLC ("GP"), a Colorado limited liability company whose address is 7991 Shaffer Parkway, Suite 200, Littleton, Colorado 80127 ("Grantor"), and GP AGGREGATES, LLC ("GP"), a Colorado limited liability company whose address is 7991 Shaffer Parkway, Suite 200, Littleton, Colorado 80127 ("Grantee") (together with Grantor, referred to as the "Parties" and individually a "Party").

RECITALS

A. Grantor is the owner of that certain real property located in the County of Prowers, State of Colorado, more fully described on Exhibit "A" hereto (the "Property").

B. Grantee is the owner of that certain real property located in the County of Prowers, State of Colorado, more fully described on Exhibit "B" hereto (the "Grantee Property") on which Grantee has constructed a water storage reservoir.

C. Grantee is the owner of that certain outlet and inlet structures currently consisting of open ditches for the conveyance of water from the Lamar Canal to Grantee's Property and from Grantee's Property to the Arkansas River a portion of which structures are located within the Property (such structures as the same may be repaired or replaced from time to time the "Conveyance Structures").

D. Grantee desires easements over the Property for the Conveyance Structures and for the purpose of accessing the Property for the maintenance and management of the Conveyance Structures.

E. Grantor is willing to grant Grantee said easements on the terms and conditions set forth herein over the Property to accomplish the foregoing.

AGREEMENT

NOW THEREFORE, in consideration of the sum of Ten Dollars ($10.00) and other good and valuable consideration in hand paid by Grantor to Grantee, the receipt and adequacy of which is hereby acknowledged by Grantee, and as additional consideration, the obligations and agreements of Grantor to be performed hereunder, Grantor and Grantee agree as follows:

1. Incorporation of Recitals. The foregoing recitals are hereby incorporated in and made a part of the Agreement of the Parties.

2. Grant of Easement. Grantor has granted and conveyed and by these presents does grant and convey unto the Grantee, its successors and assigns, a permanent, non-exclusive easement for the Conveyance Structures, for maintenance, repair, operation, improvement, replacement, reconstruction and enlargement of the Conveyance Structures, for access (including, without limitation, vehicular and pedestrian) in and across the Property for the running of water in the Conveyance Structures, and to allow Grantee to do whatever is reasonably necessary for Grantee to fully utilize and enjoy the same (the "Easement"). The Easement described herein includes Grantee's use of the Conveyance Structures, roadway, diversion structures and structural support systems, whether presently existing or constructed in the future.

3. Retained Uses. The Property shall remain in the ownership of the Grantor, its heirs, successors or assigns, and may be used for any and all purposes not inconsistent with the purposes set forth in this Agreement and which will not interfere with or endanger the Grantee's use of the Conveyance Structures, or interfere with the use of any of the rights herein granted. Such reservation by the Grantor shall include the right to dedicate and use the land for cultivation, grazing and other agricultural purposes.

4. No Permanent Structures. Except as otherwise provided herein, the Grantor, its successors and assigns, shall not erect or place any permanent building, structure or obstructive improvement within (5) feet from Conveyance Structures. The restrictions set forth in this Section 3 are not intended to prevent Grantor from utilizing its correlative rights in the Property or to prevent the installation of improvements which do not interfere with Grantee's use of the Easement.

5. Warranty of Title and Insurance. The Grantor does covenant and agree to and with the Grantee that the Grantor is the owner of Grantor's Property, the Grantor has a good and lawful right to convey the Easements to the Grantee and that the Grantor warrants the title thereto, subject to existing easements and rights of way in place or of record.

6. Liability. Grantor shall not be liable for any claim of damages or injury to persons or property which may arise as a result of Grantor's use of the Easement except for negligent acts of Grantor.

7. Notice. Any notice required or desired to be given by any Party shall be in writing and may be personally delivered; sent by certified mail, return receipt requested; or sent by a nationally recognized receipted overnight delivery service, including the United States Postal Service, United Parcel Service, Federal Express, or Airborne Express, for earliest delivery the next day. Any such notice shall be deemed to have been given and received as follows: when personally delivered to the Party to whom it is addressed; when mailed, three delivery (3) days after deposit with the United States Postal Service, postage prepaid; and when by overnight delivery service, one (1) day after deposit in the custody of the delivery service. The addresses for the mailing or delivering of notices shall be those set forth in the introductory paragraph of this Agreement or such other address as provided pursuant to this Section.

8. Binding Nature/Covenant Running with Land. This Agreement shall be binding upon, inure to the benefit of and be enforceable by, the Parties hereto, their successors or assigns. The Easement and the terms of this Agreement shall burden and run shall run with the Grantor's Property and shall be recorded at the clerk of the recorder's office in the County of Prowers, Colorado.

9. Assignment. This Agreement may not be assigned, in whole or part, by any party hereto without the express written consent of the other party hereto, which consent may be granted or withheld in the sole discretion of any such party; provided, however that Grantee shall have the right to assign all or any portion of the rights herein granted, provided the assignment does not contain any provisions that would change the substantive terms of this Agreement in a manner that increases the burden on Grantor..

10. No Third Party Beneficiaries. This Agreement is not intended and shall not be deemed to confer any rights on any person or entity not named as a Party to this Agreement or a permitted assignee of a Party hereto.

11. Sections and Headings. Sections and headings herein contained are for organization purpose only and shall not affect the interpretation of this Agreement.

12. Counterparts. This Agreement may be executed in multiple counterparts, each of which shall be deemed to be an original and all of which taken together shall constitute one and the same agreement.

[The remainder of this page is intentionally blank.]

IN WITNESSETH WHEREOF, the parties hereto have executed this Agreement on the day and year of the last signature below set forth.

GP IRRIGATED FARMS, LLC

Jay Houtsma
Managing Member

STATE ~~OF COLORADO~~ KANSAS)
) ss
COUNTY OF HAMILTON)

Ross A. Geubelle
Notary Public
State of Kansas
My Appt. Expires 5-26-2021

STATE ~~OF COLORADO~~ KANSAS)
) ss
COUNTY OF HAMILTON)

The above and foregoing instrument was subscribed and sworn before me this 6th day of July, 2018, by Jay Houtsma as Managing Member of GP Irrigated Farm, LLC a Colorado limited liability company.

My Commission expires:

5-26-2021

Witness my hand and official seal.

Notary Public

Exhibit A
PROPERTY

[see attached]

Parcel No. 1:
Township 22 South, Range 46 West of the Sixth Principal Meridian, County of Prowers, State of Colorado
A parcel of land being a part of Sections 25, 26, 27, 28, 29, 32, 33, 34, 35, and 36, being more particularly described as follows:

(All bearings used herein are based on the assumption that the North line of the SW¼ of the SE¼ of Section 35 of said Township and Range, monumented on both ends with a 4" concrete filled pipe, bears, S.89°54'46"W.)

Beginning at a point which bears N.0°14'04"W., 30.00 feet from the W¼ corner of said Section 33;

1. Thence N.0°14'04"W. along the West line of the NW¼ of said Section 33, a distance of 1267.65 feet to the Southeast corner of the N½ of the NE¼ of said Section 32;
2. Thence S.89°51'59"W. along the South line of the N½ of the NE¼ and the South line of the N½ of the NW¼ of said Section 32, a distance of 2766.79 feet;
3. Thence N.0°50'58"W., a distance of 177.83 feet to the Southeast corner of that parcel of land described in that document recorded in Book 536 at Page 196 in the records of the Prowers County Clerk and Recorder;

(The next five courses are along the East boundary of said recorded description)

4. Thence continuing N.0°50'58"W., a distance of 344.21 feet
5. Thence N.17°25'40"E., a distance of 48.67 feet;
6. Thence N.1°48'06"W., a distance of 1651.65 feet;
7. Thence N.22°48'20"E., a distance of 469.48 feet;
8. Thence N.89°47'09"W., a distance of 18.09 feet to a point on the North-South centerline of said Section 29;
9. Thence N.0°45'26"E., along said North-South centerline, a distance of 850.78 feet to a point in the South line of Indian Claim No. 27;

(The next three courses are along the South line of Indian Claim No. 27)

10. Thence S.70°25'04"E., a distance of 186.89 feet;
11. Thence N.84°56'56"E., a distance of 2931.72 feet;
12. Thence N.47°25'56"E., a distance of 397.84 feet to a point on the East-West centerline of said Section 28;
13. Thence N.89°38'12"E., along said East-West centerline, a distance of 3239.09 feet to the Northeast corner of the W½ of the SE¼ of said Section 28;
14. Thence S.0°43'07"W., along the East line of said W½ of the SE¼, a distance of 1650.00 feet;
15. Thence N.89°38'58"E. along the South line of the North 1650.00 feet of the E½ of the SE¼ of said Section 28, a distance of 1319.84 feet to a point on the West line of said Section 27;
16. Thence N.89°43'55"E., along the South line of the North 1650.00 feet of the SW¼ of said Section 27, a distance of 2670.79 feet to a point on the North-South centerline of said Section 27;
17. Thence N.0°34'32"E., along said North-South centerline, a distance of 2082.64 feet to the South line of the North 220 feet of the S½S½NE¼ of said Section 27;
18. Thence N.89°46'23"E., along the North line of said 220 foot tract, a distance of 2665.49 feet to the East line of the NE¼ of said Section 27;
19. Thence S.0°25'42"W., along said East line, a distance of 430.59 feet to the W¼ corner of said Section 26;
20. Thence N.89°50'46"E., along the East-West centerline of said Section 26, a distance of 3955.46 feet to the Southwest corner of the SE¼ of the NE¼ of said Section 26;
21. Thence N.1°10'02"E., along the West line of said SE¼ of the NE¼, a distance of 1295.41 feet to the Northwest corner of said SE¼ of the NE¼;
22. Thence N.89°57'19"E., along the North line of said SE¼ of the NE¼, a distance of 1323.96 feet to a point on the West line of said Section 25;
23. Thence S.1°24'57"W., along said West line, a distance of 415.78 feet to the Northwest corner of Lot 3 of said Section 25;

(The next three courses are along the boundary of said Lot 3)

24. Thence S.61°42'35"E., a distance of 1246.98 feet;
25. Thence S.52°32'35"E., a distance of 480.76 feet;
26. Thence N.89°45'23"W., a distance of 173.96 feet to the Northwest corner of the NE¼ of the SW¼ of said Section 25;
27. Thence S.1°09'53"W. along the West line of said NE¼ of the SW¼, a distance of 1309.75 feet to the Southwest corner of said NE¼ of the SW¼;
28. Thence S.89°55'22"E., along the South line of said NE¼ of the SW¼, a distance of 1333.23 feet to the North-South centerline of said Section 25;
29. Thence S.0°54'45"W., along said North-South centerline, a distance of 1305.79 feet to the S¼ corner of said Section 25;
30. Thence S.89°50'52"E. along the South line of Said Section 25, a distance of 1102.20 feet to a point on the South line of Indian Claim No. 29;
31. Thence S.55°59'13"E., along said South line, a distance of 726.12 feet;
32. Thence S.51°36'13"E., along said South line, a distance of 1206.11 feet to a point on the East line of said Section 36;
33. Thence S.0°40'43"W., along the East line of said Section 36, a distance of 1327.01 feet to the Northerly right-of-way line of the B.N.S.F. Railway;
34. Thence N.89°26'24"W., along said railway Right-of-Way, a distance of 7520.03 feet;
35. Thence along said right-of-way on a curve to the left whose radius is 11559.16 feet, an arc distance of 803.62 feet;
36. Thence S.86°34'15"W., along said Right-of-Way, a distance of 2256.50 feet to the East line of Section 34;

37. Thence N.0°47'1 6"E., along the East line of said Section 34, a distance of 30.39 feet to the Northerly right-of-way of County Road;
38. Thence S.86°33'36"W., along said County Road, a distance of 1444.80 feet;
39. Thence S.89°45'31"W., along said County Road, a distance of 3865.11 feet;
40. Thence S.89°37'33"W., along said County Road, a distance of 5278.29 feet to the point of beginning.

AND

41. Beginning at a point which bears S.45°50'57"E., a distance of 42.78 feet from the W1/4 corner of said Section 33;
42. Thence N.89°37'33"E., a distance of 2612.55 feet;
43. Thence S.0°11'39"E., a distance of 326.97 feet;
44. Thence S.86°33'36"W., a distance of 2616.30 feet;
45. Thence N.0°14'04"W., a distance of 466.65 feet to the point of beginning.

Excepting therefrom all that part of that parcel described in that document recorded at Reception No. 141931 in the records of the Prowers County Clerk and Recorder that is not vacated by that document recorded at Reception No. 471604 in the records of the Prowers County Clerk and Recorder

And further excepting therefrom that parcel described in that document recorded at Reception No. 471610 in the records of the Prowers County Clerk and Recorder,

All according to that certain Land Survey Plat prepared by Petersen Surveying, Inc. and recorded June 4, 2004 at Reception No. 504489 in the Prowers County Clerk and Recorder records, County of Prowers, State of Colorado.

INCLUDING the following: Lots 1, 2, 3, 4, 5, 6, 7, and 8 of Tract 2, and Lots 9, 10 and 11 of Tract 1 of GP Ranches Subdivision, all as further described in the plat recorded December 3, 2004 at Reception No. 506127 of the Prowers County Clerk and Recorder records, County of Prowers, State of Colorado.

EXHIBIT A (6 PAGES)

Parcel No. 1:

Township 22 South, Range 44 West of the Sixth Principal Meridian
Section 31: SE¼
Section 32: SW¼; SW¼NE¼; SE¼, except a tract described in Warranty Deed recorded October 18, 1995 at Reception No. 470427

Township 23 South, Range 44 West of the Sixth Principal Meridian
Section 5: NE¼ & NW¼ lying North of U. S. Highway 50

Section 6: NE¼ lying North of U. S. Highway 50

And INCLUDING the following: Lot 1, Borderland Estates Subdivision Filing No. 3, said Subdivision being a part of the E½ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the W½ of Section 4 and the N½ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 4, 2007 at Reception No. 516414 of the Prowers County Clerk and Recorder records.

EXCEPT the following three descriptions:
1. Lots 1, 2, 3, 4, 5, 6, 7 and 8, Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.
2. Lots 1, 2 and 3, Borderland Estates Subdivision Filing No. 2, being a part of the SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian, according to the plat recorded December 14, 2006 at Reception No. 513232 of the Prowers County Clerk and Recorder records.
3. Lots 2, 3 and 4, Borderland Estates Subdivision Filing No. 3, being a part of E½ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of W½ Section 4 and N½ Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, according to the plat recorded December 4, 2007 at Reception No. 516414 of the Prowers County Clerk and Recorder records.

Township 23 South, Range 44 West of the Sixth Principal Meridian
Section 4: Tract 10, as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as Recorded March 5, 1927 in Book 2, Pages 45-61, Prowers County Records, said tract being situated in the NW¼, and more particularly described as follows: Beginning at a 2" iron pipe monument which bears S.0°02'W., 100.00 feet from the NW corner of Section 4, Township 23 South, Range 44 West; thence S.89°55'E., 2628.4 feet to a 2" iron pipe monument; thence S.0°03'W., 2004.5 feet to a 2" iron pipe monument; thence N.71°45'W., 121.1 feet to a point; thence N.51°00'W., 507.0 feet to a point; thence N.64°53'W., 796.0 feet to a point; thence N.81° 06'W., 129.8 feet to a point; thence S. 72°54'W., 129.0 feet to a point; thence S. 64°47'W., 213.0 feet to a point; thence N.83°28'W., 174.5 feet to a point; thence N.78°38'W., 795.5 feet to a 2" iron pipe monument; thence N.0°02'E., 1245.7 feet to the place of beginning.
Tract 11, as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as recorded March 5,1927 in Book 2, Pages 45-61, Prowers County records, said tract being situated in the NW¼, and more particularly described as follows: Beginning at a 4" iron pipe monument marking the West Quarter corner of Section 4, Township 23 South, Range 44 West; thence N.0°02'E., 1263.7 feet to a 2" iron pipe monument; thence S.78° 38'E., 796.0 feet to a point; thence S 83°28'E., 185.0 feet to a point; thence N.64°47'E., 222.0 feet to a point; thence N.72°54'E., 114.0 feet to a point; thence S.81°06'E., 113.0 feet to a point; thence S.64 °53'E., 785.0 feet to a point; thence S.51°00'E., 504.0 feet; thence S.71°45'E., 146.0 feet to a 2" iron pipe monument; thence S.73°26'E., 342.8 feet to a point; thence S.48°52'E., 617.8 feet to a 2" iron pipe monument; thence N.89°58'W., 794.1 feet to a point; thence N.89°57'W., 2628.0 feet to the place of beginning,
except a tract of land described as follows: Beginning at the center of said Section 4; thence N.89°57'W., 100 feet to a point; thence N.0°03'E., 535 feet, more or less, to a point on the South right of way line of the XY Canal; thence S.71°45'E., 103 feet, more or less, to a point, thence S.73°26'E., 342.8 feet to a point; thence S.48°52'E., 617.8 feet to the Southeast corner of said Tract 11; thence along the South line of said Tract 11 N.89°58'W., 794.1 feet to the point of beginning;
except a tract deeded to the County of Prowers recorded January 12, 1927 at Reception No. 149133,
and except a tract deeded to the X Y Ditch Company recorded November 11, 1889 in Book 15 at page 289, and all that part of the SW¼ lying North of the North right of way line of the Atchison, Topeka and Santa Fe Railroad,
except that tract deeded to Prowers County recorded in Book 187 at Page 303,
and except a tract deeded to Prowers County recorded in Book 264 at Page 86 in the Prowers County records.

And
All that part of the SW¼ of Section 4 lying North of the North right of way line of The Atchison, Topeka and Santa Fe Railroad, except that tract deeded to the County of Prowers, recorded February 8, 1928 in Book 187 at Page 303, under Reception No. 155414.

All of Tracts 15, 16, 16A in SW¼ of Section 3, Township 23 South, Range 44 West of the Sixth P.M. as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as recorded March 5, 1927 in Book 2, Pages 45-61, Prowers County records, said tracts being more particularly described as follows:
Tract 15, Beginning at a 2" iron pipe monument which bears S.0°03'E., 410.0 feet from the West Quarter corner of Sec 3, Twp 23S, Rge 44W; thence S.0°03'E., 1180.0 feet to a 2" iron pipe monument; thence S.74°48'E., 1454.3 feet to a point; thence N.0°20'E., 1849.4 feet to a 2" iron pipe monument; thence S.78°28'W., 1445.1 feet to the place of beginning.

Tract 16, Beginning at a 4" iron pipe monument marking the center of Sec 3, Twp 23S, Rge 44W; thence S.0°29'W., 1210.0 feet to a 1½" iron pipe monument; thence West 402.0 feet to a 1½" iron pipe monument; thence S.0°29'W., 872.0 feet to a point; thence West 148.0 feet to a point; thence S.0°29'W., 54.0 feet to a 2" iron pipe monument; thence N.74°48'W., 213.5 feet to a 2" iron pipe monument; thence S.15°12'W., 50.0 feet to a point; thence N.74°48'W., 483.8 feet to a point; thence N.0°20'E., 1849.4 feet to a 2" iron pipe monument; thence N.66°40'E., 113.0 feet to a point; thence N.45°33'E., 134.6 feet to a 2" iron pipe monument; thence N.89°20'E., 1043.8 feet to the place of beginning.

Tract 16A, Beginning at a 1½" iron pipe monument, which bears S.0°29'W., 1210.0 feet from the center of Sec 3, Twp 23S, Rge 44W; thence S.0°29'W., 1075.0 feet to a 2" iron pipe monument; thence N.74°48'W., 568.0 feet to a 2" iron pipe monument; thence N.0°29'E., 54.0 feet to a point; thence East 148.0 feet to a point; thence N.0°29'E., 872.0 feet to a 1½" iron pipe monument; thence East 402.0 feet to the place of beginning.

All of Tracts 31, 32, 33, as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as Recorded March 5, 1927 In Book 2, Pages 45-61, Prowers County records, said tract being situated in the SE¼ and S½NE¼ of Section 1 and the NE¼NE¼ of Section 12, Township 23 South, Range 44 West of the Sixth P.M., and more particularly described as follows:

Tract 31, Beginning at a 4" iron pipe monument marking the East Quarter corner of Sec 1, Twp 23S, Rge 44W; thence S.89°42'W., 2615.4 feet to a 2" iron pipe monument; thence N.0°05'E., 1318.8 feet to a 2" iron pipe monument; thence S.89°43'E., 2516.0 feet to a point; thence S.63°33'E., 110.8 feet to a 2" iron pipe monument; thence S.0°03'W., 1271.0 feet to the place of beginning.

Tract 32, Beginning at a 4" iron pipe monument marking the East quarter corner of Sec 1, Twp 23S, Rge 44W; thence S.0°03'W., 1320.0 feet to a 4" iron pipe monument; thence N.89°46'W., 2609.7 feet to a 2" iron pipe monument; thence N.0°12'W., 1322.8 feet to a 2" iron pipe monument; thence N.89°42'E., 2615.4 feet to the place of beginning.

Tract 33, Beginning at a 4" iron pipe monument marking the SE corner of Sec 1, Twp 23S, Rge 44W; thence South 198.7 feet to a 2" iron pipe monument; thence N.65°53'W., 491.7 feet to a 2" iron pipe monument; thence N.69°39'W., 176.0 feet to a point; thence N.80°44'W., 235.0 feet to a point; thence S.89°32'W., 475.0 feet to a point; thence N.89°41'W., 1201.0 feet to a 2" iron pipe monument; thence N.31°36'W., 156.5 feet to a 2" iron pipe monument; thence N.0°12'W., 1093.6 feet to a 2" iron pipe monument; thence S.89°46'E., 2609.7 feet to a 4" iron pipe monument; thence S.0°03' W., 1320.8 feet to the place of beginning.

EXCEPT a parcel in Tract 33 in the Southeast Quarter of Section 1, Township 23 South, Range 44 West of the Sixth P.M. described in Warranty Deed to Department of Transportation as recorded March 31, 2003 at Reception No. 499662.

All of Tracts 37, 38, 39, situate in S½NE¼, E½SE¼, SW¼SE¼ of Section 11, Township 23 South, Range 44 West of the Sixth P.M., as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as recorded March 5, 1927 in Book 2, Pages 45-61, Prowers County records, said tracts more particularly described as follows:

Tract 37, Beginning at a 4" iron pipe monument marking the East Quarter corner of Sec 11, Twp 23S, Rge 44W; thence S.89°08'W., 125.5 feet to a point; thence N.73°33'W., 100.6 feet to a 2" iron pipe monument; thence S.89°08'W., 2425.0 feet to a 2" iron pipe monument; thence N.0°25'W., 1194.7 feet to a 2" iron pipe monument; thence S.74°48'E., 2750.5 feet to a 2" iron pipe monument; thence S.0°04'E., 463.0 feet to the place of beginning.

Tract 38, Beginning at a 4" iron pipe monument marking the center of the SE¼ of Sec 11, Twp 23S, Rge 44W; thence N.0°31'W., 1292.0 feet to a 2" iron pipe monument; thence N.89°08'E., 1095.8 feet to a 2" iron pipe monument; thence S.72°34'E., 67.7 feet to a point; thence S.54°57'E., 69.0 feet to a point; thence S.48°47'E., 69.3 feet to a point; thence S.28°10'E., 102.1 feet to a 2" iron pipe monument; thence S.0°04'E., 1087.7 feet to a 4" iron pipe monument; thence S.88°52'W., 1306.3 feet to the place of beginning.

Tract 39, Beginning at a 4" iron pipe monument marking the center of the SE¼ of Sec 11, Twp 23S, Rge 44W; thence N.88°52'E., 1306.3 feet to a 4" iron pipe monument; thence S.0°04'E., 1346.0 feet to a 2" iron pipe monument; thence S.88°44'W., 2631.6 feet to a 2" iron pipe monument; thence N.0°24'W., 1352.0 feet to a 4" iron pipe monument; thence N.88°52'E., 1333.0 feet to the place of beginning.

All of Tracts 40, 40A, 41 situate in W½ of Section 11, Township 23 South, Range 44 West of the Sixth P.M. as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as recorded March 5, 1927 in Book 2, Page 45-61, Prowers County records, said tracts being more particularly described as follows:

Tract 40, Beginning at a 2" iron pipe monument which bears N.0°24'W. 30.0' from the South Quarter corner of Sec 11, Twp 23S, Rge 44W; thence S.88°47'W., 767.8 feet to a 1½" iron pipe monument; thence North 170.0 feet to a 1½" Iron pipe monument; thence S.88°47'W., 1331.3 feet to a point; thence N.45°50'E, 204.0 feet to a 1½" iron pipe monument; thence N.44°10'W., 166.0 feet to a 1½" iron pipe monument; thence N.71°40'E., 176.5 feet to a point; thence N.28°15'E., 361.7 feet to a point; thence N.16°40'W., 639.5 feet to a point; thence N.41°35'W., 380.0 feet to a point; thence N.3°00'W., 892.5 feet to a point; thence N.88°56'E., 2194.7 feet to a 2" iron pipe monument; thence S.0°24'E., 259.00 feet to the place of beginning.

Tract 40A, Beginning at a 4" iron pipe monument marking the SW corner of Sec. 11, Twp 23S, Rge 44W; thence N.35°55'E., 467.4 feet to a point; thence N.71°40'E., 299.0 feet to a 1½" iron pipe monument; thence S.44°10'E., 166.0 feet to a 1½" iron pipe monument; thence S.45°50'W., 204.0 feet to a point; thence N.88°47'E., 1331.3 feet to a 1½"iron pipe monument; thence South 170.0 feet to a 1½" iron pipe monument; thence S. 88°47'W., 1434.2 feet to a 2" iron pipe monument; thence South 30.0 feet to a 2" iron pipe monument; thence S. 88°47'W., 425.0 feet to the place of beginning.

Tract 41, Beginning at a 2" iron pipe monument which bears N.0°25'W., 30.0 feet from the center of Sec. 11, Twp 23S, Rge 44W; thence S.88°56' W., 2197.3 feet to a point; thence N.3°00'W., 73.7 feet to a point; thence N.9°50'E., 841.2 feet to a point; thence N.34°15'E., 371.1 feet to a point; thence N.14°10' E., 508.2 feet to a 2" iron pipe monument; thence S.74°48'E., 1778.0 feet to a 2" iron pipe monument; thence S.0°25'E., 1194.7 feet to the place of beginning.

All in County of Prowers, State of Colorado.

Parcel No. 2:

Township 23 South, Range 44 West of the Sixth Principal Meridian
Section 1: NW¼ and 35 acres, more or less, lying South of the North Granada Lateral Drainage Ditch in the N½NE¼

All of Tracts 28 and 29, situate in the SW¼ of Section 1, Township 23 South, Range 44 West of the Sixth P.M. as shown by the tract maps of Lamar Manvel Farms of The American Beet Sugar Company, as recorded March 5, 1927 in Book 2, Page 45-61, Prowers County records, said tracts being more particularly described as follows:
Tract 28, Beginning at a 4" iron pipe monument marking the West Quarter corner of Sec 1, Twp 23S, Rge 44W, thence S.89°42'E., 1320.0 feet to a 4" iron pipe monument; thence S.89°42'E., 1290.6 feet to a 2" iron pipe monument; thence S.0°12'E., 1323.0 feet to a 2" iron pipe monument; thence N.89°46'W., 1292.2 feet to a 4" iron pipe monument; thence N.89°37'W., 1315.7 feet to a 4" iron pipe monument; thence N.0°18'W., 1323.2 feet to the place of beginning.
Tract 29, Beginning at a 4" iron pipe monument marking the center of the SW¼ of Sec 1, Twp 23S, Rge 44W; thence S.89°46'E., 1292.2 feet to a 2" iron pipe monument; thence S.0°12'E., 1228.1 feet to a 2" iron pipe monument; thence N.89°43'W., 2605.1 feet to a 2" iron pipe monument; thence N.0°18'W., 1230.0 feet to a 4" iron pipe monument; thence S.89°37'E., 1315.7 feet to the place of beginning.

Section 2: NE¼, LESS a tract described by a line drawn as follows: Beginning at the Center of said Section 2, running thence Easterly along the Quarter Section line between the NE¼ and SE¼ of said Section 2, 1038 feet, more or less, to the South boundary line of the right-of-way of the X-Y Canal; thence Northwesterly along the South boundary line of right-of-way of the X-Y Ditch to the Quarter Section line between the NE¼ and NW¼ of said Section 2, running thence Southerly along the Quarter Section line 476 feet, more or less, to the Place of Beginning; and EXCEPT a tract Deeded to the Granada Drainage District by Deed recorded August 25, 1926 in Book 156, Page 478 of the Prowers County Clerk and Recorder records.

Section 2: E½SE¼

AND
A tract of land in the NW¼SE¼ of said Section 2 lying East of the XY Canal and more particularly described as follows: Beginning at the Northeast corner of said NW¼SE¼ of said Section 2; thence South a distance of 1207 feet, more or less, to the East right-of-way line of the XY canal; thence in a Northwesterly direction along the East right-of-way line of said XY Canal to a point on the East-West center line of said Section 2; thence East along the said center line a distance of 222 feet, more or less, to the point of beginning;

Section 11: A tract of land in the NE¼NE¼ of said Section 11, more particularly described as follows: Beginning at the Northeast corner of said Section 11; thence South 0°4' East a distance of 1195.4 feet; thence South 71°3' West a distance of 162 feet; thence North 77°38' West a distance of 672 feet; thence North 66°41' West a distance of 113 feet; thence North 46°57' West a distance of 195 feet; thence North 40°9' West a distance of 161 feet; thence North 17°20' West a distance of 155 feet; thence North 1°45' East a distance of 641.8 feet to a point on the Section line between Sections 2 and 11; thence North 89°17' East a distance of 1183 feet along said Section line to the Place of Beginning; Being that part of Tract No. 27 lying East and North of the XY Canal, as shown by Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Page 45 to 61, inclusive, records of Prowers County, Colorado.

All of Tracts 13 and 14, as shown by Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Pages 45-61, inclusive, said tracts being situated in the NW¼ and the N½N½SW¼ of Section 3, Township 23 South, Range 44 West, being more particularly described as follows:
Tract 13:Beginning at a 4" iron pipe monument marking the West Quarter corner of Section 3, Township 23 South, Range 44 West; thence North 2546.0 feet to a 2" iron pipe monument; thence N.88°41'E., 1334.0 feet to a 2" iron pipe monument; thence S.0°05'W., 2674.0 feet to a 2" iron pipe monument; thence S.78°28'W., 1356.3 feet to a point; thence N.0°03'W., 369.2 feet to the Place of Beginning.
Tract 14: Beginning at a 2" iron pipe monument which bears S.0°17'W., 100.0 feet from the North Quarter corner of Section 3, Township 23 South, Range 44 West; thence S.0°17'W., 1605.0 feet to a 2" iron pipe monument; thence S.86°08'W., 115.0 feet to a point; thence S.45°33'W., 1485.0 feet to a point; thence S.66°40'W., 97.0 feet to a point; thence S.78°28'W., 72.0 feet to a 2" iron pipe monument; thence N.0°05'E., 2674.0 feet to a 2" iron pipe monument; thence N.88°41'E., 1340.0 feet to the Place of Beginning. ALSO Beginning at a 4" iron pipe monument marking the center of said Section 3; thence S.89°20'W., 1043.8 feet to a 2" iron pipe monument; thence N.45°33'E., 1339.0 feet to a point; thence N.86°08'E., 91.7 feet to a point; thence S.0°17'W., 931.5 feet to the Place of Beginning, EXCEPT the right-of-way of the XY Canal.

Tract 17 and that part of Tract 18 lying in the NE¼ of Section 3, as shown by Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Pages 45-61, inclusive, more particularly described as follows:
Beginning at a point S.0°35'W., 100 feet from the Northeast corner of Section 3, Township 23 South, Range 44 West of the Sixth P.M.; thence S.88°41'W., 2674.9 feet to the North and South Quarter line of said Section; thence S.0°17'W., 1605.0 feet; thence S.70°22'E., 72 feet; thence S.50°36'E., 404 feet; thence S.32°35'E., 90 feet; thence S.16°58'E., 339 feet; thence S.27°58'E., 87 feet; thence S.68°13'E., 122 feet; thence S.81°29'E., 360 feet; thence S.47°14'E. 122 feet; thence S.28°23'E., 24 feet to the East and West center line of said Section 3; thence N.89°23'E., 186 feet to a 4 inch iron pipe marking the Southeast corner of the SW¼NE¼ of said Section 3; thence East to a 2 inch iron pipe marking the East Quarter corner of said Section 3; thence N.0°35'E., 2606.8 feet to the point of beginning.
Beginning at a 4 inch iron pipe marking the center of Section 3, Township 23 South, Range 44 West of the Sixth P.M.; thence N.0°17'E.,

931.5 feet to the South right-of-way line of the XY Ditch; thence S.70°22'E., 54.8 feet; thence S.50°36'E., 396.0 feet; thence S.32°35'E., 71.4 feet; thence S.16°58'E., 332.8 feet; thence S.27°58'E., 113.8 feet; thence S.68°13'E., 139.4 feet; thence S.81°29'E., 347.8 feet; thence S.47°14'E., 99.8 feet to the East and West center line of said Section 3; thence S.89°23'W., 1099 feet to the Point of Beginning center of said Section 3, containing all of the NE¼ of said Section 3,
EXCEPT those portions thereof which have been heretofore conveyed of record by prior owners for the drainage ditch along the North line of said Quarter Section and for the right-of-way of the XY Canal, and subject to the rights-of-way for public roads adjoining the premises.

All of Tracts 19 and 20, according to the Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Pages 45-61, inclusive, said tracts being situated in the SE¼ of Section 3 and the NE¼NE¼ of Section 10, Township 23 South, Range 44 West of the Sixth P.M., being more particularly described as follows:
Tract 19: Beginning at a 4" iron pipe monument marking the center of said Section 3, Township 23 South, Range 44 West; thence N.89°23'E., 1099.0 feet to a point; thence S.28°23'E., 401.0 feet to a point; thence S.20°06'E., 107.0 feet to a point; thence S.0°20'W., 2257.2 feet to a point; thence N.74°48'W., 173.5 feet to a point; thence N.15°12'E., 50.0 feet to a point; thence N.74°48'W., 1221.5 feet to a 2" iron pipe monument; thence N.0°29'E., 2285.0 feet to the place of beginning.
Tract 20: Beginning at a 1½" iron pipe monument which bears S.0°21'W., 691.0 feet from the East Quarter corner of Section 3, Township 23 South, Range 44 West; thence S.0°21'W., 636.5 feet to a 4" iron pipe monument; thence S.0°21'W., 1761.7 feet to a 2" iron pipe monument; thence N.74°48'W., 1376.0 feet to a point; thence N.0°20'E., 2257.2 feet to a point; thence S.20°06'E., 352.0 feet to a point; thence S.42°00'E., 132.0 feet to a point; thence S.73°58'E., 405.0 feet to a point; thence N.86°06'E., 112.0 feet to a point; thence N.65°55'E., 393.0 feet to a point; thence N.59°40'E., 303.0 feet to the place of beginning.

All of Tracts 42, 43 and 43A, according to the Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Pages 45-61, inclusive, said tracts situated in the NE¼ of Section 10 and the W½NW¼ of Section 11, Township 23 South, Range 44 West, being more particularly described as follows:
Tract 42: Beginning at a 2" iron pipe monument which bears North 30.0 feet from a point which bears N.89°35'E., 1340.3 feet from the SW corner of the SE¼ of the NE¼ of Section 10, Township 23 South, Range 44 West; thence S.89°35'W., 522.0 feet to a 2" iron pipe monument; thence N.74°55'W., 93.9 feet to a point; thence N.56°55'W., 142.8 feet to a point; thence N.44°59'W., 115.3 feet to a point; thence N.29°13'W., 118.2 feet to a point; thence N.14°05'W., 119.0 feet to a point; thence N.9°45'W., 1583.1 feet to a point; thence N.14°47'W., 111.8 feet to a point thence N.26°58'W., 139.1 feet to a point; thence N.44°14'W., 142.5 feet to a point; thence N.59°33'W., 142.3 feet to a 2" iron pipe monument; thence S.74°48'E., 2493.0 feet to a 2" iron pipe monument; thence S.14°10'W., 508.2 feet to a point; thence S.34°15'W., 371.1 feet to a point; thence S.9°50'W., 841.2 feet to a point; thence S.3°00'E., 73.7 feet to a point; thence S.88°56'W., 451.7 feet to the place of beginning.
Tract 43: Beginning at a 4" iron pipe monument marking the SE corner of the SW¼ of the NE¼ of Section 10, Township 23 South, Range 44 West; thence S.89°35'W., 980.0 feet to a 2" iron pipe monument; thence S.89°35'W., 180.5 feet to a 2" iron pipe monument; thence N.0°29'W., 1235.1 feet to a point; thence East 378.5 feet to a point; thence N.0°29'W., 231.3 feet to a point; thence N.89°45'E., 658.5 feet to a 2" iron pipe monument; thence N.0°32'W., 882.5 feet to a 2" iron pipe monument; thence S.56°05'E., 105.2 feet to a point; thence S.44°11'E., 122.2 feet to a point; thence S.27°07'E., 120.9 feet to a point; thence S.14°55'E., 103.9 feet to a point; thence S.9°43'E., 1583.7 feet to a point; thence S.14°28'E., 133.6 feet to a point; thence S.29°30'E., 133.6 feet to a point; thence S.45°09'E., 130.0 feet to a point; thence S.57°07'E., 155.6 feet to a 2" iron pipe monument; thence S.89°35'W., 700.0 feet to the place of beginning.
Tract 43A: Beginning at a 2" iron pipe monument which bears N.89°25'E., 2827.0 feet from the NW corner of the SW¼ of the NW¼ of Section 10, Township 23 South, Range 44 West; thence N.0°29'W., 139.3 feet to a point; thence East 378.5 feet to a point; thence S.0°29'E., 231.3 feet to a point; thence West 378.5 feet to a point; thence N.0°29'W., 92.0 feet to the place of beginning.

All of Tracts 46, 47 and 48B, as shown by the Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Pages 45-61, inclusive, said tracts situated in the W½SE¼, SW¼, SE¼NW¼ and the SW¼NE¼ of Section 10 and the NE¼NW¼ and the NW¼NE¼ of Section 15, Township 23 South, Range 44 West; being more particularly described as follows:
Tract 46: Beginning at a 2" iron pipe monument which bears S.89°35'W., 980.0 feet from the NE corner of the NW¼ of the SE¼ of Section 10, Township 23 South, Range 44 West; thence S.10°10'E., 946.0 feet to a point; thence S.4°55'E., 159.0 feet to a point; thence S.0°40'E., 1686.8 feet to a point; thence S.68°50'W., 483.0 feet to a point; thence S.80°52'W., 79.1 feet to a point; thence N.85°20'W., 86.7 feet to a point; thence N.65°10'W., 102.7 feet to a point; thence N.60°55'W., 584.0 feet to a point; thence N.43°05'E., 11.3 feet to a 2" iron pipe monument; thence N.43°05'E., 104.3 feet to a point; thence N.24°12'E., 221.0 feet to a point; thence N.63°15'E., 99.3 feet to a point; thence N.18°45'E., 85.7 feet to a point; thence N.1°15'W., 174.5 feet to a point; thence N.25°07'W., 245.0 feet to a point; thence N.43°32'W., 120.0 feet to a point; thence N.1°50'W., 222.2 feet to a point; thence N.9°20'E., 492.8 feet to a point; thence N.14°00'W., 92.5 feet to a point; thence N.2°45'W., 303.7 feet to a point; thence N.29°03'E., 270.4 feet to a point; thence N.2°50'E., 390.3 feet to a 2" iron pipe monument; thence N.89°35'E., 555.5 feet to a 2" iron pipe monument; thence N.89°35'E., 180.5 feet to the Place of Beginning.
Tract 47: Beginning at a 4" iron pipe monument marking the West Quarter corner of Section 10, Township 23 South, Range 44 West; thence N.89°35'E., 2282.5 feet to a 2" iron pipe monument; thence S.2°50' W., 390.3 feet to a point; Thence S.29°03'W., 270.4 feet to a point; thence S.2°45'E., 303.7 feet to a point; thence S.14°00'E., 92.5 feet to a point; thence S.9°20'W., 492.8 feet to a point; thence S.1°50'E., 222.2 feet to a point; thence S.43°32'E., 120.0 feet to a point; thence S.25°07'E., 245.0 feet to a point; thence S.1°15'E., 174.5 feet to a point; thence S18°45'W., 85.7 feet to a point; thence S.63°15'W., 99.3 feet to a point; thence S.24°12'W., 221.0 feet to a point; thence S.43°05'W., 104.3 feet to a 2" iron pipe monument; thence N.60°53'W., 335.7 feet to a point; thence N.19°52'W., 251.8 feet to a point; thence N.31°47'W., 118.4 feet to a point; thence N.54°54'W., 110.5 feet to a point; thence N.64°26'W., 208.5 feet to a point; thence N.75°22'W., 141.8 feet to a point; thence S.87°54'W., 335.6 feet to a point; thence N.66°58'W., 86.8 feet to a point; thence N.39°32'W., 339.1 feet to a point; thence N.16°18'W., 83.4 feet to a point; thence N.1°17'E., 235.7 feet to a point; thence N.15°13'W., 95.1 feet to a point; thence

N.45°06'W., 113.3 feet to a point; thence S.88°31'W., 115.3 feet to a point; thence S.54°34'W., 347.2 feet to a 2" iron pipe monument; thence North 1342.9 feet to the Place of Beginning.
Also Beginning at a 4" iron pipe monument marking the SW corner of said Section 10; thence North 1251.1 feet to a 2" iron pipe monument; thence N.55°42'E., 360.8 feet to a point; thence N.87°59'E., 84.0 feet to a point; thence S.45°39'E., 82.8 feet to a point; thence S.15°26'E., 84.3 feet to a point; thence S.1°09'W., 238.5 feet to a point; thence S.17°17'E., 93.6 feet to a point; thence S.40°05'E., 362.9 feet to a point; thence S.68°14'E., 100.2 feet to a point; thence N.87°58'E., 333.5 feet to a point; thence S.75°49'E., 129.7 feet to a point; thence S.64°39'E., 208.5 feet to a point; thence S.54°37'E., 98.0 feet to a point; thence S.30°52'E., 100.8 feet to a point; thence S.20°06'E., 268.9 feet to a point; thence S.61°05'E., 337.1 feet to a 2" iron pipe monument; thence S.89°48'W., 637.0 feet to a 4" iron pipe monument; thence S.89°48'W., 1343.0 feet to the Place of Beginning, EXCEPT the right-of-way of the Manvel Canal.
Tract 48B: Beginning at a 1½" iron pipe monument which bears N.89°35'E., 2579.0 feet from the West Quarter corner of Section 10, Township 23 South, Range 44 West; thence North 214.0 feet to a 1½" iron pipe monument; thence N.88°10'E., 258.0 feet to a 1½" iron pipe monument; thence S.0°29'E., 221.0 feet to a 2" iron pipe monument; thence S.89°35'W., 259.0 feet to the Place of Beginning.

All of Tracts 48, 48A, 49 and 49A, EXCEPT the West 20 acres, more or less, of Tract No. 48 which lies West of the Farm Lateral No. 2 of the Lamar Manvel Farm Lateral Distribution System, as shown by the Tract Maps Lamar Manvel Farm, American Beet Sugar Company, filed March 5, 1927 and recorded in Book 2, Pages 45-61, inclusive, said tracts situated in the S½SW¼ of Section 3 and the NW¼ and the W½NE¼ of Section 10, all in Township 23 South, Range 44 West, being more particularly described as follows:
Tract 48: Beginning at a 4" iron pipe monument marking the West Quarter corner of Section 10, Township 23 South, Range 44 west; thence N.89°55'W., 302.5 feet to a 2" iron pipe monument; thence N.0°05'E., 530.0 feet to a point; thence N.29°00'W., 164.5 feet to a point; thence N.39°25'E., 187.7 feet to a point; thence N.20°40'W., 239.7 feet to a point; thence N.15°25'E., 285.0 feet to a 2" iron pipe monument; thence N.89°25'E., 271.5 feet to a 2" iron pipe monument; thence N.89°25'E., 2093.1 feet to a 2" iron pipe monument; thence S.0°05'W., 458.0 feet to a point; thence N.89°35'E., 738.3 feet to a 1½" iron pipe monument; thence S.0°29'E., 646.5 feet to a 1½" iron pipe monument; thence S.88°10'W., 258.0 feet to a 1½" iron pipe monument; thence South 214.0 feet to a 1½" iron pipe monument; thence S.89°35'W., 2579.0 feet to the Place of Beginning.
Tract 48A: Beginning at a 2" iron pipe monument which bears N.89°25'E., 2093.1 feet from the NW corner of the SW¼ of the NW¼ of Section 10, Township 23 South, Range 44 West; thence N.89°25'E., 733.9 feet to a 2" iron pipe monument; thence S.0°29'E., 459.6 feet to a 1½" pipe; thence S.89°35'W., 738.3 feet to a point; thence N.0°05'E., 458.0 feet to the Place of Beginning.
Tract 49: Beginning at a 2" iron pipe monument marking the NW corner of Section 10, Township 23 South, Range 44 West; thence N.0°03'W., 832.3 feet to a 2" iron pipe monument; thence S.74°48'E., 1872.1 feet to a 2" iron pipe monument; thence S.15°12'W., 40.0 feet to a 2" iron pipe monument; thence S.74°48'E., 1057.8 feet to a 2" iron pipe monument; thence S.0°29'E., 777.2 feet to a point; thence S.89°20'W., 683.7 feet to a point; thence S.1°33'E., 539.0 feet to a point; thence S.89°25'W., 60.9 feet to a 2" iron pipe monument; thence S.89°25' W., 2093.1 feet to a 2" iron pipe monument; thence N.0°02'W., 1320.0 feet to the Place of Beginning.
Tract 49A: Beginning at a 2" iron pipe monument which bears N.89°25'E., 2827.0 feet from the NW corner of the SW¼ of the NW¼ of Section 10, Township 23 South, Range 44 West; thence N.0°29'W., 539.5 feet to a point; thence S.89°20'W., 683.7 feet to a point; thence S.1°33'E., 539.0 feet to a point; thence N.89°25'E., 673.0 feet to the Place of Beginning.

All in the County of Prowers, State of Colorado

Parcel No. 3:
Lot 1 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.
And
Lot 4 of Borderland Estates Subdivision Filing No. 3, being a part of E½ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of W½ Section 4 and N½ Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 4, 2007 at Reception No. 516414 of the Prowers County Clerk and Recorder records.

Parcel No. 4:
Lot 2 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.
And
Lot 3 of Borderland Estates Subdivision Filing No. 3, said subdivision being a part of E½ Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of W½ Section 4 and N½ Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 4, 2007 at Reception No. 516414 of the Prowers County Clerk and Recorder records.

Parcel No. 5:
Lot 3 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.

Parcel No. 6:
Lot 4 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.

Parcel No. 7:
Lot 5 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, TOGETHER WITH a 15 foot access easement along the East and West lines of Lot 4 of said Subdivision, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.

And
Lot 3 of Borderland Estates Subdivision Filing No. 2, being a part of the SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the N½ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 14, 2006 at Reception No. 513232 of the Prowers County Clerk and Recorder records.

Parcel No. 8:
Lot 6 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, TOGETHER WITH a 15 foot access easement along the East and West lines of Lot 3 of said Subdivision, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.

And
Lot 1 of Borderland Estates Subdivision Filing No. 2, being a part of the SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 14, 2006 at Reception No. 513232 of the Prowers County Clerk and Recorder records.

Parcel No. 9:
Lot 7 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, TOGETHER WITH a 15 foot access easement along the East and West lines of Lot 2 of said Subdivision, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.
And
Lot 2, Borderland Estates Subdivision Filing #3, said Subdivision being a part of the E½ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the W½ of Section 4 and the N½ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 4, 2007 at Reception No. 516414 of the Prowers County Clerk and Recorder records.

Parcel No. 10:
Lot 8 of Borderland Estates Subdivision, said Subdivision being a part of the SE¼ of Section 31 and the W½SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian and a part of the NE¼ of Section 6 and the W½NW¼ of Section 5, Township 23 South, Range 44 West of the Sixth Principal Meridian, TOGETHER WITH a 15 foot access easement along the East line of Lot 2 and the West line of Lot 1 of said Subdivision, County of Prowers, State of Colorado, according to the plat recorded November 8, 2004 at Reception No. 505897 of the Prowers County Clerk and Recorder records.

And
Lot 2 of Borderland Estates Subdivision Filing No. 2, being a part of the SW¼ of Section 32, Township 22 South, Range 44 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, according to the plat recorded December 14, 2006 at Reception No. 513232 of the Prowers County Clerk and Recorder records.

EXCEPTING from the above described tracts any portion lying within U.S. Highway No. 50, Colorado State Highway No. 385, and any portion lying within Quit Claim to Prowers County from Deed recorded January 12, 1927 in Book 187 at Page 289 as Reception No. 149133.

LESS AND EXCEPT THE FOLLOWING:

A PARCEL OF LAND LOCATED IN THE NORTHEAST ¼ AND THE NORTHEAST ¼ OF THE NORTHWEST ¼ OF SECTION 33, AND THE SOUTH ½ OF THE SOUTHEAST ¼ OF SECTION 28, TOWNSHIP 22 SOUTH, RANGE 46 WEST OF THE SIXTH PRINCIPAL MERIDIAN, IN PROWERS COUNTY, COLORADO AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE POINT OF BEGINNING BEING THE NORTHEAST CORNER OF SECTION 33, TOWNSHIP 22 SOUTH, RANGE 46 WEST OF THE SIXTH PRINCIPAL MERIDIAN;

THENCE FOLLOWING THE EAST LINE OF SAID SECTION 33 S01°19'23"E, A DISTANCE OF 2369.37 FEET;

THENCE S50°40'01"W, A DISTANCE OF 255.23 FEET;

THENCE S87°42'04"W, A DISTANCE OF 2325.91 FEET;

THENCE N00°00'00"W, A DISTANCE OF 480.27 FEET;

THENCE ALONG A CURVE WITH A RADIUS OF 806.49 FEET AND LENGTH OF 1266.83 FEET, SAID CURVE HAVING A CHORD BEARING OF N45°00'00"W AND A CHORD LENGTH OF 1140.55 FEET;

THENCE N90°00'00"W FOLLOWING, A DISTANCE OF 328.25 FEET TO A POINT ON THE EAST BOUNDARY LINE OF A PARCEL OF LAND RESERVED FOR FUTURE COLORADO STATE HIGHWAY 50 REALIGNMENT;

THENCE FOLLOWING SAID EAST PARCEL BOUNDARY LINE N09°10'38"W A DISTANCE OF 858.25 FEET;

THENCE N88°15'32"E, A DISTANCE OF 1110.50 FEET;

THENCE N01°25'02"W, A DISTANCE OF 389.76 FEET TO THE NORTH ¼ CORNER OF SAID SECTION 33;

THENCE N00°30'38"W, A DISTANCE OF 966.48 FEET;

THENCE N88°25'35"E, A DISTANCE OF 2639.68 FEET TO A POINT ON THE EAST LINE OF SECTION 28, TOWNSHIP 22 SOUTH, RANGE 46 WEST OF THE SIXTH PRINCIPAL MERIDIAN;

THENCE FOLLOWING THE EAST LINE OF SAID SECTION 28 S00°29'53"E, A DISTANCE OF 951.50 FEET TO THE POINT OF BEGINNING. SAID PARCEL CONTAINS 232.78 ACRES MORE OR LESS.

BASIS OF BEARING
BASIS OF BEARING FOR THIS PERMIT BOUNDARY LEGAL DESCRIPTION BEING THE EAST LINE OF SECTION 33, TOWNSHIP 22 SOUTH, RANGE 46 WEST OF THE SIXTH PRINCIPAL MERIDIAN. SAID LINE HAVING A BEARING OF S11°19'23"E,
COUNTY OF PROWERS,
STATE OF COLORADO.

Exhibit B
GRANTEE'S PROPERTY

EXHIBIT "B"

A PARCEL OF LAND LOCATED IN THE NORTHEAST ¼ AND THE NORTHEAST ¼ OF THE NORTHWEST ¼ OF SECTION 33, AND THE SOUTH ½ OF THE SOUTHEAST ¼ OF SECTION 28, TOWNSHIP 22 SOUTH, RANGE 46 WEST OF THE SIXTH PRINCIPAL MERIDIAN, IN PROWERS COUNTY, COLORADO AND MORE PARTICULARLY DESCRIBED AS FOLLOWS:

THE POINT OF BEGINNING BEING THE NORTHEAST CORNER OF SECTION 33, TOWNSHIP 22 SOUTH, RANGE 46 WEST OF THE SIXTH PRINCIPAL MERIDIAN;

THENCE FOLLOWING THE EAST LINE OF SAID SECTION 33 S01°19'23"E, A DISTANCE OF 2389.37 FEET;

THENCE S50°40'01"W, A DISTANCE OF 256.23 FEET;

THENCE S87°42'04"W, A DISTANCE OF 2325.91 FEET;

THENCE N00°00'00"W, A DISTANCE OF 480.27 FEET;

THENCE ALONG A CURVE WITH A RADIUS OF 806.49 FEET AND LENGTH OF 1266.83 FEET, SAID CURVE HAVING A CHORD BEARING OF N45°00'00"W AND A CHORD LENGTH OF 1140.55 FEET;

THENCE N90°00'00"W FOLLOWING, A DISTANCE OF 328.25 FEET TO A POINT ON THE EAST BOUNDARY LINE OF A PARCEL OF LAND RESERVED FOR FUTURE COLORADO STATE HIGHWAY 50 REALIGNMENT;

THENCE FOLLOWING SAID EAST PARCEL BOUNDARY LINE N09°10'38"W A DISTANCE OF 868.25 FEET;

THENCE N88°15'32"E, A DISTANCE OF 1110.50 FEET;

THENCE N01°25'02"W, A DISTANCE OF 389.76 FEET TO THE NORTH ¼ CORNER OF SAID SECTION 33;

THENCE N00°30'38"W, A DISTANCE OF 966.48 FEET;

THENCE N88°25'35"E, A DISTANCE OF 2639.68 FEET TO A POINT ON THE EAST LINE OF SECTION 28, TOWNSHIP 22 SOUTH, RANGE 46 WEST OF THE SIXTH PRINCIPAL MERIDIAN;

THENCE FOLLOWING THE EAST LINE OF SAID SECTION 28 S00°29'53"E, A DISTANCE OF 951.60 FEET TO THE POINT OF BEGINNING. SAID PARCEL CONTAINS 232.78 ACRES MORE OR LESS.

BASIS OF BEARING
BASIS OF BEARING FOR THIS PERMIT BOUNDARY LEGAL DESCRIPTION BEING THE EAST LINE OF SECTION 33, TOWNSHIP 22 SOUTH, RANGE 46 WEST OF THE SIXTH PRINCIPAL MERIDIAN. SAID LINE HAVING A BEARING OF S11°19'23"E,
COUNTY OF PROWERS,
STATE OF COLORADO.

Schedule 2.4
Purchase Price Amortization Schedule

Amount:	1,750,000.00
Rate:	5.0%
Amortization (yrs):	25.00
Annual Payment:	$124,166.80

Month	Beginning Balance	Interest	Principal	Ending Balance
1	1,750,000.00	7,408.57	$2,938.66	1,747,061.34
2	1,747,061.34	7,396.33	$2,950.90	1,744,110.44
3	1,744,110.44	7,384.03	$2,963.20	1,741,147.24
4	1,741,147.24	7,371.69	$2,975.55	1,738,171.69
5	1,738,171.69	7,359.29	$2,987.94	1,735,183.75
6	1,735,183.75	7,346.84	$3,000.39	1,732,183.36
7	1,732,183.36	7,334.34	$3,012.90	1,729,170.46
8	1,729,170.46	7,321.78	$3,025.45	1,726,145.01
9	1,726,145.01	7,309.18	$3,038.05	1,723,106.96
10	1,723,106.96	7,296.52	$3,050.71	1,720,056.24
11	1,720,056.24	7,283.81	$3,063.42	1,716,992.82
12	1,716,992.82	7,271.04	$3,076.19	1,713,916.63
13	1,713,916.63	7,258.23	$3,089.01	1,710,827.62
14	1,710,827.62	7,245.36	$3,101.88	1,707,725.75
15	1,707,725.75	7,232.43	$3,114.80	1,704,610.94
16	1,704,610.94	7,219.45	$3,127.78	1,701,483.16
17	1,701,483.16	7,206.42	$3,140.81	1,698,342.35
18	1,698,342.35	7,193.33	$3,153.90	1,695,188.45
19	1,695,188.45	7,180.19	$3,167.04	1,692,021.41
20	1,692,021.41	7,167.00	$3,180.24	1,688,841.18
21	1,688,841.18	7,153.75	$3,193.49	1,685,647.69
22	1,685,647.69	7,140.44	$3,206.79	1,682,440.89
23	1,682,440.89	7,127.08	$3,220.16	1,679,220.74
24	1,679,220.74	7,113.66	$3,233.57	1,675,987.17
25	1,675,987.17	7,100.19	$3,247.05	1,672,740.12
26	1,672,740.12	7,086.66	$3,260.58	1,669,479.55
27	1,669,479.55	7,073.07	$3,274.16	1,666,205.38
28	1,666,205.38	7,059.43	$3,287.80	1,662,917.58
29	1,662,917.58	7,045.73	$3,301.50	1,659,616.08
30	1,659,616.08	7,031.97	$3,315.26	1,656,300.82
31	1,656,300.82	7,018.16	$3,329.07	1,652,971.75
32	1,652,971.75	7,004.29	$3,342.94	1,649,628.80
33	1,649,628.80	6,990.36	$3,356.87	1,646,271.93
34	1,646,271.93	6,976.37	$3,370.86	1,642,901.07
35	1,642,901.07	6,962.33	$3,384.90	1,639,516.17
36	1,639,516.17	6,948.22	$3,399.01	1,636,117.16

EXHIBIT D

Schedule 2.4
Purchase Price Amortization Schedule

Amount:	1,750,000.00
Rate:	5.0%
Amortization (yrs):	25.00
Annual Payment:	$124,166.80

Month	Beginning Balance	Interest	Principal	Ending Balance
1	1,750,000.00	7,408.57	$2,938.66	1,747,061.34
2	1,747,061.34	7,396.33	$2,950.90	1,744,110.44
3	1,744,110.44	7,384.03	$2,963.20	1,741,147.24
4	1,741,147.24	7,371.69	$2,975.55	1,738,171.69
5	1,738,171.69	7,359.29	$2,987.94	1,735,183.75
6	1,735,183.75	7,346.84	$3,000.39	1,732,183.36
7	1,732,183.36	7,334.34	$3,012.90	1,729,170.46
8	1,729,170.46	7,321.78	$3,025.45	1,726,145.01
9	1,726,145.01	7,309.18	$3,038.05	1,723,106.96
10	1,723,106.96	7,296.52	$3,050.71	1,720,056.24
11	1,720,056.24	7,283.81	$3,063.42	1,716,992.82
12	1,716,992.82	7,271.04	$3,076.19	1,713,916.63
13	1,713,916.63	7,258.23	$3,089.01	1,710,827.62
14	1,710,827.62	7,245.36	$3,101.88	1,707,725.75
15	1,707,725.75	7,232.43	$3,114.80	1,704,610.94
16	1,704,610.94	7,219.45	$3,127.78	1,701,483.16
17	1,701,483.16	7,206.42	$3,140.81	1,698,342.35
18	1,698,342.35	7,193.33	$3,153.90	1,695,188.45
19	1,695,188.45	7,180.19	$3,167.04	1,692,021.41
20	1,692,021.41	7,167.00	$3,180.24	1,688,841.18
21	1,688,841.18	7,153.75	$3,193.49	1,685,647.69
22	1,685,647.69	7,140.44	$3,206.79	1,682,440.89
23	1,682,440.89	7,127.08	$3,220.16	1,679,220.74
24	1,679,220.74	7,113.66	$3,233.57	1,675,987.17
25	1,675,987.17	7,100.19	$3,247.05	1,672,740.12
26	1,672,740.12	7,086.66	$3,260.58	1,669,479.55
27	1,669,479.55	7,073.07	$3,274.16	1,666,205.38
28	1,666,205.38	7,059.43	$3,287.80	1,662,917.58
29	1,662,917.58	7,045.73	$3,301.50	1,659,616.08
30	1,659,616.08	7,031.97	$3,315.26	1,656,300.82
31	1,656,300.82	7,018.16	$3,329.07	1,652,971.75
32	1,652,971.75	7,004.29	$3,342.94	1,649,628.80
33	1,649,628.80	6,990.36	$3,356.87	1,646,271.93
34	1,646,271.93	6,976.37	$3,370.86	1,642,901.07
35	1,642,901.07	6,962.33	$3,384.90	1,639,516.17
36	1,639,516.17	6,948.22	$3,399.01	1,636,117.16

Bent County Board of County Commissioners

April 25, 2019

Re: LAWMA Water Plan Grant Application

Dear Ms. Mauss,

Bent County understands that, at its May meeting, the CWCB will consider a loan application submitted by the Lower Arkansas Water Management Association (LAWMA). Specifically, LAWMA seeks an approximately $4.6 million loan for the acquisition of 1,564 acre-feet of storage capacity in the West Farm Gravel Pit (WFGP). Bent County previously identified several concerns regarding this loan request, by letter dated April 5, 2019 (copy attached). Because these concerns have not yet been fully resolved, Bent County requests that the CWCB defer taking any action on the loan request at its May meeting.

While Bent County generally supports the development and acquisition of additional water storage capacity in the lower Arkansas River Basin, there are certain questions that should be answered before approving the requested loan. Fully understanding any relationships between principals of the seller and LAWMA is central to answering these questions. At the Arkansas Basin Roundtable meeting on April 23, 2019, LAWMA's counsel could not provide any details regarding the seller entity, GP Resources, when asked. This leads one to wonder how the value of the gravel storage pit was determined between the parties. An independent appraisal must be provided to support the WFGP purchase price. Bent County is a shareholder in LAWMA and will bear a pro rata portion of any debt repayment burden for purchase of the WFGP. LAWMA has not specifically sought shareholder ratification of the proposed WFGP purchase or the requested CWCB loan.

Another issue that ties in to fully understanding the relationship between the principals of the seller and LAWMA concerns the potential for the WFGP to serve as a future conduit to export water from the Lower Arkansas River to the Front Range. The WFGP was previously part of a proposed water export plan. More recently, as part of a transaction involving LAWMA and at least one of the assumed principals of GP Aggregates, LAWMA and its co-applicant failed to disclose to Bent County, in the context of a 1041 permit application, plans to share the water at issue with Colorado Springs Utilities. The irrigated acreage at issue in the 1041 permit, which is being permanently dried up, represents approximately 9% of the land historically irrigated in Bent County. Thus, Bent County seeks to ensure that the WFGP will be used solely for the benefit of water users in the Lower Arkansas Basin, now and in the future.

Post Office Box 350 · Las Animas, Colorado 81054 · 719-456-1600 · Fax 719-456-0375

In light of the issues outlined above (and in the attached) Bent County urges the CWCB to take the time to carefully evaluate the LAWMA loan application, and fully understand and study the total impact it may have on the Lower Arkansas River Basin.

Sincerely,

Jean Sykes, Chair
Bent County Commissioners

Bent County Board of County Commissioners

April 5, 2019

Re: Comments to LAWMA Water Plan Grant Application

Dear Ms. Mauss,

Bent County has reviewed the Water Plan Grant Application submitted by the Lower Arkansas Water Management Association (LAWMA) seeking a grant and/or loan to acquire 1,564 acre-feet of storage capacity in the West Farm Gravel Pit (WFGP), and submits the following comments for consideration:

1. No use of storage for export of water from the Lower Arkansas River Basin. Per the attached 2011 article from the Lamar Ledger, Bent County understands that the WFGP was previously a component part of a proposal to export water from the Lower Arkansas River basin to the Front Range. LAWMA recently obtained a 1041 permit from Bent County related to dry-up of approximately 4434 acres of land in Bent County historically irrigated under the Fort Lyon Canal. Subsequent to issuance of the permit, Bent County learned of an agreement entered into between LAWMA and Colorado Springs-Utilities whereby water attributable to the lands dried up under the Fort Lyon Canal would be used, in part, by CS-U for municipal purposes. An important objective of the Colorado Water Plan is to avoid the permanent removal of irrigation water from rural areas. Accordingly, given the prior association of the WFGP with an export plan, and LAWMA's failure to disclose to Bent County as part of the 1041 permit process the plan to share water with CS-U, any loan or grant should include terms and conditions ensuring that LAWMA's interests to be acquired in the WFGP will not be used, directly or indirectly, to facilitate the removal of water from the Lower Arkansas River Basin to the Front Range.

2. Failure to notify LAWMA shareholders. Bent County owns shares in LAWMA; however, as a shareholder, the County does not believe it was adequately informed of LAWMA's intentions to obtain a loan for the WFGP. Given the size of the debt proposed to be incurred, LAWMA should provide confirmation that the proposed indebtedness has been approved by its shareholders.

Post Office Box 350 · Las Animas, Colorado 81054 · 719-456-1600 · Fax 719-456-0375

3. Appraisal. Bent County understands that the principals of GP Resources, the entity selling the WFGP interest to LAWMA, are also owners of substantial shares in LAWMA, and may have a seat on LAWMA's Board of Directors. The extent of prior transactions and relationships between GP Resources' principals and LAWMA's officers and counsel should be fully disclosed and evaluated as to any potential conflicts of interest. Further, given the apparent close relationship between the WFGP seller and LAWMA, it is critical that an objective independent appraisal be provided as part of the materials reviewed for consideration of the loan/grant.

Sincerely,

Calvin Feik, Bent County Administrator

Town of Eads

P.O. Box 8
110 W. 13th Street
Eads, CO 81036-0008
Phone (719) 438-5590
Fax (719) 438-5652
townofeads10@gmail.com

Mayor
Joe Shields

Trustees
Dennis Pearson
Meghan Buck
Justin McLoud
Terry Riley
Kathy McCracken
Lisa Trigilio

Director of Public Works
Van Brown, Jr.

Town Clerk
Robin Fox

Assistant Clerk
Shealynn McCracken

March 11, 2019

Mr. Jim Yahn, Chairman
Colorado Water Conservation Board
1313 Sherman St., Room 718
Denver, CO

RE: LAWMA request for funds

Dear Mr. Yahn:

The Town of Eads is a shareholder in the Lower Arkansas Water Management Association (LAWMA). We are therefore supporting LAWMA's request for additional West Farm Gravel Pit storage through a CWCB Water Project Loan.

As a municipality, we would like to collaborate with our fellow shareholders in securing the future of our area water in the Lower Arkansas Basin.

Please look favorably on LAWMA's request, knowing that not only municipalities, but producers, schools, industries, Colorado Parks & Wildlife, etc. appreciate their efforts to help all of us.

Thanks much,

Van Brown, Jr.
Director of
Public Works

Kiowa County
Economic Development Foundation
KCEDF

March 11, 2019

Mr. Jim Yahn, Chairman
Colorado Water Conservation Board
1313 Sherman St., Room 718
Denver, CO 80203

RE: LAWMA request for funding

Dear Mr. Yahn:

Kiowa County Economic Development Foundation (KCEDF) is a member of the Lower Arkansas Water Management Association (LAWMA). It has come to our attention that LAWMA is requesting funding for additional storage by way of a CWCB Water Project loan.

As an economic development foundation, it is always our pleasure to support requests such as this one that will be of benefit to our municipalities, schools, producers, Colorado Parks & Wildlife, etc. by a collaborative means.

The West Farm Gravel Pit storage project will assure shareholders of continued water security through LAWMA in the Lower Arkansas Basin.

KCEDF is pleased to put itself behind LAWMA's efforts toward the future of water in our area.

Thanks much,

Sincerely,

Jan Richards

Jan Richards
Economic Developer/
Community Coordinator

Post Office Box 250 Eads, Colorado 81036 719-438-2200
Website: www.kcedfonline.org Email: kcedf@kcedfonline.org

Mr. Jim Yahn, Chairman
Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver, Colorado 80203

Re: Lower Arkansas Water Management Association request for funding

Dear Mr. Yahn:

The Lower Arkansas Water Management Association (LAWMA) has requested funding to complete their West Farm Gravel Pit storage. LAWMA is applying for a CWCB Water Project Loan and grant for the construction of this project. The West Farm Pit is existing gravel lakes storage located on the Lamar Canal. This added storage space would support more flexible operations and provide LAWMA shareholders water security for their water supply, augmentation, and other uses.

We own LAWMA shares for use on our large agricultural enterprise. In addition, as a Director on the Board of the Lamar Canal & Irrigation Company, I know how important new storage can be for agricultural water users. We support this project and support the development of additional storage in the Arkansas Basin. Please consider funding the West Farm Gravel Pit storage project in order to benefit water users in this area.

Sincerely,

Doug Geubelle

Granada Farms

Board of County Commissioners

Prowers County
301 South Main, Suite 215
Lamar, Colorado 81052-2857
(719) 336-8025 FAX: (719) 336-2255

THOMAS GRASMICK
FIRST DISTRICT

RON COOK
SECOND DISTRICT

WENDY BUXTON-ANDRADE
THIRD DISTRICT

JANA COEN
CLERK TO THE BOARD

DARLA SCRANTON SPECHT
COUNTY ATTORNEY

April 1, 2019

Mr. Jim Yahn, Chairman
Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver, Colorado 80203

Re: Lower Arkansas Water Management Association request for funding

Dear Mr. Yahn;

The Lower Arkansas Water Management Association (LAWMA) has requested funding to complete their West Farm Gravel Pit storage. LAWMA is applying for a CWCB Water Project Loan and grant for the construction of this project. The West Farm Pit is existing gravel lakes storage located on the Lamar Canal. This added storage space would support more flexible operations and provide LAWMA shareholders water security for their water supply, augmentation, and other uses.

Prowers County is a shareholder in LAWMA and supports the development of additional storage in the Arkansas Basin and believes this project aligns with the initiatives outlined in the Colorado Water Plan. Please consider funding the West Farm Gravel Pit storage project in order to benefit their 207 members to include irrigators, rural water associations, municipal entities, industry, schools, construction companies and wildlife interests that use LAWMA water in the Lower Arkansas Basin

Sincerely,
PROWERS COUNTY BOARD OF COMMISSIONERS

Wendy L Buxton-Andrade
Wendy Buxton-Andrade, Chairman

Thomas L Grasmick
Thomas Grasmick, Vice-Chairman

Ron Cook
Ron Cook, Commissioner

Mr. Jim Yahn, Chairman
Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver, CO 80203

Matt Heimerich
5325 County Lane 9.5
Olney Springs, CO 81062

May 3, 2019

Dear Mr Yahn,

I am a member of the Arkansas Basin Roundtable as an At-Large Agricultural Representative. Our family has farmed in Crowley County for nearly the past seven decades. In the past, I have represented water users from the Pueblo Reservoir to John Martin Reservoir on the Arkansas River Compact Administration. At present I serve on the boards of the Colorado Canal and Lake Meredith Companies representing local irrigators.

On April 23, 2019 I heard a presentation from Richard Mehren, attorney for the Lower Arkansas Water Management Association on their West Farm Gravel Pit Storage Project. Mr Mehren made a compelling argument for the project with the purpose of delivering more flexibility and certainty to their members by providing augmentation water for their member's well deletions.

Although I do not use wells on my farm, I know how critical high volume wells can be to farmers in the Lower Arkansas Valley. LAWMA's investment in water rights and infrastructure are critical in facilitating our state's compliance with the Arkansas River Compact while keeping our most important industry, agriculture, viable.

In what remains unclear to me, the roundtable did not take a vote on the project. As an irrigated farmer and a representative of agriculture in my valley I would have cast a vote in solid support of the project and would encourage your agency to look favorably on LAWMA's request for a loan to complete the project.

Thank you for your consideration in this matter.

Matt Heimerich

Cc: Anna Mauss CWCB, Water Project Loan Program
Don Higbee, LAWMA Manager

Colorado Springs Utilities
It's how we're all connected

March 1, 2019

Mr. Jim Yahn, Chairman
Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver, Colorado 80203

Re: Lower Arkansas Water Management Association request for funding

Dear Mr. Yahn;

The Lower Arkansas Water Management Association (LAWMA) has requested funding to complete their West Farm Gravel Pit storage. LAWMA is applying for a CWCB Water Project Loan for the construction of this project. The West Farm Pit is existing gravel lakes storage located on the Lamar Canal. This added storage space would support more flexible operations and provide LAWMA shareholders water security for their water supply, augmentation, and other uses.

Colorado Springs supports the development of additional storage in the Arkansas Basin and believes this project aligns with the initiatives outlined in the Colorado Water Plan. Please consider funding the West Farm Gravel Pit storage project in order to benefit their 207 members to include irrigators, rural water associations, municipal entities, industry, schools, construction companies and wildlife interests that use LAWMA water in the Lower Arkansas Basin.

Thank you,

Abigail Ortega, PE
Water Resources Manager – Colorado Springs Utilities

cc: Anna Mauss, CWCB Water Project Loan Program
Jack Goble, CWCB Member
Don Higbee, LAWMA Manager
Richard Mehren, LAWMA attorney

1521 SOUTH HANCOCK EXPRESSWAY
P.O. BOX 1103, MAIL CODE 1825
COLORADO SPRINGS, CO 80947-1825

Mr. Jim Yahn, Chairman
Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver, Colorado 80203

Re: Lower Arkansas Water Management Association request for funding

Dear Mr. Yahn:

The Lower Arkansas Water Management Association (LAWMA) has requested funding to complete their West Farm Gravel Pit storage. LAWMA is applying for a CWCB Water Project Loan and grant for the construction of this project. The West Farm Pit is existing gravel lakes storage located on the Lamar Canal. This added storage space would support more flexible operations and provide LAWMA shareholders water security for their water supply, augmentation, and other uses.

I own LAWMA shares for use on of my farm. In addition, as the President of Fort Bent Ditch, I know how important new storage can be for agricultural water users. Our Board has agreed to support this project and supports the development of additional storage in the Arkansas Basin. Please consider funding the West Farm Gravel Pit storage project in order to benefit water users in this area.

Sincerely,

Robert Nicholson, President

Fort Bent Ditch Company

J-S Farms, Inc.

April 8, 2019

Mr. Jim Yahn, Chairman
Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver, Colorado 80203

COPY

Re: Lower Arkansas Water Management Association request for funding

Dear Mr. Yahn:

The Lower Arkansas Water Management Association (LAWMA) has requested funding to complete their West Farm Gravel Pit storage. LAWMA is applying for a CWCB Water Project Loan and grant for the construction of this project. The West Farm Pit is existing gravel lakes storage located on the Lamar Canal. This added storage space would support more flexible operations and provide LAWMA shareholders water security for their water supply, augmentation, and other uses.

I am a shareholder in LAWMA and use my shares for my large agricultural enterprise. I support the development of additional storage in the Arkansas Basin and believe this project aligns with the initiatives outlined in the Colorado Water Plan. Please consider funding the West Farm Gravel Pit storage project in order to benefit their 207 members to include irrigators, rural water associations, municipal entities, industry, schools, construction companies and wildlife interests that use LAWMA water in the Lower Arkansas Basin.

Sincerely,

John Sutphin Jr.
J-S Farms, Inc.

P.O. BOX 226
LAMAR, COLORADO 81052
800-541-1562 PH 719-336-9006 FX 719-336-2402
email: semcopumphoist@gmail.com

Mr. Jim Yahn, Chairman
Colorado Water Conservation Board
1313 Sherman Street, Room 718
Denver, Colorado 80203

Re: Lower Arkansas Water Management Association request for funding

Dear Mr. Yahn:

The Lower Arkansas Water Management Association (LAWMA) has requested funding to complete their West Farm Gravel Pit storage. LAWMA is applying for a CWCB Water Project Loan and grant for the construction of this project. The West Farm Pit is existing gravel lakes storage located on the Lamar Canal. This added storage space would support more flexible operations and provide LAWMA shareholders water security for their water supply, augmentation, and other uses.

I use LAWMA shares on some of my farm acres. In addition, as an owner of Fort Lyon Canal Company stock and the current President of the canal, I know how important new storage can be for agricultural water use. Our canal had the opportunity to store water in this gravel pit last year in a cooperative program that worked well for all parties involved. I enthusiastically support the development of additional storage in the Arkansas Basin and believe this project aligns with the initiatives outlined in the Colorado Water Plan. Please consider funding the West Farm Gravel Pit storage project in order to benefit water users in this area.

Sincerely,

Dale Mauch