Eschberger - DNR, Amy < amy.eschberger@state.co.us>

### Water Rights for Lamar East Pit

**Mike Machone** <mike.machone@ci.lamar.co.us> To: "Eschberger - DNR, Amy" <amy.eschberger@state.co.us> Tue, Aug 9, 2022 at 9:14 AM

#### Hi Amy

Attached is the information that Pat found on the water rights documentation.

Mike

#### 4 attachments

- 2016-01-30 Expert Letter report 13CW3060.pdf 4170K
- 2016-06-30 DJG to Shohet-2nd Supplem Expt Rpt-13CW3060.pdf 1038K
- 2016-09-28 Final Decree 13CW3060 (Gateway Ponds).pdf 1347K
- Final decree 17CW3000 (12-21-2017).pdf 6900K

	LED: December 21, 2017 11:56 AM JMBER: 2017CW3000
501 North Elizabeth Street, Suite 116 Pueblo, Colorado 81003	
CONCERNING THE APPLICATION FOR WATER RIGHTS OF LOWER ARKANSAS WATER MANAGEMENT ASSOCIATION	▲ COURT USE ONLY ▲ Case Number: 17CW3000
FINDINGS OF FACT, CONCLUSIONS DECREE OF THE WATER CO	

This matter has come before the Water Court on the application of the Lower Arkansas Water Management Association ("LAWMA") for a plan for augmentation. The Court, having considered the pleadings and the evidence presented, hereby enters the following Findings of Fact, Conclusions of Law, and Decree:

### FINDINGS OF FACT

- 1. <u>Applicant</u>: The applicant is the Lower Arkansas Water Management Association, c/o Donald F. Higbee, Manager, 310 South Sixth Street, P. O. Box 1161, Lamar, Colorado 81052, (719) 336-9696.
- 2. <u>The Application</u>: The application in this case was filed on January 30, 2017.
- 3. <u>Notice and jurisdiction</u>: Timely and adequate notice of the Application was given in the manner prescribed by law. This Court has jurisdiction over the subject matter of this proceeding and over all persons and property affected hereby, whether or not those persons have appeared. The water involved in this case is not within the boundaries of a designated groundwater basin. LAWMA has complied with the terms of C.R.S. § 37-92-302.
- 4. <u>Statement of opposition</u>: A timely statement of opposition was filed by the State Engineer and the Division Engineer, Water Division No. 2 ("Engineers"). The time for filing statements of opposition has expired.

- 5. <u>Stipulations</u>: LAWMA entered into a stipulation with the Engineers on November 17, 2017. The stipulation is hereby approved and incorporated into this Decree by this reference.
- 6. <u>Summary of Consultation</u>: The Division Engineer did not issue a Summary of Consultation in this matter because this case was not referred to the Water Referee.
- 7. <u>Description of Application</u>: LAWMA is a non-profit corporation organized for the purpose of, among other things, providing a means for its members to continue to make groundwater 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 Application sought to include four additional structures in LAWMA's plan for augmentation, which was decreed on March 8, 2007, in Case No. 02CW181, Water Division No. 2 ("02CW181 Decree"). Pursuant to paragraph 43 of the 02CW181 Decree, LAWMA may include additional wells or structures in the plan for augmentation by filing a new application with the Water Court.
- 8. <u>Withdrawal of claim to include Chester Bay Trucking Well in LAWMA's plan for</u> <u>augmentation</u>: LAWMA has withdrawn its claim to include the well with SEO ID No. 1706437, referred to in the Application as the Chester Bay Trucking Well, in LAWMA's plan for augmentation.
- 9. <u>Description of structures to be augmented</u>: Each of the structures described in **Exhibit A** (the "Additional LAWMA Structures"). A total of three structures will be added to LAWMA's plan for augmentation by this Decree. The Additional LAWMA Structures with SEO ID No. 6706363 and SEO ID No. 6706474 (Lamar North Gateway Pond Nos. 1 and 2) are located within Prowers County, Colorado, as shown on **Exhibit B-1**; the additional LAWMA Structure with SEO ID No. 6705304 (the Broyles Well) is located within Bent County, Colorado, as shown on **Exhibit B-2**.
  - 9.1 The UTM coordinates and PLSS locations for the Additional LAWMA Structures are as follows:
    - 9.1.1 Lamar North Gateway Pond No. 1 (SEO ID No. 6706363): UTM Easting, 708972; UTM Northing, 4220130 (centroid); Elevation 3607; Datum NAD 83, Zone 13. PLSS location: NE 1/4 of the SE 1/4, Section 30, Township 22 S, Range 46 W of the 6th PM, as shown on Exhibit A.
    - 9.1.2 Lamar North Gateway Pond No. 2 (SEO ID No. 6706474): UTM Easting, 709670; UTM Northing, 4220145 (centroid); Elevation 3604; Datum NAD 83, Zone 13. PLSS location: NW 1/4 of the SW 1/4, Section 29, Township 22 S, Range 46 W of the 6th PM, as shown on Exhibit A.

- 9.1.3 Broyles Well No. 7 (SEO ID No. 6705304): UTM Easting, 695830; UTM Northing, 4217387; Elevation 3690; Datum NAD 83, Zone 13. PLSS location: NW 1/4 of the NE 1/4, Section 2, Township 23 S, Range 48 W of the 6th PM, as shown on Exhibit A.
- 9.2 The Lamar North Gateway Pond Nos. 1 and 2 ("Gateway Ponds") shown on Exhibit B-1 also are included in the City of Lamar's plan for augmentation that was decreed on September 28, 2016 in Case No. 13CW3060, Water Division No. 2 ("13CW3060 Augmentation Plan").
- 10. Water rights and other sources of water to be used for augmentation of the Additional <u>LAWMA Structures</u>: Those water rights and other sources of water identified in paragraph 40 of the 02CW181 Decree and in the decrees entered in Case Nos. 05CW52 and 10CW85, and those water rights and other sources of water that are added as sources of augmentation water to the 02CW181 Decree pursuant to the terms and conditions of paragraph 41 of the 02CW181 Decree and the terms and conditions in the following sub-paragraphs ("Additional Augmentation Water").
  - 10.1 In accordance with paragraph 41.A of the 02CW181 Decree, LAWMA may use Additional Augmentation Water permanently for augmentation of the Additional LAWMA Structures by filing an application with the Court to add the water right as a source of replacement water to LAWMA's plan for augmentation and obtaining a decree from the Court. LAWMA shall provide notice of any such application in the manner provided by statute for a new Water Court application.
  - 10.2 In accordance with paragraph 41.B of the 02CW181 Decree, LAWMA may use Additional Augmentation Water on a temporary basis for augmentation of the Additional LAWMA Structures by serving written notice on the objectors in Case No. 02CW181 and on the Arkansas River Compact Administration ("ARCA") of LAWMA's request for approval of the State Engineer pursuant to § 37-92-308, C.R.S. At the time of LAWMA's service of written notice of such request upon the objectors in Case No. 02CW181 and the ARCA, LAWMA also shall serve such notice on the objectors in this case. LAWMA may use the noticed water right(s) for augmentation of the Additional LAWMA Structures only after the State Engineer's approval of LAWMA's request for substitute water supply plan ("SWSP") has become final, including any appeal. Such use must comply with the terms and conditions of the final approval. In no event will LAWMA be allowed to use the same portion of a water right or shares for temporary augmentation use for augmentation of the Additional LAWMA Structures for more than the period allowed by § 37-92-308, C.R.S.

#### 11. <u>Statement of plan for augmentation</u>:

- 11.1 <u>Gateway Ponds</u>: The Gateway Ponds, which are owned and operated by the City of Lamar ("City"), intercept and expose groundwater tributary to the Arkansas River, causing evaporative depletions which in turn deplete the Arkansas River. The amount, timing and location of depletions caused by the Gateway Ponds will be determined in accordance with the methodologies approved in the decree entered in Case No. 13CW3060 ("13CW3060 Decree"). These methodologies are described in paragraphs 12 and 13 of the 13CW3060 Decree, a copy of which is attached as **Exhibit** C. Pursuant to the 02CW181 Decree and this Decree, and with the exceptions and limitations described in paragraph 11.2 below, LAWMA shall account for and fully replace out-of-priority depletions caused by the Gateway Ponds.
- 11.2 <u>Exceptions to and limitations on LAWMA's replacement of the Gateway Ponds'</u> <u>stream depletions</u>: LAWMA's replacement of the Gateway Ponds' stream depletions under this Decree is limited as follows:
  - 11.2.1 Pursuant to LAWMA's bylaws and policies, LAWMA's Board of Directors has determined that the Gateway Ponds' stream depletions are curtailable and may be augmented with shares of LAWMA Common Stock, shares of LAWMA Preferred Stock or a combination of both. Accordingly, LAWMA will provide water to replace the Gateway Ponds' stream depletions based on the City's dedication of shares of LAWMA Common Stock and LAWMA Preferred Stock to the Gateway Ponds. Under LAWMA's augmentation plan, the amounts of fully consumable water allocated to LAWMA Common Stock ("Common Share Allocation") and LAWMA Preferred Stock ("Preferred Share Allocation") are determined annually.
  - 11.2.2 The volume of the Gateway Ponds' stream depletions that LAWMA must replace in any Plan Year (April 1 through March 31) ("LAWMA Gateway Ponds Replacement Volume") is limited to the volume of fully consumable water calculated as the Preferred Share Allocation multiplied by the number of shares of LAWMA Preferred Stock the City dedicates to the Gateway Ponds for that Plan Year, plus the Common Share Allocation multiplied by the number of shares of LAWMA Common Stock the City dedicates to the Gateway Ponds for that Plan Year. Each year, the City shall communicate to LAWMA its dedication of shares of LAWMA Common Stock and LAWMA Preferred Stock to the Gateway Ponds for the upcoming Plan Year no later than February 1st. Based on the City's dedication, the City

and LAWMA will agree on a monthly schedule for LAWMA's delivery of a volume of replacement water equal to the LAWMA Gateway Ponds Replacement Volume for the upcoming Plan Year ("LAWMA Gateway Ponds Replacement Schedule"). LAWMA shall identify the LAWMA Gateway Ponds Replacement Volume and the LAWMA Gateway Ponds Replacement Schedule for the upcoming Plan Year as part of the annual projection required by paragraph 47.E of the 02CW181 Decree.

- 11.2.3 Each Plan Year, LAWMA shall deliver a volume of replacement water equal to the LAWMA Gateway Ponds Replacement Volume according to the LAWMA Gateway Ponds Replacement Schedule. To the extent the LAWMA Gateway Ponds Replacement Schedule does not replace all of the Gateway Ponds' stream depletions that occur in a given month, the City shall provide replacement water pursuant to the 13CW3060 Augmentation Plan, any other Water Court approved augmentation plan, or any administratively approved Substitute Water Supply Plan or other administratively approved replacement plan to replace the remainder of the Gateway Ponds' stream depletions that occur during that month. Under no circumstance will LAWMA be responsible for replacing any portion of the Gateway Ponds' stream depletions that exceed the LAWMA Gateway Ponds Replacement Volume, or for providing more replacement water in a given month than required by the LAWMA Gateway Ponds Replacement Schedule.
- 11.3 <u>Broyles Well</u>: Under LAWMA's plan for augmentation, the Broyles Well will be pumped for domestic, commercial, and livestock watering uses. The amount, timing and location of depletions from pumping of the Broyles Well will be determined in accordance with the methodologies approved in the 02CW181 Decree (including its Exhibit R, paragraphs G and I). The presumptive depletion factor ("PDF") for the Broyles Well is listed in attached **Exhibit D** and will be used to determine the consumptive use resulting from pumping of the Broyles Well, unless the factor is modified in accordance with paragraph 13 below. The timing and location of stream depletions caused by pumping of the Broyles Well will be determined using the aquifer parameters and methodology described in **Exhibit D**. Pursuant to the 02CW181 Decree and this Decree, with the limitations described in paragraph 11.5 below, LAWMA shall account for and replace all out-of-priority stream depletions caused by pumping of the Broyles Well.
- 11.4 <u>Allocation of pumping to the Broyles Well under LAWMA's augmentation plan</u>: The Boyles Well produces water from a bedrock aquifer. Paragraph 47.F of the 02CW181 Decree provides that "[t]otal pumping by any LAWMA Structure

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producing from a bedrock aquifer over the time it operates under this plan for augmentation shall not exceed the amount that produces a future maximum annual stream depletion greater than the annual fixed allocation of replacement water from preferred stock dedicated to such well." Accordingly, LAWMA shall allocate pumping to the Broyles Well as follows: upon entry of this Decree, the Broyles Well will be included in LAWMA's augmentation plan for the remainder of the current Plan Year and the following nine Plan Years (the "Broyles Well Inclusion Period"), unless the Broyles Well is earlier deleted from LAWMA's augmentation plan pursuant to paragraph 14 below or the Broyles Well Inclusion Period is extended pursuant to paragraph 11.6 below. Each Plan Year within the Broyles Well Inclusion Period, LAWMA shall allocate 6.5 acre-feet of pumping to the Broyles Well, unless this annual pumping allocation is altered pursuant to paragraph 11.6 below. Pumping of 6.5 acre-feet each Plan Year for ten Plan Years will cause stream depletions that continue to accrue until the year 2063, with a maximum annual stream depletion of 5.7 acre-feet. Pursuant to paragraph 47.F of the 02CW181 Decree, the owner or operator of the Broyles Well has dedicated a sufficient number of shares of LAWMA Preferred Stock to the Broyles Well to replace the maximum annual stream depletion.

- 11.5 Removal of the Broyles Well from LAWMA's augmentation plan: At the end of the Broyles Well Inclusion Period, as such period may be extended pursuant to paragraph 11.6 below, and unless the Broyles Well previously has been deleted from LAWMA's augmentation plan pursuant to paragraph 14 below, the Broyles Well will be removed automatically from LAWMA's augmentation plan without any further action by LAWMA or the Court. LAWMA shall replace all ongoing stream depletions caused by LAWMA-allocated pumping of the Broyles Well that occurs before the Broyles Well is removed from LAWMA's augmentation plan pursuant to this paragraph or deleted from LAWMA's augmentation plan pursuant to paragraph 14 below, whichever occurs first. LAWMA will not be responsible for replacing depletions caused by pumping of the Broyles Well that occurs after the Broyles Well has been removed from LAWMA's augmentation plan pursuant to this paragraph or deleted from LAWMA's augmentation plan pursuant to paragraph 14 below, or that is in excess of LAWMA's annual pumping allocation to the Broyles Well as set forth in paragraph 11.4 above, as such allocation may be modified pursuant to paragraph 11.6 below.
- 11.6 <u>Extension of Broyles Well Inclusion Period and/or alteration of pumping allocation</u> <u>for Broyles Well</u>: LAWMA may extend the Broyles Well Inclusion Period or alter the annual pumping allocation of the Broyles Well by serving notice on the objectors in this case. Such notice must include an engineering report setting forth the following: (1) The length of time by which the Broyles Well Inclusion Period

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will be extended and/or the amount by which the annual pumping allocation will be increased or decreased; (2) the number of years for which all past pumping of the Broyles Well under LAWMA's augmentation plan and the SWSP associated with this case, and all future pumping of the Broyles Well pursuant to the extended Broyles Well Inclusion Period and/or altered annual pumping allocation, will cause stream depletions; (3) the maximum annual stream depletion that will be caused by all past pumping of the Broyles Well under LAWMA's augmentation plan and the SWSP associated with this case, and all future pumping of the Broyles Well pursuant to the extended Broyles Well Inclusion Period and/or altered annual pumping allocation; and (4) the number of shares of LAWMA Preferred Stock the owner or operator of the Broyles Well will dedicate to the Broyles Well to replace the maximum annual depletion. Within 21 days of the date LAWMA provides the notice required by this paragraph, any objector may file with the Court an objection to the proposed Broyles Well Inclusion Period extension and/or annual pumping allocation alteration. If an objection is filed within the objection period, the Court shall hold proceedings to resolve the objection under the Court's retained jurisdiction pursuant to paragraph 30.6 of this Decree, and the proposed Broyles Well Inclusion Period extension and/or annual pumping allocation alteration will not take effect unless the Court enters an order allowing it to do so. If no objection is filed within the objection period, the proposed Broyles Well Inclusion Period extension and/or annual pumping allocation alteration will take effect without any further action by LAWMA or the Court.

- 12. <u>Replacement of depletions</u>: LAWMA shall replace depletions attributable to the Additional LAWMA Structures as follows:
  - 12.1 In accordance with the terms and conditions of this Decree and the 02CW181 Decree, and except as provided in paragraphs 11.2 and 11.5 above, LAWMA shall replace, in time, location, and amount, all out-of-priority stream depletions to vested water rights in Colorado caused by pumping of or evaporation from the Additional LAWMA Structures; provided, however, that if evaporative depletions caused by the Gateway Ponds exceed the LAWMA Gateway Ponds Replacement Volume, the City shall replace such depletions in accordance with the terms and conditions of the 13CW3060 Decree.
  - 12.2 In accordance with the terms and conditions of this Decree and the 02CW181 Decree and except as provided in paragraphs 11.2 and 11.5 above, LAWMA shall replace, in time, location, and amount, all depletions to stateline flows caused by pumping of or evaporation from the Additional LAWMA Structures, except at times the State Engineer determines that there are unusable flows passing the stateline and all Colorado water rights located downstream from the locations at

which the Additional LAWMA Structures deplete the Arkansas River are satisfied; provided, however, that if evaporative depletions caused by the Gateway Ponds exceed the LAWMA Gateway Ponds Replacement Volume, the City shall replace such depletions in accordance with the terms and conditions of the 13CW3060 Decree. The locations at which the Additional LAWMA Structures deplete the Arkansas River are identified in **Exhibit D**. For the purposes of this Decree, the minimum criteria used by the State Engineer for determining when there are unusable flows passing the stateline will be Appendix J.2, paragraph 2, of the stipulated *Kansas v. Colorado* decree, as it may be modified in the future, or a subsequent agreement between Kansas and Colorado on that subject.

- 12.3 <u>Use of Fryingpan-Arkansas Project water and return flows as augmentation source</u>: The Broyles Well is located outside the boundaries of the Southeastern Colorado Water Conservancy District ("SECWCD"). Because the Broyles Well is located outside the boundaries of the SECWCD, it is not eligible to receive Fryingpan-Arkansas Project water, including return flows, as an augmentation source. The Gateway Ponds are located within the boundaries of the SECWCD and are eligible to receive Fryingpan-Arkansas Project water, including return flows, as an augmentation source.
- 13. <u>Change in type of use of the Additional LAWMA Structures</u>: If, in the future, the owner or user of an Additional LAWMA Structure changes the use of water diverted by that structure or obtains a new water right for a different use of water diverted by that structure, then LAWMA may add such different use to the Case No. 02CW181 plan for augmentation only by filing an application with the Court and obtaining a decree that (i) authorizes such different use, including any necessary terms and conditions related to augmentation of the different use, and (ii) approves the consumptive use factor to be applied to such different use. LAWMA shall provide notice of any such application in the manner provided by statute for a new water right application.
- 14. <u>Deletion of Additional LAWMA Structures</u>: To delete an Additional LAWMA Structure from the Case No. 02CW181 plan for augmentation, except as provided in paragraph 11.5 above, LAWMA or the owner of the Additional LAWMA Structure shall file an application with the Water Court, with notice as required by law, seeking the deletion of the Additional LAWMA Structure from the Case No. 02CW181 plan for augmentation and proposing terms and conditions on which said application should be granted. Unless and until this Court authorizes the deletion of an Additional LAWMA Structure from the Case No. 02CW181 plan for augmentation by a decree or order that includes terms and conditions requiring replacement of ongoing depletions resulting from use of the Additional LAWMA Structure under the Case No. 02CW181 plan for augmentation, or as provided in paragraph 11.5 above, LAWMA shall replace out-of-priority depletions caused

by diversions from the Additional LAWMA Structure while such structure was included in the Case No. 02CW181 plan for augmentation.

- 15. Integration into Case No. 02CW181 plan for augmentation accounting and projection: The accounting for operation of the Additional LAWMA Structures will be incorporated into the projection and accounting required by paragraphs 47.E and 47.I of the 02CW181 Decree. In the accounting for the Additional LAWMA Structures, LAWMA shall include, without limitation, monthly diversions, monthly unlagged depletions, and monthly lagged depletions for each Additional LAWMA Structure. During all times when LAWMA is replacing depletions for the Gateway Ponds, LAWMA will maintain daily measurement and accounting for LAWMA's augmentation plan for those structures. Additionally, in accounting for operation of the Additional LAWMA Structures, LAWMA shall use the accounting forms approved in Case No. 14CW3004 (the "Integrated Accounting Forms"). The Integrated Accounting Forms account for, in an integrated manner and on a monthly basis by stream reaches, LAWMA's augmentation operations under the 02CW181 Decree and all subsequent decrees adding structures to the augmentation plan decreed in Case No. 02CW181; operations under approved substitute water supply plans that utilize LAWMA shares as a source of replacement water; replacement operations under LAWMA's Rule 14 Plan; and return flow maintenance operations under any LAWMA Rule 10 Compact Compliance plan that utilizes LAWMA shares as a source of replacement water.
- 16. <u>New well permits for the Additional LAWMA Structures</u>: To the extent this Decree authorizes pumping of the Additional LAWMA Structures for uses or in amounts different from or greater than those permitted under the Additional LAWMA Structures' current well permits, the owners or operators of the Additional LAWMA Structures shall obtain new well permits for the Additional LAWMA Structures consistent with the terms and conditions of this Decree.
- 17. <u>No injury</u>: The terms and conditions in this Decree and in the 02CW181 Decree are adequate to ensure that no injury to any vested Colorado water rights will result from the operation of the plan for augmentation and are adequate to ensure that the Compact will not be violated from operation of the plan for augmentation.
- 18. <u>Approval of plan for augmentation</u>: The addition of structures to LAWMA's plan for augmentation is in accordance with law and should be granted subject to the terms of this Decree.

## **CONCLUSIONS OF LAW**

19. <u>Incorporation of Findings of Fact</u>: The foregoing Findings of Fact are incorporated herein.

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- 20. <u>Notice and jurisdiction</u>: The Water Court for Water Division No. 2 has exclusive jurisdiction over this proceeding and over all persons and property that may be affected hereby, whether or not those persons have chosen to appear. The Application in this matter and the resume publication thereof placed such persons on notice of the relief requested by the Application and granted by this Decree.
- 21. <u>Application contemplated by law</u>: The Application in this case is contemplated by law and was filed in accordance with C.R.S. § 37-92-302(1)(a).
- 22. <u>Arkansas River Compact compliance</u>: The Application in this case seeks approval of a plan for augmentation for the replacement of the stream depletions associated with the Additional LAWMA Structures in a manner that ensures compliance with the Compact. This Court has no jurisdiction over the State of Kansas in determining whether this plan for augmentation will ensure that the operation of the structures will not violate the Compact. It is the State of Colorado's obligation to ensure that Colorado complies with the Compact. The Court is required to determine the effect of this plan for augmentation on compliance with the Compact. *Se. Colo. Water Conservancy Dist. v. Ft. Lyon Canal Co.*, 720 P.2d 133 (Colo. 1980). The Court finds that the terms and conditions of this Decree and the 02CW181 Decree require that all stream depletions to stateline flows caused by the Additional LAWMA Structures be replaced, except at times when the State Engineer determines that there are unusable flows passing the stateline. Therefore, the operation of the Additional LAWMA Structures pursuant to the terms and conditions of this Decree and the 02CW181 Decree will not violate the Compact.
- 23. <u>Plan for augmentation</u>: The inclusion of the Additional LAWMA Structures in the plan for augmentation described in the 02CW181 Decree should be granted, subject to the terms and conditions contained in this Decree and the 02CW181 Decree.

## JUDGMENT AND DECREE

- 24. <u>Incorporation of Findings of Fact and Conclusions of Law</u>: The Findings of Fact and Conclusions of Law set forth in paragraphs 1 through 23 above are incorporated herein.
- 25. <u>Approval of plan for augmentation</u>: LAWMA's application is granted, subject to the terms and conditions contained in this Decree and in the 02CW181 Decree. The Additional LAWMA Structures are hereby added to the 02CW181 Decree plan for augmentation and are entitled to operate pursuant to the terms and conditions of the 02CW181 plan for augmentation.
- 26. <u>No injury</u>: 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 plan for augmentation

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and are adequate to ensure that the Compact will not be violated from operation of the plan for augmentation.

- 27. <u>02CW181 Decree</u>: This Decree does not change any provisions of the 02CW181 Decree other than the inclusion of the Additional LAWMA Structures.
- 28. <u>13CW3060 Augmentation Plan</u>: This Decree does not change any provisions of the 13CW3060 Decree.
- 29. <u>Retained jurisdiction under 02CW181 Decree</u>: The Court retains jurisdiction over operation of LAWMA's plan for augmentation as provided in the 02CW181 Decree, and this Decree does not change any of the retained jurisdiction provisions of the 02CW181 Decree.
- 30. <u>Perpetual retained jurisdiction</u>. In addition to the general retained jurisdiction described in Paragraph 31 below, the Court specifically retains perpetual jurisdiction over the following matters as they relate to the Additional LAWMA Structures:
  - 30.1 To review the modification, termination or expiration of the 1980 Operating Plan, the Offset Account Resolution, the Offset Account Crediting Agreement, Agreement "B," the Highland Canal Agreement, or any agreements for LAWMA's use of augmentation supplies, and the effect the modification, termination or expiration may have on the operation of the Additional LAWMA Structures under LAWMA's plan for augmentation.
  - 30.2 To review any petition LAWMA may file pursuant to paragraph 47.D of the 02CW181 Decree to permanently add and/or change the location at which LAWMA releases augmentation water or measures its credits for consumptively usable water left undiverted in the stream. LAWMA shall file any such petition under paragraph 47.D of the 02CW181 Decree simultaneously in Case No. 02CW181 and this case, along with a request that the Court consolidate review of the petition in the two cases under Case No. 02CW181.
  - 30.3 To review changes to the methodology for determining Compact compliance and the effect the changes may have on the operation of the Additional LAWMA Structures under LAWMA's plan for augmentation.
  - 30.4 To review changes that may be ordered by the United States Supreme Court pursuant to its retained jurisdiction in *Kansas v. Colorado*, No. 105, Original, to protect the rights of the State of Kansas under the Compact, and the effect such changes may have on the operation of the Additional LAWMA Structures under LAWMA's plan for augmentation.

- 30.5 To resolve any dispute regarding Additional Augmentation Water that LAWMA may seek to use to augment the Additional LAWMA Structures pursuant to paragraph 10.2 above.
- 30.6 To resolve any objection to a notice filed pursuant to paragraph 11.6 above.
- 31. Retained jurisdiction – Additional LAWMA Structures: In accordance with C.R.S. § 37-92-304(6), the addition of structures to LAWMA's plan for augmentation decreed herein will be subject to reconsideration for a period beginning upon entry of this Decree and running through March 2, 2042, which period will be coextensive with the period of the Court's general retained jurisdiction under paragraph 72 of the 02CW181 Decree. The retained jurisdiction will automatically terminate on March 2, 2042, unless invoked as provided herein or extended pursuant to statutory authority. The Court retains jurisdiction to reconsider whether operation of the Additional LAWMA Structures in LAWMA's plan for augmentation is causing injury to the vested water rights of others. The Court's retained jurisdiction may be invoked by any party by filing a proper petition with the Court and serving the non-petitioning parties. The petition to invoke the Court's retained jurisdiction or extend the period of retained jurisdiction must be made in good faith and under oath, and must set forth with particularity its factual basis, together with proposed decretal language to effect the petition. The party who files such a petition shall have the initial burden of coming forward to establish a prima facie showing of the existence of the injury alleged in the petition. Upon such a showing of the existence of injury by a party filing such a petition other than LAWMA, the burden of showing noninjury shifts to LAWMA. In response to a petition regarding its retained jurisdiction pursuant to this paragraph, the Court may (1) require additional or modified protective conditions to prevent injury from the operation of the Additional LAWMA Structures, (2) extend the period of retained jurisdiction as necessary to ascertain the nonoccurrence of injury from operation of the Additional LAWMA Structures, or (3) determine that operation of the Additional LAWMA Structures in accordance with the terms and conditions of this Decree and the 02CW181 Decree is not causing injury to the vested water rights of others. Such additional or modified conditions may, if adequately proved, be more or less restrictive than the terms and conditions of this Decree. Except to the extent the Court has retained jurisdiction, this Decree is final.
- 32. <u>No precedent</u>: There was no trial in this matter and no issues were litigated. The findings of fact, conclusions of law, ruling, and decree 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, ruling, and decree. It is specifically understood and agreed by the parties hereto, and found and concluded by the Court, that 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

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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 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 by allowed in any other matter, case or dispute. The parties stipulate and agree that they do not intend the findings, conclusions, ruling, and decree to have the effect of precedent or preclusion with respect to any factual or legal issue in any other matter, including but not limited to Case No. 14CW3004, Water Division 2. The parties further stipulate and agree that they each reserve the right to propose or to challenge any legal or factual position in any other plan for augmentation or other matter filed in this or any other court without limitation by these finding, conclusions, ruling, and judgment and decree.

DATED this <u>21st</u> day of <u>December</u>, 2017.

BY THE COURT:



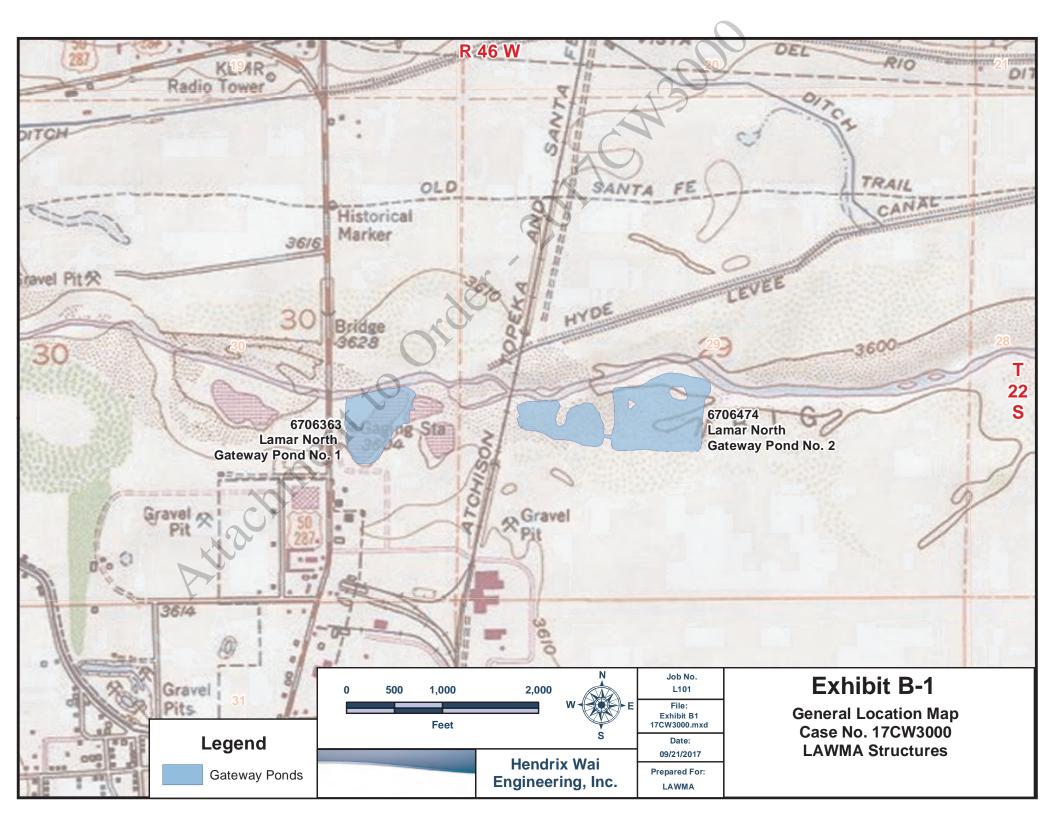
LARRY C. SCHWARTZ, WATER UDGE WATER DIVISION 2

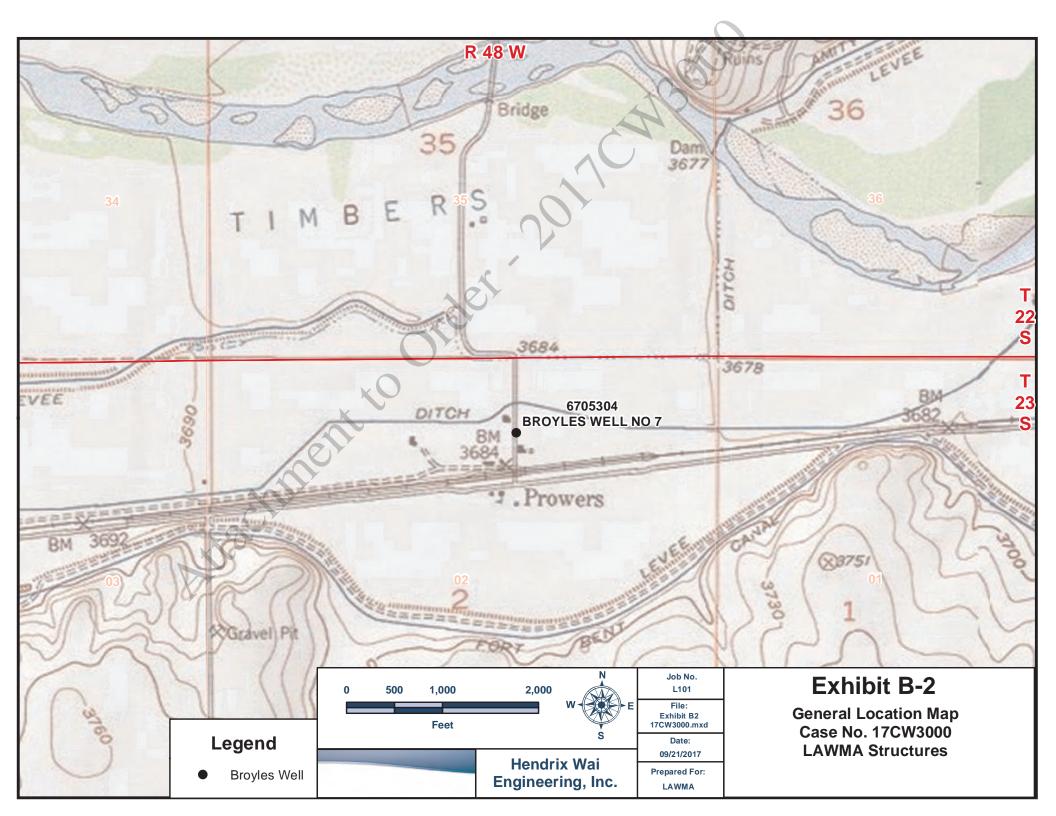
## Exhibit A Case No. 17CW3000 **LAWMA Structures**

Structure Name	Owner	SEO ID No.	Permit No.	Case No.	Q40	Q160	Sec	Ts	Rng	Distance NS Dis	stance EW	County	SECWCD	Source
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	2017 10 17(15)
Lamar North Gateway Pond No. 1	City of Lamar	6706363	52184 F	13CW3060	NE	SE	30	22S	46W	1840 SAIL	650ED	Prowers	nber <sub>es</sub> 21,	Arkansas River Valley Fill Aquifer
Lamar North Gateway Pond No. 2	City of Lamar	6706474		13CW3060	NW	SW	29	22S	46W	1900 S	1535 W	Prowers	Yes	Arkansas River Valley Fill Aquifer
Broyles Well No. 7	Broyles Land & Water LLLP	6705304	13245 RR	W2695	NW	NE	2	23S	48W	788 N	2051 E	Bent	No	Arkansas River Valley Fill Aquifer

#### **LAWMA Structures - GPS Location**

Structure Name (1)	Owner (2)	SEO ID No.	Permit No. (4)	UTM X (5)	UTM Y (6)	Elevation (7)	Datum (8)
Lamar North Gateway Pond No. 1	City of Lamar	6706363	52184 F	708972	4220130	3607	NAD83
Lamar North Gateway Pond No. 2	City of Lamar	6706474		709670	4220145	3604	NAD83
Broyles Well No. 7	Broyles Land & Water LLLP	6705304	13245 RR	695863	4217435	3690	NAD83
Notes: a) UTM coordinate values are in me b) Elevation values are in feet.	ters for UTM Zone 13.		Or	3			
	chir						
P	K'O'						





## EXHIBIT C

DISTRICT COURT, WATER DIVISION 2, COLORADO	DATE FILED: DATE PILED: September 128, 2016 8 58 PM
Court Address: 501 North Elizabeth Street, Suite 116, Pueblo, CO 81003-2940	
CONCERNING THE APPLICATION FOR WA	
THE CITY OF LAMAR	
IN PROWERS COUNTY, COLORADO	Case No.: 13CW3060
FINDINGS OF FACT, CONCLUSIONS OF L COURT GRANTING APPROVAL OF AND RIGHT OF E	PLAN FOR AUGMENTATION

This matter comes before the Water Judge upon the Application for Approval of Plan for Augmentation and Appropriative Right of Exchange ("Application") filed by the City of Lamar. Having considered the pleadings, the stipulations of the parties, the evidence, the comments of the Division Engineer, the contents of the Court file, and being fully advised in the premises, the Water Court does hereby find, conclude, and rule as follows:

## I. FINDINGS OF FACT

### **General Findings**

1. <u>Applicant</u>. The Applicant is the City of Lamar ("Lamar"), c/o City Administrator, 102 E. Parmenter, Lamar, CO 81052-3299.

2. <u>Filing of Application, Referral and Re-referral</u>. Lamar filed its Application with the District Court, Water Division No. 2, on December 18, 2013. The Water Judge referred this matter to the Water Referee by an Order dated December 20, 2013. An Order dated August 21, 2015, re-referred this matter to the Water Judge.

3. <u>Statements of Opposition</u>. Lower Arkansas Water Management Association ("LAWMA"), Southeastern Colorado Water Conservancy District ("Southeastern District"), Fort Lyon Canal Company, and Five Rivers Ranch Cattle Feeding, LLC, d/b/a Colorado Beef ("Colorado Beef") timely filed statements of opposition to the Application.

4. <u>Publication and Notice</u>. The Clerk of this Court has caused publication of the Application as provided by statute, and proofs of publication of the Application were filed with this Court. All publication costs have been paid, and all notices of the Application have been given in the manner required by law.

5. <u>Jurisdiction</u>. The Water Court has jurisdiction over the subject matter of this proceeding and over all parties affected hereby, whether they have appeared or not. The land and water rights involved herein are not included within the boundaries of a designated groundwater basin.

6. <u>Stipulations</u>. Lamar has entered into stipulations with the following parties: Southeastern District, Ft. Lyon Canal Company, Colorado Beef and LAWMA. Those stipulations have each been confirmed as orders of this Court.

7. <u>Consultation Report</u>. A Consultation Report of the Division Engineer dated February 28, 2014, was filed with the Water Court pursuant to C.R.S. §37-92-302(4) and has been considered by the Water Court in the entry of this Decree.

## Background and Summary of Application

8. <u>Plan for Augmentation</u>. Lamar acquired approximately 108 acres of land located in the portions of Sections 29 and 30 in Township 22 South, Range 46 West of the 6th P.M. The property acquired by Lamar was formerly a mine site known as Valco Lamar East Pit M-77-572. Upon completion of mining activities on the property, the property has been reclaimed leaving two unlined ponds that intercept and expose groundwater tributary to the Arkansas River. Lamar seeks a plan of augmentation to replace the evaporative depletions caused by the two ponds. The augmentation supply will be Fryingpan-Arkansas Project water, shares in the Fort Bent Ditch Company Lamar changed in Case No. 05CW107-A, and Lamar's sewered return flows, non-sewered return flows, and/or recharged water available for Lamar's use in accordance with the terms and conditions of the decree entered in Case No. 05CW107-A.

9. <u>Appropriative Right of Exchange</u>. Lamar also seeks a conditional appropriative right of exchange from the confluence of Clay Creek and the Arkansas River to the point of depletion of the ponds to the Arkansas River.

### Plan for Augmentation

10. <u>Structures to be augmented</u>. The structures to be augmented under this plan are described as follows:

A. Lamar North Gateway Park Pond No. 1:

i. <u>Legal Description of Pond:</u> In the NE1/4 of the SE 1/4 of Section 30, Township 22 South, Range 46 West of the 6<sup>th</sup> P.M., approximately 1,840 feet north of the South Section Line and 950 feet west of the East Section Line. The UTM coordinates for this pond are: Northing (UTMy) 4220130 and Easting (UTMx) 708972. (Zone 13).

ii. <u>Source:</u> Exposed groundwater as the result of gravel mining tributary to the Arkansas River.

iii. <u>Surface Area of Pond:</u> 9.25 acres.

## B. <u>Lamar North Gateway Park Pond No. 2<sup>1</sup></u>:

i. <u>Legal Description</u>: In the SW 1/4 of Section 29, Township 22 South, Range 46 West of the 6<sup>th</sup> P.M., approximately 1,900 feet north of the South Section Line and 1,535 feet east of the West Section Line. The UTM coordinates for this pond are: Northing (UTMy) 4220145 and Easting 709670 (UTMx) (Zone 13).

ii. <u>Source:</u> Exposed groundwater as the result of gravel mining tributary to the Arkansas River.

iii. <u>Surface Area:</u> 23.62 acres.

Collectively, the above structures are referred to as the "Lamar North Gateway Park Ponds." The Lamar North Gateway Park Ponds are shown on the attached Exhibit 1 map.

11. <u>Water Sources for Augmentation</u>. To the extent that the following water sources are not needed to meet Lamar's other augmentation and replacement commitments, including without limitation under the decree entered in Case No.

<sup>&</sup>lt;sup>1</sup> At the time of filing of the Application, Lamar had three ponds that were the subject of this Application. A berm previously separated Ponds No. 2 and 3. During the prosecution of this Application, Lamar has removed a portion of that berm creating one pond, which pond is now collectively Lamar North Gateway Park Pond No. 2.

05CW107-A, the water sources for augmentation for the Lamar North Gateway Park Ponds consist of the following:

A. Lamar's Shares in the Fort Bent Ditch Company. The water rights to be used for augmentation of the Lamar North Gateway Park Ponds include 2,813.6 shares of Fort Bent Ditch Company ("Fort Bent") owned by Lamar, including the associated Fort Bent Article II storage account water stored in John Martin Reservoir. The Fort Bent water rights are decreed as follows:

- i. Appropriation Dates, Priority Numbers and Amounts:
  - a. April 1, 1886, Priority No. 6 for 27.77 c.f.s.
  - b. March 10, 1889, Priority No. 10 for 32.77 c.f.s.
  - c. September 11, 1889, Priority No. 12 for 11.7 c.f.s.
  - d. August 12, 1890, Priority No. 14 for 26.27 c.f.s.
  - e. January 1, 1893, Priority No. 1918-2 for 50 c.f.s.
  - f. December 31, 1900, Priority No. 1918-9 for 80 c.f.s.

ii. <u>Original Decree for Priority Nos. 6, 10, 12 and 14</u>. An unnumbered adjudication titled "In the matter of the Adjudication of Priorities to the use of Water for Irrigation in District Number 67" decreed on July 1, 1895, by the Bent County District Court.

iii. <u>Original Decree for Priority Nos. 1918-2 and 1918-9.</u> An unnumbered adjudication titled "In the Matter of the Adjudication of Water Rights and priorities to the use of Water in Water District Number Sixty-seven, in the State of Colorado" decreed on October 14, 1918, by the Bent County District Court.

iv. <u>Decrees entered in Case Nos. 02CW181 and 05CW107-A</u>. Of Lamar's 2,813.6 shares in the Fort Bent, 923 of the Fort Bent shares were changed by LAWMA in Case No. 02CW181, Water Division 2 (the "LAWMA Decree"). In Case No. 05CW107-A, decreed on June 8, 2015, Lamar changed an additional 1,890.6 shares in the Fort Bent shares of Fort Bent Ditch Company for Lamar's augmentation and replacement uses. Lamar's 2,813.6 shares in the Fort Bent can be used by Lamar as an augmentation source under this Decree pursuant to the terms and conditions of the decrees entered in Case Nos. 02CW181, 05CW107-A and this Decree.

B. <u>Fryingpan-Arkansas Project Water</u>. Project Water is the subject of numerous decrees entered in Water Divisions 2 and 5. As a constituent of Southeastern District, Lamar is entitled to make annual requests for both municipal first-use and return flows from Southeastern District for delivery of Project Water. Subject to Paragraph 26(A) below, Project Water and return flows therefrom may be used as an augmentation source under this Decree, pursuant to the terms of this Decree. The Project water rights are described as follows:

i. <u>West Slope Decrees</u>: The Fryingpan-Arkansas project diverts surface water from the headwaters of Hunter Creek and the Fryingpan River and their tributaries in Pitkin County. The principal water rights were adjudicated by the decrees in Civil Action No. 4613 (District Court, Garfield county) dated June 20, 1958, and August 3, 1959; and were modified by the Decree in Case No. W-829-76 (District Court, Water Division 5) dated November 27, 1979; and were supplemented by the Decree in Case No. 83CW352 (District Court, Water division No. 5) dated May 31, 1985. These water rights have an appropriation date of July 29, 1957. Water diverted under these decrees travels under the Continental Divide through Boustead Tunnel, which empties into Turquoise Reservoir. This water may be stored in Turquoise Reservoir, Twin Lakes Reservoir, and elsewhere, and applied to beneficial use within Southeastern's District boundaries. Because the water is imported from another river basin, it is fully consumable in Water Division 2.

ii. <u>East Slope Decrees</u>: The Fryingpan-Arkansas Project also diverts and stores surface water from the Arkansas River and its tributaries in Lake, Chaffee, Fremont, and Pueblo Counties. The principal water rights were adjudicated by the decrees in Civil Action No. 5141 (District Court, Chaffee County) dated July 9, 1969, and Civil Action No. B-42135 (District Court, Pueblo County) dated June 25, 1962; and were modified and supplemented by the Decree in Case No. 80CW6 (District Court, Water Division 2), dated October 23, 1980. These water rights include storage in Turquoise Reservoir, Twin Lakes Reservoir, Pueblo Reservoir, and elsewhere, with an appropriation date of February 10, 1939, and are expressly decreed for reuse and exchange for beneficial use within Southeastern's District boundaries. Under these decrees, Turquoise Reservoir and Twin Lakes Reservoir may store native water or imported water, directly or by exchange with each other or with Pueblo Reservoir.

Neither description of, reference to, or omission or description of or reference to, Fryingpan-Arkansas structures and water rights of the Southeastern District in this Decree, nor anything else in this Decree will in any way amend, limit or act to the detriment of the decrees for the Southeastern District's water rights.

C. <u>Sewered Waste Water Return Flows</u>. Lamar operates a central wastewater treatment facility for disposal of potable water used for indoor purposes. Lamar's wastewater treatment facility consists of an influent pumping station and three lagoons covering an area of 96.1 acres. The first two lagoons are naturally aspirated, facultative lagoons operating in series. The second lagoon overflows into a third lagoon that is partially covered with phreatophytes. Lamar's wastewater treatment facility is located near the Arkansas River in the Sections 27 and 28, Township 22 South, Range 46 West of the 6th P.M., Prowers County, Colorado. A portion of Lamar's wastewater seeps into the underlying alluvium from all three lagoons and can be used by Lamar as an augmentation source under this Decree pursuant to the terms and conditions of the 05CW107-A Decree and this Decree.

D. Lawn Irrigation Return Flows. A portion of Lamar's water supply is applied to irrigation of residential and commercial lawns and gardens. When applied for such uses, a portion of the water runs off as surface tail water and is intercepted by storm drains, which discharge to Willow Creek, other tributary channels or the Arkansas River. The remaining portion percolates through the root zone to the groundwater aquifer. Lawn irrigation return flows from Lamar's potable and non-potable water systems can be claimed and used by Lamar as a replacement credit and augmentation source under this Decree pursuant to the terms and conditions of the 05CW107-A Decree and this Decree.

12. Quantification of Depletions. Lamar seeks approval of a plan for augmentation to replace the depletions caused by the evaporation of water from the Lamar North Gateway Park Ponds. The maximum surface area of the Lamar North Gateway Park Ponds is 32.87 acres, which is at the elevation of the outlet pipes from the Lamar North Gateway Park Ponds to the Arkansas River. 7.0 acres of this exposed surface water existed as of December 30, 1980. Therefore, pursuant to C.R.S. § 37-90-137(11)(a)(II)(b)(2013), a maximum of 25.87 acres of the 32.87 acres of exposed surface area require replacement of stream depletions due to evaporation from the ponds. Lamar's water resource engineers have calculated that the annual net evaporation rate of the ponds is 4.11 annual acre feet per acre of exposed water surface area. Accordingly, the Lamar North Gateway Park Ponds will cause a maximum depletion of 106.33 annual acre-feet to the Arkansas River. Elevation-area tables for the Lamar North Gateway Park Ponds are attached hereto as Exhibit 2. Lamar North Gateway Park Ponds have a staff gauge installed that can be used by Lamar to determine the water elevation in each pond. Monthly losses to evaporation from the ponds will be calculated based upon the average exposed surface on a monthly basis as determined (in acres) by observations of staff gage readings in each of the ponds at the beginning of each month and at the end of each month. Exposed surface area for each pond shall be computed by using the applicable elevation-area table for each pond. Evaporation losses from the Lamar North Gateway Park Ponds shall calculated by multiplying the combined monthly average exposed surface area (in acres) for the Lamar North Gateway Park Ponds, less 7 acres to

account for the surface area exposed prior to December 30, 1980, by the rate of net evaporation for the applicable month set forth in the table below and the calculated evaporation losses shall be replaced by Lamar pursuant to the terms and conditions of this decree.

Month	Net Evaporation Rate (ft.)	Maximum Pond Evaporation To Be Replaced (acre feet)
January	0.13	3.36
February	0.15	3.88
March	0.22	5.69
April	0.37	9.57
May	0.46	11.90
June	0.59	15.26
July	0.62	16.04
August	0.55	14.23
September	0.43	11.12
October	0.30	7.76
November	0.17	4.40
December	0.12	3.10

13. <u>Timing of Depletions and Replacement</u>. The Lamar North Gateway Park Ponds are located an average distance of 57.5 feet from the Arkansas River. Lamar's water resource engineer performed a Glover analysis on the Lamar North Gateway Park Ponds, using an aquifer transmissivity of 200,000 gpd/ft and a specific yield of 0.20. The result of the analysis shows that 96.8 percent of depletions to the Arkansas River resulting from pond evaporation occur within the same month. Therefore, Lamar will return the full amount of that month's replacement water to the Arkansas River in the same month as the depletion.

## Appropriative Right of Exchange

14. <u>Background and Request for Exchange</u>. Lamar seeks a conditional appropriative right of exchange of the recharge accretions available pursuant to the recharge plan decreed in Case No. 05CW107-A that accrue to the Arkansas River to the Lamar North Gateway Park Ponds' furthest upstream point of depletion to the Arkansas River.

15. <u>Water to Be Exchanged</u>. Lamar's 2,813.6 Fort Bent shares and Project water delivered to the Recharge Facilities that accrues to the Arkansas River and available to Lamar pursuant to the terms and conditions of the decree entered in Case No. 05CW107-A.

16. <u>Reach of Exchange</u>. The lower terminus (exchange from point) of Lamar's conditional exchange is the confluence of Clay Oper and the Arkansa's River located in the NE1/4 of Section 36, Township 22 South, Range 46 West of the 6th P.M., Prowers County, Colorado. The upper terminus (exchange to point) of Lamar's conditional exchange is Lamar North Gateway Park Pond No. 1's furthest upstream point of depletion to the Arkansas River located in the NE1/4 of the SE1/4 of Section 30, Township 22 South, Range 46 West of the 6th P.M. The UTM coordinates for this point are: Northing (UTMy) 4220230 and Easting (UTMx) 708855 (Zone 13).

17. <u>Use of Exchange Water</u>. Consistent with the decreed uses of the source of substitute supply, Lamar will use the exchanged water for augmentation of evaporative depletions from the Lamar North Gateway Park Ponds.

18. <u>Appropriation Date</u>. The appropriation date of this exchange is April 30, 2013, which was the date that the City of Lamar acquired the Lamar North Gateway Park Ponds confirming its intent to initiate this water right and authorizing the appropriative right of exchange, all with the intent to acquire and appropriate water for beneficial use as set forth herein.

19. <u>Exchange Rate</u>. The maximum exchange rate shall be 0.261 c.f.s., conditional, which is the maximum daily rate of depletion of the Lamar North Gateway Park Ponds.

## II. CONCLUSIONS OF LAW

20. <u>Jurisdiction</u>. This Application was filed with the Water Clerk, Water Division 2, pursuant to C.R.S. § 37-92-302(1)(a), and this Court has exclusive jurisdiction over these proceedings. C.R.S. § 37-92-302(1)(a) and (5), and § 37-92-305.

21. <u>Water Rights Contemplated by Law</u>. Lamar's request for approval of a plan for augmentation, and for an appropriative right of exchange is contemplated and authorized by law. Lamar has fulfilled all legal requirements including C.R.S. §§ 37-92-302 and 37-92-305 for the requested decree for the water right and its related uses as described above. The plan for augmentation requested in the Application and described herein complies with the applicable law and meets the statutory criteria for such a plan as set forth in C.R.S. §§ 37-92-103(9), -302(1) and (2), and -305(3) and (5).

22. <u>Retained Jurisdiction</u>. No retention of jurisdiction on the question of injury to other vested water rights is required for an appropriative right of exchange. <u>City of Florence v. Board of Water Works of the City of Pueblo</u>, 793 P.2d 148 (Colo. 1990).

### III. DECREE

NOW THEREFORE, IT IS HEREBY ORDERED, ADJUDGED AND DECREED AS FOLLOWS:

23. <u>Incorporation of Findings and Conclusions</u>. All of the foregoing Findings of Fact and Conclusions of Law are incorporated by reference herein, and are to be considered a part of the decretal portion hereof as though set forth in full.

24. <u>Approval of Application</u>. The Application for plan for augmentation and appropriative right of exchange is hereby approved, subject to the terms and conditions of this Decree.

25. <u>No Material Injury</u>. The Court has considered the depletions from the Lamar North Gateway Park Ponds in quantity and in time, the amount and timing of augmentation water which will be provided by Lamar, and the existence, if any, of injury to any owner of or person entitled to use water under a vested water right or a decreed conditional water right. The Court determines that, so long as this augmentation plan is operated in accordance with the terms and conditions of this Decree, the timing, quantity, and location of replacement water and the protective terms outlined herein are sufficient to protect the vested rights of other water users and will not result in injury to other vested Colorado water rights nor violate the Arkansas River Compact.

26. Terms and Conditions.

A. <u>Use of Project water</u>. The Southeastern District allocates Project water and return flows annually based on its principles, policies, rules, and regulations. Southeastern District's allocation and Lamar's purchase and use of Project water and return flows therefrom will be pursuant to and subject to the above-referenced decrees for the Fryingpan-Arkansas Project, and to all lawful rules, regulations, policies, procedures, contracts, charges and terms as those may be lawfully determined by the Southeastern District from time to time. Any decree entered in this case will not give Lamar any rights to use Fryingpan-Arkansas Project structures, or any rights of ownership or rights to purchase or receive allocations of Project water or return flows therefrom, but does not alter any existing rights, Lamar has to purchase and receive an allocation of Project water or Project return flows.

Project water or Project water return flows therefrom may be used by Lamar hereunder only if, and to the extent such water is allocated by Southeastern District to Lamar, and is purchased from Southeastern District. Lamar will only utilize Project water or return flows therefrom under this Decree within Southeastern District's boundaries, as

a supplemental supply for the uses decreed herein. Lamar's use of such water under this Decree will be only to augment or replace depletions (including exchange of Project water for such uses) resulting from Lamar's beneficial use of water within Southeastern District's boundaries.

Unless otherwise agreed to by the Southeastern District and Lamar, Lamar's use of municipal Project water to augment Lamar's depletions hereunder must first be attributed to municipal Project water return flows available to Lamar. If sufficient municipal Project water return flows are not available to Lamar in time, place, or amount for Lamar to make its augmentation obligations hereunder, then Lamar may use its allocated municipal Project water for augmentation purposes.

Lamar's municipal allocation of Project water is currently released from Pueblo Reservoir and delivered to the headgate of the Fort Bent Ditch for diversion and delivery to Lamar. The Arkansas Valley Conduit, an original component of the Fryingpan-Arkansas Project, is contemplated to terminate at Lamar's potable water tanks. Until construction is completed on the Arkansas Valley Conduit, Lamar will account for the unconsumed portion of Project water due to conveyance loss in the Fort Bent Ditch and the unconsumed portion of transit losses between John Martin Dam and the Fort Bent Ditch headgate and take credit for such water for augmentation and replacement purposes. The credit Lamar may take for the unconsumed portion of transit losses on Lamar's Project Water between John Martin Dam and the Fort Bent Ditch headgate for augmentation and replacement purposes shall be determined by the Division Engineer. Lamar also preserves its claim to the unconsumed portion of transit losses between Pueblo Reservoir and John Martin Reservoir.

B. <u>Use of Fort Bent Shares</u>. The historical consumptive use findings decreed in Case Nos. 02CW181 and 05CW107-A are binding as a matter of *res judicata*. <u>Williams v. Midway Ranches Property Owners Association, Inc.</u>, 938 P.2d 515 (Colo. 1997). There have been no material changed circumstances since the entry of the decrees in Case Nos. 02CW181 and 05CW107-A to modify the historical consumptive use determinations and they continue to hold true to the date of this Decree. Lamar's use of its Fort Bent shares to augment depletions hereunder shall be pursuant to the terms and conditions of the decrees entered in Case Nos. 02CW181 and 05CW107-A. Those shares not needed by Lamar to meet its augmentation and replacement obligations under the 05CW107-A Decree may be used by Lamar as an augmentation supply within the plan for augmentation decreed in this case. This Decree does not alter any other element, provision, finding, obligation, term, or condition of the decrees entered in Case Nos. 02CW181 and 05CW107-A.

C. <u>Claiming of Return Flows</u>. Lamar's use of sewered and non-sewered return flows for augmentation purposes under this Decree shall be in accordance with the terms and conditions decreed in Case No. 05CW107-A.

D. Timing and Operation of Exchange. The exchange decreed herein shall not exceed the rate and volume of Lamar's accretions to the Arkansas River pursuant to the operation of the recharge plan decreed in Case No. 05CW107-A. The operation of the exchange will be limited in time to periods when the water rights to be exchanged are available at the exchange-from point, and further limited to the rate and volume of the source of substitute supply legally and physically available for Lamar's use at the exchange-from point. The exchanges may be operated only when there is a continuous live stream maintained between the points of the initiation of the exchanges and the upstream terminus of the exchange. If a live stream ceases to exist at any point between the exchange from point and the exchange to point while the exchange is being operated, the operation of the exchange shall cease immediately. The exchange may only be operated when and to the extent that other vested and decreed water rights senior to this exchange within the exchange reach are not deprived of water to which they would have been entitled in the absence of the operation of the exchange. Prior to the operation of this exchange. Lamar shall coordinate with and receive the approval of the water commissioner or Division Engineer in order to assure that the requirements of this Decree are satisfied. The exchange will occur contemporaneous with exchange potential. Exchange potential shall be determined by the water commissioner or Division Engineer in a timely manner as part of Lamar's required coordination with the water commissioner or Division Engineer.

E. <u>Use of the Lamar North Gateway Park Ponds.</u> Lamar intends to use the Lamar North Gateway Park Ponds for recreational, wildlife and piscatorial uses. As these uses are non-consumptive and Lamar is replacing 100% of the evaporative depletions associated with the ponds, a separate augmentation plan is not needed by Lamar to utilize the ponds for such uses. Lamar can utilize the Lamar North Gateway Park Ponds for non-consumptive uses of recreational, wildlife and piscatorial so long as it replaces 100% of the evaporative depletions from the ponds. Lamar shall not use the ponds for any irrigation to establish or maintain vegetation around the Lamar North Gateway Park Ponds absent further administrative approval or judicial decree. Nothing in this decree, however, shall prevent Lamar from irrigating around the Lamar North Gateway Park Ponds to establish and maintain vegetation with other legally decreed water rights owned by Lamar for such purposes.

F. <u>Hyde Canal</u>. The Hyde Mutual Ditch Company operates the Hyde Canal, which has its surface point of diversion between the upper and lower termini of Lamar's exchange decreed herein. Lamar shall not operate the exchange decreed

herein at times when the surface diversion decreed to the Hyde Canal is sweeping the Arkansas River.

Curtailment. Pursuant to C.R.S. § 37-92-305(8), the State Engineer, the 27. Division Engineer, and/or the Water Commissioner shall curtail all out-of-priority depletions which are not replaced pursuant to the terms and conditions of this Decree to prevent injury to vested water rights. To the extent that Lamar or one of its successors or assigns is ever unable to provide the quantity of replacement water required to replace depletions under the terms and conditions of this Decree, then the Lamar North Gateway Park Ponds shall not be entitled to operate under the protection of this plan, and shall be subject to administration and curtailment in accordance with the laws, rules, and regulations of the State of Colorado. Because no water rights are decreed to the Lamar North Gateway Park Ponds, the evaporative depletions from the ponds will be out of priority and therefore required to be replaced at all times except when the State Engineer determines that there are unusable flows passing the stateline and all Colorado water rights located downstream of the ponds are satisfied. For purposes of this decree, the minimum criteria used by the State Engineer for determining when there are unusable flows passing the stateline will be Appendix J.2, paragraph 2, of the stipulated Kansas v. Colorado decree, as it may be modified in the future, or a subsequent agreement between Kansas and Colorado.

28. <u>Quality of Substituted Supply</u>. It is established that the substituted water provided under this plan for augmentation and for Lamar's appropriative right of exchange is of a quality and quantity so as to meet the requirements for which the water of senior appropriators has normally been used, and such substituted water shall be accepted by the senior appropriators in substitution of the water derived by the exercise of Lamar's decreed rights. Wherever the substituted water is supplied by Lamar as provided herein, Lamar may operate its exchanges and take an equivalent amount of water for beneficial use within the exchange reach without impairing the availability of water lawfully diverted by senior appropriators and without material injury to any owner of or person entitled to use water under a vested water right.

29. <u>Elements for the Appropriation of a Conditional Water Right</u>. Lamar has completed all of the elements necessary for the appropriation of a conditional water right, including: (a) Lamar has formed the intent to appropriate water; (b) Lamar has performed overt acts coincidental with this intent to manifest its intent to appropriate water to beneficial use and to demonstrate the taking of a substantial step toward applying water to beneficial use; and, (c) these acts were of such a nature as to provide interested third parties with notice of the nature and extent of the proposed diversion and the consequent demand upon the river system. The waters to be exchanged can and will be diverted, stored, or otherwise captured, possessed or controlled and will be beneficially

used. The proposed conditional water right can and will be completed with diligence within a reasonable period of time.

30. <u>Additional Augmentation Water</u>. Pursuant to C.R.S. § 37-92-305(8), Lamar may add additional and alternative sources for replacement in this plan for augmentation after entry of this Decree if such sources are decreed or have been administratively approved for such use. As contemplated by C.R.S. 37-92-305(8)(c), this paragraph sets forth the procedures under which these sources may be used in this plan for augmentation, but not as sources of substitute supply for the exchange decreed herein. These procedures are adequate to prevent injury to other water rights that might otherwise result from the addition of these sources to this plan for augmentation.

Additional water rights separately decreed or lawfully available for A. augmentation use. If a water right is decreed or lawfully available for augmentation or replacement use and not already approved for such use under this Decree, Lamar shall give at least forty-five days advance written Notice of Use of Water Right for Augmentation to the Court, the Division Engineer, and all Objectors herein ("Notice"), which Notice shall describe (a) the water right by name and decree if any; (b) the annual and monthly amount of water available to Lamar from the water right; (c) the location or locations at which the water will be delivered to the stream; (d) evidence that Lamar owns or controls the water right to be added and that the claimed amount of water will not be used by another person or entity; and (e) the manner in which Lamar will account for use of the augmentation credits. If any person wishes to object to the addition of the noticed water rights to this plan for augmentation, that person shall file a written objection with the Court within forty-five days after the date Lamar gave the Notice. If no objection is so filed, then Lamar may use the noticed water rights in this plan for augmentation in the manner stated in the Notice without further action by the Court. If an objection is so filed, then Lamar may not use the noticed water rights until the Court determines whether and under what terms and conditions necessary to prevent injury to vested water rights and decreed conditional rights the noticed water rights may be used in this plan for augmentation.

B. Additional water rights – temporary administrative approval. If a water right is not decreed or otherwise lawfully available for augmentation or replacement use and Colorado statutes or other governing authority provide a mechanism for using such water right without the need of a decree, Lamar shall provide written notice to the Objectors herein of its request for approval of the State Engineer pursuant to C.R.S. § 37-92-308, C.R.S. § 37-92-309, or other applicable statute. Such notice shall be in addition to any notice required by the applicable statute. Lamar may use such water rights in this plan for augmentation upon the State Engineer's approval of the underlying administrative application for the term of such approval, unless such approval is reversed or modified on appeal or under retained jurisdiction.

C. <u>Retained jurisdiction</u>. The Court retains jurisdiction perpetually to add new augmentation water to this plan for augmentation and to be solve disputes and objections under this paragraph 30, including but not limited to claims of injury that relate to Lamar's use of additional or alternative augmentation sources in this plan for augmentation pursuant to C.R.S. § 37-92-305(8) and the procedure described above. In any such proceeding, Lamar shall bear the burden of demonstrating non-injury from the use of any additional augmentation sources.

Accounting. Lamar will maintain measurement and accounting for the 31. operation of the augmentation plan and exchange of water rights on a daily basis and will prepare and provide monthly accounting forms to the Division Engineer. Lamar's accounting for this decree will be integrated into Lamar's accounting under the 05CW107-A Decree and shall include the total augmentation supply available to Lamar under the 05CW107-A Decree, Lamar's total augmentation obligations met under the 05CW107-A Decree, the remaining augmentation supply available to Lamar for use under this Decree, Lamar's total augmentation obligations met under this Decree, the amount of all deliveries from LAWMA's augmentation station, and Lamar's portion of deliveries from LAWMA's augmentation station. The accounting form shall be updated to include a column tracking the river call from downstream Colorado water rights and a column for tracking whether there are unusable flows passing the stateline if Lamar desires to not replace the evaporative depletions from the ponds during times when there is no call from any downstream Colorado water rights and there are unusable flows passing the stateline.

32. <u>Measuring Devices</u>. Lamar shall install, maintain, and operate such meters, measuring devices, or other structures as are reasonably required by the Division Engineer to implement and administer the Decree, and the plan approved herein.

33. <u>Retained Jurisdiction</u>. Pursuant to the provisions of C.R.S. § 37-92-304(6), the plan for augmentation shall be subject to the reconsideration of this Court on the question of material injury to vested water rights of others for a period of five (5) years from the date of entry of this decree. Any party who has participated in this case as an objector may petition the Court to invoke its retained jurisdiction. Any such party seeking to invoke the Water Court's retained jurisdiction shall file a verified petition with the Court setting forth with particularity the factual basis for requesting the Court to reconsider material injury to petitioner's vested water rights associated with the operation of this Decree. The party filing the petition shall have the burden of proof of going forward to establish a prima facie case based on the facts alleged in the petition. If the Court finds those facts to be established, Lamar shall thereupon have the burden of proof to show: a) that the petitioner is not materially injured; or, b) that any modification sought by the petitioner is not required to avoid material injury to the petitioner; or, c) that any term or condition proposed by Lamar in response to the petition does avoid material injury to the

petitioner. The Division of Water Resources as a petitioner shall be entitled to assert material injury to the vested water rights of others. If no such petition is filed within the five year period and the retained jurisdiction period is not extended by the Water Court in accordance with the provisions of the statute, this Decree shall become final under its own terms. The expiration of the period of retained jurisdiction shall not limit the rights of owners of vested water rights to seek enforcement of the terms of this Decree, or to seek other modifications to the administration and accounting procedures of this Decree (as opposed to the substantive provisions of the Decree) as necessary to prevent any material injury to vested water rights that results from a change in the manner of administration of water rights on Arkansas River.

34. <u>Diligence</u>. As to the conditional water right awarded herein, and pursuant to C.R.S. § 37-92-301(4)(a), Lamar shall file an application for a finding of reasonable diligence every sixth year after the calendar date in which this conditional water right is hereby decreed or a subsequent diligence decree issued, and if not so filed, unless an absolute decree is issued, this conditional water right shall be considered abandoned. Lamar shall, during the month of September 2022, file an application for a finding of reasonable diligence herein unless prior to that time Lamar shall have made an application to make absolute the conditional water rights granted herein.

35. <u>Transfer of Conditional Water Rights</u>. Pursuant to Rule 9 of the Uniform Local Rules for all State Water Court Divisions, upon the sale or transfer of any conditional water right, the transferee shall file with the Clerk of this Court a notice of transfer which shall state: a) the title and case number of the case under which the conditional decree was issued; b) the description of the conditional water right transferred; c) the name of the transferor; d) the name and address of the transferee; and e) a true and correct copy of the recorded deed. Further, the owner of this conditional water right shall notify the Clerk of this Court of any change in mailing address. The Clerk of this Court shall place any notice of transfer or change of address in this case file, and in the case file in which this Court first made a finding of reasonable diligence.

36. <u>Priority</u>. The priority decreed for this appropriative right of exchange is for a filing made to the Water Court in the year of 2013 and shall be administered as having been filed in that year, and shall be junior to all priorities awarded in previous years. As between other water rights filed in this same calendar year, priorities shall be determined by historical dates of appropriation and not administered by the date of entry of this Decree.

37. <u>No Precedent</u>. This Decree is the result of substantial negotiations and settlement discussions between the parties. Its terms are based on the specific facts and circumstances of this case and compromises by the parties. By stipulation to entry of this Decree, no party in this case intends that it become precedent to resolve issues in any

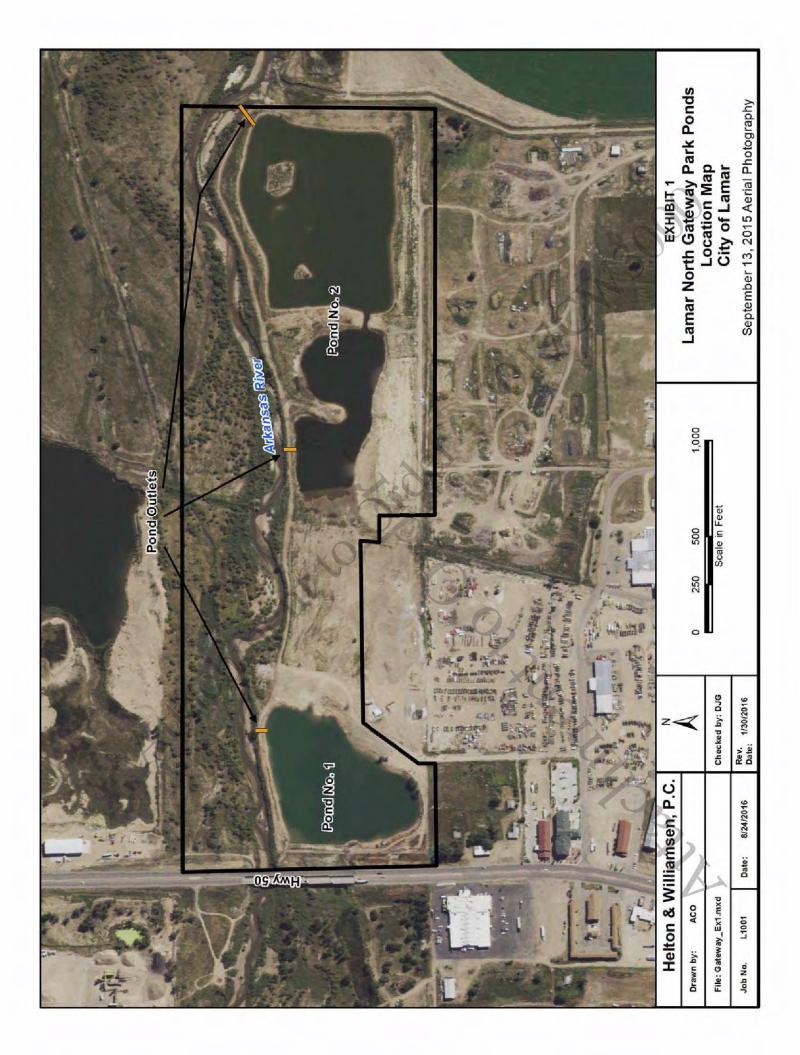
other case, and all parties reserve their rights to challenge the terms and conditions to be applied to any other Water Court application.

38. Copies of this Decree when entered by the Court shall be mailed to the parties as required by statute.

DATED THIS 28<sup>th</sup> day of September, 2016.

Attachment

BY THE COURT: C/SCHWARTZ, WATER JUDGE WATER DIVISION 2



# Exhibit 2 13CW3060

#### North Gateway Pond 1 Elevation-Area Table **City of Lamar**

10.00		11						Area, a	cres				
Staff gage (ft)	Elevation (ft)	Area (ft2)	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	Incr
1.00	3604.00	386791	8.88	8.88	8.88	8.89	8.89	8.89	8.90	8.90	8.90	8.90	0.002648
1.10	3604.10	387944.3	8.91	8.91	8.91	8.91	8.92	8.92	8.92	8.92	8.93	8.93	0.002648
1.20	3604.20	389097.6	8.93	8.94	8.94	8.94	8.94	8.95	8.95	8.95	8.95	8.96	0.002648
1.30	3604.30	390250.9	8.96	8.96	8.96	8.97	8.97	8.97	8.97	8.98	8.98	8.98	0.002648
1.40	3604.40	391404.2	8.99	8.99	8.99	8.99	9.00	9.00	9.00	9.00	9.01	9.01	0.002648
1.50	3604.50	392557.5	9.01	9.01	9.02	9.02	9.02	9.03	9.03	9.03	9.03	9.04	0.002648
1.60	3604.60	393710.8	9.04	9.04	9.04	9.05	9.05	9.05	9.05	9.06	9.06	9.06	0.002648
1.70	3604.70	394864.1	9.06	9.07	9.07	9.07	9.08	9.08	9.08	9.08	9.09	9.09	0.002648
1.80	3604.80	396017.4	9.09	9.09	9.10	9.10	9.10	9.10	9.11	9.11	9.11	9.12	0.002648
1.90	3604.90	397170.7	9.12	9.12	9.12	9.13	9.13	9.13	9.13	9.14	9.14	9.14	0.002648
2.00	3605.00	398324	9.14	9.15	9.15	9.15	9.15	9.15	9.15	9.16	9.16	9.16	0.001589
2.10	3605.10	399016	9.16	9.16	9.16	9.16	9.17	9.17	9.17	9.17	9.17	9.17	0.001589
2.20	3605.20	399708	9.18	9.18	9.18	9.18	9.19	9.19	9.19	9.19	9.19	9.20	0.002287
2.30	3605.30	400704.38	9.20	9.20	9.20	9.21	9.21	9.21	9.21	9.21	9.22	9.22	0.002287
2.40	3605.40	401700.75	9.22	9.22	9.23	9.23	9.23	9.23	9.24	9.24	9.24	9.24	0.002287
2.50	3605.50	402697.13	9.24	9.25	9.25	9.25	9.25	9.26	9.26	9.26	9.26	9.27	0.002287
2.60	3605.60	403693.5	9.27	9.27	9.27	9.27	9.28	9.28	9.28	9.28	9.29	9.29	0.002287
2.70	3605.70	404689.88	9.29	9.29	9.29	9.30	9.30	9.30	9.30	9.31	9.31	9.31	0.002287
2.80	3605.80	405686.25	9.31	9.32	9.32	9.32	9.32	9.32	9.33	9.33	9.33	9.33	0.002287
2.90	3605.90	406682.63	9.34	9.34	9.34	9.34	9.35	9.35	9.35	9.35	9.35	9.36	0.002287
3.00	3606.00	407679	9.36	9.36	9.36	9.37	9.37	9.37	9.37	9.37	9.38	9.38	0.002199
3.10	3606.10	408637	9.38	9.38	9.39	9.39	9.39	9.39	9.39	9.40	9.40	9.40	0.002199
3.20	3606.20	409595	9.40	9.41	9.41	9.41	9.41	9.41	9.42	9.42	9.42	9.42	0.002199
										AFA			
3.30	3606.30	410553	9.43	9.43	9.43	9.43	9.43	9.44	9.44	9.44	9.44	9.44	0.002199
3.40	3606.40	411511	9.45	9.45	9.45	9.45	9.46	9.46	9.46	9.46	9.46	9.47	0.002199
3.50	3606.50	412469	9.47	9.47	9.47	9.48	9.48	9.48	9.48	9.48	9.49	9.49	0.002199
3.60	3606.60	413427	9.49	9.49	9.50	9.50	9.50	9.50	9.50	9.51	9.51	9.51	0.002199
3.70	3606.70	414385	9.51	9.52	9.52	9.52	9.52	9.52	9.53	9.53	9.53	9.53	0.002199
3.80	3606.80	415343	9.53	9.54	9.54	9.54	9.54	9.55	9.55	9.55	9.55	9.55	0.002199
3.90	3606.90	416301	9.56	9.56	9.56	9.56	9.57	9,57	9.57	9.57	9.57	9.58	0.002199
4.00	3607.00	417259	9.58	9.58	9.58	9.59	9.59	9.59	9.59	9.60	9.60	9.60	0.002610
4.10	3607.10	408637	9.61	9.61	9.61	9.61	9.62	9.62	9.62	9.62	9.63	9.63	0.002610
4.20	3607.20	409595	9.63	9.63	9.64	9.64	9.64	9.64	9.65	9.65	9.65	9.65	0.002610
4.30	3607.30	410553	9.66	9.66	9.66	9,67	9.67	9.67	9.67	9.68	9.68	9.68	0.002610
4.40	3607.40	411511	9.68	9.69	9.69	9.69	9.69	9.70	9.70	9.70	9.70	9.71	0.002610
4.50	3607.50	412469	9.71	9.71	9.71	9.72	9.72	9.72	9.73	9.73	9.73	9.73	0.002610
4.60	3607.60	413427	9.74	9.74	9.74	9.74	9.75	9.75	9.75	9.75	9.76	9.76	0.002610
4.70	3607.70	414385	9.76	9.76	9.77	9.77	9.77	9.77	9.78	9.78	9.78	9.79	0.002610
4.80	3607.80	415343	9.79	9.79	9.79	9.80	9.80	9.80	9.80	9.81	9.81	9.81	0.002610
4.90	3607.90	416301	9.81	9.82	9.82	9.82	9.82	9.83	9.83	9.83	9.83	9.84	0.002610
5.00	3608.00	417259	9.84	9,84	9,85	9,85	9,85	9.86	9,86	9,86	9.87	9,87	0.003500
5.10	3608.10	408637	9.87	9.88	9.88	9.89	9.89	9.89	9.90	9.90	9.90	9.91	0.003500
5.20	3608.20	409595	9.91	9.91	9.92	9.92	9.92	9.93	9.93	9.93	9.94	9.94	0.003500
5.30	3608.30	410553	9.94	9.95	9.95	9.96	9.96	9.96	9.97	9.97	9.97	9.98	0.003500
5.40	3608.40	411511	9.98	9.98	9.99	9.99	9.99	10.00	10.00	10.00	10.01	10.01	0.003500
5.50	3608.50	412469	10.01	10.02	10.02	10.03	10.03	10.03	10.04	10.04	10.04	10.05	0.003500
5.60	3608.60	413427	10.05	10.05	10.06	10.06	10.06	10.07	10.07	10.07	10.08	10.08	0.003500
5.70	3608.70	414385	10.08	10.09	10.09	10.10	10.10	10.10	10.11	10.11	10.11	10.12	0.003500
5.80	3608.80	415343	10.12	10.12	10.13	10.13	10.13	10.14	10.14	10.14	10.15	10.15	0.003500
5.90	3608.90	416301	10.15	10.16	10.16	10.17	10.17	10.17	10.18	10.18	10.18	10.19	0.003500
6.00	3609.00	417259	10.19										

Invert of outlet pipe = 3605.53 feet Elevation values shown in *bold* correspond to surface area measurements.

Elevations above 4.00 feet were added July 2016 by Helton & Williamsen, P.C. by digitizing the 3,608.0- and 3,609.0-foot contours on W. Work's survey drawing.

# Exhibit 2 13CW3060

#### North Gateway Pond 2 Elevation-Area Table City of Lamar

gage	Elevation						Area, ac	res				
(ft)	(ft)	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	Incr
0.50	3600.0	19.40	19.42	19.44	19.47	19.49	19.51	19.53	19.56	19.58	19.60	0.022412
0.60	3600.1	19.62	19.64	19.66	19.69	19.71	19.73	19.75	19.78	19.80	19.82	0.022412
0.70	3600.2	19.85	19.87	19.89	19.92	19.94	19.96	19.98	20.01	20.03	20.05	0.022412
0.80	3600.3	20.07	20.09	20.11	20.14	20.16	20.18	20.20	20.23	20.25	20.27	0.022412
0.90	3600.4	20.29	20,31	20.33	20.36	20.38	20.40	20.42	20.45	20.47	20.49	0.022412
1.00	3600.5	20.52	20.54	20.56	20.59	20.61	20.63	20.65	20.68	20.70	20.72	0.022412
.10	3600.6	20.74	20.76	20.78	20.81	20.83	20.85	20.87	20.90	20.92	20.94	0.022412
1.20	3600.7	20.97	20.99	21.01	21.04	21.06	21.08	21.10	21.13	21.15	21.17	0.022412
1.30	3600.8	21.19	21.21	21.23	21.26	21.28	21.30	21.32	21.35	21.37	21.39	0.022412
.40	3600.9	21.41	21.43	21.45	21.48	21.50	21.52	21.54	21.57	21.59	21.61	0.022412
.50	3601.0	21.64	21.65	21.66	21.67	21.68	21.69	21.71	21.72	21.73	21.74	0.010926
.60	3601.1	21.75	21.76	21.77	21.78	21.79	21.80	21.82	21.83	21.84	21.85	0.010926
.70	3601.2	21.86	21.87	21.88	21.89	21.90	21.91	21.93	21.94	21.95	21.96	0.022412 0.022412 0.022412 0.022412 0.022412 0.022412 0.022412 0.022412 0.022412 0.022412 0.022412 0.010926 0.010926 0.010926 0.010926
.80	3601.3	21.97	21.98	21.99	22.00	22.01	22.02	22.04	22.05	22.06	22.07	0.010926
.90	3601.4	22.08	22.09	22.10	22.11	22.12	22.13	22.15	22.16	22.17	22.18	0.010926
2.00	3601.5	22.18	22.19	22.20	22.21	22.21	22.22	22.23	22.24	22.25	22.26	0.008750
2.10	3601.6	22.27	22.28	22.30	22.31	22.32	22.33	22.35	22.36	22.37	22.38	0.012504
.20	3601.7	22.40	22.41	22.43	22.44	22.45	22.46	22.48	22.49	22.50	22.51	0.012504
.30	3601.8	22.52	22.53	22.55	22.56	22.57	22.58	22.60	22.61	22.62	22.63	0.012504
2.40	3601.9	22.65	22.66	22.68	22.69	22.70	22.71	22.73	22.74	22.75	22.76	0.012504
.50	3602.0	22.77	22.78	22.79	22.80	22.81	22.82	22.83	22.84	22.85	22.87	0.010625
.60	3602.1	22.88	22.89	22.90	22.91	22.92	22.93	22.94	22.95	22.96	22.98	0.010625
2.70	3602.2	22.98	22.99	23.00	23.01	23.02	23.03	23.04	23.05	23.06	23.08	0.010625
2.80	3602.3	23.09	23.10	23.11	23.12	23.13	23.14	23.15	23.16	23.17	23.19	0.010625
2.90	3602.4	23.20	23.21	23.22	23.23	23.24	23.25	23.26	23.27	23.28	23.30	0.010625
3.00	3602.5	23.30	23.31	23.32	23.33	23.34	23.35	23.36	23.37	23.38	23.40	0.010625
8.10	3602.6	23.41	23.42	23.43	23.44	23.45	23.46	23.47	23.48	23.49	23.51	0.010625
3.20	3602.7	23.52	23.53	23.54	23.55	23.56	23.57	23.58	23.59	23.60	23.62	0.010625
3.30	3602.8	23.62	23.63	23.64	23.65	23.66	23.67	23.68	23.69	23.70	23.72	0.010625
8.40	3602.9	23.73	23.74	23.75	23.76	23.77	23.78	23.79	23.80	23.81	23.83	0.010625
3.50	3603.0	23.83	23.84	23.85	23.86	23.87	23.88	23.89	23.90	23.91	23.92	0.010052
3.60	3603.1	23.94	23.95	23.96	23.97	23.98	23.99	24.00	24.01	24.02	24.03	0.010052
3.70	3603.2	24.04	24.05	24.06	24.07	24.08	24.09	24.10	24.11	24.12	24.13	0.010052
3.80	3603.3	24.14	24.15	24.16	24.17	24.18	24.19	24.20	24.21	24.22	24.23	0.010052
3.90	3603.4	24.24	24.25	24.26	24.27	24.28	24.29	24.30	24.31	24.32	24.33	0.010052
4.00	3603.5	24.34	24.35	24.36	24.37	24.38	24.39	24.40	24.41	24.42	24.43	0.010052
4.10	3603.6	24.44	24.45	24.46	24.47	24.48	24.49	24.50	24.51	24.52	24.53	0.010052
4.20	3603.7	24.54	24.55	24.56	24.57	24.58	24.59	24.60	24.61	24.62	24.63	0.010052
4.30	3603.8	24.64	24.65	24.66	24.67	24.68	24.69	24.70	24.71	24.72	24.73	0.010052
4.40	3603.9	24.74	24.75	24.76	24.77	24.78	24.79	24.80	24.81	24.82	24.83	0.010052
4.50	3604.0	24.84			1.1	1.1.1				1.1	1. 2	

Invert of outlet pipe = 3602.80 feet

The bank separating Ponds 2 and 3 was removed forming 1 pond. The breach area was included and the area for the two islands in Pond 3 were deducted. Elevation values shown in *bold* correspond to surface area measurements.

Elevations above 3.50 feet were added July 2016 by Helton & Williamsen, P.C. by digitizing the 3,604.0-foot contour on W. Work's survey drawing.

#### Exhibit D Case No. 17CW3000 Pertinent Information for Determining Depletions Caused by the LAWMA Structures

Structure Name (1)	Owner (2)	Wellhead Depletion Rate (3)	SEO ID No.	Permit No. (5)	Source (6)	DATE F Lagging Method (7)	LED: Do T (gpd /ft) (8)	s (9)	ber 21 X (ft) (10)	, 2017 W (ft) (11)	10:17 AM Boundary Condition (12)	H-I Model Stream Reaches (13)	
	(2)		(+)			(7)			(10)				
Lamar North Gateway Pond No. 1	City of Lamar	100% <sup>A</sup>	6706363	52184 F	Arkansas River Valley Fill Aquifer	Glover	200,000	0.20	57.5	7,300	Alluvial Aquifer	Reach 14	
Lamar North Gateway Pond No. 2	City of Lamar	100% <sup>A</sup>	6706474	(	Arkansas River Valley Fill Aquifer	Glover	200,000	0.20	57.5	7,300	Alluvial Aquifer	Reach 14	
Broyles Well No. 7	Broyles Land & Water LLLP	100% <sup>B</sup>	6705304	13245 RR	Dakota Aquifer	Glover		0.01	2175		Infinite Aquifer		
Potnotes: A) Case No. 02CW181, Exhibit R - Paragraph A.ii. B) Case No. 02CW181, Exhibit R - Paragraphs G and I Control of the the test of t													

#### Footnotes:

DISTRICT COURT, WATER DIVISION 2, COLORADO	DATE FILED: September 28, 2016 858 PM CASE NUMBER: 2013CW3060
Court Address: 501 North Elizabeth Street, Suite 116, Pueblo, CO 81003-2940	
CONCERNING THE APPLICATION FOR WATER RIGHTS OF:	▲ COURT USE ONLY ▲
THE CITY OF LAMAR	
IN PROWERS COUNTY, COLORADO	Case No.: 13CW3060
FINDINGS OF FACT, CONCLUSIONS OF LAW, AN COURT GRANTING APPROVAL OF PLAN F AND RIGHT OF EXCHANC	OR AUGMENTATION

This matter comes before the Water Judge upon the Application for Approval of Plan for Augmentation and Appropriative Right of Exchange ("Application") filed by the City of Lamar. Having considered the pleadings, the stipulations of the parties, the evidence, the comments of the Division Engineer, the contents of the Court file, and being fully advised in the premises, the Water Court does hereby find, conclude, and rule as follows:

### I. FINDINGS OF FACT

### General Findings

1. <u>Applicant</u>. The Applicant is the City of Lamar ("Lamar"), c/o City Administrator, 102 E. Parmenter, Lamar, CO 81052-3299.

2. <u>Filing of Application, Referral and Re-referral</u>. Lamar filed its Application with the District Court, Water Division No. 2, on December 18, 2013. The Water Judge referred this matter to the Water Referee by an Order dated December 20, 2013. An Order dated August 21, 2015, re-referred this matter to the Water Judge.

3. <u>Statements of Opposition</u>. Lower Arkansas Water Management Association ("LAWMA"), Southeastern Colorado Water Conservancy District ("Southeastern District"), Fort Lyon Canal Company, and Five Rivers Ranch Cattle

Feeding, LLC, d/b/a Colorado Beef ("Colorado Beef") timely filed statements of opposition to the Application.

4. <u>Publication and Notice</u>. The Clerk of this Court has caused publication of the Application as provided by statute, and proofs of publication of the Application were filed with this Court. All publication costs have been paid, and all notices of the Application have been given in the manner required by law.

5. <u>Jurisdiction</u>. The Water Court has jurisdiction over the subject matter of this proceeding and over all parties affected hereby, whether they have appeared or not. The land and water rights involved herein are not included within the boundaries of a designated groundwater basin.

6. <u>Stipulations</u>. Lamar has entered into stipulations with the following parties: Southeastern District, Ft. Lyon Canal Company, Colorado Beef and LAWMA. Those stipulations have each been confirmed as orders of this Court.

7. <u>Consultation Report</u>. A Consultation Report of the Division Engineer dated February 28, 2014, was filed with the Water Court pursuant to C.R.S. §37-92-302(4) and has been considered by the Water Court in the entry of this Decree.

### Background and Summary of Application

8. <u>Plan for Augmentation</u>. Lamar acquired approximately 108 acres of land located in the portions of Sections 29 and 30 in Township 22 South, Range 46 West of the 6th P.M. The property acquired by Lamar was formerly a mine site known as Valco Lamar East Pit M-77-572. Upon completion of mining activities on the property, the property has been reclaimed leaving two unlined ponds that intercept and expose groundwater tributary to the Arkansas River. Lamar seeks a plan of augmentation to replace the evaporative depletions caused by the two ponds. The augmentation supply will be Fryingpan-Arkansas Project water, shares in the Fort Bent Ditch Company Lamar changed in Case No. 05CW107-A, and Lamar's sewered return flows, non-sewered return flows, and/or recharged water available for Lamar's use in accordance with the terms and conditions of the decree entered in Case No. 05CW107-A.

9. <u>Appropriative Right of Exchange</u>. Lamar also seeks a conditional appropriative right of exchange from the confluence of Clay Creek and the Arkansas River to the point of depletion of the ponds to the Arkansas River.

### Plan for Augmentation

10. <u>Structures to be augmented</u>. The structures to be augmented under this plan are described as follows:

### A. Lamar North Gateway Park Pond No. 1:

i. <u>Legal Description of Pond:</u> In the NE1/4 of the SE 1/4 of Section 30, Township 22 South, Range 46 West of the 6<sup>th</sup> P.M., approximately 1,840 feet north of the South Section Line and 950 feet west of the East Section Line. The UTM coordinates for this pond are: Northing (UTMy) 4220130 and Easting (UTMx) 708972. (Zone 13).

ii. <u>Source:</u> Exposed groundwater as the result of gravel mining tributary to the Arkansas River.

iii. <u>Surface Area of Pond:</u> 9.25 acres.

## B. Lamar North Gateway Park Pond No. 2<sup>1</sup>:

i. <u>Legal Description:</u> In the SW 1/4 of Section 29, Township 22 South, Range 46 West of the 6<sup>th</sup> P.M., approximately 1,900 feet north of the South Section Line and 1,535 feet east of the West Section Line. The UTM coordinates for this pond are: Northing (UTMy) 4220145 and Easting 709670 (UTMx) (Zone 13).

ii. <u>Source:</u> Exposed groundwater as the result of gravel mining tributary to the Arkansas River.

iii. <u>Surface Area:</u> 23.62 acres.

Collectively, the above structures are referred to as the "Lamar North Gateway Park Ponds." The Lamar North Gateway Park Ponds are shown on the attached Exhibit 1 map.

11. <u>Water Sources for Augmentation</u>. To the extent that the following water sources are not needed to meet Lamar's other augmentation and replacement commitments, including without limitation under the decree entered in Case No.

<sup>&</sup>lt;sup>1</sup> At the time of filing of the Application, Lamar had three ponds that were the subject of this Application. A berm previously separated Ponds No. 2 and 3. During the prosecution of this Application, Lamar has removed a portion of that berm creating one pond, which pond is now collectively Lamar North Gateway Park Pond No. 2.

05CW107-A, the water sources for augmentation for the Lamar North Gateway Park Ponds consist of the following:

A. <u>Lamar's Shares in the Fort Bent Ditch Company</u>. The water rights to be used for augmentation of the Lamar North Gateway Park Ponds include 2,813.6 shares of Fort Bent Ditch Company ("Fort Bent") owned by Lamar, including the associated Fort Bent Article II storage account water stored in John Martin Reservoir. The Fort Bent water rights are decreed as follows:

- i. <u>Appropriation Dates, Priority Numbers and Amounts</u>:
  - a. April 1, 1886, Priority No. 6 for 27.77 c.f.s.
  - b. March 10, 1889, Priority No. 10 for 32.77 c.f.s.
  - c. September 11, 1889, Priority No. 12 for 11.7 c.f.s.
  - d. August 12, 1890, Priority No. 14 for 26.27 c.f.s.
  - e. January 1, 1893, Priority No. 1918-2 for 50 c.f.s.
  - f. December 31, 1900, Priority No. 1918-9 for 80 c.f.s.

ii. <u>Original Decree for Priority Nos. 6, 10, 12 and 14</u>. An unnumbered adjudication titled "In the matter of the Adjudication of Priorities to the use of Water for Irrigation in District Number 67" decreed on July 1, 1895, by the Bent County District Court.

iii. <u>Original Decree for Priority Nos. 1918-2 and 1918-9.</u> An unnumbered adjudication titled "In the Matter of the Adjudication of Water Rights and priorities to the use of Water in Water District Number Sixty-seven, in the State of Colorado" decreed on October 14, 1918, by the Bent County District Court.

iv. <u>Decrees entered in Case Nos. 02CW181 and 05CW107-A</u>. Of Lamar's 2,813.6 shares in the Fort Bent, 923 of the Fort Bent shares were changed by LAWMA in Case No. 02CW181, Water Division 2 (the "LAWMA Decree"). In Case No. 05CW107-A, decreed on June 8, 2015, Lamar changed an additional 1,890.6 shares in the Fort Bent shares of Fort Bent Ditch Company for Lamar's augmentation and replacement uses. Lamar's 2,813.6 shares in the Fort Bent can be used by Lamar as an augmentation source under this Decree pursuant to the terms and conditions of the decrees entered in Case Nos. 02CW181, 05CW107-A and this Decree.

B. <u>Fryingpan-Arkansas Project Water</u>. Project Water is the subject of numerous decrees entered in Water Divisions 2 and 5. As a constituent of Southeastern District, Lamar is entitled to make annual requests for both municipal first-use and return flows from Southeastern District for delivery of Project Water. Subject to Paragraph 26(A) below, Project Water and return flows therefrom may be used as an augmentation source under this Decree, pursuant to the terms of this Decree. The Project water rights are described as follows:

i. <u>West Slope Decrees</u>: The Fryingpan-Arkansas project diverts surface water from the headwaters of Hunter Creek and the Fryingpan River and their tributaries in Pitkin County. The principal water rights were adjudicated by the decrees in Civil Action No. 4613 (District Court, Garfield county) dated June 20, 1958, and August 3, 1959; and were modified by the Decree in Case No. W-829-76 (District Court, Water Division 5) dated November 27, 1979; and were supplemented by the Decree in Case No. 83CW352 (District Court, Water division No. 5) dated May 31, 1985. These water rights have an appropriation date of July 29, 1957. Water diverted under these decrees travels under the Continental Divide through Boustead Tunnel, which empties into Turquoise Reservoir. This water may be stored in Turquoise Reservoir, Twin Lakes Reservoir, and elsewhere, and applied to beneficial use within Southeastern's District boundaries. Because the water is imported from another river basin, it is fully consumable in Water Division 2.

ii. <u>East Slope Decrees</u>: The Fryingpan-Arkansas Project also diverts and stores surface water from the Arkansas River and its tributaries in Lake, Chaffee, Fremont, and Pueblo Counties. The principal water rights were adjudicated by the decrees in Civil Action No. 5141 (District Court, Chaffee County) dated July 9, 1969, and Civil Action No. B-42135 (District Court, Pueblo County) dated June 25, 1962; and were modified and supplemented by the Decree in Case No. 80CW6 (District Court, Water Division 2), dated October 23, 1980. These water rights include storage in Turquoise Reservoir, Twin Lakes Reservoir, Pueblo Reservoir, and elsewhere, with an appropriation date of February 10, 1939, and are expressly decreed for reuse and exchange for beneficial use within Southeastern's District boundaries. Under these decrees, Turquoise Reservoir and Twin Lakes Reservoir may store native water or imported water, directly or by exchange with each other or with Pueblo Reservoir.

Neither description of, reference to, or omission or description of or reference to, Fryingpan-Arkansas structures and water rights of the Southeastern District in this Decree, nor anything else in this Decree will in any way amend, limit or act to the detriment of the decrees for the Southeastern District's water rights.

C. <u>Sewered Waste Water Return Flows</u>. Lamar operates a central wastewater treatment facility for disposal of potable water used for indoor purposes. Lamar's wastewater treatment facility consists of an influent pumping station and three lagoons covering an area of 96.1 acres. The first two lagoons are naturally aspirated, facultative lagoons operating in series. The second lagoon overflows into a third lagoon that is partially covered with phreatophytes. Lamar's wastewater treatment facility is located near the Arkansas River in the Sections 27 and 28, Township 22 South, Range 46 West of the 6th P.M., Prowers County, Colorado. A portion of Lamar's wastewater seeps into the underlying alluvium from all three lagoons and can be used by Lamar as an augmentation source under this Decree pursuant to the terms and conditions of the 05CW107-A Decree and this Decree.

D. <u>Lawn Irrigation Return Flows</u>. A portion of Lamar's water supply is applied to irrigation of residential and commercial lawns and gardens. When applied for such uses, a portion of the water runs off as surface tail water and is intercepted by storm drains, which discharge to Willow Creek, other tributary channels or the Arkansas River. The remaining portion percolates through the root zone to the groundwater aquifer. Lawn irrigation return flows from Lamar's potable and non-potable water systems can be claimed and used by Lamar as a replacement credit and augmentation source under this Decree pursuant to the terms and conditions of the 05CW107-A Decree and this Decree.

12. Quantification of Depletions. Lamar seeks approval of a plan for augmentation to replace the depletions caused by the evaporation of water from the Lamar North Gateway Park Ponds. The maximum surface area of the Lamar North Gateway Park Ponds is 32.87 acres, which is at the elevation of the outlet pipes from the Lamar North Gateway Park Ponds to the Arkansas River. 7.0 acres of this exposed surface water existed as of December 30, 1980. Therefore, pursuant to C.R.S. § 37-90-137(11)(a)(II)(b)(2013), a maximum of 25.87 acres of the 32.87 acres of exposed surface area require replacement of stream depletions due to evaporation from the ponds. Lamar's water resource engineers have calculated that the annual net evaporation rate of the ponds is 4.11 annual acre feet per acre of exposed water surface area. Accordingly, the Lamar North Gateway Park Ponds will cause a maximum depletion of 106.33 annual acre-feet to the Arkansas River. Elevation-area tables for the Lamar North Gateway Park Ponds are attached hereto as Exhibit 2. Lamar North Gateway Park Ponds have a staff gauge installed that can be used by Lamar to determine the water elevation in each pond. Monthly losses to evaporation from the ponds will be calculated based upon the average exposed surface on a monthly basis as determined (in acres) by observations of staff gage readings in each of the ponds at the beginning of each month and at the end of each month. Exposed surface area for each pond shall be computed by using the applicable elevation-area table for each pond. Evaporation losses from the Lamar North Gateway Park Ponds shall calculated by multiplying the combined monthly average exposed surface area (in acres) for the Lamar North Gateway Park Ponds, less 7 acres to

account for the surface area exposed prior to December 30, 1980, by the rate of net evaporation for the applicable month set forth in the table below and the calculated evaporation losses shall be replaced by Lamar pursuant to the terms and conditions of this decree.

Month	Net Evaporation Rate (ft.)	Maximum Pond Evaporation To Be Replaced (acre feet)					
January	0.13	3.36					
February	0.15	3.88					
March	0.22	5.69					
April	0.37	9.57					
Мау	0.46	11.90					
June	0.59	15.26					
July	0.62	16.04					
August	0.55	14.23					
September	0.43	11.12					
October	0.30	7.76					
November	0.17	4.40					
December	0.12	3.10					

13. <u>Timing of Depletions and Replacement</u>. The Lamar North Gateway Park Ponds are located an average distance of 57.5 feet from the Arkansas River. Lamar's water resource engineer performed a Glover analysis on the Lamar North Gateway Park Ponds, using an aquifer transmissivity of 200,000 gpd/ft and a specific yield of 0.20. The result of the analysis shows that 96.8 percent of depletions to the Arkansas River resulting from pond evaporation occur within the same month. Therefore, Lamar will return the full amount of that month's replacement water to the Arkansas River in the same month as the depletion.

### Appropriative Right of Exchange

14. <u>Background and Request for Exchange</u>. Lamar seeks a conditional appropriative right of exchange of the recharge accretions available pursuant to the recharge plan decreed in Case No. 05CW107-A that accrue to the Arkansas River to the Lamar North Gateway Park Ponds' furthest upstream point of depletion to the Arkansas River.

15. <u>Water to Be Exchanged</u>. Lamar's 2,813.6 Fort Bent shares and Project water delivered to the Recharge Facilities that accrues to the Arkansas River and available to Lamar pursuant to the terms and conditions of the decree entered in Case No. 05CW107-A.

16. <u>Reach of Exchange</u>. The lower terminus (exchange from point) of Lamar's conditional exchange is the confluence of Clay Creek and the Arkansas River located in the NE1/4 of Section 36, Township 22 South, Range 46 West of the 6th P.M., Prowers County, Colorado. The upper terminus (exchange to point) of Lamar's conditional exchange is Lamar North Gateway Park Pond No. 1's furthest upstream point of depletion to the Arkansas River located in the NE1/4 of the SE1/4 of Section 30, Township 22 South, Range 46 West of the 6th P.M. The UTM coordinates for this point are: Northing (UTMy) 4220230 and Easting (UTMx) 708855 (Zone 13).

17. <u>Use of Exchange Water</u>. Consistent with the decreed uses of the source of substitute supply, Lamar will use the exchanged water for augmentation of evaporative depletions from the Lamar North Gateway Park Ponds.

18. <u>Appropriation Date</u>. The appropriation date of this exchange is April 30, 2013, which was the date that the City of Lamar acquired the Lamar North Gateway Park Ponds confirming its intent to initiate this water right and authorizing the appropriative right of exchange, all with the intent to acquire and appropriate water for beneficial use as set forth herein.

19. <u>Exchange Rate</u>. The maximum exchange rate shall be 0.261 c.f.s., conditional, which is the maximum daily rate of depletion of the Lamar North Gateway Park Ponds.

### II. CONCLUSIONS OF LAW

20. <u>Jurisdiction</u>. This Application was filed with the Water Clerk, Water Division 2, pursuant to C.R.S. § 37-92-302(1)(a), and this Court has exclusive jurisdiction over these proceedings. C.R.S. § 37-92-302(1)(a) and (5), and § 37-92-305.

21. <u>Water Rights Contemplated by Law</u>. Lamar's request for approval of a plan for augmentation, and for an appropriative right of exchange is contemplated and authorized by law. Lamar has fulfilled all legal requirements including C.R.S. §§ 37-92-302 and 37-92-305 for the requested decree for the water right and its related uses as described above. The plan for augmentation requested in the Application and described herein complies with the applicable law and meets the statutory criteria for such a plan as set forth in C.R.S. §§ 37-92-103(9), -302(1) and (2), and -305(3) and (5).

22. <u>Retained Jurisdiction</u>. No retention of jurisdiction on the question of injury to other vested water rights is required for an appropriative right of exchange. <u>City of Florence v. Board of Water Works of the City of Pueblo</u>, 793 P.2d 148 (Colo. 1990).

### III. DECREE

NOW THEREFORE, IT IS HEREBY ORDERED, ADJUDGED AND DECREED AS FOLLOWS:

23. <u>Incorporation of Findings and Conclusions</u>. All of the foregoing Findings of Fact and Conclusions of Law are incorporated by reference herein, and are to be considered a part of the decretal portion hereof as though set forth in full.

24. <u>Approval of Application</u>. The Application for plan for augmentation and appropriative right of exchange is hereby approved, subject to the terms and conditions of this Decree.

25. <u>No Material Injury</u>. The Court has considered the depletions from the Lamar North Gateway Park Ponds in quantity and in time, the amount and timing of augmentation water which will be provided by Lamar, and the existence, if any, of injury to any owner of or person entitled to use water under a vested water right or a decreed conditional water right. The Court determines that, so long as this augmentation plan is operated in accordance with the terms and conditions of this Decree, the timing, quantity, and location of replacement water and the protective terms outlined herein are sufficient to protect the vested rights of other water users and will not result in injury to other vested Colorado water rights nor violate the Arkansas River Compact.

26. <u>Terms and Conditions</u>.

A. <u>Use of Project water</u>. The Southeastern District allocates Project water and return flows annually based on its principles, policies, rules, and regulations. Southeastern District's allocation and Lamar's purchase and use of Project water and return flows therefrom will be pursuant to and subject to the above-referenced decrees for the Fryingpan-Arkansas Project, and to all lawful rules, regulations, policies, procedures, contracts, charges and terms as those may be lawfully determined by the Southeastern District from time to time. Any decree entered in this case will not give Lamar any rights to use Fryingpan-Arkansas Project structures, or any rights of ownership or rights to purchase or receive allocations of Project water or return flows therefrom, but does not alter any existing rights, Lamar has to purchase and receive an allocation of Project water or Project return flows.

Project water or Project water return flows therefrom may be used by Lamar hereunder only if, and to the extent such water is allocated by Southeastern District to Lamar, and is purchased from Southeastern District. Lamar will only utilize Project water or return flows therefrom under this Decree within Southeastern District's boundaries, as

a supplemental supply for the uses decreed herein. Lamar's use of such water under this Decree will be only to augment or replace depletions (including exchange of Project water for such uses) resulting from Lamar's beneficial use of water within Southeastern District's boundaries.

Unless otherwise agreed to by the Southeastern District and Lamar, Lamar's use of municipal Project water to augment Lamar's depletions hereunder must first be attributed to municipal Project water return flows available to Lamar. If sufficient municipal Project water return flows are not available to Lamar in time, place, or amount for Lamar to make its augmentation obligations hereunder, then Lamar may use its allocated municipal Project water for augmentation purposes.

Lamar's municipal allocation of Project water is currently released from Pueblo Reservoir and delivered to the headgate of the Fort Bent Ditch for diversion and delivery to Lamar. The Arkansas Valley Conduit, an original component of the Fryingpan-Arkansas Project, is contemplated to terminate at Lamar's potable water tanks. Until construction is completed on the Arkansas Valley Conduit, Lamar will account for the unconsumed portion of Project water due to conveyance loss in the Fort Bent Ditch and the unconsumed portion of transit losses between John Martin Dam and the Fort Bent Ditch headgate and take credit for such water for augmentation and replacement purposes. The credit Lamar may take for the unconsumed portion of transit losses on Lamar's Project Water between John Martin Dam and the Fort Bent Ditch headgate for augmentation and replacement purposes shall be determined by the Division Engineer. Lamar also preserves its claim to the unconsumed portion of transit losses between Pueblo Reservoir and John Martin Reservoir.

B. <u>Use of Fort Bent Shares</u>. The historical consumptive use findings decreed in Case Nos. 02CW181 and 05CW107-A are binding as a matter of *res judicata*. <u>Williams v. Midway Ranches Property Owners Association, Inc.</u>, 938 P.2d 515 (Colo. 1997). There have been no material changed circumstances since the entry of the decrees in Case Nos. 02CW181 and 05CW107-A to modify the historical consumptive use determinations and they continue to hold true to the date of this Decree. Lamar's use of its Fort Bent shares to augment depletions hereunder shall be pursuant to the terms and conditions of the decrees entered in Case Nos. 02CW181 and 05CW107-A. Those shares not needed by Lamar to meet its augmentation and replacement obligations under the 05CW107-A Decree may be used by Lamar as an augmentation supply within the plan for augmentation decreed in this case. This Decree does not alter any other element, provision, finding, obligation, term, or condition of the decrees entered in Case Nos. 02CW181 and 05CW107-A.

C. <u>Claiming of Return Flows</u>. Lamar's use of sewered and non-sewered return flows for augmentation purposes under this Decree shall be in accordance with the terms and conditions decreed in Case No. 05CW107-A.

Timing and Operation of Exchange. The exchange decreed herein D. shall not exceed the rate and volume of Lamar's accretions to the Arkansas River pursuant to the operation of the recharge plan decreed in Case No. 05CW107-A. The operation of the exchange will be limited in time to periods when the water rights to be exchanged are available at the exchange-from point, and further limited to the rate and volume of the source of substitute supply legally and physically available for Lamar's use at the exchange-from point. The exchanges may be operated only when there is a continuous live stream maintained between the points of the initiation of the exchanges and the upstream terminus of the exchange. If a live stream ceases to exist at any point between the exchange from point and the exchange to point while the exchange is being operated, the operation of the exchange shall cease immediately. The exchange may only be operated when and to the extent that other vested and decreed water rights senior to this exchange within the exchange reach are not deprived of water to which they would have been entitled in the absence of the operation of the exchange. Prior to the operation of this exchange, Lamar shall coordinate with and receive the approval of the water commissioner or Division Engineer in order to assure that the requirements of this Decree are satisfied. The exchange will occur contemporaneous with exchange potential. Exchange potential shall be determined by the water commissioner or Division Engineer in a timely manner as part of Lamar's required coordination with the water commissioner or Division Engineer.

E. <u>Use of the Lamar North Gateway Park Ponds.</u> Lamar intends to use the Lamar North Gateway Park Ponds for recreational, wildlife and piscatorial uses. As these uses are non-consumptive and Lamar is replacing 100% of the evaporative depletions associated with the ponds, a separate augmentation plan is not needed by Lamar to utilize the ponds for such uses. Lamar can utilize the Lamar North Gateway Park Ponds for non-consumptive uses of recreational, wildlife and piscatorial so long as it replaces 100% of the evaporative depletions from the ponds. Lamar shall not use the ponds for any irrigation to establish or maintain vegetation around the Lamar North Gateway Park Ponds absent further administrative approval or judicial decree. Nothing in this decree, however, shall prevent Lamar from irrigating around the Lamar North Gateway Park Ponds to establish and maintain vegetation with other legally decreed water rights owned by Lamar for such purposes.

F. <u>Hyde Canal</u>. The Hyde Mutual Ditch Company operates the Hyde Canal, which has its surface point of diversion between the upper and lower termini of Lamar's exchange decreed herein. Lamar shall not operate the exchange decreed

herein at times when the surface diversion decreed to the Hyde Canal is sweeping the Arkansas River.

Curtailment. Pursuant to C.R.S. § 37-92-305(8), the State Engineer, the 27. Division Engineer, and/or the Water Commissioner shall curtail all out-of-priority depletions which are not replaced pursuant to the terms and conditions of this Decree to prevent injury to vested water rights. To the extent that Lamar or one of its successors or assigns is ever unable to provide the quantity of replacement water required to replace depletions under the terms and conditions of this Decree, then the Lamar North Gateway Park Ponds shall not be entitled to operate under the protection of this plan, and shall be subject to administration and curtailment in accordance with the laws, rules, and regulations of the State of Colorado. Because no water rights are decreed to the Lamar North Gateway Park Ponds, the evaporative depletions from the ponds will be out of priority and therefore required to be replaced at all times except when the State Engineer determines that there are unusable flows passing the stateline and all Colorado water rights located downstream of the ponds are satisfied. For purposes of this decree, the minimum criteria used by the State Engineer for determining when there are unusable flows passing the stateline will be Appendix J.2, paragraph 2, of the stipulated Kansas v. Colorado decree, as it may be modified in the future, or a subsequent agreement between Kansas and Colorado.

28. <u>Quality of Substituted Supply</u>. It is established that the substituted water provided under this plan for augmentation and for Lamar's appropriative right of exchange is of a quality and quantity so as to meet the requirements for which the water of senior appropriators has normally been used, and such substituted water shall be accepted by the senior appropriators in substitution of the water derived by the exercise of Lamar's decreed rights. Wherever the substituted water is supplied by Lamar as provided herein, Lamar may operate its exchanges and take an equivalent amount of water for beneficial use within the exchange reach without impairing the availability of water lawfully diverted by senior appropriators and without material injury to any owner of or person entitled to use water under a vested water right.

29. <u>Elements for the Appropriation of a Conditional Water Right</u>. Lamar has completed all of the elements necessary for the appropriation of a conditional water right, including: (a) Lamar has formed the intent to appropriate water; (b) Lamar has performed overt acts coincidental with this intent to manifest its intent to appropriate water to beneficial use and to demonstrate the taking of a substantial step toward applying water to beneficial use; and, (c) these acts were of such a nature as to provide interested third parties with notice of the nature and extent of the proposed diversion and the consequent demand upon the river system. The waters to be exchanged can and will be diverted, stored, or otherwise captured, possessed or controlled and will be beneficially

used. The proposed conditional water right can and will be completed with diligence within a reasonable period of time.

30. <u>Additional Augmentation Water</u>. Pursuant to C.R.S. § 37-92-305(8), Lamar may add additional and alternative sources for replacement in this plan for augmentation after entry of this Decree if such sources are decreed or have been administratively approved for such use. As contemplated by C.R.S. 37-92-305(8)(c), this paragraph sets forth the procedures under which these sources may be used in this plan for augmentation, but not as sources of substitute supply for the exchange decreed herein. These procedures are adequate to prevent injury to other water rights that might otherwise result from the addition of these sources to this plan for augmentation.

Α. Additional water rights separately decreed or lawfully available for augmentation use. If a water right is decreed or lawfully available for augmentation or replacement use and not already approved for such use under this Decree, Lamar shall give at least forty-five days advance written Notice of Use of Water Right for Augmentation to the Court, the Division Engineer, and all Objectors herein ("Notice"), which Notice shall describe (a) the water right by name and decree if any; (b) the annual and monthly amount of water available to Lamar from the water right; (c) the location or locations at which the water will be delivered to the stream; (d) evidence that Lamar owns or controls the water right to be added and that the claimed amount of water will not be used by another person or entity; and (e) the manner in which Lamar will account for use of the augmentation credits. If any person wishes to object to the addition of the noticed water rights to this plan for augmentation, that person shall file a written objection with the Court within forty-five days after the date Lamar gave the Notice. If no objection is so filed, then Lamar may use the noticed water rights in this plan for augmentation in the manner stated in the Notice without further action by the Court. If an objection is so filed, then Lamar may not use the noticed water rights until the Court determines whether and under what terms and conditions necessary to prevent injury to vested water rights and decreed conditional rights the noticed water rights may be used in this plan for augmentation.

B. <u>Additional water rights – temporary administrative approval</u>. If a water right is not decreed or otherwise lawfully available for augmentation or replacement use and Colorado statutes or other governing authority provide a mechanism for using such water right without the need of a decree, Lamar shall provide written notice to the Objectors herein of its request for approval of the State Engineer pursuant to C.R.S. § 37-92-308, C.R.S. § 37-92-309, or other applicable statute. Such notice shall be in addition to any notice required by the applicable statute. Lamar may use such water rights in this plan for augmentation upon the State Engineer's approval of the underlying administrative application for the term of such approval, unless such approval is reversed or modified on appeal or under retained jurisdiction.

C. <u>Retained jurisdiction</u>. The Court retains jurisdiction perpetually to add new augmentation water to this plan for augmentation and to resolve disputes and objections under this paragraph 30, including but not limited to claims of injury that relate to Lamar's use of additional or alternative augmentation sources in this plan for augmentation pursuant to C.R.S. § 37-92-305(8) and the procedure described above. In any such proceeding, Lamar shall bear the burden of demonstrating non-injury from the use of any additional augmentation sources.

Accounting. Lamar will maintain measurement and accounting for the 31. operation of the augmentation plan and exchange of water rights on a daily basis and will prepare and provide monthly accounting forms to the Division Engineer. Lamar's accounting for this decree will be integrated into Lamar's accounting under the 05CW107-A Decree and shall include the total augmentation supply available to Lamar under the 05CW107-A Decree, Lamar's total augmentation obligations met under the 05CW107-A Decree, the remaining augmentation supply available to Lamar for use under this Decree, Lamar's total augmentation obligations met under this Decree, the amount of all deliveries from LAWMA's augmentation station, and Lamar's portion of deliveries from LAWMA's augmentation station. The accounting form shall be updated to include a column tracking the river call from downstream Colorado water rights and a column for tracking whether there are unusable flows passing the stateline if Lamar desires to not replace the evaporative depletions from the ponds during times when there is no call from any downstream Colorado water rights and there are unusable flows passing the stateline.

32. <u>Measuring Devices</u>. Lamar shall install, maintain, and operate such meters, measuring devices, or other structures as are reasonably required by the Division Engineer to implement and administer the Decree, and the plan approved herein.

33. <u>Retained Jurisdiction</u>. Pursuant to the provisions of C.R.S. § 37-92-304(6), the plan for augmentation shall be subject to the reconsideration of this Court on the question of material injury to vested water rights of others for a period of five (5) years from the date of entry of this decree. Any party who has participated in this case as an objector may petition the Court to invoke its retained jurisdiction. Any such party seeking to invoke the Water Court's retained jurisdiction shall file a verified petition with the Court setting forth with particularity the factual basis for requesting the Court to reconsider material injury to petitioner's vested water rights associated with the operation of this Decree. The party filing the petition shall have the burden of proof of going forward to establish a prima facie case based on the facts alleged in the petition. If the Court finds those facts to be established, Lamar shall thereupon have the burden of proof to show: a) that the petitioner is not material injury to the petitioner; or, c) that any term or condition proposed by Lamar in response to the petition does avoid material injury to the

petitioner. The Division of Water Resources as a petitioner shall be entitled to assert material injury to the vested water rights of others. If no such petition is filed within the five year period and the retained jurisdiction period is not extended by the Water Court in accordance with the provisions of the statute, this Decree shall become final under its own terms. The expiration of the period of retained jurisdiction shall not limit the rights of owners of vested water rights to seek enforcement of the terms of this Decree, or to seek other modifications to the administration and accounting procedures of this Decree (as opposed to the substantive provisions of the Decree) as necessary to prevent any material injury to vested water rights that results from a change in the manner of administration of water rights on Arkansas River.

34. <u>Diligence</u>. As to the conditional water right awarded herein, and pursuant to C.R.S. § 37-92-301(4)(a), Lamar shall file an application for a finding of reasonable diligence every sixth year after the calendar date in which this conditional water right is hereby decreed or a subsequent diligence decree issued, and if not so filed, unless an absolute decree is issued, this conditional water right shall be considered abandoned. Lamar shall, during the month of September 2022, file an application for a finding of reasonable diligence herein unless prior to that time Lamar shall have made an application to make absolute the conditional water rights granted herein.

35. <u>Transfer of Conditional Water Rights</u>. Pursuant to Rule 9 of the Uniform Local Rules for all State Water Court Divisions, upon the sale or transfer of any conditional water right, the transferee shall file with the Clerk of this Court a notice of transfer which shall state: a) the title and case number of the case under which the conditional decree was issued; b) the description of the conditional water right transferred; c) the name of the transferor; d) the name and address of the transferee; and e) a true and correct copy of the recorded deed. Further, the owner of this conditional water right shall notify the Clerk of this Court of any change in mailing address. The Clerk of this Court shall place any notice of transfer or change of address in this case file, and in the case file in which this Court first made a finding of reasonable diligence.

36. <u>Priority</u>. The priority decreed for this appropriative right of exchange is for a filing made to the Water Court in the year of 2013 and shall be administered as having been filed in that year, and shall be junior to all priorities awarded in previous years. As between other water rights filed in this same calendar year, priorities shall be determined by historical dates of appropriation and not administered by the date of entry of this Decree.

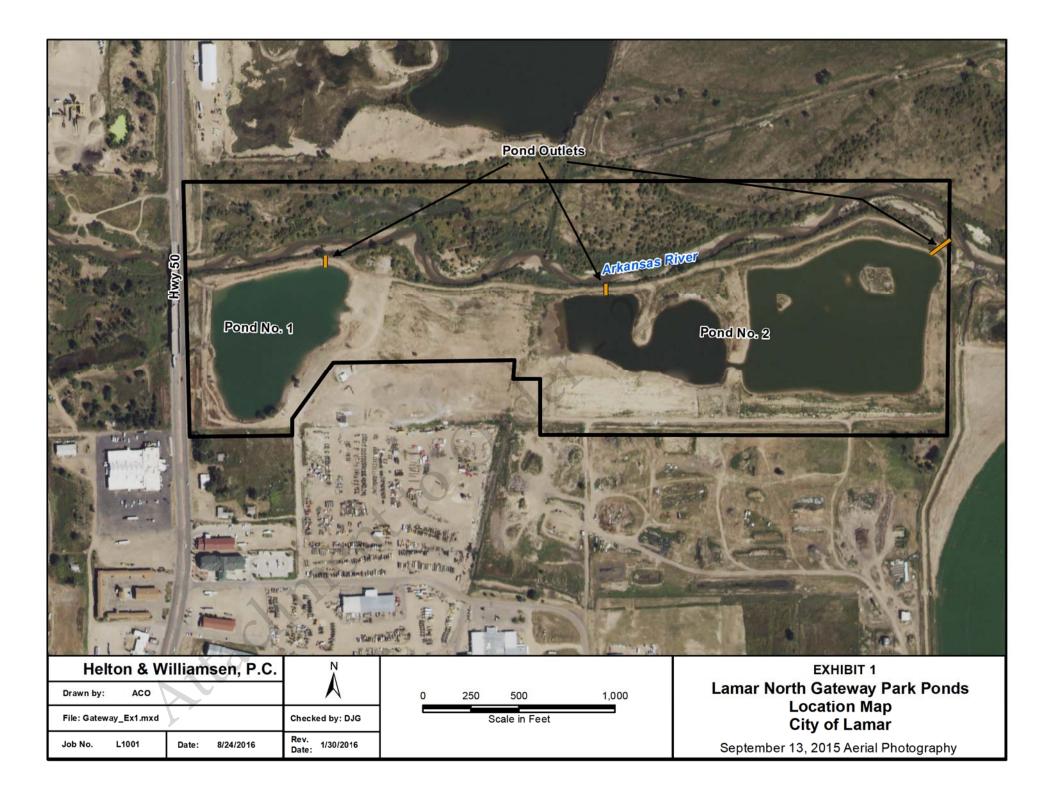
37. <u>No Precedent</u>. This Decree is the result of substantial negotiations and settlement discussions between the parties. Its terms are based on the specific facts and circumstances of this case and compromises by the parties. By stipulation to entry of this Decree, no party in this case intends that it become precedent to resolve issues in any

other case, and all parties reserve their rights to challenge the terms and conditions to be applied to any other Water Court application.

38. Copies of this Decree when entered by the Court shall be mailed to the parties as required by statute.

DATED THIS 28<sup>th</sup> day of September, 2016.

BY THE COURT: VARRY C/SCHWARTZ, WATER JUDGE WATER DIVISION 2



#### North Gateway Pond 1 Elevation-Area Table **City of Lamar**

								Area, a	cres					
Staff	Elevation		0.00	0.04	0.00		0.04			0.07	0.00	0.00		
gage (ft)	(ft)	Area (ft2)	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	Incr	
1.00	3604.00	386791	8.88	8.88	8.88	8.89	8.89	8.89	8.90	8.90	8.90	8.90	0.002648	
1.10	3604.10	387944.3	8.91	8.91	8.91	8.91	8.92	8.92	8.92	8.92	8.93	8.93	0.002648	
1.20	3604.20	389097.6	8.93	8.94	8.94	8.94	8.94	8.95	8.95	8.95	8.95	8.96	0.002648	
1.30	3604.30	390250.9	8.96	8.96	8.96	8.97	8.97	8.97	8.97	8.98	8.98	8.98	0.002648	
1.40	3604.40	391404.2	8.99	8.99	8.99	8.99	9.00	9.00	9.00	9.00	9.01	9.01	0.002648	
1.50	3604.50	392557.5	9.01	9.01	9.02	9.02	9.02	9.03	9.03	9.03	9.03	9.04	0.002648	
1.60	3604.60	393710.8	9.04	9.04	9.04	9.05	9.05	9.05	9.05	9.06	9.06	9.06	0.002648	
1.70	3604.70	394864.1	9.06	9.07	9.07	9.07	9.08	9.08	9.08	9.08	9.09	9.09	0.002648	
1.80	3604.80	396017.4	9.09	9.09	9.10	9.10	9.10	9.10	9.11	9.11	9.11	9.12	0.002648	
1.90	3604.90	397170.7	9.12	9.12	9.12	9.13	9.13	9.13	9.13	9.14	9.14	9.14	0.002648	
2.00	3605.00	398324	9.14	9.15	9.15	9.15	9.15	9.15	9.15	9.16	9.16	9.16	0.001589	1
2.10	3605.10	399016	9.16	9.16	9.16	9.16	9.17	9.17	9.17	9.17	9.17	9.17	0.001589	
2.20	3605.20	399708	9.18	9.18	9.18	9.18	9.19	9.19	9.19	9.19	9.19	9.20	0.002287	
2.30	3605.30	400704.38	9.20	9.20	9.20	9.21	9.21	9.21	9.21	9.21	9.22	9.22	0.002287	
2.40	3605.40	401700.75	9.22	9.22	9.23	9.23	9.23	9.23	9.24	9.24	9.24	9.24	0.002287	
2.50	3605.50	402697.13	9.24	9.25	9.25	9.25	9.25	9.26	9.26	9.26	9.26	9.27	0.002287	~N30k
2.60	3605.60	403693.5	9.27	9.27	9.27	9.27	9.28	9.28	9.28	9.28	9.29	9.29	0.002287	
2.70	3605.70	404689.88	9.29	9.29	9.29	9.30	9.30	9.30	9.30	9.31	9.31	9.31	0.002287	
2.80	3605.80	405686.25	9.31	9.32	9.32	9.32	9.32	9.32	9.33	9.33	9.33	9.33	0.002287	
2.90	3605.90	406682.63	9.34	9.34	9.34	9.34	9.35	9.35	9.35	9.35	9.35	9.36	0.002287	
3.00	3606.00	407679	9.36	9.36	9.36	9.37	9.37	9.37	9.37	9.37	9.38	9.38	0.002199	
3.10	3606.10	408637	9.38	9.38	9.39	9.39	9.39	9.39	9.39	9.40	9.40	9.40	0.002199	
3.20	3606.20	409595	9.40	9.41	9.41	9.41	9.41	9.41	9.42	9.42	9.42	9.42	0.002199	
3.30	3606.30	410553	9.43	9.43	9.43	9.43	9.43	9.44	9.44	9.44	9.44	9.44	0.002199	
3.40	3606.40	411511	9.45	9.45	9.45	9.45	9.46	9.46	9.46	9.46	9.46	9.47	0.002199	
3.50	3606.50	412469	9.47	9.47	9.47	9.48	9.48	9.48	9.48	9.48	9.49	9.49	0.002199	
3.60	3606.60	413427	9.49	9.49	9.50	9.50	9.50	9.50	9.50	9.51	9.51	9.51	0.002199	
3.70	3606.70	414385	9.51	9.52	9.52	9.52	9.52	9.52	9.53	9.53	9.53	9.53	0.002199	
3.80	3606.80	415343	9.53	9.54	9.54	9.54	9.54	9.55	9.55	9.55	9.55	9.55	0.002199	
3.90	3606.90	416301	9.56	9.56	9.56	9.56	9.57	9.57	9.57	9.57	9.57	9.58	0.002199	
4.00	3607.00	417259	9.58	9.58	9.58	9.59	9.59	9.59	9.59	9.60	9.60	9.60	0.002610	
4.10	3607.10	408637	9.61	9.61	9.61	9.61	9.62	9.62	9.62	9.62	9.63	9.63	0.002610	
4.10	3607.10	408637	9.63	9.63	9.64	9.64	9.64	9.62	9.62	9.65	9.65	9.65	0.002610	
4.20	3607.20	409595	9.63	9.66	9.66	9.64	9.64	9.64	9.65	9.65	9.65	9.65	0.002610	
													0.002610	
4.40	3607.40	411511	9.68	9.69	9.69	9.69	9.69	9.70	9.70	9.70	9.70	9.71		
4.50	3607.50	412469 413427	9.71	9.71	9.71	9.72	9.72	9.72	9.73	9.73	9.73	9.73	0.002610	
4.60	3607.60		9.74	9.74	9.74	9.74	9.75	9.75	9.75	9.75	9.76	9.76	0.002610	
4.70	3607.70	414385	9.76	9.76	9.77	9.77	9.77	9.77	9.78	9.78	9.78	9.79	0.002610	
4.80	3607.80	415343	9.79	9.79	9.79	9.80	9.80	9.80	9.80	9.81	9.81	9.81	0.002610	
4.90	3607.90	416301	9.81	9.82	9.82	9.82	9.82	9.83	9.83	9.83	9.83	9.84	0.002610	
5.00	3608.00	417259	9.84	9.84	9.85	9.85	9.85	9.86	9.86	9.86	9.87	9.87	0.003500	4
5.10	3608.10	408637	9.87	9.88	9.88	9.89	9.89	9.89	9.90	9.90	9.90	9.91	0.003500	
5.20	3608.20	409595	9.91	9.91	9.92	9.92	9.92	9.93	9.93	9.93	9.94	9.94	0.003500	1
5.30	3608.30	410553	9.94	9.95	9.95	9.96	9.96	9.96	9.97	9.97	9.97	9.98	0.003500	
5.40	3608.40	411511	9.98	9.98	9.99	9.99	9.99	10.00	10.00	10.00	10.01	10.01	0.003500	
5.50	3608.50	412469	10.01	10.02	10.02	10.03	10.03	10.03	10.04	10.04	10.04	10.05	0.003500	
5.60	3608.60	413427	10.05	10.05	10.06	10.06	10.06	10.07	10.07	10.07	10.08	10.08	0.003500	
5.70	3608.70	414385	10.08	10.09	10.09	10.10	10.10	10.10	10.11	10.11	10.11	10.12	0.003500	
5.80	3608.80	415343	10.12	10.12	10.13	10.13	10.13	10.14	10.14	10.14	10.15	10.15	0.003500	
5.90	3608.90	416301	10.15	10.16	10.16	10.17	10.17	10.17	10.18	10.18	10.18	10.19	0.003500	
6.00	3609.00	417259	10.19											

Invert of outlet pipe = 3605.53 feet Elevation values shown in **bold** correspond to surface area measurements.

Elevations above 4.00 feet were added July 2016 by Helton & Williamsen, P.C. by digitizing the 3,608.0- and 3,609.0-foot contours on W. Work's survey drawing.

# Exhibit 2 13CW3060

#### North Gateway Pond 2 Elevation-Area Table City of Lamar

gage	Elevation						Area ac	00				]	
(ft)	(ft)	0.00	0.01	0.02	0.03	0.04	Area, act 0.05	0.06	0.07	0.08	0.09	Incr	
0.50	3600.0	19.40	19.42	19.44	19.47	19.49	19.51	19.53	19.56	19.58	19.60	0.022412	
0.60	3600.1	19.62	19.64	19.66	19.69	19.71	19.73	19.75	19.78	19.80	19.82	0.022412	
0.70	3600.2	19.85	19.87	19.89	19.92	19.94	19.96	19.98	20.01	20.03	20.05	0.022412	
0.80	3600.3	20.07	20.09	20.11	20.14	20.16	20.18	20.20	20.23	20.25	20.27	0.022412	
0.90	3600.4	20.29	20.31	20.33	20.36	20.38	20.40	20.42	20.45	20.47	20.49	0.022412	
1.00	3600.5	20.52	20.54	20.56	20.59	20.61	20.63	20.65	20.68	20.70	20.72	0.022412	
1.10	3600.6	20.74	20.76	20.78	20.81	20.83	20.85	20.87	20.90	20.92	20.94	0.022412	
1.20	3600.7	20.97	20.99	21.01	21.04	21.06	21.08	21.10	21.13	21.15	21.17	0.022412	
1.30	3600.8	21.19	21.21	21.23	21.26	21.28	21.30	21.32	21.35	21.37	21.39	0.022412	
1.40	3600.9	21.41	21.43	21.45	21.48	21.50	21.52	21.54	21.57	21.59	21.61	0.022412	
1.50	3601.0	21.64	21.65	21.66	21.67	21.68	21.69	21.71	21.72	21.73	21.74	0.010926	
1.60	3601.1	21.75	21.76	21.77	21.78	21.79	21.80	21.82	21.83	21.84	21.85	0.010926	13
1.70	3601.2	21.86	21.87	21.88	21.89	21.90	21.91	21.93	21.94	21.95	21.96	0.010926	N306
1.80	3601.3	21.97	21.98	21.99	22.00	22.01	22.02	22.04	22.05	22.06	22.07	0.010926	
1.90	3601.4	22.08	22.09	22.10	22.11	22.12	22.13	22.15	22.16	22.17	22.18	0.010926	$\mathcal{I}$
2.00	3601.5	22.18	22.19	22.20	22.21	22.21	22.22	22.23	22.24	22.25	22.26	0.008750	
2.10	3601.6	22.27	22.28	22.30	22.31	22.32	22.33	22.35	22.36	22.37	22.38	0.012504	
2.20	3601.7	22.40	22.41	22.43	22.44	22.45	22.46	22.48	22.49	22.50	22.51	0.012504	
2.30	3601.8	22.52	22.53	22.55	22.56	22.57	22.58	22.60	22.61	22.62	22.63	0.012504	
2.40	3601.9	22.65	22.66	22.68	22.69	22.70	22.71	22.73	22.74	22.75	22.76	0.012504	
2.50	3602.0	22.77	22.78	22.79	22.80	22.81	22.82	22.83	22.84	22.85	22.87	0.010625	
2.60	3602.1	22.88	22.89	22.90	22.91	22.92	22.93	22.94	22.95	22.96	22.98	0.010625	
2.70	3602.2	22.98	22.99	23.00	23.01	23.02	23.03	23.04	23.05	23.06	23.08	0.010625	
2.80	3602.3	23.09	23.10	23.11	23.12	23.13	23.14	23.15	23.16	23.17	23.19	0.010625	
2.90	3602.4	23.20	23.21	23.22	23.23	23.24	23.25	23.26	23.27	23.28	23.30	0.010625	
3.00	3602.5	23.30	23.31	23.32	23.33	23.34	23.35	23.36	23.37	23.38	23.40	0.010625	
3.10	3602.6	23.41	23.42	23.43	23.44	23.45	23.46	23.47	23.48	23.49	23.51	0.010625	
3.20	3602.7	23.52	23.53	23.54	23.55	23.56	23.57	23.58	23.59	23.60	23.62	0.010625	
3.30	3602.8	23.62	23.63	23.64	23.65	23.66	23.67	23.68	23.69	23.70	23.72	0.010625	
3.40	3602.9	23.73	23.74	23.75	23.76	23.77	23.78	23.79	23.80	23.81	23.83	0.010625	
3.50	3603.0	23.83	23.84	23.85	23.86	23.87	23.88	23.89	23.90	23.91	23.92	0.010052	
3.60	3603.1	23.94	23.95	23.96	23.97	23.98	23.99	24.00	24.01	24.02	24.03	0.010052	
3.70	3603.2	24.04	24.05	24.06	24.07	24.08	24.09	24.10	24.11	24.12	24.13	0.010052	
3.80	3603.3	24.14	24.15	24.16	24.17	24.18	24.19	24.20	24.21	24.22	24.23	0.010052	
3.90	3603.4	24.24	24.25	24.26	24.27	24.28	24.29	24.30	24.31	24.32	24.33	0.010052	
4.00	3603.5	24.34	24.35	24.36	24.37	24.38	24.39	24.40	24.41	24.42	24.43	0.010052	
4.10	3603.6	24.44	24.45	24.46	24.47	24.48	24.49	24.50	24.51	24.52	24.53	0.010052	
4.20	3603.7	24.54	24.55	24.56	24.57	24.58	24.59	24.60	24.61	24.62	24.63	0.010052	
4.30	3603.8	24.64	24.65	24.66	24.67	24.68	24.69	24.70	24.71	24.72	24.73	0.010052	
4.40	3603.9	24.74	24.75	24.76	24.77	24.78	24.79	24.80	24.81	24.82	24.83	0.010052	
4.50	3604.0	24.84											

Invert of outlet pipe = 3602.80 feet

The bank separating Ponds 2 and 3 was removed forming 1 pond. The breach area was included and the area for the two islands in Pond 3 were deducted.

Elevation values shown in *bold* correspond to surface area measurements.

Elevations above 3.50 feet were added July 2016 by Helton & Williamsen, P.C. by digitizing the 3,604.0-foot contour on W. Work's survey drawing.

## HELTON & WILLIAMSEN, P.C. CONSULTING ENGINEERS IN WATER RESOURCES

384 INVERNESS PARKWAY, SUITE 144 ENGLEWOOD, COLORADO 80112-5822 PHONE (303) 792-2161 dgillham@helton-williamsen.com

June 30, 2016

David Shohet, Esq. Monson, Cummins & Shohet, LLC 319 N. Weber St. Colorado Springs, Colorado 80903

#### Subject: Second Supplemental Report – Case No. 13CW3060, City of Lamar's North Gateway Park Ponds

Dear David,

This letter supplements our Expert Reports submitted to you by letters dated January 30 and April 4, 2016, in Case No. 13CW3060, City of Lamar's ("Lamar") North Gateway Park Ponds (hereinafter, the "Ponds"). I am writing to clarify certain issues that have been brought up by Opposer Lower Arkansas Water Management Association ("LAWMA") in their redlined proposed decree dated May 27, 2016.

#### 1. Water Sources for Augmentation

Our January 30, 2016 report did not specifically identify direct delivery through an augmentation station(s) of Lamar's Fort Bent Ditch shares as an augmentation source for the Ponds, even though as noticed in the Application in this Case, Lamar can deliver water derived from its 2,813.6 Fort Bent Ditch Company shares ("Fort Bent shares"), changed in Case Nos. 02CW181 and 05CW107-A, directly to the Arkansas River via the LAWMA or another future augmentation station(s). This oversight was unintentional and does not change Lamar's intent to maximize the beneficial use by optimizing the utility of all of Lamar's water sources. Lamar does intend to use this source as needed and available for augmentation of evaporation depletions from the Ponds. Lamar currently uses this source for augmentation of other depletions, which is demonstrated in Lamar's accounting sheets (in particular, see Lamar's 2015 accounting sheets). Additionally, the sample accounting forms Lamar provided to Opposers in Case No. 05CW107-B on April 25, 2016 demonstrate Lamar's intention to use its Fort Bent shares for direct augmentation of the Ponds.

### 2. Case No. 13CW3060 as a Standalone Plan for Augmentation

Lamar's water system is integrated and accounting for all of Lamar's plans for augmentation and exchange are contained in one spreadsheet as requested by other objectors. However, Lamar intends Case No. 13CW3060 to be a standalone plan for augmentation. To the extent available and not needed for augmentation or exchange in its other plans, Lamar will assign its lawn irrigation return flows, sewered and nonDavid Shohet, Esq. June 30, 2016 Page 2

sewered wastewater return flows, recharge accretions, and direct deliveries of augmentation water against evaporation depletions by the Ponds in this Case. This is consistent with the Application and proposed decree in this Case, and this intent is evident in the form and function of the above-mentioned sample accounting forms.

Priority of use of the various augmentation water sources will be: first, the water sources noticed in the Application in this Case, and second, sources decreed for use in the LAWMA plan for augmentation in Case No. 02CW181. Lamar currently utilizes Lamar Canal water rights changed in Case No. 02CW181 by agreement with Colorado Parks and Wildlife ("CPW"), via a substitute water supply plan. Lamar also owns 273 common shares and 20 preferred shares of LAWMA stock. Lamar has requested LAWMA to file a Water Court application to include the Ponds in its plan for augmentation. Thus, in the future, the LAWMA sources available to replace the Ponds' depletions under Case No. 02CW181 will include but not be limited to any/all of 1) Lamar's 923 Fort Bent shares and 50 Lamar Canal shares changed in Case No. 02CW181 as they may be leased by Lamar to LAWMA, 2) the CPW Lamar Canal water, and 3) any/all of LAWMA's other available sources of augmentation credits applied to Pond depletions by LAWMA, by virtue of LAWMA shares owned or leased by Lamar that Lamar may assign to the Ponds.

Notwithstanding this "order of priority", Lamar will make ongoing management decisions in assigning its water sources to the Ponds and its other plans at its sole discretion in order to maximize the beneficial use of its water supplies.

### 3. Sufficiency of Water Available for Augmentation under Case No. 13CW3060

Lamar's May 2016 accounting spreadsheet contains actual usage for April-May and projected usage for June 2016-March 2017. The final row of Table 3 of the accounting shows that after augmenting and replacing all of its depletions and return flow obligations, Lamar will have up to approximately 76.3 acre-feet of excess reusable credit accruing to the Arkansas River this year. See Attachment 1. As noted above, LAWMA will include the Ponds in its plan for augmentation in the future, allowing Lamar to utilize its LAMWA shares as an additional source to augment the Ponds' evaporation. Thus, Lamar has sufficient augmentation sources available to augment the Ponds under Case No. 13CW3060 as well as its other depletions.

Please call with any questions.

David Shohet, Esq. June 30, 2016 Page 3



Sincerely yours,

**HELTON & WILLIAMSEN, P.C.** 

Vanne

Daniel J. Gillham, P.E.

Attachment

CC: John Sutherland w/ Att.

DJG/djg

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Table 3
Operations under Case No. 05CW107-A and Rule 14 Plan
City of Lamar's Monthly Accounting for April 2016 through March 2017
Inclusive of Pumping under Rule 14, W-4015, and Case No. 05CW107-A

- . . .

(values in ac-ft)

HOM-AGE PAREMAG         Bit		1	Projected												
1         Wins 1-20: 8 10A argenets under Reis 14 Prin         102         2001         103: 8 10         007         00.1         00	Row		Apr-16	May-16	Jun-16	Jul-16	Aug-16	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17	Total
2         Mole 3-DB augmention under Notes 4-Para         20         47.8         40.0         44.6         12.8         31.3         30.0         20.0         30.0         40.0         12.0         13.0         20.0			10.0	26.0	124 5	102.0	10E 0	05 4	67 4	62.4	60 <del>7</del>	60.4	E0 4	74 5	846.0
3         Weil # suggements used COVTA         6.6         0.0         0.0         0.0         0.00															581.3
C         Const Pumping unest SQM107-A         Both															0.0
Step-tage under SCAMPUT-AR (FL Bert Shares & Retinned)         SACD         Gild Card Action         Sacd         Sac															0.0
B         Description Graph Applie Charge Functionage         2007         32.2         30.8         192.2         50.4         192.9         50.5         42.0<															1,825.4
Tread         Description         Control         Contro         Control         Control         <						+									398.
7         0															1
B         Enged regret depletions         0.01<		STREAM DEPLETIONS FROM PUMPING													ł
10         Conf Course, Well No. 31 Backs bigget dynamics         0.0 <td>7</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-26.9</td> <td></td> <td></td> <td>-25.4</td> <td></td> <td></td> <td>-23.8</td> <td></td> <td>-312.9</td>	7						-26.9			-25.4			-23.8		-312.9
Tot Total Net Stream Degletion         Derivation OF STREAM ACCRETIONS FROM OSC/MIOT A & RULE 14 PUMPING         Part A         Part A        <	-		-			-	-			-		-	-	-	-1.4
Department of P STREAM ACCRETIONS FROM 05CW107-A B RULE 14 PLINPING         7.9         5.6         6.7         6.2         6.7         6.2         6.7         7.5         9.20         9.1         8.8         7.8           11         Including use         1.9         1.0         1.9         1.0         1.9         1.0         1.9         1.0         1.9         1.0         1.9         1.0         1.0         0.0 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>0.0</td></t<>															0.0
In         Induiding use         24 6         88.3         75 5         56 8         62.7         62.3         77.5         92.0         91.0         88.0         93.4         87.5         92.0	10	Total Net Stream Depletion	-28.7	-28.4	-27.9	-27.5	-27.0	-26.5	-26.0	-25.5	-25.0	-24.5	-23.9	-23.4	-314.4
12       Non-solvered in-building use       19       19       19       19       19       19       19       19       18       18       23       22       22       22       23         13       Intigation use monomered in-building and imgation uses       4.3       50       20       10       74       41.5       20       20       10       74       41.6       20 <td></td> <td>DERIVATION OF STREAM ACCRETIONS FROM 05CW107-A &amp; RULE 14 PL</td> <td>JMPING</td> <td></td> <td>ł</td>		DERIVATION OF STREAM ACCRETIONS FROM 05CW107-A & RULE 14 PL	JMPING												ł
13       Impairon use       17.3       11.5       127.6       128.6       121.4       82.9       4.38       18.6       0.0       0.0       0.0       14.4       5         13       Acceleration from Row 14       100       0.00       0.0															831.4
14       Return flows from non-swared in-building and ingition uses       4.3       8.0       200       20.7       180       11.4       16.3       6.2       2.0       2			-	-	-	-	-								24.
116       December for Row 14       10.6       10.0       12.6       12.9       13.5       13.1       12.6       11.9       11.4       10.8       10.0       0.0		0													595.
Instrument         Instrum															111.
17       Accelerations from Row 18       1.5       3.1       1.2       1.1       1.0       0.8       0.7       0.6       0.4       0.3       0.3       0.2         18       Return frows from Row 18       0.0 <t< td=""><td>15</td><td>Accretions from Row 14</td><td>10.6</td><td></td><td></td><td>12.9</td><td></td><td></td><td></td><td></td><td></td><td></td><td>+</td><td>10.6</td><td>144.4</td></t<>	15	Accretions from Row 14	10.6			12.9							+	10.6	144.4
18         Feature from from Rev 16         100         0.0	16														10.4
10       0.1       0.1       0.0       0.	17	Accretions from Row 16	1.5	3.1	1.2	1.1	1.0	0.8	0.7	0.6	0.4	0.3	0.3	0.2	11.2
10       Accelerations from Row 18       0.1       0.1       0.0 <td< td=""><td>18</td><td>Return flows from Ball Fields irrigation with Ft. Bent water</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.0</td><td>0.</td></td<>	18	Return flows from Ball Fields irrigation with Ft. Bent water	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.
21       Lamar Power Plent coal washing discharge to server       0.0	19		0.1							0.0	0.0			0.0	0.
1       Lamar Prover Plent coal washing discharge to server       0.0	20	Sewage inflow to wastewater treatment langons											+	121 0	1,439.
22       Adjusted sewage inform to us wastewater treatment legons       70.3       72.7       70.3       70.9<															0.0
23       Evaporation & organization from lagoons       +43.2       -97.7       -70.2       -72.1       -71.1       31.8       -43.5       -20.9       -14.4       -14.4       -14.4       -14.4       -14.4       -14.4       -14.4       -14.4       -14.4       -14.4       -14.5       70.9       -60.9       65.4       55.4       3       33       17.1       -13.8       40.5       70.9       60.9       66.3       55.9       3       3       117.7       12.45       40.7       60.2       66.9       65.3       59.9       3       3       117.7       75.6       0 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>909.</td></td<>															909.
24       Net sewage return flow from Rule 14 and Wel No. 47 pumping       6.4       7.1       0.2       0.5       5.4       17.1       31.8       49.5       70.0       69.5       64.3       65.8       3         25       Accretions from Rw. 24       22.2       10.7       32.1       10.3       31.17       24.4       40.7       00.0       0.0															-491.
226         Descriptions from Row 24         2.22         10.7         3.2         11.0         3.3         11.7         24.5         40.7         60.2         68.4         66.8         59.9         3.3           26         Total Delivery of shares under 02CW181         26.0         31.2         17.6         7.00.2         22.1         64.5         55.6         40.0         2.0         0.0         0         0         0.0         0															380.
27       Return Flow Collegation for Delivery of shares under 02CW181       -76.7       -108.2       22.1       -48.5       -58.6       -40.6       -28.5       0			23.2	10.7		1.0	3.3	11.7	24.5	40.7	60.2	68.4	66.8	59.9	373.
27       Return Flow Collegation for Delivery of shares under 02CW181       -76.7       -108.2       22.1       -48.5       -58.6       -40.6       -28.5       0	26	Total Delivery of shares under 02CW181	226.8	312.1	63.7	186.0	154 7	117 1	76.6	0	0	0	0	0	1,137.0
28       Cumulative Balance under 02CW161 (RFO + Aug Sla Deliv)       -2.5       45.0       64.3       0.8.7       93.5       94.8       0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-392.2</td>										-	-	-	-	-	-392.2
198       Total Delivery of shares undar 05CW107-A       494.8       597.8       103.0       372.4       310.8       237.3       156.6       0.0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>94.8</td>										-	-	-	-	-	94.8
30         050W107A BEAN RETURN FLOW FACTORS (USED IN ROW 31)         38.8%         39.2%         37.8%         30.0%         40.3%         2.4%         48.1%         2.0%         0.4%         0.7%         0.2%         0.6%         0.1           12         0050W107A JDLER RETURN FLOW FACTORS (USED IN ROW 33)         24.9%         26.0%         26.4%         29.5%         40.0%         53.3%         0.6%         -0.0         0.0													<u> </u>		
11       Return Flow Obligation Below Lamar Canal, Bean Shares       -1.0       -1.2       -0.2       -0.8       -0.7       -0.5       -0.4       -0.2       0.0       0.0       0.0       -0.1         20 <i>CoSW107 A</i> IDLER RETURN FLOW FACTORS (VISED IN ROW 301 249%       26.6%       26.0%       25.6%       26.0%       53.5%       .0.6%       2.4%       .45.2       45.0       .36.6       .45.2       45.0       .36.6       .45.2       .45.0       .36.6       .45.2       .45.0       .36.6       .45.2       .45.0       .36.6       .45.2       .45.0       .36.6       .45.2       .45.0       .36.6       .45.2       .45.0       .36.0       .36.0       .36.0       .28.0       .29.7<															2,272.8
32         06/32/10/2															-5.2
33       Return Flow Obligation, Idler shares (Apr-Oct above Lamar Canal)       -122.5       -143.0       -242.2       -249.2       -249.2       -249.2       24.2       24.2       24		05CW107-A IDLER RETURN FLOW FACTORS (USED IN ROW 33)							-					-	-0.2
134       Cumulative Balance Above Lamar Canal under 65CW 107-A (Apr-Oct)       50.8       143.0       224.3       229.2       224.0       249.2       224.4       0 </td <td></td> <td>-813.8</td>															-813.8
35       Cumulative Balance at Augmentation Station (02CW181 + 05CW107-A)       11.4       188.0       298.7       297.5       292.7       289.1       290.6       0 </td <td></td> <td>254.4</td>															254.4
136       Excess Augmentation Credits Applied to City Depletions       0.0       0.0       19.9       18.7       15.0       5.0       0.0       0 <td>25</td> <td></td> <td>44.4</td> <td></td> <td>  </td>	25		44.4												 
137       Remaining Cumulative Balance at Aug. Station (02CW181 + 06CW107-A)       11.4       188.0       278.8       277.7       284.1       290.6       0 <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td> 58.6</td>										-	-	-	-	-	 58.6
FRYINGPAN-ARKANSAS RETURN FLOWS AND NON-CONSUMED TRANST LOSS         0.0											-	-	-	-	
18         In-Building use from Project Pumping         0.0	57			100.0	210.0	210.0	211.1	204.1	200.0	0	0	0	Ŭ	0	1
39       Net Sewage return flow from Project Pumping       0.0															
40       Irrigation Use from Project Pumping       0.0															0.0
11       Refurm flows from Project Imgation Uses       0.0<															0.0
42       Return flows from Ball Fields irrigation with Project water       0.0															0.0
43       Accretions from Rows 41 & 42 (includes previous years)       0.5       0.5       0.4															0.0
44       Total Accretions to Arkansas River from Lamar Use       0.5       0.5       0.4       0.4       0.4       0.4       0.4       0.4       0.4       0.4       0.4       0.4       0.4       0.4       0.4       0.4       0.4       0.4       0.4       0.4       0.3       0.3       0.3         45       Net nonconsumed river transit loss       0.3       0.2       0.2       0.2       0.2       0.1       0.															4.8
45       Net nonconsumed river transit loss       0.0															4.8
46       Lagged Fort Bent Ditch net loss (includes previous years)       0.3       0.2       0.2       0.2       0.1 </td <td></td> <td>0.0</td>															0.0
47       Total Accretions of Non-Consumed Transit Loss       0.3       0.2       0.2       0.2       0.1 <t< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td>1.8</td></t<>															1.8
48       Total Accretions of Project Return Flows (Ret. Flows + Non-Cons. TL)       0.7       0.7       0.6       0.6       0.5       0.5       0.5       0.5       0.4       0.4         49       Project RF assigned to Well 31 backup, Park, Cem., Shop well depletions       0.1															1.6
49       Project RF assigned to Well 31 backup, Park, Cem., Shop well depletions       0.1			+										+		
50       Lagged Rule 14 Plan depletions by Wells 1-20, 10A       -0.4       -0.6       -0.8       -1.0       -1.1       -1.3       -1.6       -1.8       -2.0       -2.2       -2.5       -2.7       -         51       Project RF assigned to Wells 1-20, 10A depletions under Rule 14 Plan       0.4       0.6       0.5       0.5       0.4       0.4       0.4       0.3       0.3       0.3       0.3         52       Net Well 31 backup, Park, Cemetery, Shop, & 1-20, 10A Depl(-)/Accret(+)       1.5       3.0       1.0       0.6       0.3       -0.1       -0.4       -0.8       -1.2       -1.5       -1.9       -2.2         53       Excess Augmentation Station Delivery Assigned to Rule 14 & 05CW107-A       16.9       12.6       9.6       0.8       0 <td>48</td> <td>I I OLAI ACCTEUOIIS OI PROJECI RETURN FIOWS (RET. FIOWS + NON-CONS. IL)</td> <td>0.7</td> <td>0.7</td> <td>0.6</td> <td>0.6</td> <td>U.6</td> <td>0.5</td> <td>0.5</td> <td>0.5</td> <td>0.5</td> <td>0.5</td> <td>0.4</td> <td>0.4</td> <td>6.6</td>	48	I I OLAI ACCTEUOIIS OI PROJECI RETURN FIOWS (RET. FIOWS + NON-CONS. IL)	0.7	0.7	0.6	0.6	U.6	0.5	0.5	0.5	0.5	0.5	0.4	0.4	6.6
50       Lagged Rule 14 Plan depletions by Wells 1-20, 10A       -0.4       -0.6       -0.8       -1.0       -1.1       -1.3       -1.6       -1.8       -2.0       -2.2       -2.5       -2.7       -         51       Project RF assigned to Wells 1-20, 10A depletions under Rule 14 Plan       0.4       0.6       0.5       0.5       0.4       0.4       0.4       0.3       0.3       0.3       0.3         52       Net Well 31 backup, Park, Cemetery, Shop, & 1-20, 10A Depl(-)/Accret(+)       1.5       3.0       1.0       0.6       0.3       -0.1       -0.4       -0.8       -1.2       -1.5       -1.9       -2.2         53       Excess Augmentation Station Delivery Assigned to Rule 14 & 05CW107-A       16.9       12.6       9.6       0.8       0 <td>49</td> <td>Project RF assigned to Well 31 backup, Park, Cem., Shop well depletions</td> <td>0.1</td> <td>0.1</td> <td>0.1</td> <td>0.1</td> <td>0.1</td> <td>0.1</td> <td>0.1</td> <td>0.1</td> <td>0.1</td> <td></td> <td></td> <td>0.1</td> <td>1.4</td>	49	Project RF assigned to Well 31 backup, Park, Cem., Shop well depletions	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1			0.1	1.4
52       Net Well 31 backup, Park, Cemetery, Shop, & 1-20, 10A Depl(-)/Accret(+)       1.5       3.0       1.0       0.6       0.3       -0.1       -0.4       -0.8       -1.2       -1.5       -1.9       -2.2         53       Excess Augmentation Station Delivery Assigned to Rule 14 & 05CW107-A       16.9       12.6       9.6       0.8       0       0       0       0       0       0         54       NET RULE 14 & 05CW107-A DEPLETIONS (-) ACCRETIONS (+)       6.3       -4.2       6.5       0.0       0.3       0.3       12.4       15.0       2.7       13.1       18.2       38.7       1         NORTH GATEWAY PARK POND NOS. 1 & 2 (PENDING CASE NO. 13CW3060)       -9.1       -11.4       -14.9       -16.0       -14.2       -11.1       -7.8       -4.4       -3.1       -3.4       -3.9       -5.7       -10         56       Augmented by LAWMA Under Case No. 02CW181       5.9       11.6       9.5       9.9       8.8       6.9       0.6         5         57       Augmented with Other Sources per 13CW3060 or SWSP       -       -       -       -       5       5       5.4       4.2       0       0.0       0.0       0.0       0.0       0.0       0.0		Lagged Rule 14 Plan depletions by Wells 1-20, 10A	-0.4					-1.3			-2.0				-18.0
53       Excess Augmentation Station Delivery Assigned to Rule 14 & 05CW107-A       16.9       12.6       9.6       0.8       0       0       0       0       0         54       NET RULE 14 & 05CW107-A DEPLETIONS (-) ACCRETIONS (+)       6.3       -4.2       6.5       0.0       0.3       0.3       12.4       15.0       2.7       13.1       18.2       38.7       1         NORTH GATEWAY PARK POND NOS. 1 & 2 (PENDING CASE NO. 13CW3060)       -9.1       -11.4       -14.9       -16.0       -14.2       -11.1       -7.8       -4.4       -3.1       -3.4       -3.9       -5.7       -10         55       Evaporation Depletion       -9.1       -11.4       -14.9       -16.0       -14.2       -11.1       -7.8       -4.4       -3.1       -3.4       -3.9       -5.7       -10         56       Augmented by LAWMA Under Case No. 02CW181       5.9       11.6       9.5       9.9       8.8       6.9       0.6       5       57       Augmented with Other Sources per 13CW3060 or SWSP       5       57       Augmented with Other Sources per 13CW3060 or SWSP       5       5       6.1       5.4       4.2       0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0 <td>51</td> <td>Project RF assigned to Wells 1-20, 10A depletions under Rule 14 Plan</td> <td>0.4</td> <td>0.6</td> <td>0.5</td> <td>0.5</td> <td>0.5</td> <td>0.4</td> <td>0.4</td> <td>0.4</td> <td>0.4</td> <td>0.3</td> <td>0.3</td> <td>0.3</td> <td>5.0</td>	51	Project RF assigned to Wells 1-20, 10A depletions under Rule 14 Plan	0.4	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0.3	5.0
53       Excess Augmentation Station Delivery Assigned to Rule 14 & 05CW107-A       16.9       12.6       9.6       0.8       0       0       0       0       0         54       NET RULE 14 & 05CW107-A DEPLETIONS (-) ACCRETIONS (+)       6.3       -4.2       6.5       0.0       0.3       0.3       12.4       15.0       2.7       13.1       18.2       38.7       1         NORTH GATEWAY PARK POND NOS. 1 & 2 (PENDING CASE NO. 13CW3060)       -9.1       -11.4       -14.9       -16.0       -14.2       -11.1       -7.8       -4.4       -3.1       -3.4       -3.9       -5.7       -10         55       Evaporation Depletion       -9.1       -11.4       -14.9       -16.0       -14.2       -11.1       -7.8       -4.4       -3.1       -3.4       -3.9       -5.7       -10         56       Augmented by LAWMA Under Case No. 02CW181       5.9       11.6       9.5       9.9       8.8       6.9       0.6       5       57       Augmented with Other Sources per 13CW3060 or SWSP       5       57       Augmented with Other Sources per 13CW3060 or SWSP       5       5       6.1       5.4       4.2       0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0       0.0 <td>52</td> <td>Net Well 31 backup, Park, Cemetery, Shop, &amp; 1-20. 10A Depl(-)/Accret(+)</td> <td>1.5</td> <td>3.0</td> <td>1.0</td> <td>0.6</td> <td>0.3</td> <td>-0.1</td> <td>-0.4</td> <td>-0.8</td> <td>-1.2</td> <td>-1.5</td> <td>-1.9</td> <td>-2.2</td> <td>-1.8</td>	52	Net Well 31 backup, Park, Cemetery, Shop, & 1-20. 10A Depl(-)/Accret(+)	1.5	3.0	1.0	0.6	0.3	-0.1	-0.4	-0.8	-1.2	-1.5	-1.9	-2.2	-1.8
54       NET RULE 14 & 05CW107-A DEPLETIONS (-) ACCRETIONS (+)       6.3       -4.2       6.5       0.0       0.3       0.3       12.4       15.0       2.7       13.1       18.2       38.7       1         NORTH GATEWAY PARK POND NOS. 1 & 2 (PENDING CASE NO. 13CW3060)       -9.1       -11.4       -14.9       -16.0       -14.2       -11.1       -7.8       -4.4       -3.1       -3.4       -3.9       -5.7       -10.         55       Evaporation Depletion       -9.1       -11.4       -14.9       -16.0       -14.2       -11.1       -7.8       -4.4       -3.1       -3.4       -3.9       -5.7       -10.         56       Augmented by LAWMA Under Case No. 02CW181       5.9       11.6       9.5       9.9       8.8       6.9       0.6       5       5       5       5       -3.9       -5.7       -10.       5       5       9.9       8.8       6.9       0.6       5       5       5       5       -10.5       5       5       5       -10.5       5       -4.4       -3.1       -3.4       -3.9       -5.7       -10.5       5       5       -10.5       5       -10.5       -5       9       8.8       6.9       0.6       5       -10.5 <td></td> <td>39.9</td>															39.9
NORTH GATEWAY PARK POND NOS. 1 & 2 (PENDING CASE NO. 13CW3060)         -9.1         -11.4         -14.9         -16.0         -14.2         -11.1         -7.8         -4.4         -3.1         -3.4         -3.9         -5.7         -10.0           55         Evaporation Depletion         -9.1         -11.4         -14.9         -16.0         -14.2         -11.1         -7.8         -4.4         -3.1         -3.4         -3.9         -5.7         -10.0           56         Augmented by LAWMA Under Case No. 02CW181         5.9         11.6         9.5         9.9         8.8         6.9         0.6         5           57         Augmented with Other Sources per 13CW3060 or SWSP         -         0.0 </td <td></td> <td></td> <td>6.2</td> <td>_4 2</td> <td></td> <td></td> <td></td> <td></td> <td>12 /</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td>109.2</td>			6.2	_4 2					12 /						109.2
55       Evaporation Depletion       -9.1       -11.4       -14.9       -16.0       -14.2       -11.1       -7.8       -4.4       -3.1       -3.4       -3.9       -5.7       -10.0         56       Augmented by LAWMA Under Case No. 02CW181       5.9       11.6       9.5       9.9       8.8       6.9       0.6       -10.0       55         57       Augmented with Other Sources per 13CW3060 or SWSP       -       -       -       -       -       -       55         58       Lamar Project Accretions Assigned to N. Gateway Park Ponds       0.2       0.0				7.4	0.0	0.0	5.5	0.0	12.4		2.1	.0.1	.0.2	55.7	.00.2
56       Augmented by LAWMA Under Case No. 02CW181       5.9       11.6       9.5       9.9       8.8       6.9       0.6       5         57       Augmented with Other Sources per 13CW3060 or SWSP       5 <td></td> <td></td> <td></td> <td></td> <td></td> <td>10.0</td> <td>4</td> <td></td> <td></td> <td></td> <td></td> <td>•</td> <td></td> <td>  </td> <td>10.10</td>						10.0	4					•			10.10
57       Augmented with Other Sources per 13CW3060 or SWSP       Image: constraint of the sources per 13CW3060 or SWSP       Image: constraled sources per 13CW3060 or SWSP       Image:										-4.4	-3.1	-3.4	-3.9	-5.7	-104.9
58       Lamar Project Accretions Assigned to N. Gateway Park Ponds       0.2       0.0<			5.9	11.6	9.5	9.9	8.8	6.9	0.6						53.1
59       Excess Augmentation Station Delivery Assigned to Ponds       3.0       6.1       5.4       4.2       0       0       0       0       0         60       Net Pond Evap. Augmented with City Return Flows & Recharge Accretions       3.0       0.0       2.3       0.0       0.0       0.0       0				~ ~ ~	0.0		0.0	~ ~ ~		0.0	~ ~ ~			0.0	0.
60       Net Pond Evap. Augmented with City Return Flows & Recharge Accretions       3.0       0.0       2.3       0.0       0.0       7.2       4.4       2.7       3.7       3.9       5.7         61       Net North Gateway Park Ponds Depletions (-)/ Accretions (+)       0.0       0.2       -0.2       0.0       0.0       0.0       0.0       -0.4       0.4       0.0       0.0         TOTAL NET DEPLETIONS (-) ACCRETIONS (+) UNDER ALL PLANS AT			0.2	0.0											0.1 18.1
61       Net North Gateway Park Ponds Depletions (-)/ Accretions (+)       0.0       0.2       -0.2       0.0       0.0       0.0       0.0       -0.4       0.4       0.0       0.0         TOTAL NET DEPLETIONS (-) ACCRETIONS (+) UNDER ALL PLANS AT			3.0	0.0						-		-		-	18. 32.
TOTAL NET DEPLETIONS (-) ACCRETIONS (+) UNDER ALL PLANS AT															
	<u> </u>		0.0	0.2	0.2	5.5	5.5	0.0	0.0	0.0	01	0.4	0.0	0.0	0.0
	62		3.3	-4.0	4.0	0.0	0.3	0.2	5 2	10.6	-0.4	9.0	14.3	33.0	76.3

#### Row explanations:

1 Pumping by Wells 1-20 and 10A not augmented by W-4015. Equal to Table 2 Row 14.

Pumping by Wells 21-28. (Table 1 Row 15.) 2

Pumping by Well 47. (Table 1 Row 16.) 3

Pumping by other Lamar wells under 05CW107-A. Sum of Table 1 Rows 27 through 32. 4

Net recharge of Fort Bent water pursuant to Case Nos. 05CW107-A and 05CW107-B, calculated in "Pond Operation" sheet. Total effective recharge equals delivery - monthly change in storage-5

evaporation - floating pump deliveries for irrigation. Effective recharge pursuant to Case Nos. 05CW107-A/B is prorated from total effective recharge based on beginning of month content plus delivery to the recharge site during the month. See the "Pond Operation" sheet.

- Row 5 minus sum of Rows 1-3. (Note: Row 4 wells are not located in the Clay Creek aquifer.) 6
- Row 6 lagged using Clay Creek aguifer Glover parameters. 7
- Depletions caused by prior pumping of structures that are now included in LAWMA's plan for augmentation Case No. 02CW181, or by current pumping of these structures over the amount augmented by 8 LAWMA
- Lagged depletions caused by pumping in Table 1 Row 24. Includes lagged depletion from previous pumping. Cheyenne aquifer and Glover parameters. 9
- Row 7 + Row 8 + Row 9. 10
- 11 Rule 14 and Case No. 05CW107-A portion of in-building use. Calculated as the sum of Rows 1 3, multiplied by Table 1 Row 19, divided by Table 1 Row 18.
- 12 Table 1 Row 19 x 86 / 3487. There are 3487 total potable metered accounts; 86 of these utilize septic systems and have a 10% depletion rate.
- 13 Sum of Rows 1 4 minus Row 11. Irrigation uses have an 85% depletion rate.
- 14 Row 12 x 90% + Row 13 x 15%.
- 15 13% of irrigation uses lagged as deep percolation and 2% return as surface runoff in the same as application. Row 13 x 2% (same month) + (Row 12 x 90% + Row 13 x 13%) lagged (SDF = 429 days).
- 16 From Table 1: (Row 25 + Row 26 Row 23) x 15%.
- Row 16 is distributed to golf course and to cemetery based on deliveries to each. Return flows from golf course and surface runoff from cemetery (2%) occur in same month as delivery (Table 1: (Row 26 -17 Row 23) x 15% + Row 25 x 2%). Cemetery deep percolation lagged to Willow Creek (Table 1 Row 25 x 13%). Willow Creek Aquifer and Glover parameters.
- Table 1 Row 6a x 15%. 18
- 19 Row 18 returned to Willow Creek. 13% of ballfield pumping of Ft. Bent water (Table 1 Row 6a) lagged, 2% returned in same month as application. Willow Creek Aquifer and Glover parameters.
- 20 Metered sewage influent to wastewater treatment lagoons.
- 21 Metered use of Well ID No. 6705272 for non-consumptive coal washing at Lamar Power Plant and discharge to sewer.
- 22 Minimum of 1) Row 20 Row 21, 2) 95% of net total in-building use not including non-sewered use (95% x (Table 1 Row 19 Table 3 Row 12)).
- Evaporation and evapotranspiration from lagoons. (63.7 acres water surface and 32.4 acres phreatophytes).
  (Row 22 + Row 23) x (Row 11 Row 12)/(Table 1, Row 19 Row 12).
- Row 24 returned to Arkansas River. SDF = 13.8. 25
- 26 Delivery of Fort Bent shares under Case No. 02CW181. Equal to the sum of Table 1, Row 4b + Table 1, Row 9.
- 27 Historical return flow obligation on deliveries in Row 26 pursuant to Case No. 02CW181.

April - October: Row 26 x 33.8%.

November - March: Row 26 x 100% (the decree in Case No. 02CW181 limits diversions to April - October only).

28 Row 27 + Table 1, Row 4b + Row 28 from previous month.

Table 3

# **ATTACHMENT 1**

Operations under Case No. 05CW107-A and Rule 14 Plan City of Lamar's Monthly Accounting for April 2016 through March 2017

Inclusive of Pumping under Rule 14, W-4015, and Case No. 05CW107-A

(values in ac-ft) Apr-16 May-16 Jul-16 Aug-16 Sep-16 Oct-16 Nov-16 Dec-16 Jan-17 Feb-17 Mar-17 Row Jun-16 Total 29 Delivery of Fort Bent shares pursuant to Case No. 05CW107-A. Equal to the sum of Table 1, Rows 5b, 6a, and 10. 30 Return flow factors for 10 Bean shares pursuant to the decree in Case No. 05CW107-A. Return flow obligation for delivery of 10 Bean shares. April-October: Equal to -Row 30 x Row 29 x 10 / total number of 05CW107-A shares delivered. November-March: Equal to -Row 30 x Total of Row 29 31 x 10 / total number of 05CW107-A shares delivered. (See "Control" sheet for total number of 05CW107-A shares delivered.) Return flow factors for Idler shares pursuant to the decree in Case No. 05CW107-A. 32 Return flow obligation for delivery of Idler shares. April-October: Equal to -Row 32 x Row 29 x number of Idler shares delivered / total number of 05CW107-A shares delivered. November-March: Equal to -33 Row 32 x Total of Row 29 x number of ldler shares delivered / total number of 05CW107-A shares delivered. (See "Control" sheet for total number of 05CW107-A shares delivered. = total 05CW107-A shares minus 10 Bean shares.) In Summer this is delivered above the Lamar Canal headgate. In Winter it is delivered at or above the confluence of Clay Creek (see Row 48). Row 33 - Row 36 + Table 1, Row 5b + Row 34 from previous month. May 2016: subtracted 0.6 ac-ft from this credit for Bean delivery over the May volumetric limit. Row 28 + Row 34 - Sum of April-to-Previous Month's Row 36. Total cumulative balance at the augmentation station for Case Nos. 02CW181 & 05CW107-A deliveries, after assignment of excess deliveries to augment City depletions in Row 36. Rows 35 & 37, April 2015: Cumulative balance was 48.3 ac-ft. 36.9 ac-ft of this is assigned to unmet Idler return flow obligations (05CW17=07-A) over the winter of 2015-2016. See March 2016 accounting sheet. Amount of excess cumulative delivery at augmentation station from Row 35 that is manually assigned to well and evaporation depletions below the Lamar Canal. Sum of Rows 53 & 59. 36 The Lamar Canal passed the assigned augmentation station deliveries in 2015, indicated by the stream flows measured at the Lamar gage during those months. Row 35 - Row 36 Should remain positive 37 Minimum of 1) Table 2 Row 8 or 2) Table 1 Row 19 - Table 3 Row 11. Constrained to positive numbers or zero. 38 (Row 22 + Row 23) x (Row 38)/(Table 1, Row 19). 39 Minimum of 1) Table 2 Row 8 - Table 3 Row 38 or 2) Table 1 Row 18 - Table 1 Row 19 - Table 3 Row 13. Constrained to positive numbers or zero. 40 41 Row 40 x 15% 42 Table 1 Row 6b x 15% 43 13% of irrigation with Project water is lagged as deep percolation (SDF = 429 for Town use, and Willow Creek Aquifer and Glover Parameters for Ballfield use); and 2% returns in the same month of application. (Row 40 + Table 1 Row 6b) x 2% + Row 40 x 13%, lagged + Table 1 Row 6b x 13%, lagged. 44 Row 39 + Row 43. 45 90% of transit loss of Project water between John Martin Reservoir and the Ft. Bent Ditch. Transit loss is calculated as the difference between deliveries of Project water below John Martin Reservoir and diversion of Project water by the Ft. Bent Ditch. (90% of Col. 2 - Col. 4 of "Monthly FtBent" sheet.) 90% of actual Fort Bent conveyance losses of Project water, lagged to Arkansas River and combined with lagged amounts from previous years. Lagging based on factors from HI model. Conveyance 46 loss calculated as the difference between Ft. Bent diversions of Project water and deliveries of Project water to Lamar's recharge site and the Ballfields. 60% of these net lagged ditch losses accrues to the Arkansas River above the Lamar Canal headgate, and 40% accrues below the Lamar Canal headgate. 47 Row 45 + Row 46. Row 44 + Row 47. 48 Project return flow and non-consumed loss assigned to depletions by Well 31 backup and depletions by the Park, Cemetery, and Shop wells that are not covered by LAWMA. Calculated as the minimum 49 of a) Row 44 + Row 47, or b) the negative sum of Rows 8 & 9. Lagged depletions caused by pumping by Wells 1-20 and 10A under the Rule 14 Plan (Row 1). SDF=5825. Project return flow and non-consumed loss assigned to depletions by Wells 1-20 and 10A pumping under the Rule 14 Plan (Row 50). Calculated as the minimum of a) Row 48 - Row 49, or b) the 51 negative of Row 50. 52 Net return flow obligations for Well 31 Backup; Park, Cemetery, and Shop wells; and Wells 1-20 & 10A after assignment of Project water. Sum of Rows 8, 9, 17, 49, & 51. Positive means net accretion of return flows after assignment of Project water. Amount of excess cumulative delivery at augmentation station that is manually assigned below the Lamar Canal for well depletions. 53 Net depletions (-) or accretions (+) under the Rule 14 and 05CW107-A Plans. Sum of Rows 7, 15, 19, 25, 31, -50, & 52. NOTE: Row 33 (Idler return flow obligation) is also added to this row in the winter, as no augmentation deliveries are made at the Ft. Bent Augmentation Station (no diversions). NOTE 2: Row 50 must be subtracted because Row 52 includes both the depletion and replacement of Rule 14 pumping by Wells 1-20 & 10A. Subtracting Row 50 avoids double-counting these depletions. The net depletion after assignment of Project return flows is included in Row 52, so all Rule 14 depletions by these wells are accounted for and replaced. Total evaporation depletions from North Gateway Park Ponds 1 & 2. 55 Amount of evaporation covered by LAWMA sources (including CPW agreement) under Case No. 02CW181. 56 Amount of evaporation covered by additional sources or SWSP pursuant to the final decree in Case No. 13CW3060. 57 Project return flows assigned for augmentation of North Gateway Park Pond Nos. 1 & 2. Minimum of a) Row Row 48 - Row 49 - Row 51, or b) - Row 55 - Row 56 - Row 57. 58 Amount of excess cumulative delivery at augmentation station that is manually assigned below the Lamar Canal for North Gateway Park Ponds evaporation. 59 Net augmentation requirement for Lamar North Gateway Park Pond Nos. 1 & 2, to come from excess accretions and return flows. Minimum of net requirement including any shortfall from previous month 60 (sum of Rows 55 - 59 and previous month's Row 61), or remaining excess accretions and return flows (Row 54). Sum of Rows 55 - 60. 61 Net effect of all of Lamar's operations. Equal to Row 54 + Row 61 - Row 60. Negative (-) values indicate net depletion to river/ Positive values indicate net accretion to river. NOTE: This formula does not 62 consider additional excess augmentation deliveries over what is assigned specifically for credit in Rows 53 & 59.

### HELTON & WILLIAMSEN, P.C. CONSULTING ENGINEERS IN WATER RESOURCES

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January 30, 2016

David M. Shohet, Esq. Felt, Monson & Culichia, LLC 319 N. Weber St. Colorado Springs, Colorado 80903

Subject: Expert Report - Plan for Augmentation and Exchange – Case No. 13CW3060, Water Division 2, Lamar North Gateway Park Pond Nos. 1, 2 and 3, Well Permit No. 52184-F, City of Lamar, Prowers County

Dear David:

This letter describes a plan for augmentation and exchange for the Lamar North Gateway Park Pond Nos. 1, 2 and 3 filed in Case No. 13CW3060 by the City of Lamar on December 18, 2013. Attachment 1 is a copy of the water rights application. Valco, Inc. transferred ownership of the park area on April 30, 2013 to the City of Lamar which annexed the property by Ordinance No. 1189 on November 11, 2013. Attachment 2 is a copy of the ordinance and Attachment 3 is the Special Warranty Deed dated April 30, 2013 conveying the 108 acre property from Valco, Inc. to the City of Lamar.

The Lamar North Gateway Park property has been developed as a city park offering recreation, fishing, hiking, and wildlife viewing opportunities around three reclaimed gravel pit ponds. These uses of the North Gateway Park Ponds are non-consumptive, however, Lamar is responsible for replacement of out-of-priority depletions caused by evaporation from the ponds. Figure 1 is a 2015 aerial photo map of the property showing the locations of the ponds and Figure 2 shows the park and Lamar's water supply and wastewater treatment facilities.

The Lamar North Gateway Ponds are located in portions of sections 29 and 30, T.22S., R.46W. of the 6<sup>th</sup> P.M. The location of the approximate center point of each pond follow:

**Pond No. 1** - in the NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> of section 30, T.22S., R.46W. of the 6<sup>th</sup> P.M., approximately 1,840 feet from the south section line and 950 feet from the east section line.

**Pond Nos. 2 and 3 -** in the SW<sup>1</sup>/<sub>4</sub> of section 29, T.22S., R.46W. of the 6<sup>th</sup> P.M., approximately 1,839 feet from the south section line and 1,447 feet from the west

section line. (Note: Ponds 2 and 3 are now connected by a small channel through the berm that used to separate the ponds.)

A substitute water supply plan (SWSP) for the Lamar North Gateway Ponds was approved by the State Engineer on August 22, 2013 for the period June 1, 2013 through May 31, 2014 and a plan renewal was approved on June 17, 2014 for the period June 1, 2014 through May 31, 2015. A second renewal was approved on August 26, 2015 for the period June 1, 2015 through May 31, 2016.

### Water Requirements

Table 1 presents the calculation of the net evaporation from the 3 ponds. The calculations of monthly evaporation and net evaporation amounts are based on the State Engineer's guidelines<sup>1</sup>. The annual gross lake evaporation, 60 inches, is taken from NOAA Technical Report NWS 33<sup>2</sup>. This annual value is distributed monthly using the distribution percentages for areas below 6,500 feet msl. Effective precipitation was calculated as 70 percent of the average monthly precipitation values (1900-1999) for Lamar and subtracted from the gross monthly evaporation to derive net evaporation rates. The annual effective precipitation totaled 10.76 inches and the net evaporation totaled 49.24 inches or 4.11 acrefeet per acre. These results are the same net evaporation rates for gravel pits for the Lamar area found in paragraph A.ii. of Exhibit R of LAWMA's decree in Case No. 02CW181.

Mining at the site was completed by Valco in 2012. Figure 3 is a survey drawing completed for Valco on June 29, 2012. Since then, the berm between Ponds 2 and 3 has been breached, resulting in one pond (referred to herein as "Ponds 2 & 3"). Tables 2 and 3 are the elevation-area tables for Pond 1 and Ponds 2 & 3, respectively, resulting from surveys performed during 2015. The surveys measured the surface area from a level approximately 1.5 feet below the water surface level at the time of the survey to the top of the embankment separating the pond from the Arkansas River. The total normal surface area of the ponds corresponding with the inverts of the outlet pipes is 32.87 acres (see Tables 2 and 3).

Figure 4 is a map from Valco's first substitute water supply plan request completed by WRC Engineering, Inc. which shows the location of 13.2 acres of pond area as of December 31, 1980. In accordance with C.R.S. §37-90-137(11)(b) and the State Engineer's current administration, gravel pits "shall only be allowed to claim an exemption from augmentation

<sup>&</sup>lt;sup>1</sup> General Guidelines for Substitute Water Supply Plans for sand and Gravel Pits, Colorado Division of Water Resources, Updated April 1, 2011.

<sup>&</sup>lt;sup>2</sup> Richard K. Farnsworth & Edwin S. Thompson, "Evaporation Atlas for the Contiguous 48 United States", June 1982.

requirements for pre-1981 exposed surface area for the pit in which such exposure continues to exist and only to the extent such pre-1981 exposure continues to exist in the same pre-1981 location."<sup>3</sup>

A comparison of the 13.2 acres of pre-1981 area shown on Figure 4 with the 32.87 acres of present pond area shown on Figure 1 shows a "current" pre-1981 area of 7.0 acres. This results in a post-1980 area of 25.87 acres (32.87 - 7.0 = 25.87) requiring the replacement of stream depletions in the plan for augmentation. An annual net evaporation rate of 4.11 acre-feet per acre was determined as described in Table 1. The net evaporation for 25.87 acres totals 106.33 acre-feet per year ( $25.87 \times 4.11 = 106.33$ ).

### **Stream Depletions**

The northerly edge of the three ponds shown in Figure 1 averages a distance of 76.7 feet to the Arkansas River. A Glover analysis<sup>4</sup> was completed using an aquifer transmissivity of 200,000 gpd/ft, an aquifer width ("w") of 7,300 feet, and a specific yield of 0.20, which are considered representative of the Arkansas River alluvial aquifer materials at the site<sup>5</sup>. The results of the analysis are enclosed as Attachment 4 and show that 95.8 percent of depletions to the river resulting from pond evaporation occur within the first month. For the purpose of administering the plan for augmentation and for accounting purposes we propose that the net evaporation and the resulting depletion to the river should occur within the same month.

### **Replacement of Stream Depletions**

The decree in Case No. 05CW107-A (entered by the Water Court on June 8, 2015) allows Lamar to add additional structures to be augmented by the sources of replacement water included in that decree. The sources of replacement water include accretions to the Arkansas River from water delivered to Lamar's recharge site, sewered and non-sewered wastewater return flows, and lawn irrigation return flows derived from Lamar's Fort Bent Ditch Company share interests and Fryingpan-Arkansas Project water. The Fryingpan-Arkansas Project water is available also in the form of return flows from Fort Bent Ditch seepage and transit loss. These augmentation sources will be utilized for replacement of net evaporation losses from the Lamar North Gateway Ponds in compliance with terms and conditions contained in the decree in Case No. 05CW107-A.

<sup>&</sup>lt;sup>3</sup> Dick Wolfe, State Engineer, to Colorado Stone, Sand and Gravel Association, September 4, 2009.

<sup>&</sup>lt;sup>4</sup> "Analytical Stream Depletion Model", Dewayne Schroeder, Office of the State Engineer Division of Water Resources, September 1987.

<sup>&</sup>lt;sup>5</sup> "Geology and Ground-Water Resources of Prowers County, Colorado", U.S. Geological Survey Water-Supply Paper 1772, Paul T. Voegeli and Lloyd Hershey, 1965.

The replacement water accretions identified above accrue to the Arkansas River above its confluence with Clay Creek. The amount of the accounted accretions exceeding the required replacement needs under the decree in Case No. 05CW107-A will be available to replace the depletions caused by evaporation from the North Gateway Ponds. This replacement will occur by exchange from the confluence of Clay Creek and the Arkansas River to the most upstream point of depletion. The "exchange from" point is located in the NE¼ of section 36 and the "exchange to" point is located in the NE¼ of the SE¼ of section 30, T.22S., R.46W. of the 6<sup>th</sup> P.M. a distance of 5 miles. The appropriation date of the exchange is April 30, 2013 which is the date Lamar purchased the property from Valco, Inc.

The rate of the exchange will be equal to the daily rate of net evaporation from the North Gateway Ponds (maximum 0.261 cfs, based on the July evaporation volume in Table 1). This section of the Arkansas River is a gaining stream, and the daily flow at the Arkansas River at Lamar gage was always greater than this maximum exchange rate in the 1990-2014 period<sup>6</sup> (the Lamar gage is near the upper terminus). The only diversion from the Arkansas River in the exchange segment is the Hyde Canal. To the best of our knowledge, the Hyde Canal has not ever swept the river. If this ever occurs, Lamar would not be able to make this exchange and the evaporation would have to be made up from other sources.

For the approved substitute water supply plans the Colorado Division of Parks and Wildlife (CPW) has committed replacement water supplies derived from their interests in the Lamar Canal and Irrigation Company which were changed to include replacement uses in LAWMA's Case No. 02CW181. CPW's commitment adds 47.68 acre-feet of replacement water to the substitute water supply plan<sup>7</sup>. CPW's replacement water is delivered to the Arkansas River through the Lamar Canal and LAWMA's augmentation stations. Lamar and CPW are working toward a long-term agreement for Lamar's future use of this replacement source. Lamar also owns preferred and common LAWMA shares which in the future may be included in a LAWMA plan for augmentation for replacement of the net evaporation from the North Gateway Ponds. Inclusion of these additional sources of replacement water will provide additional flexibility in meeting their augmentation needs.

<sup>&</sup>lt;sup>6</sup> Colorado Decision Support System (CDSS)/Hydrobase

<sup>&</sup>lt;sup>7</sup> This amount was half of 95.36 acre-feet, which was the total annual evaporation based on 30.2 acres of exposed water surface area prior to the berm between Ponds 2 and 3 being breached and the ponds resurveyed in 2015.

#### Accounting

Attachment 5 contains selected sheets from the accounting under Lamar's Rule 14 plan, augmentation plan in Case No. 05CW107-A, and substitute water supply plan for North Gateway Ponds. Provisions on the "Summary", "Table 3", and "Pond Data" tables show the proposed accounting for the North Gateway Ponds.

#### Conclusion

Lamar's North Gateway Park includes three reclaimed gravel pits which are used for recreation, fishery and wildlife purposes. These purposes are non-consumptive, however, the net evaporation from the ponds requires replacement to the Arkansas River. Due to the closeness of the ponds to the river and the hydraulic properties of the aquifer, the net evaporation and the resulting depletions will occur in the same month. This depletion to the Arkansas River will be replaced by accretions to the Arkansas River from water delivered to Lamar's recharge site, sewered and non-sewered wastewater return flows, and lawn irrigation return flows derived from Lamar's Fort Bent Ditch Company share interests and Fryingpan-Arkansas Project water. The water supplies are adequate in time and quantity to replace the depletions caused by the pond evaporation and no injury will occur to other water users.

Please call if you have any questions.

Sincerely yours,

**HELTON & WILLIAMSEN, P.C.** 



Daniel J. Gillham

Dami

Thomas A. Willa

Thomas A. Williamsen



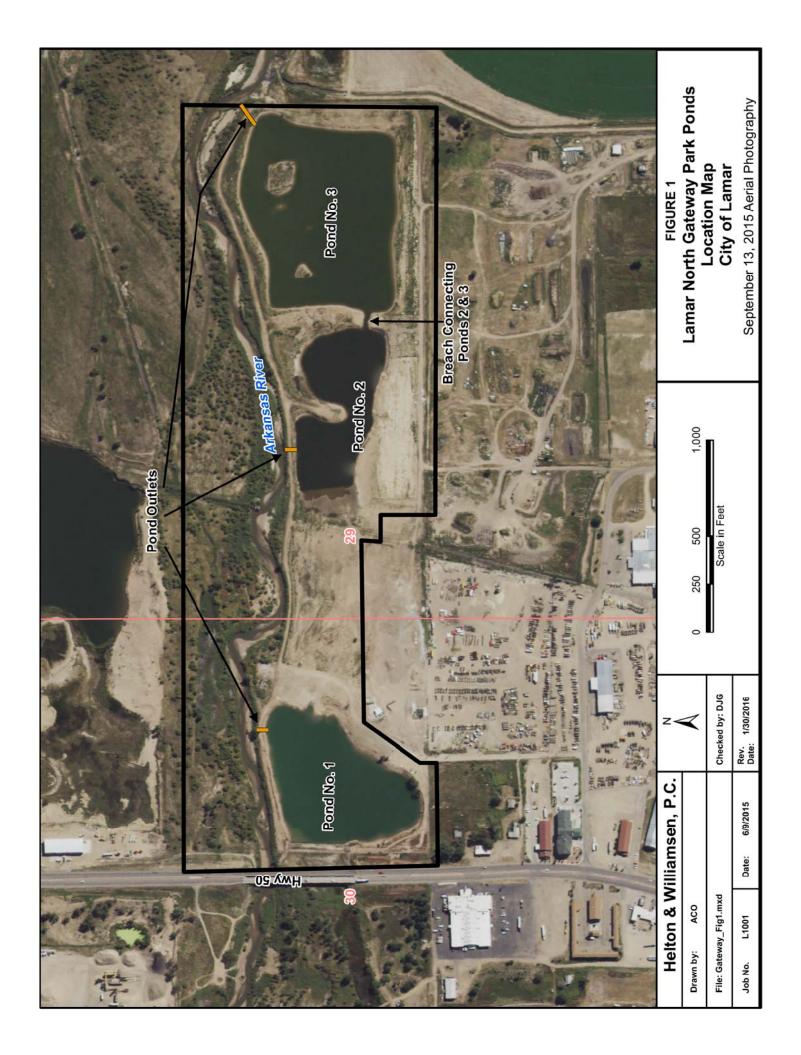
Enclosures

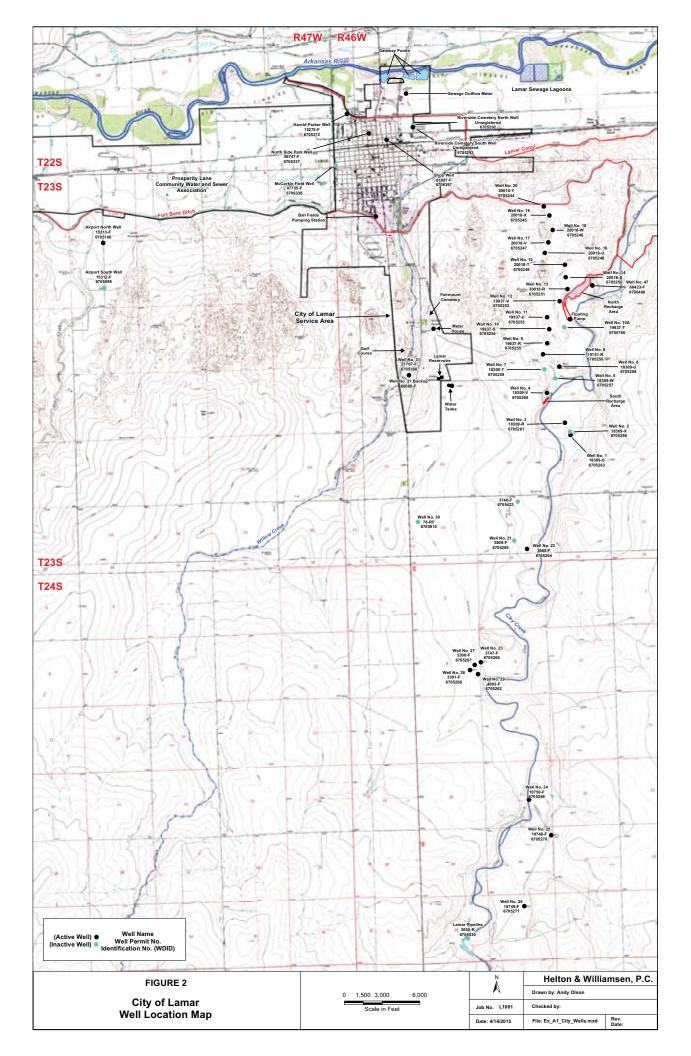
States.

cc: John Sutherland w/enclosures Patrick Mason w/ enclosures Robbie Batdorf w/ enclosures

#### DJG/TAW/taw

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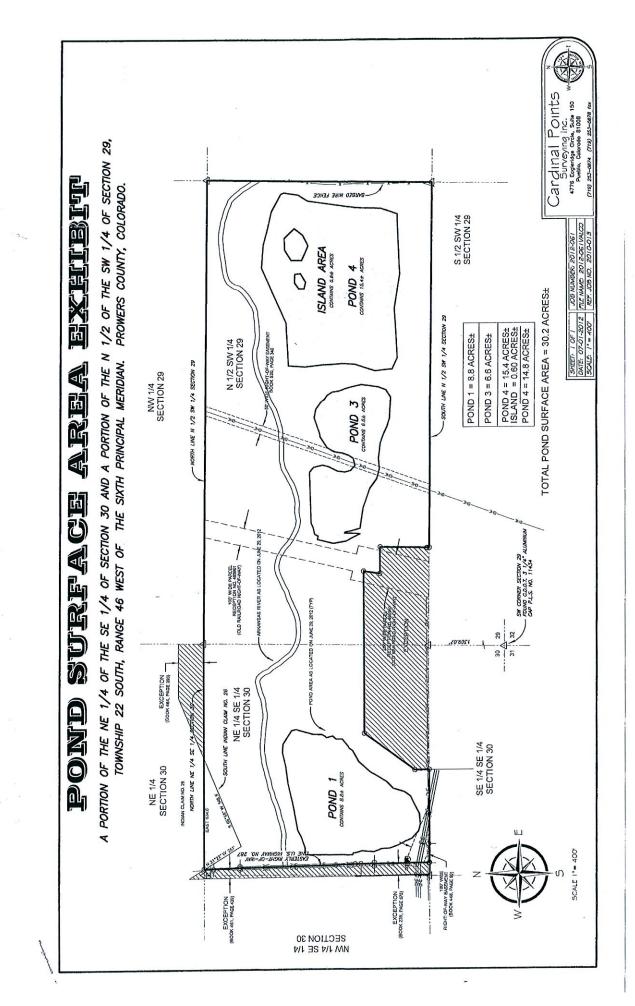
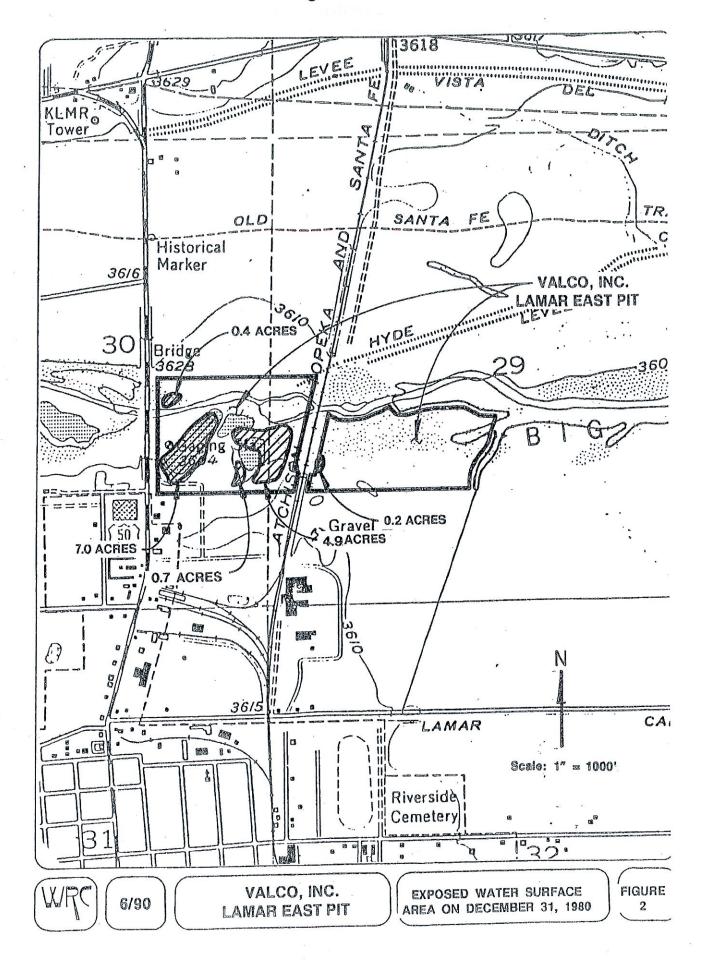


Figure 3

Figure 4



## Table 1 **Derivation of Monthly Net Evaporation Amounts** Lamar North Gateway Park Pond Nos. 1, 2 and 3 **City of Lamar**

Month (1)	(%) (inches)			Effective Precipitation (inches) (5)	Net Evaporation Rate (feet) (6)	Pond Evaporation (acre-feet) (7)
January	3.0	1.80	0.38	0.27	0.13	3.36
February	3.5	2.10	0.47	0.33	0.15	3.88
March	5.5	3.30	0.86	0.60	0.22	5.69
April	9.0	5.40	1.45	1.01	0.37	9.57
Мау	12.0	7.20	2.42	1.69	0.46	11.90
June	14.5	8.70	2.24	1.56	0.59	15.26
July	15.0	9.00	2.30	1.61	0.62	16.04
August	13.5	8.10	2.17	1.52	0.55	14.23
September	10.0	6.00	1.19	0.84	0.43	11.12
October	7.0	4.20	0.88	0.62	0.30	7.76
November	4.0	2.40	0.57	0.40	0.17	4.40
December	3.0	1.80	0.44	0.31	0.12	3.10
Total	100.0	60.00	15.37	10.76	4.11	106.33

### **Explanation of Columns:**

- 2) Monthly Distribution from "General Guidelines for Substitute Water Supply for Sand and Gravel Pits" (Updated April 1, 2011)
- 3) Interpolated from "Evaporation Atlas for the Contiguous 48 United States", NOAA Technical Report NWS 33 Map 3, U.S. Department of Commerce, June 1982.
- 4) Average Precipitation from Colorado Climate Center for Lamar Climate Station No. 54770 for 1900-1999.
- 5) Column 4 X 70 percent.
- 6) (Column 3 Column 5) ÷ 12 inches per foot.

7) Column 6 X 25.87 acres. (Total surface area is 32.87 acres of which the allowable pre-1981 area totals 7.0 acres leaving 25.87 acres of post-1981 area.)

Helton & Williamsen, P.C.

1/29/2016, djg

# Table 2North Gateway Pond 1 Elevation-Area TableCity of Lamar

							Area, acr	es			-	
Staff gage (ft)	Elevation (ft)	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	Incr
1.00	3604.00	8.88	8.88	8.88	8.89	8.89	8.89	8.90	8.90	8.90	8.90	0.002648
1.10	3604.10	8.91	8.91	8.91	8.91	8.92	8.92	8.92	8.92	8.93	8.93	0.002648
1.20	3604.20	8.93	8.94	8.94	8.94	8.94	8.95	8.95	8.95	8.95	8.96	0.002648
1.30	3604.30	8.96	8.96	8.96	8.97	8.97	8.97	8.97	8.98	8.98	8.98	0.002648
1.40	3604.40	8.99	8.99	8.99	8.99	9.00	9.00	9.00	9.00	9.01	9.01	0.002648
1.50	3604.50	9.01	9.01	9.02	9.02	9.02	9.03	9.03	9.03	9.03	9.04	0.002648
1.60	3604.60	9.04	9.04	9.04	9.05	9.05	9.05	9.05	9.06	9.06	9.06	0.002648
1.70	3604.70	9.06	9.07	9.07	9.07	9.08	9.08	9.08	9.08	9.09	9.09	0.002648
1.80	3604.80	9.09	9.09	9.10	9.10	9.10	9.10	9.11	9.11	9.11	9.12	0.002648
1.90	3604.90	9.12	9.12	9.12	9.13	9.13	9.13	9.13	9.14	9.14	9.14	0.002648
2.00	3605.00	9.14	9.15	9.15	9.15	9.15	9.15	9.15	9.16	9.16	9.16	0.001589
2.10	3605.10	9.16	9.16	9.16	9.16	9.17	9.17	9.17	9.17	9.17	9.17	0.001589
2.20	3605.20	9.18	9.18	9.18	9.18	9.19	9.19	9.19	9.19	9.19	9.20	0.002287
2.30	3605.30	9.20	9.20	9.20	9.21	9.21	9.21	9.21	9.21	9.22	9.22	0.002287
2.40	3605.40	9.22	9.22	9.23	9.23	9.23	9.23	9.24	9.24	9.24	9.24	0.002287
2.50	3605.50	9.24	9.25	9.25	9.25	9.25	9.26	9.26	9.26	9.26	9.27	0.002287
2.60	3605.60	9.27	9.27	9.27	9.27	9.28	9.28	9.28	9.28	9.29	9.29	0.002287
2.70	3605.70	9.29	9.29	9.29	9.30	9.30	9.30	9.30	9.31	9.31	9.31	0.002287
2.80	3605.80	9.31	9.32	9.32	9.32	9.32	9.32	9.33	9.33	9.33	9.33	0.002287
2.90	3605.90	9.34	9.34	9.34	9.34	9.35	9.35	9.35	9.35	9.35	9.36	0.002287
3.00	3606.00	9.36	9.36	9.36	9.37	9.37	9.37	9.37	9.37	9.38	9.38	0.002199
3.10	3606.10	9.38	9.38	9.39	9.39	9.39	9.39	9.39	9.40	9.40	9.40	0.002199
3.20	3606.20	9.40	9.41	9.41	9.41	9.41	9.41	9.42	9.42	9.42	9.42	0.002199
3.30	3606.30	9.43	9.43	9.43	9.43	9.43	9.44	9.44	9.44	9.44	9.44	0.002199
3.40	3606.40	9.45	9.45	9.45	9.45	9.46	9.46	9.46	9.46	9.46	9.47	0.002199
3.50	3606.50	9.47	9.47	9.47	9.48	9.48	9.48	9.48	9.48	9.49	9.49	0.002199
3.60	3606.60	9.49	9.49	9.50	9.50	9.50	9.50	9.50	9.51	9.51	9.51	0.002199
3.70	3606.70	9.51	9.52	9.52	9.52	9.52	9.52	9.53	9.53	9.53	9.53	0.002199
3.80	3606.80	9.53	9.54	9.54	9.54	9.54	9.55	9.55	9.55	9.55	9.55	0.002199
3.90	3606.90	9.56	9.56	9.56	9.56	9.57	9.57	9.57	9.57	9.57	9.58	0.002199
4.00	3607.00	9.58										

Invert of outlet pipe = 3605.53 feet

Elevation values shown in *bold* correspond to surface area measurements.

# Table 3North Gateway Pond 2 & 3 Elevation-Area TableCity of Lamar

			Area, acres									
Staff gage (ft)	Elevation (ft)	0.00	0.01	0.02	0.03	0.04	0.05	0.06	0.07	0.08	0.09	Incr
0.50	3600.0	19.40	19.42	19.44	19.47	19.49	19.51	19.53	19.56	19.58	19.60	0.022412
0.60	3600.1	19.62	19.64	19.66	19.69	19.71	19.73	19.75	19.78	19.80	19.82	0.022412
0.70	3600.2	19.85	19.87	19.89	19.92	19.94	19.96	19.98	20.01	20.03	20.05	0.022412
0.80	3600.3	20.07	20.09	20.11	20.14	20.16	20.18	20.20	20.23	20.00	20.00	0.022412
0.90	3600.4	20.29	20.00	20.33	20.36	20.38	20.40	20.42	20.45	20.23	20.49	0.022412
1.00	3600.5	20.52	20.54	20.56	20.59	20.61	20.63	20.42	20.43	20.70	20.43	0.022412
1.10	3600.6	20.74	20.76	20.78	20.81	20.83	20.85	20.03	20.00	20.92	20.72	0.022412
1.10	3600.7	20.97	20.99	21.01	21.04	21.06	21.08	21.10	21.13	21.15	21.17	0.022412
1.30	3600.8	21.19	20.99	21.01	21.26	21.00	21.30	21.10	21.13	21.13	21.39	0.022412
1.40	3600.9	21.13	21.43	21.25	21.20	21.50	21.50	21.52	21.55	21.57	21.61	0.022412
1.40	3601.0	21.41	21.45	21.45	21.40	21.68	21.69	21.71	21.72	21.73	21.01	0.010926
1.60	3601.1	21.75	21.00	21.00	21.78	21.79	21.80	21.71	21.83	21.73	21.85	0.010926
1.70	3601.2	21.75	21.70	21.88	21.70	21.79	21.00	21.92	21.03	21.04	21.05	0.010926
1.80	3601.2	21.00	21.98	21.99	22.00	22.01	22.02	22.04	22.05	22.06	22.07	0.010926
1.90	3601.3	22.08	22.09	22.10	22.00	22.01	22.02	22.15	22.00	22.00	22.18	0.010926
2.00	3601.5	22.18	22.09	22.10	22.21	22.12	22.13	22.13	22.10	22.17	22.10	0.008750
2.10	3601.6	22.10	22.13	22.30	22.31	22.32	22.33	22.35	22.36	22.37	22.38	0.012504
2.10	3601.7	22.27	22.20	22.30	22.31	22.32	22.33	22.48	22.30	22.50	22.50	0.012504
2.20	3601.8	22.52	22.53	22.55	22.56	22.43	22.58	22.60	22.43	22.62	22.63	0.012504
2.40	3601.9	22.65	22.66	22.68	22.69	22.70	22.71	22.73	22.74	22.75	22.05	0.012504
2.50	3602.0	22.77	22.78	22.79	22.80	22.81	22.82	22.83	22.84	22.85	22.87	0.012604
2.60	3602.1	22.88	22.89	22.90	22.91	22.92	22.93	22.94	22.95	22.96	22.98	0.010625
2.70	3602.2	22.98	22.99	23.00	23.01	23.02	23.03	23.04	23.05	23.06	23.08	0.010625
2.80	3602.3	23.09	23.10	23.11	23.12	23.13	23.14	23.15	23.16	23.17	23.19	0.010625
2.90	3602.4	23.20	23.21	23.22	23.23	23.24	23.25	23.26	23.27	23.28	23.30	0.010625
3.00	3602.5	23.30	23.31	23.32	23.33	23.34	23.35	23.36	23.37	23.38	23.40	0.010625
3.10	3602.6	23.41	23.42	23.43	23.44	23.45	23.46	23.47	23.48	23.49	23.51	0.010625
3.20	3602.7	23.52	23.53	23.54	23.55	23.56	23.57	23.58	23.59	23.60	23.62	0.010625
3.30	3602.8	23.62	23.63	23.64	23.65	23.66	23.67	23.68	23.69	23.70	23.72	0.010625
3.40	3602.9	23.73	23.74	23.75	23.76	23.77	23.78	23.79	23.80	23.81	23.83	0.010625
3.50	3603.0	23.83						v			0	

Invert of outlet pipe = 3602.80 feet

The bank separating Ponds 2 and 3 was removed forming 1 pond. The breach area was included and the area for the two islands in Pond 3 were deducted.

Elevation values shown in *bold* correspond to surface area measurements.

Application for Approval of Plan for Augmentation and Appropriative Right of Exchange

Case No. 13CW3060

City of Lamar

December 18, 2013

DISTRICT COURT, WATER DIVISION 2, COLORADO Court Address: 320 W. 10 <sup>th</sup> Street Pueblo, CO. 81003 Phone Number: (719) 583-7000	
CONCERNING THE APPLICATION FOR SURFACE WATER RIGHTS OF:	
THE CITY OF LAMAR	
PROWERS COUNTY, COLORADO.	▲ COURT USE ONLY ▲
Attorneys for Applicant: David M. Shohet, #36675 Ryan W. Farr, #39394 FELT, MONSON & CULICHIA, LLC 319 N. Weber Street Colorado Springs, Colorado 80903 Phone Number: (719) 471-1212 Fax Number: (719) 471-1234 E-mail: <u>dms@fmcwater.com</u> <u>rwf@fmcwater.com</u>	Case No.: 13CW
APPLICATION FOR APPROVAL OF PLAN FOR	DR AUGMENTATION AND

### APPROPRIATIVE RIGHT OF EXCHANGE

### I. Name, Address and Telephone Number of Applicant.

City of Lamar, Colorado c/o City Administrator 102 E. Parmenter Street Lamar, CO. 81052

### Name, Address and Telephone Number of Applicants' Attorneys:

FELT, MONSON & CULICHIA, LLC David M. Shohet, #36675 Ryan W. Farr, #39394 319 N. Weber St. Colorado Springs, CO 80903 (719) 471-1212

### II. Summary of Plan for Augmentation.

The City of Lamar ("Lamar") has recently acquired approximately 108 acres of land located in the portions of Sections 29 and 30 in Township 22 South, Range 46 West of the 6<sup>th</sup> P.M. The property acquired by Lamar was formerly a mine site known as Valco Lamar East Pit M-77-572. Upon completion of mining activities on the property, the property has been reclaimed leaving three ponds with a total water surface area of 30.2 acres. Of the 30.2 acres of surface area, 7.0 acres existed pre-1981 resulting in a post-1980 surface area of 23.2 acres. Lamar files this Application for requesting a permanent plan of augmentation to replace all evaporative depletions associated with 23.2 acres of surface area of the ponds with water rights owned by the Lamar, including without limitation, Lamar's shares in the Fort Bent Ditch Company, allocated Fryingpan-Arkansas Project water, and Lamar's sewered and non-sewered return flows. Lamar intends to utilize the ponds, in conjunction with the Colorado Parks and Wildlife, for recreational, wildlife and piscatorial uses. Lastly, this Application requests an appropriative right of exchange from the confluence of Clay Creek and the Arkansas River to the point of depletion of the ponds to the Arkansas River.

### III. Plan for Augmentation.

Lamar seeks a plan for augmentation to cover the out-of-priority depletions attributable to evaporation associated with the three ponds now known as the Lamar North Gateway Park Ponds as described as follows.

- A. <u>Name of Structures to be Augmented:</u>
  - 1. Lamar North Gateway Park Pond No. 1:

a. <u>Legal Description of Pond:</u> In the NE1/4 of the SE 1/4, Section 30, Township 22 South, Range 46 West of the 6<sup>th</sup> P.M., approximately 1,840 feet north of the South Section Line and 950 feet west of the East Section Line.

b. <u>Source:</u> Exposed groundwater as the result of gravel mining tributary to the Arkansas River.

- c. <u>Surface Area of Pond:</u> 8.8 acres.
- 2. Lamar North Gateway Park Pond No. 2:

a. <u>Legal Description:</u> In the NW ¼ of the SW 1/4, Section 29, Township 22 South, Range 46 West of the 6<sup>th</sup> P.M., approximately 1,810 feet north of the South Section Line and 1,020 feet east of the West Section Line.

b. <u>Source:</u> Exposed groundwater as the result of gravel mining tributary to the Arkansas River.

### c. <u>Surface Area:</u> 6.6 acres.

### 3. Lamar North Gateway Park Pond No. 3:

a. <u>Legal Description</u>: In the NE 1/4, SW 1/4, Section 29, Township 22 South, Range 46 West of the 6<sup>th</sup> P.M., approximately 1,890 feet north of the South Section Line and 2,050 feet east of the West Section Line.

b. <u>Source:</u> Exposed groundwater as the result of gravel mining tributary to the Arkansas River.

c. <u>Surface Area:</u> 14.8 acres of surface area.

Collectively, the above structures are the Lamar North Gateway Park Ponds. The Lamar North Gateway Park Ponds are shown on the attached Figure 1.

B. <u>Water Rights to be used for augmentation</u>:

1. <u>Shares in the Fort Bent Ditch Company</u>. The water rights to be used for augmentation of the Lamar North Gateway Park Ponds include 2,813.6 shares of Fort Bent Ditch Company ("Ft. Bent") owned by Lamar including the associated Ft. Bent Article II storage account water stored in John Martin Reservoir. Of the 2,813.6 shares in the Ft. Bent to be used for augmentation hereunder, 923 of the shares have been changed in Case No. 02CW181. The remaining shares are to be changed under Lamar's pending change case, Case No. 05CW107-A. Lamar will use all shares to augment depletions hereunder pursuant to the terms and conditions entered in Case Nos. 02CW181 and 05CW107-A. The Fort Bent water rights are decreed as follows:

- a. Appropriation Dates, Priority Numbers and Amounts:
  - i. April 1, 1886, Priority No. 6 for 27.77 c.f.s.
  - ii. March 10, 1889, Priority No. 10 for 32.77 c.f.s.
  - iii. September 11, 1889, Priority No. 12 for 11.7 c.f.s.
  - iv. August 12, 1890, Priority No. 14 for 26.27 c.f.s.
  - v. January 1, 1893, Priority No. 1918-2 for 50 c.f.s.
  - vi. December 31, 1900, Priority No. 1918-9 for 80 c.f.s.
- b. Original Decree for Priority Nos. 6, 10, 12 and 14:

i. <u>Case No</u>.: Unnumbered adjudication titled "In the matter of the Adjudication of Priorities to the use of Water for Irrigation in District Number 67."

- ii. <u>Dated entered</u>: July 1, 1895.
- iii. <u>Court:</u> Bent County District Court.
- c. Original Decree for Priority Nos. 1918-2 and 1918-9:

i. <u>Case No.</u>: Unnumbered adjudication titled "In the Matter of the Adjudication of Water Rights and priorities to the use of Water in Water District Number Sixty-seven, in the State of Colorado."

ii. <u>Date entered</u>: October 14, 1918.

iii. <u>Court</u>: Bent County District Court.

d. <u>Decreed Point of Diversion</u>: The decreed headgate location is at "a point in the South bank of the Arkansas River, which point is located as follows: at a point whence it is South 48°17' East 438 feet to the Southwest corner of Lot Four (4), in Section One (1), Township Twenty-three (23) South, Range Forty-nine (49) West of the sixth Principal Meridian, in Bent County, Colorado."

e. <u>Source</u>: The Arkansas River.

2. <u>Fryingpan-Arkansas Project water</u>. Lamar is within the boundaries of the Southeastern Colorado Water Conservancy District ("Southeastern District") and is therefore entitled to receive an annual allocation of water from the Fryingpan-Arkansas project ("Project Water"). Lamar claims the right to use, reuse, and successively use to extinction the Project Water for augmentation hereunder. The project water rights are described as follows:

(i) West Slope Decrees: The Fryingpan-Arkansas project diverts surface water from the headwaters of Hunter Creek and the Fryingpan River and their tributaries in Pitkin County. The principal water rights were adjudicated by the decrees in Civil Action No. 4613 (District Court, Garfield county) dated June 20, 1958, and August 3, 1959; and were modified by the Decree in Case No. W-829-76 (District Court, Water Division 5) dated November 27, 1979; and were supplemented by the Decree in Case No. 83CW352 (District Court, Water division No. 5) dated May 31, 1985. These water rights have an appropriation date of July 29, 1957. Water diverted under these decrees travels under the Continental Divide through Boustead Tunnel, which empties into Turquoise Reservoir. This water may be stored in Turquoise Reservoir, Twin Lakes Reservoir and elsewhere, and applied to beneficial use within Southeastern's District boundaries. Because the water is imported from another river

basin, it is fully consumable in Water Division 2.

(ii) East Slope Decrees: The Fryingpan-Arkansas Project also diverts and stores surface water from the Arkansas River and its tributaries in Lake, Chaffee, Fremont and Pueblo Counties. The principal water rights were adjudicated by the decrees in Civil Action No. 5141 (District Court, Chaffee County) dated July 9, 1969; and Civil Action No. B-42135 (District Court, Pueblo County) dated June 25, 1962; and were modified and supplemented by the Decree in Case No. 80CW6 (District Court, Water Division 2), dated October 23, 1980. These water rights include storage in Turquoise Reservoir, Twin Lakes Reservoir, Pueblo Reservoir and elsewhere, with an appropriation date of February 10, 1939, and are expressly decreed for reuse and exchange for beneficial use within Southeastern's District boundaries. Under these decrees, Turquoise Reservoir and Twin Lakes Reservoir may store native water or imported water, directly or by exchange with each other or with Pueblo Reservoir.

The Southeastern District allocates Project Water annually based on its principles, policies, rules and regulations. Any and all use of Project Water therefrom will be pursuant to and subject to the above-referenced decrees for the Fryingpan-Arkansas Project, and to all lawful rules, regulations, policies, and contract obligations of the Southeastern District. Any decree entered in this case will not give Lamar any rights to use Fryingpan-Arkansas Project structures, or any rights of ownership or rights to purchase or receive allocations of Project Water therefrom, but will not alter the existing rights, including allocation rights, held by Lamar.

3. <u>Wastewater treatment system</u>. Lamar operates a wastewater treatment facility for disposal of water used for in-building purposes collected by a central wastewater collection system. The portion of the fully consumable treated wastewater delivered to the three lagoons that is not evaporated from the water surface or consumed by phreatophytes percolates into the Arkansas River alluvium and the City claims these treated wastewater return flows for augmentation purposes. The City of Lamar's wastewater disposal lagoons are located in the SW1/4 of section 27 and the SE1/4 of section 28, Township 22 South, Range 46 West of the 6th P.M., Prowers County. Lamar's sewered return flows are to be calculated and decreed in Case No. 05CW107-A.

4. <u>Lawn and landscape irrigation return flows</u>. Potable and nonpotable water is used for irrigation of residential and commercial lawns and landscape and public parks, athletic fields, golf course, cemeteries and open space. Lamar's irrigation return flows are to be calculated and decreed in Case No. 05CW107-A.

C. <u>Statement of Plan for Augmentation</u>. Lamar seeks approval of a plan for augmentation to cover depletions caused by the Lamar North Gateway Park Ponds. The total surface area of the Lamar North Gateway Park Ponds is 30.2 acres. 7.0 acres of this exposed surface water existed as of December 30, 1980. Therefore, of the 30.2 acres of exposed surface area, 23.2 acres requires replacement of stream depletions

due to evaporation from the ponds. Lamar's water resource engineers have calculated that the annual net evaporation rate of the ponds is 4.11 annual acre feet per acre of surface area exposed. Accordingly, the Lamar North Gateway Park Ponds will cause 95.35 annual acre-feet of depletions to the Arkansas River.

Lamar North Gateway Park Ponds are located an average distance of 76.7 feet from the Arkansas River. A Glover analysis was completed by Lamar's water resource engineers with an aquifer transmissivity of 200,000 gpd/ft and a specific yield of 0.20. The result of the analysis shows that 95.8 percent of depletions to the river resulting from pond evaporation occur within the same month. Therefore, Lamar will return the full amount of that month's replacement water to the Arkansas River in the same month. Monthly evaporation for the Lamar North Gateway Park Ponds have been determined as follows:

Month	Net Evaporation Rate (ft.)	Pond Evaporation To Be Replaced (acre feet)
January	0.13	2.97
February	0.15	3.40
March	0.23	5.24
April	0.36	8.46
Мау	0.46	10.67
June	0.60	13.86
July	0.62	14.27
August	0.55	12.76
September	0.43	10.00
October	0.30	6.96
November	0.17	3.88
December	0.12	2.88

Total Replacement = 95.35 af.

Replacement water associated with the Fort Bent shares will be returned to the Arkansas River by either an augmentation station located on the Fort Bent Ditch or by returning water to the Arkansas River at its confluence with Clay Creek as a result of placement of water into Lamar's recharge facility located in portions of Sections 10, 15, 22, Township 23 South, Range 46 West, 6<sup>th</sup> P.M.

### IV. Appropriative Right of Exchange.

A. <u>Water to Be Exchanged</u>. Lamar seeks to exchange the following water rights:

1. <u>Fort Bent water</u>. 2,813.6 Ft. Bent shares as described above.

2. <u>Fryingpan-Arkansas Project water</u>. Lamar's allocated Project Water as described above.

B. <u>Exchange Right</u>. Lamar delivers its Fort Bent water and Project water to a recharge facility tributary to Clay Creek located in portions of Sections 10, 15, and 22, Township 23 South, Range 46 West of the 6th P.M., Prowers County, Colorado, to replace diversions associated with its municipal well pumping from its Clay Creek wells. Deliveries of water for recharge purpose that exceeds the amount diverted by Lamar at its Clay Creek wells returns to the Arkansas River. Lamar seeks to adjudicate the amount of water that returns to the Arkansas River in Case No. 05CW107-A in the SE1/4 Section 25, Township 22 South, Range 46 West of the 6th P.M, to Lamar North Gateway Park Ponds point of depletions on the Arkansas River located in the SW1/4 Section 29 and SE1/4 Section 30, Township 22 South, Range 46 West of the 6th P.M.

C. <u>Uses</u>. Lamar seeks to use the exchanged water for augmentation and replacement purposes.

D. <u>Appropriation Date</u>. April 30, 2013.

E. <u>Amount of Exchange</u>. The maximum exchange rate shall be 8 c.f.s., conditional.

## V. Name And Address Of Owners Of Land On Which Structures Will Be Located.

Lamar owns the land on which all three of the Lamar North Gateway Park Ponds are located.

### VI. Additional Terms and Conditions.

A. Lamar shall install and maintain such water measuring devices as deemed essential by the State Engineer or Division Engineer and the same shall be installed and operated in accordance with the instruction of that office.

B. The Lamar North Gateway Park Ponds are currently permitted under Well Permit No. 52184-F issued by the State Engineer. Lamar will obtain a new well permit in accordance with any final decree entered in this matter.

C. Lamar will provide appropriate monthly accountings to the Division Engineer demonstrating compliance with this plan for each pond.

D. The operation of the exchange will be limited to the timing of the availability of the water rights to be exchanged within the exchange reach. The exchanges may only be operated to the extent that other vested water rights senior to this exchange within the exchange reaches are not deprived of water to which they would have been entitled in the absence of such exchanges.

7

E. The Division Engineer shall assess appropriate transit losses, if any.

F. Lamar intends to use the Lamar North Gateway Park Ponds for recreational, wildlife and piscatorial uses. As these uses are non-consumptive and Lamar is replacing 100% of the evaporative depletions associated with the ponds, a separate augmentation plan is not needed to utilize the ponds for such future uses. Lamar, however, seeks confirmation that it can utilize the Lamar North Gateway Park Ponds for its future uses so long as it replaces 100% of the evaporative depletions from the ponds.

WHEREFORE, Lamar requests that its Application for Approval of Plan for Augmentation Application and for Appropriative Right of Exchange be granted as requested herein, and for such other and further relief as the Court deems appropriate in these circumstances.

RESPECTFULLY submitted this <u>18<sup>th</sup></u> day of December, 2013.

FELT, MONSON & CULICHIA, LLC (Pursuant to CRCP 121, the original, signed document is kept on file at Felt, Monson & Culichia, LLC)

### s/ David M. Shahet

David M. Shohet, #36675 Ryan W. Farr, #39394

### STATE OF COLORADO

) ) ss.

)

### COUNTY OF PROWERS

John Sutherland, being first duly sworn, states that he is the City Administrator for the City of Lamar, that he has read the foregoing Application and that same is true and accurate to the best of his knowledge and belief.

John Sutherland

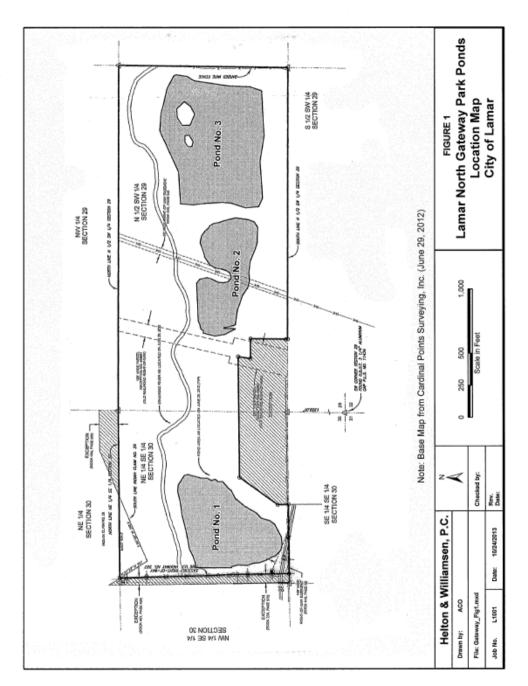
City Administrator, City of Lamar

The foregoing instrument was acknowledged before me this  $\underline{17}$  day of December 2013, by John Sutherland as City Administrator for the City of Lamar.

My commission expires: 8-03-2015



Bienda, Van Campeus Notary Public



Ordinance No. 1189

An Ordinance of the City of Lamar, Colorado Annexing Property Known as the North Gateway Park Annexation to the City of Lamar, Colorado

October 28, 2013

### AN ORDINANCE OF THE CITY OF LAMAR, COLORADO ANNEXING PROPERTY KNOWN AS THE NORTH GATEWAY PARK ANNEXATION TO THE CITY OF LAMAR, COLORADO

WHEREAS, Resolution 13-08-02, finding substantial compliance with the provisions of the Municipal Annexation Act, 31-12-101, et seq., Colorado Revised Statutes, determining that the area is eligible for annexation; and,

WHEREAS, the City Council does hereby find and determines that it is in the best interests of the City to annex said area to the City.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY COUNCIL OF THE CITY OF LAMAR, **COLORADO AS FOLLOWS:** 

That the property described on the Exhibit attached hereto and made a Section 1. part hereof by reference, be and hereby is, annexed to the City of Lamar and made a part of said City.

That the property is hereby zoned A-L Agricultural District. Section 2.

That the City does hereby consent, pursuant to Section 37-45-136(3.6), Section 3. Colorado Revised Statutes, to the inclusion of said property into the Southeastern Water **Conservancy District.** 

INTRODUCED, READ IN FULL, AND PASSED ON FIRST READING this 28th day of October, 2013, in accordance with the City Charter.

**CITY OF LAMAR, COLORADO** 

Roger Stagner, Mayor

ATTEST:

Linda Williams, City Clerk

INTRODUCED, READ IN FULL, AND PASSED ON SECOND READING this 11th day of November, 2013, in accordance with the City Charter.

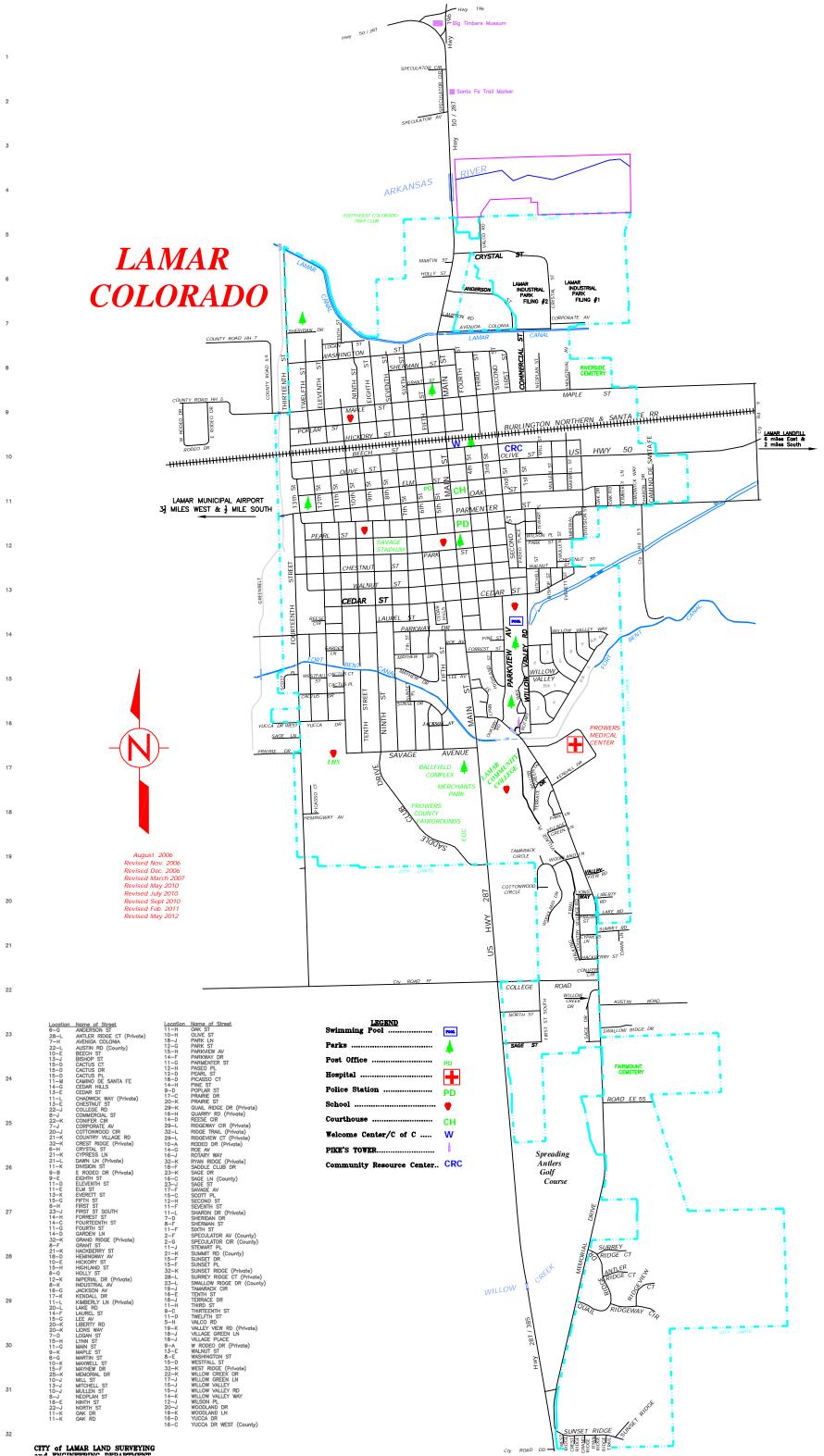
**CITY OF LAMAR, COLORADO** 

Roger Stagner, Mayor

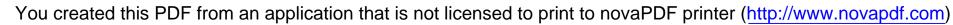
ATTEST

I, Linda Williams, City Clerk for the City of Lamar, Colorado do hereby certify that the above and foregoing Ordinance was introduced and read in full at a regular meeting of the City Council of the said City on the 28<sup>th</sup> day of October, 2013 and that it was thereafter on the 1<sup>st</sup> day of November, 2013 published in full in the Lamar Ledger and that on the 11<sup>th</sup> day of November, 2013, at a regular meeting of the City Council, it was passed and approved upon final reading and was thereafter on the 15<sup>th</sup> day of November, 2013 again published in the Lamar Ledger.

CITY O (SI **¢ITY CLERK** 



1	3-E	CEDAR ST	9-D	POPLAR ST
1	1-L	CHADWICK WAY (Private)	17-C	PRAIRIE DR
1	3-E	CHESTNUT ST	20-K	PRAIRIE ST
2	22—J	COLLEGE RD	29-K	QUAL RIDGE DR (Private
E	3-J	COMMERCIAL ST	10-1	QUARRY RD (Private)
2	22-K	CONIFER CIR	20-1	DIDOEWAY CID (Delusta)
1	-J	CORPORATE AV	29-L	RIDGE TRAIL (Private)
4	20-5 21-K	COUNTRY VILLACE RD	32-L	RIDGE IRAIL (Private)
1	12_K	CREST RIDCE (Private)	29-L	RODED DR (Privata)
ě	Б—Н	CRYSTAL ST	14-6	ROF AV
2	21-K	CYPRESS LN	16-J	ROTARY WAY
2	21—L	DAWN LN (Private)	32-K	RYAN RIDGE (Private)
1	1-K	DIVISION ST	18-F	SADDLE CLUB DR
8	9-8	E RODEO DR (Private)	23–K	SAGE DR
8	9-E	EIGHTH ST	16-C	SAGE LN (County)
	1-0	ELEVENIM SI	23-J	SAGE ST
	3-6	ELM ST	1/	SAVAGE AV
1	5-G	FIFTH ST	12-4	SECOND ST
é	3-H	FIRST ST	11-F	SEVENTH ST
2	23–J	FIRST ST SOUTH	11-L	SHARON DR (Private)
1	4-H	FORREST ST	7-D	SHERIDAN DR
1	4-C	FOURTEENTH ST	8-F	SHERMAN ST
	1-0 4-D	CARDEN IN	11-F	SIXTH ST
1	19_K	CRAND RIDGE (Private)	2-F	SPECULATOR AV (County)
ě	I-F	GRANT ST	2-G	SPECULATOR CIR (County
2	21-K	HACKBERRY ST	11-J	SILWARI PL
1	8-D	HEMINGWAY AV	21-K	SUNSET DR
1	0-E	HICKORY ST	15-F	SUNSET PL
1	5-H	HIGHLAND ST	32-K	SUNSET RIDGE (Private)
1	2_1	INDEDIAL DB (Briverte)	28-L	SURREY RIDGE CT (Priva
ė	2-n 1-K	INDUSTRIAL AV	23–L	SWALLOW RIDGE DR (Cou
1	6-G	JACKSON AV	19-J	TAMARACK CIR
1	7-K	KENDALL DR	16-E	TENTH ST
1	1-L	KIMBERLY LN (Private)	16-J 11_H	THIPD ST
2	20-L	LAKE RD	9-0	THIRTEENTH ST
1	4-1	LAUREL SI	11-D	TWELFTH ST
5	0-K	LEE AV	5-H	VALCO RD
2	20-K	LIONS WAY	19-K	VALLEY VIEW RD (Private
7	7-D	LOGAN ST	18-J	VILLAGE GREEN LN
1	5-H	LYNN ST	18-J	VILLAGE PLACE
1	1-G	MAIN ST	9-A	WALNUT CT
2	/-K	MAPLE ST	8-F	WASHINGTON ST
1	0-K	MAYWELL ST	15-D	WESTFALL ST
i	5-F	MAYHEW DR	32-K	WEST RIDGE (Private)
2	25-K	MEMORIAL DR	22-K	WILLOW CREEK DR
1	0-J	MILL ST	17-J	WILLOW GREEN LN
1	3-J	MITCHELL ST	15-J	WILLOW VALLEY
1	0-J	MULLEN SI	15-J	WILLOW VALLEY WAY
1	6-F	NINTH ST	12-J	WILSON PL
2	22-J	NORTH ST	20-J	WOODLAND DR
1	1-K	OAK DR	19-K	WOODLAND LN
1	1-K	OAK RD	16-D	YUCCA DR
			16-C	YUCCA DR WEST (County
		CEDAR'ST CEDAR'ST CHADWICK WAY (Private) CHESTNUT ST COMMERCAL ST COMMERCAL ST COMMERCAL ST COMMERCAL ST COMMERCAL ST COMMERCAL (Private) CONTONWOOD CIR COUNTRY (HLAGE RD COUNTRY (HLAGE RD CONTRY ST ST FIRST ST SOUTH ST FIRST ST SOUTH ST FIRST ST SOUTH ST FIRST ST		
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Township 22 South, Range 46 West of the Sixth Principal Meridian, County of Prowers, State of Colorado

Section 29: N 1/2 SW 1/4

Section 30: NE ½ SE ½ (also described as Lot 6); AND a Tract of land in the E ½, more particularly described as follows:

COMMENCING at the intersection of South line of Indian Claim No. 26 and the East line of said Section 30; thence West 310 feet; thence South 66°58' West a distance of 375.5 feet to the True Point of Beginning; thence South 66°58'West a distance of 548.5 feet to the Southern most corner of said Indian Claim No. 26; thence North 31°22' West a distance of 251 feet; thence East 634.6 feet to the TRUE POINT OF BEGINNING:

EXCEPT a Tract of land to the Board of County Commissioners described in deed recorded November 23, 1932 in Book 235, Page 575;

EXCEPT a Tract of land to the Department of Highways described in deed recorded March 1, 1966 in Book 461, Page 439;

EXCEPT a Tract of land to Amelia M. Dorenkamp in deed recorded August 3, 1966 in Book 464, Page 396.

### FURTHER EXCEPTING:

A parcel of land being within a portion of the NW ¼ of the SW ¼ of Section 29 and within a portion of the NE ¼ of the SE ¼ of Section 30, Township 22 South, Range 46 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, being more particularly described as follows:

BEGINNING at the SW comer of the said NW ¼ of the SW ¼ of Section 29 from which the SW comer of said Section 29 bears S 00°44'30"W (Bearings based on the west line of the said SW ¼ of Section 29, Township 22 South, Range 46 West of the Sixth Principal Meridian, monumented at the south end with a C.D.O.T. 3 ¼" aluminum cap P.L.S. No. 11434 and monumented at the north end with a 3 ¼" aluminum cap P.L.S. No. 30087, assumed to bear N 00°44'30"E), a distance of 1309.07 feet; thence S 89°35'56"W, along the south line of the said NE ¼ of the SE ¼ of Section 30, a distance of 710.79 feet; thence N 00°47'17"W, a distance of 82.18 feet; thence N 35°29'02"E, a distance of 362.63 feet; thence N 89°35'56"E, a distance of 152.02 feet; thence S 00°44'30"W, a distance of 285.85 feet to a point on the south line of the SW ¼ of the SW ¼ of Section 29; thence N 89°39'10"W, along said south line of the NW ¼ of the SW ¼, a distance of 561.93 feet to the POINT OF BEGINNING.

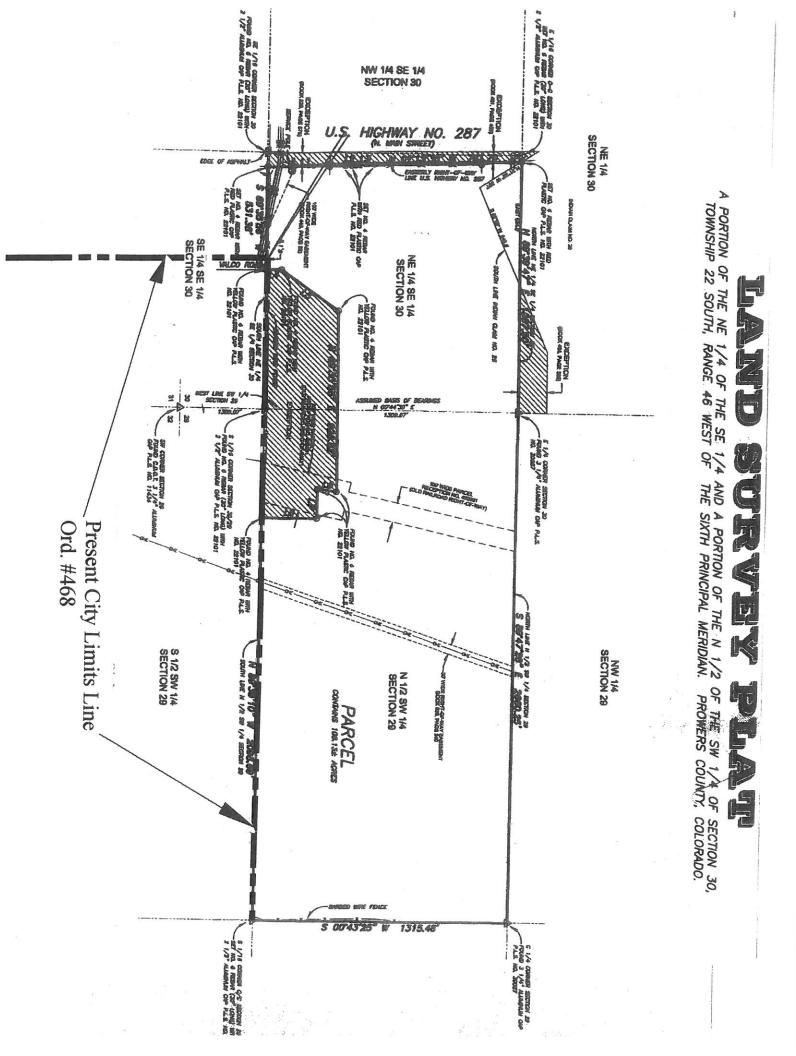
Said Parcel contains 108.13 acres, more or less.

I, RANDY G. REEVES, a Professional Land Surveyor registered in the State of Colorado, hereby certify that a survey of the above described premises was conducted by me or under my direct responsible charge in August, 2010 and complies with the minimum standards of Land Surveys and Plats as set forth in Section 38-51-106 et, seq. C.R.S. 1995 (as amended.)

RANDY GAREEVES PROFESSIONAL LAND SURVEYOR NO 22101

9-13-10





### Special Warranty Deed between Valco, Inc. and the City of Lamar, Colorado

### North Gateway Park Property

April 30, 2013

After recording return to: City of Lamar, City Attorney 102 East Parmenter Lamar, CO 81052

ie . . .

### SPECIAL WARRANTY DEED

THIS DEED, made this <u>30</u> day of April, 2013, between VALCO, INC., a Colorado corporation ("Grantor"), whose address is 12753 South Parker Road, Suite 203, Parker, CO 80134, and the CITY OF LAMAR, Colorado, a Colorado municipal corporation ("Grantee"), whose address is 102 East Parmenter, Lamar, CO 81052.

WITNESSETH, that Grantor, for and in consideration of Ten Dollars (\$10.00) and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, has granted, bargained, sold and conveyed, and by these presents does grant, bargain, sell, convey and confirm unto Grantee and its successors and assigns forever all the real property (the "**Property**") situate, lying and being in the County of Prowers, State of Colorado, described as follows:

See Exhibit A attached hereto and incorporated herein by this reference.

TOGETHER WITH all and singular the hereditaments and appurtenances thereto belonging, or in anywise appertaining, and the reversion and reversions, remainder and remainders, rents, issues and profits thereof; and all the estate, right, title, interest, claim and demand whatsoever of Grantor, either in law or equity, of, in and to the Property.

TO HAVE AND TO HOLD the said premises above bargained and described, with the appurtenances, unto Grantee, and its successors and assigns forever. Grantor, for itself and its successors and assigns, does covenant and agree that it shall and will WARRANT AND FOREVER DEFEND the Property in the quiet and peaceable possession of Grantee, and its successors and assigns, against all and every person or persons claiming the whole or any part thereof by, through or under Grantor and not otherwise, EXCEPT AND SUBJECT TO taxes and assessments for the year 2013 and subsequent years, a lien not yet due and payable, and the matters listed on Exhibit B attached hereto and incorporated herein by this reference.

NO DOCUMENTARY FEE IS REQUIRED PURSUANT TO C.R.S. SECTION 39-13-104(1)(a).

[This space intentionally left blank. Signature page follows.]

IN WITNESS WHEREOF, Grantor has executed this Deed on the date set forth above.

Valco, Inc., a Colorado corporation

Bv:<

Thomas E. Brubaker, President

State of Colorado ) ) ss. County of <u>flowers</u>

والمعرد والأربير

The forgoing Agreement was acknowledged before me this 30 day of 40 me this 2013 by Thomas E. Brubaker, President of Valco, Inc.

Witness my hand and official seal:

Brench Van Campen Notary Public

My Commission Expires: 8-03-2015

### EXHIBIT A

### **LEGAL DESCRIPTION**

Township 22 South, Range 46 West of the Sixth Principal Meridian, County of Prowers, State of Colorado

Section 29: N 1/2 SW 1/4

Section 30: NE  $\frac{1}{2}$  SE  $\frac{1}{2}$  (also described as Lot 6); AND a Tract of land in the E  $\frac{1}{2}$ , more particularly described as follows:

COMMENCING at the intersection of South line of Indian Claim No. 26 and the East line of said Section 30; thence West 310 feet; thence South 66°58' West a distance of 375.5 feet to the True Point of Beginning; thence South 66°58'West a distance of 548.5 feet to the Southern most comer of said Indian Claim No. 26; thence North 31°22' West a distance of 251 feet; thence East 634.6 feet to the TRUE POINT OF BEGINNING;

EXCEPT a Tract of land to the Board of County Commissioners described in deed recorded November 23, 1932 in Book 235, Page 575;

EXCEPT a Tract of land to the Department of Highways described in deed recorded March 1, 1966 in Book 461, Page 439;

EXCEPT a Tract of land to Amelia M. Dorenkamp in deed recorded August 3, 1966 in Book 464, Page 396.

FURTHER EXCEPTING:

A parcel of land being within a portion of the NW ¼ of the SW ¼ of Section 29 and within a portion of the NE ¼ of the SE ¼ of Section 30, Township 22 South, Range 46 West of the Sixth Principal Meridian, County of Prowers, State of Colorado, being more particularly described as follows:

BEGINNING at the SW corner of the said NW ¼ of the SW ¼ of Section 29 from which the SW corner of said Section 29 bears S 00°44′30″W (Bearings based on the west line of the said SW ¼ of Section 29, Township 22 South, Range 46 West of the Slxth Principal Meridian, monumented at the south end with a C.D.O.T. 3 ¼″ aluminum cap P.L.S. No. 11434 and monumented at the north end with a 3 ¼″ aluminum cap P.L.S. No. 30087, assumed to bear N 00°44′30″E), a distance of 1309.07 feet; thence S 89°35′56″W, along the south line of the said NE ¼ of the SE ¼ of Section 30, a distance of 710.79 feet; thence N 00°47′17″W, a distance of 82.18 feet; thence N 35°29′02″E, a distance of 362.63 feet; thence S 89°35′56″E, a distance of 928.62 feet; thence S 00°44′30″W, a distance of 98.03 feet; thence S 89°26′16″E, a distance of 152.02 feet; thence S 00°44′30″W, a distance of 285.85 feet to a point on the south line of the said NW ¼ of the SW ¼ of Section 29; thence N 89°39′10″W, along said south line of the NW ¼ of the SW ¼, a distance of 561.93 feet to the POINT OF BEGINNING.

Said Parcel contains 108.13 acras, more or less.

BUS\_RE/4667559.1

### EXHIBIT B

### PERMITTED EXCEPTIONS

1. Taxes for the year 2013, a lien not yet due and payable.

A a d i re i -

- 2. Existing streets, highways or roadways and rights of way or easements therefore whether or not shown by the Public Records.
- 3. Grant of all minerals in the instrument between A.E. Bent and State of Colorado recorded April 2, 1919 at Book 103, Page 356, together with the appurtenant rights to use the surface. The Company makes no representation as to present ownership of this interest.
- 4. Right of way for electric transmission as shown in deed between Sigmon and Lydia Brausall and Southeast Colorado Power Association filed May 22, 1951 at Book 354, Page 587.
- Right of way easement in NE¼SW¼ 29-22-46 for transmission in deed between Lamar Valco and Southeast Colorado Power Association filed September 17, 1974 at Book 530, Page 340.
- 6. Flood Damage Prevention Resolution for purpose of enforcement or application of County Flood Plain Regulations by the Board of Prowers County Commissioners, recorded June 27, 1986, at Reception No. 432500.
- Right of way easement in NE¼SE¼ 30-22-46 for transmission in deed between Sigmon & Lydia Brausall and Electric Department of City of Lamar filed June 26, 1946 at Book 297, Page 508.
- 8. Right of way easement in NE<sup>1</sup>/<sub>4</sub>SE<sup>1</sup>/<sub>4</sub> 30-22-46 for transmission in deed between Valley Concrete Co and Utilities Board of City of Lamar filed February 18, 1964 at Book 448, Page 92.
- 9. Right of way easement for power lines as shown in deed between Lamar Valley Concrete Co and Utilities Board of City of Lamar filed July 20, 1970 at Book 495, Page 475.

Stream Depletion Using Glover Techniques Lamar North Gateway Park Pond Nos. 1, 2, and 3 September 13, 2013

# North Gateway Park, Glover Analysis-1 STREAM DEPLETION USING GLOVER TECHNIQUES CITY OF LAMAR LAMAR NORTH GATEWAY PARK POND NOS. 1, 2, AND 3 AUG. 31, 2015 STREAM STREAM STREAM OWELL OWELL

### PUMPING SCHEDULE TOTAL TIME SIMULATED= 12 MONTHS

PUMPI NG PERI OD	Q (GPM)	LENGTH (MONTHS)	CUM. TIME (MONTHS)	VOL. PUMPED THIS PERIOD (ACRE-FEET)	CUM. VOL. PUMPED (ACRE-FEET)
1	74. 406	1	1	10. 000	10. 000
2	0. 000	11	12	0. 000	10. 000

### STREAM DEPLETION

DEP. RATE (GPM)	VOL. OF DEP. (ACRE-FEET)	VOL. OF DEP. THIS STEP (ACRE-FEET)
72. 8094 0. 4708 0. 2273 0. 1604 0. 1278 0. 1051 0. 0865 0. 0718	9.5779 9.8223 9.8651 9.8904 9.9096 9.9252 9.9380 9.9487 9.9487	9. 5779 0. 2444 0. 0428 0. 0254 0. 0192 0. 0156 0. 0128 0. 0107
0.0595	9.9575 9.9647	0. 0088 0. 0072
0.0408	9. 9708 9. 9758	0.0062
	(GPM) 72. 8094 0. 4708 0. 2273 0. 1604 0. 1278 0. 1051 0. 0865 0. 0718 0. 0595 0. 0493	(GPM)         (ACRE-FEET)           72. 8094         9. 5779           0. 4708         9. 8223           0. 2273         9. 8651           0. 1604         9. 8904           0. 1278         9. 9096           0. 1051         9. 9252           0. 0865         9. 9380           0. 0718         9. 9487           0. 0595         9. 9575           0. 0493         9. 9647           0. 0408         9. 9708

Proposed Water Accounting Worksheets

Case Nos. 05CW107-A & 13CW3060

### Control Sheet City of Lamar's Monthly Accounting Inclusive of Pumping under Rule 14 and Case Nos. W-4015, 02CW181, and 05CW107-A

Plan Year (Starting Year of April - March plan): 2015 <-- User enters the plan year in this cell. Beginning Date of Plan: 4/1/2015 <-- This cell sets the date of all sheets in the plan.

Ending Date of Plan: 3/31/2016

### Lamar's Ft. Bent Shares:

_	Total	Used this Yr
W-4015:	386	386
02CW181:	923	923
05CW107-A:	1890.6	1890.6

Plan	Month	Days per	Lamar Share	s at Ft. Bent Au	ug. Sta.	Shares	at Clay Cr. Ro	hg. Pond	Shares a	t Ballfield			Checks	3
Months:	No.	Month:	02CW181	05CW107-A	Total	W-4015	02CW181	05CW107-A	02CW181	05CW107-A	Total	W-4015	02CW181	05CW107-A
4/1/2015	4	30	363	415	778	386	560	1445.6	0	30	3199.6	0	0	0
5/1/2015	5	31	363	415	778	386	560	1445.6	0	30	3199.6	0	0	0
6/1/2015	6	30	363	415	778	386	560	1445.6	0	30	3199.6	0	0	0
7/1/2015	7	31	363	415	778	386	560	1445.6	0	30	3199.6	0	0	0
8/1/2015	8	31	363	475	838	386	560	1385.6	0	30	3199.6	0	0	0
9/1/2015	9	30	363	650	1013	386	560	1210.6	0	30	3199.6	0	0	0
10/1/2015	10	31	363	850	1213	386	560	1010.6	0	30	3199.6	0	0	0
11/1/2015	11	30						``						
12/1/2015	12	31												
1/1/2016	1	31												
2/1/2016	2	29												
3/1/2016	3	31												

### Pumping Allocated to Wells in LAWMA

Depl. Factor						
85%						
85%						
85%						
85%						
85%						
100%						
37	(273 owned)					
20	(20 owned)					
75%						
47.75						
	Depl. Factor           85%           85%           85%           85%           100%           37           20           75%					

### Irrigation Depletion/Return Flow

Irrigation Depletion	85%
Surface Runoff of Irrigation	2%
Deep Percolation of Irrigation	13%

Accounts ServicedTotalNon-Sewered3,48786

### Color Coding:

= data entry required

= Derivation sheets: Copy and Paste Special/Values for the previous year AFTER pasting the formulas down 12 months for the new year.

### Calculation of Winter In-Building Use Rate, Acre-Feet

	thly Use	is Winter Mor	Previou
<u>Per-Day Avg In-Bldg Use</u>	Feb-15	<u>Jan-15</u>	Dec-14
2.696	75.76	86.67	80.19

### SUMMARY

City of Lamar's Monthly Accounting for April 2015 through March 2016

Inclusive of Pumping, Replacements, Recharge, and Exchanges under Rule 14, W-4015, 05CW107-A, and 05CW107-B

(values in ac-ft)

Row		Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total
	PUMPING					Ŭ								
1	Total Clay Creek Aquifer Pumping	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2	Wells 1-20, 10A Pumping under W-4015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3	Wells 1-20, 10A Pumping under 05CW107-A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4	Pumping by Wells 21-28	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5	Pumping by Well 47	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6	Total Clay Creek Check (Row 1 - Rows 2-5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7	Pumping by Well 31 backup	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8	Pumping by City Wells under 05CW107-A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9	FORT BENT DITCH DIVERSIONS & RETURN FLOWS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	
-	Fort Bent Water Right	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10 11	Fryingpan-Arkansas Project Water Lamar Exchange/Stored Exchange per 05CW017-B	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12	Total Diversions at Ft. Bent Headqate		0.0	0.0		0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0
12	Ft. Bent Water Delivered to Lamar Recharge Site	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	Lamar 05CW107-B Delivered to Recharge Site	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14	Ft. Bent Water Delivered to Ballfields	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
16	Total Lamar Augmentation Station Delivery	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
17	Total Deliveries to City of Lamar - 3199.6 shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
18	Total Fort Bent Return Flow Obligation Above Lamar Canal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Augmentation Station Delivery assigned to Depletions	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
20	Aug. Station Deliv. Exchgd. to Storage (05CW107-B)	0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Cumulative Balance Above Lamar Canal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
21		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	0.0
	REPLACEMENT OBLIGATION (negative impact to River)													
22	Total 05CW107-A & Rule 14 Depletion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
23	05CW107-A Return Flow Obligtion Below Lamar Canal	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
24	North Gateway Park Pond Nos. 1, 2 & 3 (Lamar Portion)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
25	Total Replacement Obligation	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	REPLACEMENTS (positive impact to River)													
26	Net Recharge under W-4015	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
27	05CW107-A and Rule 14 Return Flows	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
28	Fryingpan-Arkansas Project Return Flow Credit Against 05CW107-A, 13CW3060, & Rule 14 Depletions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
29	Total Credit, All Plans	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
30	Net City of Lamar Depletion (-)/ Accretion (+)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(1) Table 1 Row 18

- (2) Table 2 Row 10
- (3) Table 2 Row 14
- (4) Table 1 Row 16
- (5) Table 1 Row 17
- (6) Row 1 minus the Sum of Rows 2 5
- (7) Table 1 Row 24
- (8) Table 3 Row 4
- (9) Table 1 Row 1a
- (10) Table 1 Row 1b
- (11) Sum of Table 1 Rows 1c & 1d

- (12) Table 1 Row 1e
- (13) Sum of Table 1 Rows 8-10
- (14) Table 1 Row 11
- (15) Table 1 Row 6a
- (16) Table 1 Row 3
- (17) Sum of Rows 13-16
- (18) Table 3 Row 27 + Table 3 Row 33. Nov-Mar: Idler return flow (Table 3 Row 33) delivered below Lamar Canal.
- (19) Table 3 Row 36
- (20) Table 1 Row 5c
- (21) Current month's Row 16 + 18 19, plus previous month's Row 21.

- (22) Table 3 Row 10
- (23) Apr-Oct: Table 3 Row 31. Nov-Mar: Adds Table 3 Row 33.
- (24) Sum of Table 3, Rows 54 & 55
- (25) Row 22 + Row 23 + Row 24
- (26) Table 2 Row 5
- (27) Sum of Table 3 Rows 15, 17, 19, and 25
- (28) Sum of Table 3 Rows 49, 51, & 57
- (29) Row 27 + Row 28
- (30) Sum of Rows 25, 29, & 19. Equals Table 3 Row 59.

### Table 1

Measured Water Use - Fort Bent Ditch and Wells

City of Lamar's Monthly Accounting for April 2015 through March 2016

Inclusive of Pumping under Rule 14, W-4015, and Case No. 05CW107-A

(values in ac-ft)

Row		Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total
	FORT BENT DITCH HEADGATE DIVERSIONS		,											
1a	Fort Bent Water Rights													0.0
1b	Fryingpan-Arkansas Project Water													0.0
1c	Lamar Diversion by Exchange (05CW107-B)													0.0
1d	Lamar - Other Diversions (JMR) (05CW107-B)													0.0
1e	Total													0.0
	CITY OF LAMAR FRYINGPAN-ARKANSAS PROJECT WATER													
2a	Below John Martin Reservoir													0.0
2a 2b	Transit loss to Fort Bent Headqate													0.0
20 20	Fort Bent Ditch conveyance loss/shrink charge													0.0
-														0.0
	MEASURED DELIVERIES FROM FORT BENT DITCH													
	Delivery from Fort Bent Ditch													
3	Total City of Lamar deliveries to Fort Bent Aug. Station													0.0
4a	02CW181 shares (33.7%)													
4b	02CW181 Delivery													0.0
5a	05CW107-A shares													
5b	05CW107-A Delivery													0.0
5c	05CW107-B Delivery for Exchange													0.0
6a	Ball Fields (05CW107-A shares)													0.0
6b	Ball Fields (Fryingpan-Arkansas Project water)													0.0
	Delivery to Recharge Site													
7	Project water under W-4015													0.0
8	386 Fort Bent shares under W-4015													0.0
9	Fort Bent shares under 02CW181													0.0
10	Fort Bent shares under 05CW107-A													0.0
11	Exchanged/Previously Stored under 05CW107-B													0.0
12	Total Measured Delivery to Recharge Site													0.0
13	End of Month Staff Gage Reading (ft)													
14	End of Month Content													
	CLAY CREEK AQUIFER PUMPING													
15	Wells 1-20, 10A													0.0
16	Wells 21-28													0.0
17	Well No. 47 (ID 6706406) (SWSP structure)													0.0
18	Total Pumping from Clay Creek Aquifer													0.0
19	In-Building Use													0.0
20	Irrigation Use													0.0
	RECHARGE SITE PUMPING													
21	Floating Pump for Irrigation													0.0
22	Floating Pump for Recharge to South Recharge Site													0.0
	OTHER PUMPING AND DELIVERY UNDER CASE NO. 05CW107	/-A												
23	Well No. 31 (ID No.6705388) (Pre-1985 bedrock aquifer well)													0.0
24	Golf Course Well No. 31 Backup													0.0
25	Metered delivery to Fairmount Cemetery													0.0
26	Metered delivery to Golf Course												<u> </u>	0.0
27	Harold Parker Well (6705372)*													0.0
28	Northside Park Well (6706337)*											ļ		0.0
29	McCorkle Field Well (6706338)*													0.0
30	Riverside Cemetery North Well (6705292)*													0.0
31	Riverside Cemetery South Well (6705293)*													0.0
32	Shop Well (6706397)*													0.0

Table 1

Measured Water Use - Fort Bent Ditch and Wells

City of Lamar's Monthly Accounting for April 2015 through March 2016

Inclusive of Pumping under Rule 14, W-4015, and Case No. 05CW107-A

(values in ac-ft)

Apr-15 May-15 Jun-15 Jul-15 Aug-15 Sep-15 Oct-15 Nov-15 Dec-15 Jan-16 Feb-16 Mar-16 Total
-------------------------------------------------------------------------------------------

### Row explanations:

Row

- 1a Diversions of Fort Bent Ditch water rights (Row 1c minus Row 1b).
- 1b Diversions of Project water at Fort Bent Ditch headgate, provided by the Water Commissioner or Ft. Bent Ditchrider.
- 1c Diversions of excess recharge accretions and City return flows pursuant to Case No. 05CW107-B.
- 1d Diversions of water previously stored by exchange in John Martin Reservoir, pursuant to Case No. 05CW107-B.
- 1e Total monthly diversions by Fort Bent Ditch (State Engineer's real-time records or Ft. Bent Ditchrider).
- 2a Lamar's Project water below John Martin Reservoir (Division Engineer).
- 2b Transit loss from John Martin Reservoir to Fort Bent Ditch. Calculated as Row 2a minus Row 1b.
- 2c Conveyance loss in the Fort Bent Ditch. Ft. Bent HG diversion of Project water minus delivery to recharge site (Row 1b Row 7, or "Monthly FtBent" sheet Col. 4 Col. 12).
- 3 Deliveries of Fort Bent shares (Case Nos. 05CW107-A and/or 02CW181) through LAWMA's Fort Bent Augmentation Station after deduction for ditch loss. Provided by LAWMA. See "FtBent Daily Record" sheet for daily detail. (Return flow obligations for Lamar's Fort Bent shares leased to LAWMA and used in LAWMA's plan for augmentation under Case No. 02CW181 are met by LAWMA.)
- 4a Number of shares changed in Case No. 02CW181 delivered at LAWMA's augmentation station pursuant to Case No. 05CW107-A. See "Control" sheet.
- 4b Portion of Row 3 made up of Lamar's shares pursuant to Case No. 02CW181. Calculated in the "Monthly FtBent" sheet, equivalent to Row 3 x Row 4a / (Row 4a + Row 5a). Includes return flow obligation and consumptive use credit (see "Monthly FtBent" sheet).
- 5a Number of shares delivered at LAWMA's augmentation station pursuant to Case No. 05CW107-A. See "Control" sheet.
- 5b Portion of Row 3 made up of Lamar's shares pursuant to Case No. 05CW107-A. Calculated in the "Monthly FtBent" sheet, equivalent to Row 3 x Row 5a / (Row 4a + Row 5a). Includes return flow obligation and consumptive use credit (see "Monthly FtBent" sheet).
- 5c Delivery of additional consumptive use water for exchange to John Martin and/or Pueblo Reservoirs pursuant to Case No. 05CW107-B. (Not used for augmentation credit.)
- 6a Amount of Fort Bent Ditch water pumped from ditch to ball fields (5.9 acres) and considered fully consumable. Entered manually in the "Monthly FtBent" sheet.
- 6b Amount of Project water pumped from Fort Bent Ditch to ball fields (5.9 acres). Entered manually in the "Monthly FtBent" sheet.
- 7 Delivery of Project water to the Clay Creek recharge site pursuant to Case No. W-4015. Calculated in the "Monthly FtBent" sheet.
- 8 Delivery of 386 Fort Bent shares (Case No. W-4015) to the Clay Creek recharge site. Calculated in the "Monthly FtBent" sheet.
- 9 Delivery of Fort Bent shares pursuant to Case No. 02CW181 to the Clay Creek recharge site. Calculated in the "Monthly FtBent" sheet.
- 10 Delivery of Fort Bent shares pursuant to Case No. 05CW107-A to the Clay Creek recharge site. Calculated in the "Monthly FtBent" sheet.
- 11 Delivery of water diverted by exchange or from storage by exchange under Case No. 05CW107-B to the Clay Creek recharge site (delivery of diversions shown in Rows 1c & 1d).
- 12 Total reported delivery to the recharge site. If this is less than the total floating pump (Rows 20 & 21), the data should be checked.
- 13 End of month staff gage reading at the recharge site, reported by Lamar.
- 14 End of month content of the recharge site based on the staff gage.
- 15 Pumping by Wells 1-20 and 10A. Equal to Row 17 Row 16 Row 15. Limited to positive or zero.
- 16 Metered pumping by Wells 21-28. Limited to no more than the total metered pumping in Row 17.
- 17 Metered pumping by Well 47.
- 18 Total metered pumping by the Clay Creek well field (master meter).
- 19 <u>April-November</u>: Minimum of 1) the per-day average of the previous winter's Row 17, totaled for the month, or 2) Row 17. (The previous winter's per-day average is calculated on the "Control" sheet.) <u>Winter (December February)</u>: Row 17. <u>March</u>: Minimum of 1) the per-day average of December-February Row 17, totaled for the month, or 2) March Row 17.
- 20 Row 18 Row 19
- 21 Floating pump deliveries from the recharge site to cemetery and park.
- 22 Floating pump deliveries from the recharge site to the south recharge site.
- 23 Metered pumping by Well No. 31, ID No. 6705388, a pre-1985 Dakota/Cheyenne bedrock aquifer well.
- 24 Metered pumping by Golf Course Well No. 31 Backup pursuant to Case No. 05CW107-A.
- 25 Metered delivery to Fairmount Cemetery.
- 26 Metered delivery to Golf Course.
- 27 Metered pumping by Harold Parker well under Case No. 05CW107-A.
- 28 Metered pumping by Northside Park well under Case No. 05CW107-A.
- 29 Metered pumping by McCorkle Field well under Case No. 05CW107-A.
- 30 Metered pumping by Riverside Cemetery North well under Case No. 05CW107-A.
- 31 Metered pumping by Riverside Cemetery South well under Case No. 05CW107-A.
- 32 Metered pumping by Shop well under Case No. 05CW107-A.
- \* (Wells listed in Rows 27-32 are currently included in LAWMA's plan for augmentation, Case No. 02CW181. Pumping shown is the amount not augmented by LAWMA.)

### Table 2

**Operations under Case No. W-4015** 

City of Lamar's Monthly Accounting for April 2015 through March 2016

Inclusive of Pumping under Rule 14, W-4015, and Case No. 05CW107-A

### (values in ac-ft)

Row		Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total/Current
	PUMPING BY WELLS 1-20 & 10A													
1	Total Pumping (Table 1 Row 14)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	RECHARGE OPERATIONS UNDER W-4015													
2	Project water delivery under W-4015 (Table 1 Row 7)													0.0
3	Fort Bent delivery (386 shares) under W-4015 (Table 1 Row 8)													0.0
4	Evaporation of W-4015 water in Recharge Site													0.0
5	Net W-4015 Delivery less Evaporation													0.0
6	Net Delivery of Project Water													0.0
7	Net Delivery of 386 Fort Bent shares													0.0
	PUMPING BY WELLS 1-20 & 10A UNDER W-4015													
8	Pumping of Project Water under W-4015													0.0
9	Pumping of 386 Fort Bent shares under W-4015													0.0
10	Total Pumping under W-4015													0.0
11	Remaining Project Water													0.0
12	Remaining Fort Bent Water													0.0
13	Carryover Pumping													
14	WELLS 1-20 & 10A PUMPING UNDER RULE 14/05CW107-A													0.0

### Row explanations:

- 1 Pumping by Wells 1-20 and 10A. Table 1 Row 15.
- 2 Delivery of Project water to the recharge site. Table 1 Row 7.
- 3 Delivery of water derived from the 386 Fort Bent shares to the recharge site. Table 1 Row 8.
- 4 The Case No. W-4015 evaporation rate of 0.533 ac-ft per day is charged to the W-4015 Fort Bent shares and Project water. See the "Pond Operation" sheet.
- 5 W-4015 delivery less evaporation. Row 2 + Row 3 Row 4.
- 6 Row 5 prorated to Project water. The evaporation in Row 4 is prorated to Project water based on storage and delivery. (See "Montly FtBent" & "Pond Operation" sheets.)
- 7 Row 5 prorated to Fort Bent water. The evaporation in Row 4 is prorated to Fort Bent water based on storage and delivery. (See "Montly FtBent" & "Pond Operation" sheets.)
- 8 Pumping of Project water (Row 6) pursuant to W-4015. Minimum of 1) Row 1 Row 14 + prev. month's Row 13; 2) Row 6 + prev. month's Row 11.
- 9 Pumping of 386 Fort Bent shares (Row 7) pursuant to W-4015. Minimum of 1) Row 1 Row 8 Row 14 + prev. month's Row 13; 2) Row 7 + prev. month's Row 12.
- 10 Total pumping under Case No. W-4015. Row 8 + Row 9.
- 11 Project water remaining from year-to-date operations. Row 6 Row 8 + previous month's Row 11.
- 12 Fort Bent water remaining from year-to-date operations. Row 7 Row 9 + previous month's Row 12.
- 13 Pumping not replaced in the current month by recharge pursuant to Case No. W-4015. Row 1 + prev. month's Row 13 Row 8 Row 9 Row 14.
- 14 Pumping by Wells 1-20 and 10A not augmented by Case No. W-4015. Manually assigned to Case No. 05CW107-A. NOTE: Row 5 + Row 14 should equal Row 1.

### Table 3

Operations under Case No. 05CW107-A and Rule 14 Plan

City of Lamar's Monthly Accounting for April 2015 through March 2016

Inclusive of Pumping under Rule 14, W-4015, and Case No. 05CW107-A

(values in ac-ft)

Row		Apr-15	May-15	Jun-15	Jul-15	Aua-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total
	NON-W-4015 PUMPING													
1	Wells 1-20 & 10A augmented under Rule 14 Plan													0.0
2	Wells 21-28 augmented under Rule 14 Plan													0.0
3	Well 47 augmented under 05CW107-A													0.0
4	Other Pumping under 05CW107-A													0.0
5	Recharge under 05CW107-A/B (Ft. Bent Shares & Retimed)													0.0
<b>5</b> 6		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	
0	Net Clay Creek Aquifer Change (Recharge - Pumping)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
_	STREAM DEPLETIONS FROM PUMPING													
7	05CW107-A/B & Rule 14 lagged depletions/accretions													0.0
8	Lagged depletions by Park, Cemetery and Shop wells													0.0
9	Golf Course Well No. 31 Backup lagged depletions													0.0
10	Total Net Stream Depletion	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	DERIVATION OF STREAM ACCRETIONS FROM 05CW107-A & RULE 14 PU	MPING												
11	In-Building use	-												0.0
12	Non-sewered in-building use								<u> </u>					0.0
13	Irrigation use													0.0
14	Return flows from non-sewered in-building and irrigation uses													0.0
15	Accretions from Row 14													0.0
16	Return flows from Floating pump and Well No. 31 Backup irrigation	<b> </b>	+				<u> </u>							0.0
17	Accretions from Row 16													0.0
18	Return flows from Ball Fields irrigation with Ft. Bent water													0.0
19	Accretions from Row 18													0.0
20	Sewage inflow to wastewater treatment lagoons													0.0
	Lamar Power Plant coal washing discharge to sewer													0.0
21														
22	Adjusted sewage inflow to wastewater treatment lagoons													0.0
23	Evaporation & evapotranspiration from lagoons													0.0
24	Net sewage return flow from Rule 14 and Well No. 47 pumping													0.0
25	Accretions from Row 24													0.0
26	Total Delivery of shares under 02CW181													0.0
27	Return Flow Obligation for Delivery of shares under 02CW181													0.0
28	Cumulative Balance under 02CW181 (RFO + Aug Sta Deliv)													0.0
29	Total Delivery of shares under 05CW107-A	0.0	0.0	0.0	0.0	0.0	0.0	0.0		0.0	0.0	0.0	0.0	0.0
30	05CW107-A BEAN RETURN FLOW FACTORS (USED IN ROW 31)	38.8%	39.2%	37.8%	39.0%	40.3%	42.4%	48.1%	2.0%	0.4%	0.1%	0.2%	0.6%	
31	Return Flow Obligation Below Lamar Canal, Bean Shares	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
32	05CW107-A IDLER RETURN FLOW FACTORS (USED IN ROW 33)	24.9%	26.0%	26.0%	25.4%	29.5%	40.0%	53.5%	0.6%	2.0%	1.9%	1.6%	0.4%	
33	Return Flow Obligation, Idler shares (Apr-Oct above Lamar Canal)													0.0
34	Cumulative Balance Above Lamar Canal under 05CW107-A (Apr-Oct)						<u> </u>		0	0	0	0	0	0.0
35	Cumulative Balance at Augmentation Station (02CW181 + 05CW107-A)			T					0	0	0	0	0	
	Excess Augmentation Credits Applied to City Depletions								0	0	0	0	0	0.0
	Remaining Cumulative Balance at Aug. Station (02CW181 + 05CW107-A)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	0	
37			0.0	0.0	0.0	0.0	0.0	0.0	0	0	0	0	U	
	FRYINGPAN-ARKANSAS RETURN FLOWS AND NON-CONSUMED TRANS	T LOSS												
38	In-Building use from Project Pumping													0.0
39	Net Sewage return flow from Project Pumping													0.0
40	Irrigation Use from Project Pumping													0.0
41	Return flows from Project Irrigation Uses													0.0
42	Return flows from Ball Fields irrigation with Project water													0.0
43	Accretions from Rows 41 & 42 (includes previous years)													0.0
44	Total Accretions to Arkansas River from Lamar Use	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
45	Net nonconsumed river transit loss													0.0
46	Lagged Fort Bent Ditch net loss (includes previous years)													0.0
ΨU	Lagges . or Done Ditor hor lood (moldado providad yeard)													0.0

### Table 3

Operations under Case No. 05CW107-A and Rule 14 Plan

City of Lamar's Monthly Accounting for April 2015 through March 2016

Inclusive of Pumping under Rule 14, W-4015, and Case No. 05CW107-A

### (values in ac-ft)

Row		Apr-15	May-15	Jun-15	Jul-15	Aug-15	Sep-15	Oct-15	Nov-15	Dec-15	Jan-16	Feb-16	Mar-16	Total
47	Total Accretions of Non-Consumed Transit Loss	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
48	Total Accretions of Project Return Flows (Ret. Flows + Non-Cons. TL)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
49	Project RF assigned to Well 31 backup, Park, Cem., Shop well depletions													0.0
50	Lagged Rule 14 Plan depletions by Wells 1-20, 10A													0.0
51	Project RF assigned to Wells 1-20, 10A depletions under Rule 14 Plan													0.0
52	Net Well 31 backup, Park, Cemetery, Shop, & 1-20, 10A well depletions	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
53	NET RULE 14 & 05CW107-A DEPLETIONS (-) ACCRETIONS (+)													0.0
	NORTH GATEWAY PARK POND NOS. 1, 2, & 3 (PENDING CASE NO. 13CW	V3060)												
	Evaporation Depletions	<b>,</b>												0.0
55	CPW Augmentation Credits													0.0
56	Credits assigned from Lamar's LAWMA shares													
57	Lamar Project Accretions Assigned to N. Gateway Park Pond Nos. 1-3													0.0
58	Lamar's Net Augmentation Requirement for N. Gateway Park Pond Nos. 1-3													0.0
59	TOTAL NET DEPLETIONS (-) ACCRETIONS (+) UNDER ALL PLANS	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

### Row explanations:

- 1 Pumping by Wells 1-20 and 10A not augmented by W-4015. Equal to Table 2 Row 14.
- 2 Pumping by Wells 21-28. (Table 1 Row 15.)
- 3 Pumping by Well 47. (Table 1 Row 16.)
- 4 Pumping by other Lamar wells under 05CW107-A. Sum of Table 1 Rows 27 through 32.
- 5 Net recharge of Fort Bent water pursuant to Case Nos. 05CW107-A and 05CW107-B, calculated in "Pond Operation" sheet. Total effective recharge equals delivery monthly change in storage- evaporation floating pump deliveries for irrigation. Effective recharge pursuant to Case Nos. 05CW107-A/B is prorated from total recharge based on beginning of month content plus delivery to the recharge site during the month. See the "Pond Operation" sheet.
- 6 Row 5 minus sum of Rows 1-3. (Note: Row 4 wells are not located in the Clay Creek aquifer.)
- 7 Row 6 lagged using Clay Creek aquifer Glover parameters.
- 8 Depletions caused by prior pumping of structures that are now included in LAWMA's plan for augmentation Case No. 02CW181, or by current pumping of these structures over the amount augmented by LAWMA.
- 9 Lagged depletions caused by pumping in Table 1 Row 24. Includes lagged depletion from previous pumping. Cheyenne aquifer and Glover parameters.
- 10 Row 7 + Row 8 + Row 9.
- 11 Rule 14 and Case No. 05CW107-A portion of in-building use. Calculated as the sum of Rows 1 3, multiplied by Table 1 Row 19, divided by Table 1 Row 18.
- 12 Table 1 Row 19 x 86 / 3487. There are 3487 total potable metered accounts; 86 of these utilize septic systems and have a 10% depletion rate.
- 13 Sum of Rows 1 4 minus Row 11. Irrigation uses have an 85% depletion rate.
- 14 Row 12 x 90% + Row 13 x 15%.
- 15 13% of irrigation uses lagged as deep percolation and 2% return as surface runoff in the same as application. Row 13 x 2% (same month) + (Row 12 x 90% + Row 13 x 13%) lagged (SDF = 429 days).
- 16 From Table 1: (Row 25 + Row 26 Row 23) x 15%.
- 17 Row 16 is distributed to golf course and to cemetery based on deliveries to each. Return flows from golf course and surface runoff from cemetery (2%) occur in same month as delivery (Table 1: (Row 26 Row 23) x 15% + Row 25 x 2%). Cemetery deep percolation lagged to Willow Creek (Table 1 Row 25 x 13%). Willow Creek Aguifer and Glover parameters.
- 18 Table 1 Row 6a x 15%.
- 19 Row 18 returned to Willow Creek. 13% of ballfield pumping of Ft. Bent water (Table 1 Row 6a) lagged, 2% returned in same month as application. Willow Creek Aquifer and Glover parameters.
- 20 Metered sewage influent to wastewater treatment lagoons.
- 21 Metered use of Well ID No. 6705272 for non-consumptive coal washing at Lamar Power Plant and discharge to sewer.
- 22 Minimum of 1) Row 20 Row 21, 2) 95% of net total in-building use not including non-sewered use (95% x (Table 1 Row 19 Table 3 Row 12)).
- 23 Evaporation and evapotranspiration from lagoons. (63.7 acres water surface and 32.4 acres phreatophytes).
- 24 (Row 22 + Row 23) x (Row 11 Row 12)/(Table 1, Row 19 Row 12).
- 25 Row 24 returned to Arkansas River. SDF = 13.8.
- 26 Delivery of Fort Bent shares under Case No. 02CW181. Equal to the sum of Table 1, Row 4b + Table 1, Row 9.
- 27 Historical return flow obligation on deliveries in Row 26 pursuant to Case No. 02CW181.
- April October: Row 26 x 33.8%. November - March: Row 26 x 100% (the decree in Case No. 02CW181 limits diversions to April - October only).
- 28 Row 27 + Table 1, Row 4b + Row 28 from previous month.
- 29 Delivery of Fort Bent shares pursuant to Case No. 05CW107-A. Equal to the sum of Table 1, Rows 5b, 6a, and 10.

### Table 3

Operations under Case No. 05CW107-A and Rule 14 Plan

City of Lamar's Monthly Accounting for April 2015 through March 2016

Inclusive of Pumping under Rule 14, W-4015, and Case No. 05CW107-A

### (values in ac-ft)

# Row Apr-15 May-15 Jun-15 Jul-15 Aug-15 Sep-15 Oct-15 Nov-15 Dec-15 Jan-16 Feb-16 Mar-16 Total 30 Return flow factors for 10 Bean shares pursuant to the decree in Case No. 05CW107-A. 31 Return flow obligation for delivery of 10 Bean shares. April-October: Equal to -Row 30 x Row 29 x 10 / total number of 05CW107-A shares delivered. November-March: Equal to -Row 30 x Total of Row 29

x 10 / total number of 05CW107-A shares delivered. (See "Control" sheet for total number of 05CW107-A shares delivered.)

- 32 Return flow factors for Idler shares pursuant to the decree in Case No. 05CW107-A.
- 33 Return flow obligation for delivery of Idler shares. April-October: Equal to -Row 32 x Row 29 x number of Idler shares delivered / total number of 05CW107-A shares delivered. November-March: Equal to -Row 32 x Total of Row 29 x number of Idler shares delivered / total number of 05CW107-A shares delivered. (See "Control" sheet for total number of 05CW107-A shares delivered. Idler shares delivered = total 05CW107-A shares minus 10 Bean shares.) In Summer this is delivered above the Lamar Canal headgate. In Winter it is delivered at or above the confluence of Clay Creek (see Row 48).
- 34 Row 33 Row 36 + Table 1, Row 5b + Row 34 from previous month.
- 35 Row 28 + Row 34 Sum of April-to-Previous Month's Row 36. Total cumulative balance at the augmentation station for Case Nos. 02CW181 & 05CW107-A deliveries, after assignment of excess deliveries to augment City depletions in Row 36.
- 36 Amount of excess cumulative delivery at augmentation station from Row 35 that is manually assigned to City depletions below the Lamar Canal. The Lamar Canal passed the assigned augmentation station deliveries in 2015, indicated by the stream flows measured at the Lamar gage during those months.
- 37 Row 35 Row 36.
- 38 Minimum of 1) Table 2 Row 8 or 2) Table 1 Row 19 Table 3 Row 11. Constrained to positive numbers or zero.
- 39 (Row 22 + Row 23) x (Row 38)/(Table 1, Row 19).
- 40 Minimum of 1) Table 2 Row 8 Table 3 Row 38 or 2) Table 1 Row 18 Table 1 Row 19 Table 3 Row 13. Constrained to positive numbers or zero.
- 41 Row 40 x 15%.
- 42 Table 1 Row 6b x 15%.
- 43 13% of irrigation with Project water is lagged as deep percolation (SDF = 429 for Town use, and Willow Creek Aquifer and Glover Parameters for Ballfield use); and 2% returns in the same month of application. (Row 40 + Table 1 Row 6b) x 2% + Row 40 x 13%, lagged + Table 1 Row 6b x 13%, lagged.
- 44 Row 39 + Row 43.
- 45 90% of transit loss of Project water between John Martin Reservoir and the Ft. Bent Ditch. Transit loss is calculated as the difference between deliveries of Project water below John Martin Reservoir and diversion of Project water by the Ft. Bent Ditch. (90% of Col. 2 Col. 4 of "Monthly FtBent" sheet.)
- 46 90% of actual Fort Bent conveyance losses of Project water, lagged to Arkansas River and combined with lagged amounts from previous years. Lagging based on factors from HI model. Conveyance loss calculated as the difference between Ft. Bent diversions of Project water and deliveries of Project water to Lamar's recharge site and the Ballfields. 60% of these net lagged ditch losses accrues to the Arkansas River above the Lamar Canal headgate, and 40% accrues below the Lamar Canal headgate.
- 47 Row 45 + Row 46.
- 48 Row 44 + Row 47.
- 49 Project return flow and non-consumed loss assigned to depletions by Well 31 backup and depletions by the Park, Cemetery, and Shop wells that are not covered by LAWMA. Calculated as the minimum of a) Row 44 + Row 47, or b) the negative sum of Rows 8 & 9.
- 50 Lagged depletions caused by pumping by Wells 1-20 and 10A under the Rule 14 Plan (Row 1). SDF=5825.
- 51 Project return flow and non-consumed loss assigned to depletions by Wells 1-20 and 10A pumping under the Rule 14 Plan (Row 50). Calculated as the minimum of a) Row 48 Row 49, or b) the negative of Row 50.
- 52 Net return flow obligations for Well 31 Backup; Park, Cemetery, and Shop wells; and Wells 1-20 & 10A after assignment of Project water. Sum of Rows 8, 9, 17, 49, & 51. Positive means net accretion of return flows after assignment of Project water.
- 53 Net depletions (-) or accretions (+) under the Rule 14 and 05CW107-A Plans. Sum of Rows 7, 15, 19, 25, 31, & 52, minus Row 50. NOTE 1: Row 50 subtracted to remove the Wells 1-20 & 10A depletions from Row 7 so they are not counted twice. NOTE 2: Row 33 (Idler return flow obligation) is also added to this row in the winter, as no augmentation deliveries are made at the Ft. Bent Augmentation Station (no diversions).
- 54 Total evaporation depletions from North Gateway Park Ponds 1, 2, & 3.
- 55 By Agreement, Colo. Parks & Wildlife augments half of the evaporation from North Gateway Park Ponds 1, 2, & 3.
- 56 Credits derived from Lamar's LAWMA shares assigned to North Gateway Park Pond Nos. 1, 2, & 3 depletions.
- 57 Project return flows assigned for augmentation of North Gateway Park Pond Nos. 1, 2, & 3. Minimum of a) Row Row 48 Row 49 Row 51, or b) Row 54 Row 55 Row 56.
- 58 Net augmentation requirement for Lamar North Gateway Park Pond Nos. 1, 2, & 3 Substitute Supply Plan (pending Case No. 13CW3060), to come from excess accretions. Sum of Rows 54 57.
- 59 Row 53 + Row 58 + Row 36. Negative (-) values indicate net depletion to river/ Positive values indicate net accretion to river.

### North Gateway Ponds (Case No. 13CW3060) Monthly Staff Gage Readings

Month	Pond 1 (ft)	Pond 1 Area (acres)	Ponds 2&3 (ft)	Ponds 2&3 Area (acres)	Total Pond Area (acres)	Pre-1981 Area (acres)	Net Area (acres)	Evap Depth (ac- ft/ac)	Evap Volume (ac- ft)
(Col 1)	(Col 2)	(Col 3)	(Col 4)	(Col 5)	(Col 6)	(Col 7)	(Col 8)	(Col 9)	(Col 10)
Apr-15					0.00	7.00	-7.00	0.13	0.00
May-15					0.00	7.00	-7.00	0.15	0.00
Jun-15					0.00	7.00	-7.00	0.22	0.00
Jul-15					0.00	7.00	-7.00	0.37	0.00
Aug-15					0.00	7.00	-7.00	0.46	0.00
Sep-15					0.00	7.00	-7.00	0.59	0.00
Oct-15					0.00	7.00	-7.00	0.62	0.00
Nov-15					0.00	7.00	-7.00	0.55	0.00
Dec-15					0.00	7.00	-7.00	0.43	0.00
Jan-16					0.00	7.00	-7.00	0.30	0.00
Feb-16					0.00	7.00	-7.00	0.17	0.00
Mar-16					0.00	7.00	-7.00	0.12	0.00
Total								4.11	0.00