# *FEASIBILITY STUDY OF THE JURGENS RESERVOIR CONSTRUCTION PROJECT*

***Sponsored by:***
**Lower Latham Reservoir Company**
in conjunction with the
**Colorado Water Conservation Board**


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**Feasibility Study Approval**

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

Zachary Salin — 5/23/2025

Signed — Date

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## INTRODUCTION

The Lower Latham Reservoir Company ("LLRC") operates jointly with the Lower Latham Ditch Company ("LLDC") to service approximately 11,000 acres of irrigated lands within Weld County. In 2003 LLRC elected to pursue a decreed augmentation plan for wells included within the LLRC and LLDC service area and filed Case No. 03CW047 in District Court, Water Division 1, for a change of water rights and approval of plan for augmentation to ensure a means of continued legal operation of the irrigation wells. The final decree in consolidated Case Nos. 03CW047/06CW291 was entered on November 25, 2012 ("Latham Augmentation Decree"). The LLRC has diligently pursued additional water rights acquisitions to support the plan for augmentation, some acquisitions of which have been facilitated with CWCB low interest loan financing. The LLRC has obtained water rights to provide for a sufficient replacement supply for the plan for augmentation ("Latham Plan") operated pursuant to the Latham Augmentation Decree. However, reservoir storage is required to maximize the use of the acquired water supplies and to provide a firm water supply during periods of drought conditions. The LLRC has been actively pursuing new reservoir storage development for many years. In recent years, the LLRC has focused on the development of reservoir storage at its Jurgens Farm, which is located approximately 2 miles northwest of Kersey, Colorado and immediately adjacent to the South Platte River. This location is centrally located within the LLRC's service area and it is ideally located for capturing excess senior water supplies that are oftentimes available to the LLRC. The proposed Jurgens Reservoir will allow LLRC to capture and store its excess senior water supplies and then subsequently release those supplies to the river to meet replacement requirements for the LLRC's decreed plan for augmentation and increase the potential well pumping available under the Latham Plan, particularly during drought periods.

LLRC intends to initially develop the site with aquifer porosity storage by constructing a slurry wall perimeter barrier around the reservoir. The slurry wall has been designed and placed out to bid for construction and recently awarded to Odin Environmental Solutions, LLC – DBA Odin. The construction of the slurry wall is expected to begin immediately with substantially completion expected in the fall of this year. It is expected that the ancillary facilities will be completed over the course of the next two years, after which time the reservoir will be fully operational.

## PROJECT SPONSOR

The sponsor for this reservoir project is LLRC. The LLRC is a mutual irrigation company and a corporation registered in the State of Colorado. There are currently 39 shareholders who own 156 total outstanding shares of stock in the LLRC. One shareholder, owning 1 share of stock, is a municipal entity while the remainder of the shareholders are agricultural entities, or individuals. The LLRC has the power to set annual assessments to be paid by the shareholders; the power to curtail water deliveries to shareholders that fail to pay their assessments; the power to curtail well pumping for wells included in the Latham Plan and the power to offer stock for sale to pay back assessments. The LLRC articles of incorporation and by-laws are included in Appendices A and B, respectively.

In addition to the LLRC, two other Lower Latham companies, the Lower Latham Ditch Company ("LLDC") and the Lower Latham Asset Management Company ("LLAMC"), are integral to the operation of the Latham Plan. LLDC provides a means for delivering the LLRC water supplies to the various shareholders under the Lower Latham irrigation system. In addition, the use of the Lower Latham Ditch, which is owned by LLDC, is necessary for the operation of the Latham Plan for making physical water deliveries. Requirements for eligibility in Latham Plan include the need for the well owners to own either LLRC or LLDC stock. The Lower Latham Asset Management Company was established in January 2004 for purposes of managing and administering the Latham Plan.

## PROJECT SERVICE AREA

LLRC and LLDC jointly provide irrigation water to a service area of approximately 11,000 acres in Weld County. The Lower Latham Reservoir is filled with local inflow in the Beebe Draw basin and from the diversions from the South Platte River that are delivered through the Union Ditch under a carriage agreement with the Union Ditch Company. The Lower Latham Ditch headgate is located on the South Platte River in Section 31, Township 5N, Range 65W. The ditch conveys direct flow water from the river and storage water from Lower Latham Reservoir. Figure 1 shows the general service area of the Lower Latham Ditch and Reservoir system.

## WATER RIGHTS

The following Table 1 summarizes the water rights decreed to the Lower Latham Reservoir.

**TABLE 1**
**LOWER LATHAM RESERVOIR**
**WATER RIGHTS TABULATION**

| Water Right Name | Adjudication Date | Appropriation Date | Decreed Amount |
|---|---|---|---|
| Lower Latham Reservoir - Original | 8/2/1918 | 6/23/1898 | 4325.07 ac-ft |
| Lower Latham Reservoir – Enlargement | 8/2/1918 | 6/24/1900 | 1430.21 ac-ft |
| Lower Latham Reservoir - Refill | 11/12/1924 | 8/7/1915 | 2180.89 ac-ft |

Lower Latham Reservoir is located in the NE1/4 SW1/4 of Section 35, Township 6 North, Range 65 West of the 6th P.M., Weld County, Colorado. Lower Latham Reservoir was originally decreed in Case No. CA5468, Water District No. 1. The original water right has an appropriation date of June 23, 1898, adjudication date of August 2, 1918 for a decreed storage volume of 4,325.07 acre-feet. The reservoir enlargement right has an appropriation date of June 24, 1900, adjudication date of August 2, 1918 for a decreed storage volume of 1,430.21 acre-feet. The reservoir re-fill right has an appropriation date of August 7, 1915, adjudication date of November 12, 1915 for a decreed storage volume of 2,180.89 acre-feet.

In the Latham Augmentation Decree, the LLRC obtained a decree to for a change of use of water rights, plan for augmentation, and conditional exchange right. The decree allows for the change of use of water rights to be stored within Lower Latham Reservoir. The decree also allows for the exchange right to store water within the Lower Latham Reservoir. Uses for the changed water rights and exchange right include augmentation and replacement of depletions from wells included in the plan for augmentation decreed in the Latham Augmentation Decree.

A copy of the decrees for Lower Latham Reservoir and the Latham Augmentation Decree are provided in Appendix C.

## NEED FOR THE PROJECT

The Latham Augmentation Decree is structured such that additional water supplies and facilities may be added to improve the overall augmentation supply and increase allowable pumping. Over the several years subsequent to filing the initial water court application, the LLRC acquired new water rights and developed various structures to improve the plan for augmentation. LLRC acquired shares in the LLDC and other local ditch companies including the Union Ditch Company, Greeley Irrigation

Company, and Plumb Irrigation Company. The attached Table 2 summarizes the current water supplies owned by LLRC and used for augmentation purposes. LLRC owns 8 shares of PIC that have been changed to augmentation uses and are currently delivered through the Jurgens Farm for augmentation purposes and used within the Latham Plan. It is expected that the future operations will include the delivery of the PIC water directly into lined storage at Jurgens Reservoir. The primary replacement supplies currently utilized in the Latham Plan, the projection (or dry year ) yield for each source and the average year yield for each source are summarized in Table 2. These sources include 1) a total of 32.5 shares in The Lower Latham Ditch Company; 2) a total of 12.5 shares in The Union Ditch Company; 3) a total of 15.19 shares in The Greeley Irrigation Company; and 4) a total of 8 shares in The Plumb Irrigation Company. The projection yield values as shown on Table 2 are defined by the change decree for each of the sources and represent the expected yield during drought year conditions.

*Need for Storage*

Historically, the Latham Plan has utilized storage space in Lower Latham Reservoir to store changed water supplies during the summer months for subsequent release to the river during the winter months. The Latham Augmentation Decree allows for the direct delivery of changed water into the reservoir or delivery into the reservoir by exchange. This water administration has operated sufficiently in past years but the yield of the Lower Latham Reservoir senior storage rights are effectively reduced by these operations because a large portion of the reservoir storage space is physically occupied by augmentation water supplies. As described above, the Lower Latham Reservoir has three storage priorities decreed for irrigation that amount to a combined volume of 7,936 acre-feet. These priorities include a 4,325.07 acre-foot original priority, 1,430.21 acre-foot enlargement priority, plus a 2,180.89 acre-foot re-fill priority. The development of new lined storage for the augmentation water supplies will allow LLRC to exercise its three senior storage priorities for Lower Latham Reservoir more fully and increase the overall irrigation water supply available to its shareholders.

The terms and conditions of the Latham Augmentation Decree require a 5-year projection of operations. Well pumping curtailment is required to the extent necessary to maintain conditions of no negative impact to the South Platte River. The replacement sources summarized in Table 2 will provide a combined average annual yield approximately 1,000 acre-feet higher during normal year

conditions compared to the projection dry-year yield, demonstrating a need for reservoir storage. The projection for the Latham Plan also utilizes replacement supplies available within storage and in-ground accretions from recharge structures. The availability of water residing in lined storage at the beginning of the projection period greatly improves the projection operations and allows for significantly higher pumping volumes under the Latham Plan.

*Replacement Obligations*

As shown in Table 2, the native water rights utilized by LLRC in its plan for augmentation have yields that are available only during the summer months of April through October. The native water rights have return flow obligations throughout the summer and winter months that create replacement obligations as a result of the changed uses of the water. The return flow obligation is a replacement obligation defined by decree that simulates the timing and volume of surface and groundwater return flows to the river or stream that resulted from the historical irrigation use of the water. Due to the lagged timing of groundwater returns, a portion of the flows accrue to the river during the winter months. Pursuant to terms and conditions of the change of use decrees, LLRC must maintain historical return flow obligations that simulate the historical return flows from the irrigation use of the native water supplies utilized. This return flow maintenance is typically achieved within the Latham Plan by either 1) placing the native water into lined storage during summer months for later release during winter months; or 2) delivering the native water into alluvial recharge facilities during summer months, which results in lagged groundwater accretions to the stream.

The various wells within the Latham Plan are located throughout the system and create lagged depletions to the river. Similar to the lagged timing of groundwater returns to the river, the groundwater well diversions pumped from the alluvial aquifer of the South Platte River, or its tributaries, and result in lagged river depletions. Depending upon the distance that the well is located from the river and the aquifer parameters, the diversion of groundwater from a well results in lagged depletions at the river that typically extend over a period of several years for a majority of the wells within the Latham Plan. A year-round replacement or augmentation obligation to the river is created as a result of the pumping of wells under the Latham Plan and the resulting lagged well depletions.

The attached Table 3 summarizes the combined lagged river depletions caused by well pumping and return flow obligations associated with the native water rights that have been changed and are

utilized in the plan for augmentation. Several scenarios were considered including 1) the 2020 actual projection; 2) the 2012 actual conditions; 3) estimated 2002 drought-year; and 4) 1954 through 1956 estimated drought-period. The 2020 scenario is included because it is based upon actual projections that are prepared and submitted pursuant to the Latham Plan requirements. The 2012 scenario is included because it is a recent drought year during which actual well pumping records are available. The 2002 drought year is a severe drought year that is commonly used for water supply planning purposes and is oftentimes used as the basis for determining projected yields of local native water supplies. The 1954 through 1956 drought period scenario is included because it is an extended drought period commonly used for water supply planning purposes. It is during drought periods such as 2002, 2012, and 1954-56 that the availability of reservoir storage is critical such that the water supplies may be consecutively carried from one year to the next.

Reservoir operation analyses were performed for each of the various scenarios described above. The reservoir operations for each of the drought periods are a simplified one-year analysis completed in a monthly timestep. The analysis considers reservoir storage capacity, diversion capacity, the net excess water availability or deficit at the river based upon the augmentation projection for each scenario. Evaporative losses are assumed to be zero for the 2002, 2012 and 2020 operational scenarios because the lined storage provided by porosity storage has minimal exposed water surfaces. The lined storage capacity required for the 1954-56 scenario is significantly higher and therefore it is assumed that the reservoir pool would be exposed and incur evaporative losses. Table 4 summarizes the reservoir operations analysis for each scenario.

**TABLE 4**
**Summary of Reservoir Operations**

| | 2020 Projection | 2012 Drought | 2002 Drought | 1954 Drought | 1955 Drought | 1956 Drought |
|---|---|---|---|---|---|---|
| *Lined Storage Capacity (af):* | 1,650 | 2,540 | 3,350 | 14,500 | | |
| *Inflow Capacity (cfs):* | 5 | 7 | 8 | 6 | | |
| Beginning of Year Storage (af) | 825 | 1,651 | 2,345 | 14,065 | 7,620 | 3,106 |
| Diversion into Storage (af) | 825 | 973 | 909 | 570 | 260 | 510 |
| Release to River from Storage (af) | 1,601 | 2,618 | 3,248 | 6,351 | 4,430 | 3,461 |
| Evaporative Loss (af) | 0 | 0 | 0 | 664 | 344 | 141 |
| End of Year Storage (af) | 49 | 7 | 6 | 7,620 | 3,106 | 14 |
| *NET RIVER BALANCE (af)* | 1,871 | 66 | 0 | 8 | 0 | 0 |

The results of the analysis show that a total of 1,650 acre-feet of lined reservoir storage is required during the 2020 Projection scenario. A total lined reservoir capacity of 3,350 and 2,540 acre-feet is required during the 2002 and 2012 drought-year scenarios, respectively. During the 1954 through 1956 drought period, a total lined storage capacity of 14,500 acre-feet is required to maintain operations of the Latham Plan without negative impact to the river and without curtailment of well pumping to satisfy the water supply shortages under the Lower Latham system. Based upon the results of this analysis, it is estimated that a total lined storage capacity of 3,350 acre-feet is necessary in order operate the Latham Plan without well pumping curtailment through a severe drought similar to 2002. The proposed Jurgens Reservoir will have a porosity storage capacity of 2,665 acre-feet. With a portion of site (Cell #1) mined and reclaimed, the capacity would increase to 3,575 acre-feet and sufficient to allow the Latham Plan to operate under conditions similar to 2002.

**PROPOSED LINED STORAGE AT JURGENS RESERVOIR**

The attached Figure 2 shows the location of the lined storage at the Jurgens Farm, the conceptual locations of ancillary facilities, and the general infrastructure of the Plumb Ditch. The reservoir is situated such that diversions into the reservoir storage may be accomplished by 1) direct delivery from the Plumb Ditch; and 2) pumping from the drain ditch on the Jurgens Farm. Infrastructure could potentially be added in the future to facilitate pumping directly from the South Platte River. The LLRC owns 17 out of 90 outstanding shares in the PIC; 8 shares of which have been changed to augmentation uses. The PIC has a decreed water right for 24.4 cfs, of which the LLRC has a pro-rata entitlement of 7.4 cfs. Existing laterals from the Plumb Ditch convey water to the Jurgens Farm and may be utilized to deliver PIC water by gravity flow into the lined storage at the Jurgens Reservoir.

A diversion structure located on the Plumb Drain Ditch, which runs along the south side of the reservoir, will be constructed to divert water directly into the reservoir for storage. Diversions at this location could be utilized by exercising a short exchange from the South Platte River up the tributary to capture excess water that LLRC has available in river. Portions of the Jurgens Farm extend to the South Platte River which enables the future river diversion structure, pump and pipeline facilities to be located entirely on LLRC property. In the future, a direct flow diversion from the river could potentially be constructed along with a pump station on the edge of the South Platte River and within the Jurgens Farm to divert water from the river into the lined storage. The same pipeline would be utilized to pump water from lined reservoir storage on the Jurgens Farm back into the river, when

necessary. The river diversion and pump station is not currently proposed but may be considered if/when the reservoir is mined and reclaimed. Diversions and releases from these alternate points would all occur within Administrative Reach C of the Latham Plan.

The following table summarizes the anticipated storage capacity of the Jurgens Reservoir. Porosity storage assumes that the sand and gravel alluvium will provide a 20 percent storage capacity.

**TABLE 5**
**Jurgens Reservoir**
**Estimated Storage Capacity (acre-feet)**

| | Cell #1 | Cell #2 | Total |
|---|---|---|---|
| Porosity Storage (Unmined Condition) | 390 | 2,275 | 2,265 |
| Mined Condition | 1,300 | 9,160 | 10,460 |

LLRC has no immediate plans for mining the site. However, subsurface exploration has indicated that the site has significant sand and gravel resources and therefore the site could potentially be mined in the future. Conservative estimates are that Cell #1 could potentially be mined in the near future and provide a storage space of 1,300 acre-feet. This combined with 2,265 acre-feet of porosity storage at Cell #2 would provide a combined storage capacity of 3,575 acre-feet.

## ALTERNATIVES TO JURGENS RESERVOIR

Three alternatives to the proposed Jurgens Reservoir project have been considered. They include: (1) no action; (2) development of new storage at the LLRC's Gibbs Farm; and (3) development of new storage at alternate locations.

*No Action Alternative*

The "no action" alternative is considered unacceptable because it would require that the LLRC continue to utilize Lower Latham Reservoir for storage of augmentation water supplies and impact storage space necessary for senior storage rights indefinitely. The no action alternative would also result in the continued loss of senior water supplies downstream, instead of capturing the water

senior water for later beneficial uses.

*New Water Storage at Gibbs Farm Alternative*

LLRC has also investigated the potential for lined storage development at the Gibbs Farm. Similar to the subject Jurgens Farm property, the Gibbs Farm property is ideally located near the South Platte River which would facilitate reservoir development. The Gibbs Farm is ideally located within Administrative Reach A, from which releases could be conveyed to all the administrative reaches for which the Latham Plan has replacement requirements. In 2016, the LLRC acquired the services of Smith Geotech to evaluate the feasibility for developing lined storage on the Gibbs property. Smith Geotech investigated several different storage options, the most feasible of which included a combination of porosity storage with surface storage. Appendix D includes the cost estimate and conceptual design of this alternative, which would have resulted in approximately 707 acre-feet of storage capacity. The costs for this alternative were developed by Smith Geotech in 2016 and are adjusted to today's cost using an adjustment of 31.8 percent. It is estimated that today's cost would be $9,709,862, or $13,734 per acre-foot of storage. Lined storage development at the Gibbs Farm was determined to be infeasible because 1) the unit cost for storage space was high, ranging from $13,734 to $19,770 per acre-foot; and 2) the volume of storage space was inadequate, ranging from 275 to 707 acre-feet. By comparison, the total estimated porosity storage at the Jurgens property is 2,665 acre-feet. The estimated total water storage capacity of the Jurgens Reservoir after mining and reclamation of the small cell is approximately 3,575 acre-feet. The development cost of the Jurgens Reservoir is approximately $7,208 per acre-foot of porosity storage, and $5,373 per acre-foot for storage with the Cell #1 mined and reclaimed. Lined storage at the subject Jurgens Farm property is more feasible regarding unit cost, is geographically located for efficient operations within the augmentation plan, and its larger capacity will allow LLRC to achieve their long-term water planning needs.

*New Water Storage at Alternate Locations*

The other properties acquired by LLRC are not feasible for lined reservoir development for various reasons. The Roth farms are located such that storage at those locations could not be beneficially administered within the augmentation plan. Releases from storage on the Roth farms would enter the lowest administrative reach of the Latham Plan. This location of replacement would result in the

Latham Plan being out of compliance with its' augmentation decree, unless other supplies were provided upstream. The alternate properties owned by LLRC are also located a significant distance from the river making water deliveries to and from storage difficult and more expensive. Easements would be required from intervening property owners for the pumping station and pipeline associated with reservoir storage at the alternate locations. The alternate properties are also of insufficient size to develop the volume of lined storage necessary for LLRC's long-term needs.

**PROJECT COSTS**

The LLRC is seeking funding from CWCB for the purposes of development of the Jurgens Reservoir project for 2,665 acre-feet of porosity storage and potentially 3,575 acre-feet of storage after the small cell at the site is mined and reclaimed. Appendix E includes the final construction drawings for the slurry wall portion of the project. It is anticipated that the slurry wall will be completed by the fall of 2025 and ancillary facilities will be completed by the end of 2027.

The cost for slurry wall construction ($14,165,323) is based upon the recent bid for slurry wall construction by Odin, which includes the following items.

1. Primary slurry wall construction.
2. Optional Items
    a. Secondary slurry wall construction to create two individual cells.
    b. Excavation and grading for perimeter drain ditches.
    c. Platform, cast out material and cap removal.
    d. Dewatering for leak testing.
    e. Seeding and reclamation.

The Primary slurry wall work has been awarded to Odin at the bid price of $12,732,123. The Optional Items have not yet been awarded to Odin and some or all may be performed by an alternate contractor. The total bid for all optional items is $1,433,200. Schnabel Engineering will be performing the engineering services during the slurry wall construction at an estimated cost of $722,000. Other costs related to the design and construction of ancillary facilities total $4,321,000. Ancillary facilities include the following.

1. A total of three permanent dewatering wells with stainless steel casing, pumps, flow meters, meter vaults, and pipeline.
2. Diversion structure with two Rubicon Flumegates for diverting water from the drain ditch into the Jurgens Reservoir.
3. A total of four measurement structures form measuring water deliveries into the Jurgens Reservoir recharge basins.
4. All necessary electrical and communication equipment.
5. Erosion control and BMP's.

The following table summarizes all remaining project costs.

**TABLE 6**
**TOTAL PROJECT COST**
**Jurgens Reservoir Project**

| | | |
|---|---|---|
| Feasibility Study (Engineering) | $ | 6,500 |
| Slurry Wall Construction (Odin bid) | $ | 12,732,123 |
| Slurry Wall Optional Items (Odin bid) | $ | 1,433,200 |
| Engineering during Slurry Wall Construction | $ | 722,000 |
| Ancillary Facility Construction | $ | 3,757,000 |
| Engineering for Ancillary Facilities | $ | 564,000 |
| Estimated Total Costs (rounded to nearest $1k) | $ | 19,215,000 |

Appendix F includes more detailed information on the cost estimates including the Odin bid tabulation and itemized quantities and units costs for the ancillary facility construction. Appendix F also contains a copy of the Notice of Award to Odin.

## IMPLEMENTATION

The slurry wall construction work for the Jurgens Reservoir has recently been awarded to Odin and their work is expected to begin mid-April of 2025. Mobilization and site setup for the slurry wall construction is expected to be completed in April 2025 and the slurry wall construction is expected to be completed by the fall of 2025. Final grading, culvert installations, fencing and site cleanup associated with the slurry wall construction is expected to be completed by May of 2026. Leak testing of the slurry wall will be completed in early 2026. Ancillary facilities are expected to be designed and constructed by mid-2027.

## PERMITTING

The appropriate Federal, State, County and local permitting will be obtained for the project. Weld County Floodplain Development permit has been obtained for this project. The construction contractor(s) will be required to obtain additional permits, as necessary. It is not expected that a substitute water supply plan will be required to provide water supplies during construction of the slurry wall as LLRC will provide the necessary water supplies directly to the construction site without a need for pumping groundwater.

## INSTITUTIONAL CONSIDERATIONS

Entities that are, or may, be involved in this proposed project include the following:

1. Lower Latham Reservoir Company; financing and project management.
2. Schnabel Engineering; design and project management.
3. NOCO Engineering, Inc.; engineering support.
4. Hydrologik; SCADA and instrumentation.
5. Randolph W. Starr; legal advisor.
6. Daniel K. Brown; water attorney.
7. CWCB; financing and construction.
8. Weld County; permitting.
9. Odin; slurry wall construction.

The LLRC will be the lead for financing and will be the entity entering into contract and agreements associated with the finance, design and construction of this project.

## FINANCIAL ANALYSIS

As summarized in Table 6, the total anticipated cost of the project is $19,215,000. All prior costs associated with the project, including slurry wall design, subsurface exploration and materials testing, are site surveying are excluded. LLRC is seeking funding from the CWCB Water Plan Grant to the extent available. LLRC will match the grant funding with an in-kind amount from its reserve funds. LLRC is also seeking funding from the CWCB Water Project Loan Program for the balance of the

project cost, but not to exceed $10 million, including 1% loan origination fee. The term and rate for the CWCB loan is requested to be 30 years at 2.21 percent. Interest rate is prorated based upon agricultural and municipal ownership in the LLRC. A total of 155 shares (or 99.36%) are owned by agricultural interests and 1 share (or 0.64%) owned by municipal interest. Application of a loan interest rate of 2.20 percent for the agricultural owned shares and 3.95 percent for the municipal owned shares results in a weighted average interest rate of 2.21 percent. LLRC is requesting $10 million from the CWCB Water Project Loan Program, of which $9,900,000 would be available for project costs. LLRC will pay for the balance of the project with funding provided by CWCB Water Plan Grant and current funds available in LLRC's cash reserves. The requested loan amount of $10 million, with a 30-year re-payment period and 2.21 percent interest rate, would have annual payments in the amount of $459,495.

The LLRC is a well-established company with a long history debt re-payment with CWCB. LLRC has CWCB Water Project Loans as summarized in the following table.

TABLE 7
Lower Latham Reservoir Company's
Existing Loans with CWCB

| Loan | Interest Rate | Origination Date | Current Balance | Annual Payment | Payments Remaining |
|---|---|---|---|---|---|
| C150253 | 2.25% | Jul-2007 | 1,028,556.75 | 92,149.02 | 13 |
| C150264 | 2.25% | Mar-2008 | 368,525.73 | 30,983.13 | 14 |
| C150304 | 2.75% | Jan-2010 | 1,725,341.09 | 119,379.88 | 20 |
| TOTAL | | | 3,122,423.57 | 242,512.03 | |

LLRC has no other debt, except for the above-tabulated loans with CWCB. The requested CWCB Water Project Loan would increase the total loan obligation to CWCB to $13,122,423.57 and the sum of annual payments for all loans would increase to about $702,007.

The LLRC has sufficient funds available to pay for the balance of the project costs that exceed the amount provided by CWCB. Similar to the previously approved loans, LLRC anticipates repayment of the new CWCB loan by means of annual revenue to the company. If the annual revenue is insufficient, LLRC will assess shareholders to the extent necessary. The annual CWCB loan

payment, as estimated above, will be $457,801.55, or $2,934.63 per share for the 156 active shares in the company. The LLRC may utilize a portion of its current revenue reserve to re-pay the loan and reduce individual assessments. Appendix G includes copies of the financial statements for the LLRC for the past three years. The most recent balance sheet shows that LLRC has approximately $20,924,834 in assets currently available for funding the project to the extent necessary.

## COLATERAL

If necessary, the LLRC will pledge revenue from assessments as allowed by the LLRC bylaws and articles of incorporation, and the water storage project itself.

## ECONOMIC ANALYSIS

The economic benefit of the project is considerable as it will result in approximately 2,665 acre-feet of new porosity storage space. The unit cost per acre-foot of storage space gained is $7,208 per acre-foot, which is reasonable and comparable to other storage development projects. Additional storage could potentially be developed at the site by mining and reclaiming one or both cells. The LLRC will rely primarily upon senior water rights that have previously been changed for augmentation uses to fill the reservoir. In addition, the LLRC will occasionally capture junior water supplies to supplement the fill of the reservoir. This new storage space will result in increased efficiency of water rights currently owned by LLRC which are available in excess supply in the South Platte River. The new storage will increase supplemental irrigation water deliveries to the farms under the Lower Latham irrigation system and will increase augmentation supplies substantially. As a result, the Jurgens Reservoir project will increase farm and property values under the Lower Latham system.

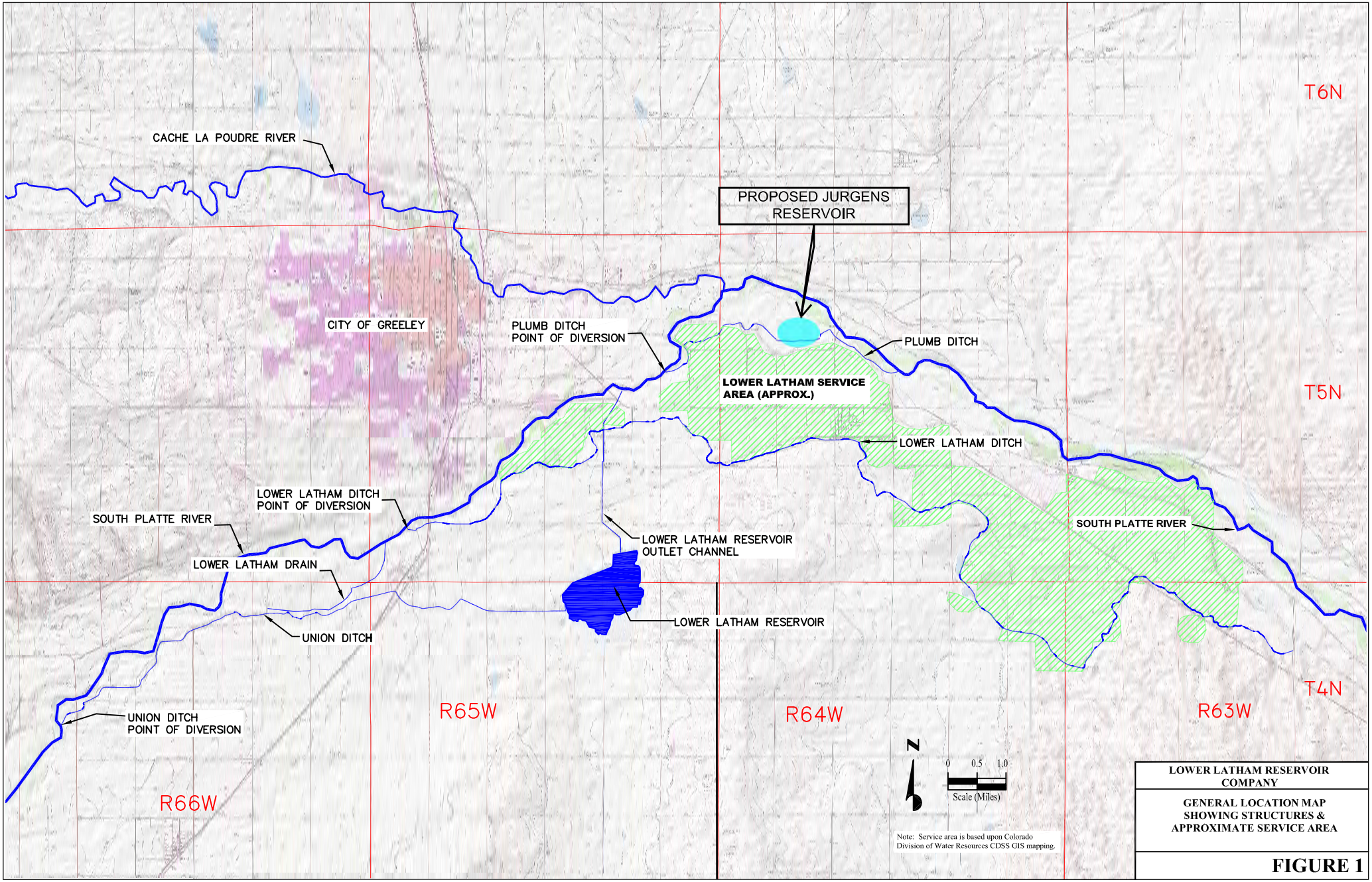
## SOCIAL AND PHYSICAL IMPACTS

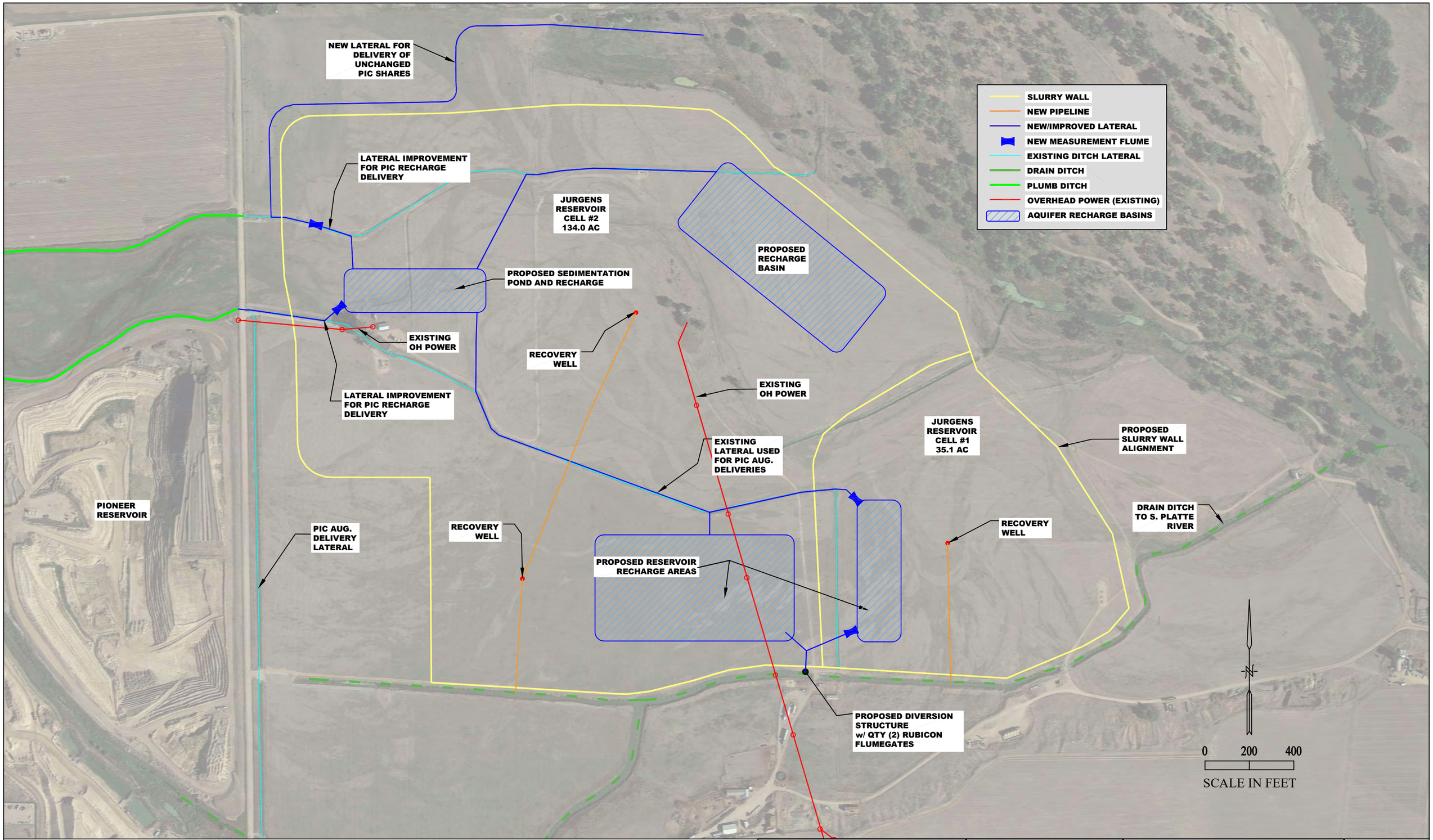
The project will have no significant social impacts, since it will result in the reservoir operations with very little impact. The project will have minor, short-term physical impacts over the duration of the slurry wall construction. After the soils have drained, the deposited sediment will be graded and seeded to re-store the area to its prior condition.

## CONCLUSION

1. The LLRC is an incorporated entity in the State of Colorado with the ability to enter into a contract with the CWCB for obtaining a Grant and/or Construction Fund loan.
2. The project will create new reservoir storage in a critical location along the South Platte River. The LLDC, LLRC and LLAMC will all benefit from the use of new storage capacity for the irrigation of farmland under the Lower Latham system.
3. The total estimated cost of the project is $19,215,000 and this will be financed, to the extent possible, by the CWCB Water Plan Grant plus the CWCB Water Project Loan Program, not to exceed $10 million. LLRC will provide financing for the balance of the project from its financial reserves.
4. The project is technically and financially feasible.

# FIGURES


T6N
T5N
T4N
R66W
R65W
R64W
R63W
CACHE LA POUDRE RIVER
PROPOSED JURGENS RESERVOIR
CITY OF GREELEY
PLUMB DITCH POINT OF DIVERSION
PLUMB DITCH
LOWER LATHAM SERVICE AREA (APPROX.)
LOWER LATHAM DITCH
LOWER LATHAM DITCH POINT OF DIVERSION
SOUTH PLATTE RIVER
LOWER LATHAM RESERVOIR OUTLET CHANNEL
SOUTH PLATTE RIVER
LOWER LATHAM DRAIN
LOWER LATHAM RESERVOIR
UNION DITCH
UNION DITCH POINT OF DIVERSION
N
0 0.5 1.0
Scale (Miles)
Note: Service area is based upon Colorado Division of Water Resources CDSS GIS mapping.
LOWER LATHAM RESERVOIR COMPANY
GENERAL LOCATION MAP SHOWING STRUCTURES & APPROXIMATE SERVICE AREA
FIGURE 1




Prepared by:
NOCO ENGINEERING, INC.
PO Box 613
Loveland, CO 80539

Date: March 24, 2025

**Lower Latham Reservoir Co.**

Jurgens Farm
Proposed Improvements
for Reservoir Development

FIGURE:
2

# TABLES

**TABLE 2**
**Lower Latham Reservoir Company**
**Water Rights Owned and Utilized for Augmentation in the Latham Plan**
**Projection / Dry-Year Yield and Average Year Yield**

| | | Projection/Dry Year Yield (acre-feet) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ditch System | No. of Shares | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Total |
| Lower Latham Ditch Company | 32.5 | 270.7 | 581.4 | 814.2 | 897.3 | 960.9 | 478.7 | 369.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4,372.2 |
| Greeley Irrigation Company | 15.19 | 0.0 | 25.8 | 47.9 | 63.8 | 54.5 | 38.5 | 42.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 273.2 |
| Union Ditch Company | 12.5 | 58.8 | 133.8 | 158.8 | 128.8 | 125.0 | 136.3 | 93.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 835.0 |
| Plumb Irrigation Company | 8 | 2.4 | 53.5 | 79.4 | 53.2 | 52.9 | 42.9 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 285.4 |

| | | Average Year Yield (acre-feet) | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Ditch System | No. of Shares | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Total |
| Lower Latham Ditch Company | 32.5 | 295.8 | 604.5 | 838.5 | 1,355.3 | 1,209.0 | 588.3 | 256.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5,148.0 |
| Greeley Irrigation Company | 15.19 | 4.0 | 42.0 | 54.9 | 70.1 | 63.9 | 45.8 | 17.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 298.0 |
| Union Ditch Company | 12.5 | 44.1 | 133.2 | 185.0 | 249.9 | 230.5 | 147.5 | 50.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1,040.7 |
| Plumb Irrigation Company | 8 | 5.3 | 34.9 | 46.9 | 78.1 | 72.9 | 34.9 | 7.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 280.0 |

| Combined Total (ac-ft) | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Projection / Dry Year Yield | 331.8 | 794.5 | 1,100.3 | 1,143.0 | 1,193.3 | 696.4 | 506.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 5,765.8 |
| Average Year Yield | 349.2 | 814.6 | 1,125.4 | 1,753.3 | 1,576.3 | 816.4 | 331.5 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 6,766.7 |
| Difference | 17.4 | 20.1 | 25.1 | 610.3 | 383.0 | 120.0 | -175.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 1,000.9 |

**TABLE 3**

**Lower Latham Reservoir Company**

**Combined Augmentation Obligations (Lagged Well Depletion + Return Flow Obligations)**

| Scenario | Augmentation Obligation (ac-ft) | | |
|---|---|---|---|
| | Reaches A-B | Reaches C-E | TOTAL |
| 1954 Drought | 2,330 | 10,068 | 12,399 |
| 1955 Drought | 1,981 | 8,682 | 10,664 |
| 1956 Drought | 1,786 | 7,579 | 9,365 |
| 2002 Drought | 1,658 | 7,039 | 8,697 |
| 2012 Drought | 1,458 | 6,400 | 7,858 |
| 2020 Projection | 887 | 4,122 | 5,009 |

# APPENDIX A

## ARTICLES OF INCORPORATION OF THE LOWER LATHAM RESERVOIR COMPANY

# Certificate of Incorporation

-of-

# THE LOWER LATHAM RESERVOIR COMPANY.

---

KNOW ALL MEN BY THESE PRESENTS, That the undersigned, Asa Sterling, Henry A. Irons and Cornelius Reinks, citizens of The United States of America and of the State of Colorado, residents of Weld county, Colorado, have associated themselves together and hereby do associate themselves together as a corporation under and by virtue of the laws of the State of Colorado, and in pursuance of that end do hereby certify and declare:

FIRST: That the corporate name of said company is and shall be, THE LOWER LATHAM RESERVOIR COMPANY.

SECOND: That the objects for which said company is incorporated are and shall be the following, that is to say:

1st: To acquire and become the owner by purchase or other lawful means, of all that certain land in Weld county, Colorado, constituting a certain natural depression adapted for reservoir purposes and for the storage of water, located and described as follows, viz: the north-west quarter, the principal part of the west half of the north-east quarter and of the west fourth of the south-west quarter of section 2, the north east quarter, the principal part of the north half of the south-east quarter and of the south-east quarter of the south east quarter and portions of the east half of the north-west quarter and of the north-east quarter of the south-west quarter of section 3., all the foregoing being in township 4 north of

range 65 west of the sixth principal meridian; also nearly all of the south-west quarter and certain contiguous portions of the south-half of the north-west quarter and of the south-~~east~~ west quarter of the north-east quarter and of the west half of the south-east quarter of section 35 in township 5 north of range 65 west of the sixth principal meridian; also a trapezoidal strip of land, being ~~more~~ about than one half of the south half of the south-east quarter of section 34 in said last named township and range; said strip of land being bounded on the south and east by the boundary lines of said last named quarter section; the area of said reservoir site bounded by its proposed high water mark to be seven hundred two and one-half acres of land and to contain 188,400,000 cubic feet of water according to survey of I. L. Stimpson, Civil Engineer, commenced June 20th 1898. Also, if deemed expedient, to acquire and become the owner by purchase or otherwise of lands contiguous to said reservoir site useful for the proper maintenance and operation of such proposed reservoir.

2nd: To construct, erect, keep in repair, control, operate, manage and maintain, all embankments, flumes, head-gates, outlet and inlet weirs and all other structures and appliances necessary, proper and expedient to render such reservoir site to be acquired by said company well adapted for the storage of water in large quantities as an irrigation reservoir, with means for drawing water so stored gradually therefrom as needed for irrigation purposes to irrigate lands belonging to stock holders of said company, their respective tenants and privies in interest.

3rd: To acquire by contract or [illegible] lawful means the permanent right outside of regular irrigating seasons to use that

# ILLEGIBILITY FLASHER

This flasher indicates that illegibility was due to the poor condition of the ink or paper when microfilmed.

DEPARTMENT OF ADMINISTRATION

**DIVISION OF STATE ARCHIVES AND PUBLIC RECORDS**

**MICRO-TECHNICS UNIT**
**Denver, Colorado**

certain irrigating ditch known as the Union Ditch, now owned and operated by The Union Ditch Company, and particularly that part thereof from its head-gate down to some point near said reservoir site, as a conduit for water and as a part of the inlet system and principal feeder of the reservoir of this company, and also the right, if deemed necessary at any time, to enlarge the carrying capacity of said portion of said Union Ditch for said purpose.

4th: To acquire by purchase or other lawful means, right of way for and to excavate, construct, keep in repair, operate, manage and maintain a ditch commencing at a point on the east bank of said Union Ditch where the same crosses the half section line running east and west through section 3, township 4, north of range 65 west in said county and state, the centre line of which runs thence east 600 feet to a point on the high water line of said proposed reservoir, which said ditch is to be at least 12 feet wide on the bottom with slope of banks 1 to 1, depth of at least 3 feet and a grade of 5.28 feet per mile, with a capacity of at least [illegible] cubic feet per second of time; also the power, if at any time it be deemed expedient, to increase the capacity of said ditch, which said ditch, in connection with said Union Ditch, is to constitute the principal feeder and inlet of said proposed reservoir of this company.

5th: If deemed expedient at any time, to acquire and become the owner of other ditches suitable to conduct water from the South Platte River or from any other available source to said reservoir and to cause to flow in such feeders all waste, drainage and seepage waters obtainable.

6th: To appropriate and divert from the South Platte River, at and through the head-gate of said Union Ditch and the other ditch specially mentioned to be constructed by said company and through all other available conduits, water not otherwise appropriated, at times when there is water in said river which can be lawfully so diverted, for the purpose of filling and refilling said reservoir from time to time, so far as it is practical so to do, and to appropriate and conduct water from all other available sources of supply into said reservoir for the purposes aforesaid.

7th: To acquire by purchase or other lawful means a right of way for and to construct, keep in repair, operate and maintain an outlet ditch commencing at a point from whence the quarter section corner between sections 34 and 35 of township 5 north of range 65 west, bears south 86 degrees 43 minutes west, 1365 feet, thence running to a point on the south bank of the Lower Latham Ditch, which outlet ditch shall be at least 12 feet wide on the bottom, with slope of banks 1 to 1, with grade of 2.64 feet per mile and with a depth of at least 2 feet and of a carrying capacity of at least 50 cubic feet per second, with the right to enlarge said ditch at any time if deemed expedient. Also to acquire by any lawful means all necessary rights of way to construct other outlet ditches to be used as conduits to conduct water out of said reservoir of said company to lands lying below the same and capable of irrigation therefrom; also to obtain by contract or any other lawful means right to conduct water stored and to be stored in said reservoir, into, through and along the ditch of The Lower Latham Ditch Company, commonly called the Lower Latham Ditch, and to deliver water at head-gates along the line of said ditch to stockholders of this company, their lessees and privies in interest,

owning, controlling and possessing lands thereunder capable of irrigation by means of such water to supplement their irrigation supply and otherwise to irrigate lands for the production of agricultural crops.

8th: To acquire by purchase, if deemed expedient, any appropriations and priorities of water now belonging to others as appropriators from the South Platte river and tributaries thereof and from all other available sources of supply, in order to supplement the supply of said reservoir and those entitled to water therefrom.

9th. To manage, control, keep in repair and improve from time to time the reservoir, flumes, head-gates, embankments, weirs, ditches, and conduits of this company, and to superintend and control the filling of said reservoir with water, the storage of water therein, the diversion of water therefrom and the delivery of such water for irrigation purposes to those entitled thereto.

10th: To borrow money for any proper corporate purpose, when deemed necessary, and to secure the payment of the same by notes, deeds of trust or mortgages on the property and franchises of said company and to provide for the payment of any such loans and interest thereon and expenses incident thereto in any lawful manner.

THIRD: That the stream from which the water is to be taken and diverted by this company for the purposes aforesaid is and shall be the South Platte River and tributaries thereof and other sources of supply as aforesaid.

FOURTH: That the place on said stream at or near which water shall be diverted therefrom into the principal feeder of the reservoir of this company shall be at the head-gate of the Union Ditch, at or near the north-east corner of section 18, township 4,

north of range 66 west of the sixth principal meridian, in Weld county, Colorado; also any points which may be found practicable for the purposes of this company.

FIFTH: That the line and course of the main feeder of the reservoir of this company is and shall be along the line of said Union Ditch to the point above mentioned where the inlet ditch of this company leading from the Union Ditch to said reservoir commences and thence along the line of said ditch so to be constructed in an easterly course until it reaches a point from which the water will readily flow into said reservoir site.

SIXTH: That the use to which the water appropriated, acquired and stored by this company shall be applied is for the irrigation of agricultural lands lying in the county of Weld and State of Colorado, capable of irrigation from said reservoir and from the Lower Latham Ditch; said water shall be appropriated and distributed pro rata among the stock-holders of this company or those having contractual relations with them respectively, on the ratio of the number of shares held by each person using the same.

SEVENTH: The amount of the capital stock of said company shall be $20,000 to be divided into 200 shares of $100 each. The subscription to said stock shall be limited and confined to those persons who are stock-holders or interested as equity owners of stock in The Lower Latham Ditch Company. Such persons shall be entitled to subscribe for stock in this company only on the ratio of one share of stock herein to one share of stock in said The Lower Latham Ditch Company; provided that after the 1st day of November A.D. 1898, the stock then remaining unsubscribed may be

open to subscription to the then stock-holders of this company and other owners of stock in The Lower Latham Ditch Company, on such terms and conditions and in such ratio as the board of directors may prescribe. If for any reason the entire authorized capital stock is not subscribed, the subscribers to stock shall notwithstanding be liable for their subscriptions and the company shall proceed to do business with the stock actually subscribed.

of said corporation

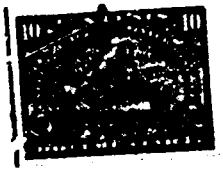
EIGHTH: That the term of existence shall be 20 years.

NINTH: That the board of directors of said company shall consist of five persons. The names of the directors who are hereby appointed to manage the affairs of said company for the first year of its existance and until their successors are elected are and shall be , Asa Sterling, Henry A. Irons, Cornelius Reinks, James Loustalot and J. John James.

TENTH: That the principal office of said company shall be in Greeley, in the county of Weld and State of Colorado. The principal business of said corporation shall be carried on in said county of Weld.

ELEVENTH: That the board of directors of said corporation shall have power to adopt and enact such prudential by-laws as they deem proper for the management of the affairs of the company, not inconsistant with the laws of this state for the purpose of carrying on all kinds of business within the objects and purposes of said company.

Witness the hands and seals of said incorporators this 18th day of August, A.D. 1898, in duplicate.



Asa Sterling (Seal)

Henry A Irons (Seal)

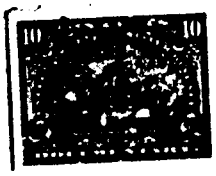
Cornelius Reinks (Seal)

State of Colorado )
) ss:
County of Weld, )

I, J. D. Phillips, a Notary Public, within and for said county and state do hereby certify that Asa Sterling, Henry A. Irons and Cornelius Reinks, personally known to me to be the persons who signed and sealed the above certificate of incorporation in duplicate, appeared before me this day in person and each severally acknowledged that he signed and sealed the foregoing instrument in writing and the duplicate thereof as his free and voluntary act for the uses and purposes therein set forth.

Given under my hand and notarial seal this 18th day of August, A. D. 1898.

I further certify that my commission expires on the 10th day of Dec A.D. 1901.



J. D. Phillips
Notary Public.

27097

CERTIFICATE of INCORPORATION
of
The Lower Latham
Reservoir Company.

27097

DOMESTIC

FILED in the office of the Secretary of State, of the State of Colorado, on the 22 day of August A. D. 1908 at 2:25 o'clock P.M. Recorded in Book 70 Page 176

[illegible] SECRETARY OF STATE.

By [illegible] Deputy

This document has been Inspected and properly Entered on the Records of The Fi[illegible]x Depar[illegible]ment.

O K

Date July 25, 1968

[illegible] Clerk

# ILLEGIBILITY FLASHER

This flasher indicates that illegibility was due to the poor condition of the ink or paper when microfilmed.

DEPARTMENT OF ADMINISTRATION

**DIVISION OF STATE ARCHIVES AND PUBLIC RECORDS**

**MICRO-TECHNICS UNIT**

**Denver, Colorado**

CERTIFICATE OF PAID-UP STOCK OF

THE LOWER LATHAM RESERVOIR COMPANY.

The undersigned, Asa Sterling, President, and Asa Sterling, Henry A. Irons and Cornelius Rienks, a majority of the directors of The Lower Latham Reservoir Company, a Colorado corporation, pursuant to section 1 of "An Act to Amend Chapter 19 of the General Laws of the State of Colorado," approved February 8, 1872, also appearing as section 487 of Mills Annotated Statutes, do hereby certify as follows:

FIRST-- That said Asa Sterling is and since the 14th day of December, 1901, has been the duly elected and acting President of said corporation.

SECOND-- That the said Asa Sterling, Henry A. Irons and Cornelius Rienks are and since the 14th day of December, 1901, have been a majority of the duly elected and acting directors of said corporation.

THIRD-- That of the authorized two hundred shares of the capital stock of said corporation there have been subscribed and issued certificates for one hundred and fifty-six shares of the par value of $100 per share; that pursuant to the authority conferred by the certificate of incorporation of said company, the Board of Directors thereof have limited and fixed the total number of shares to be issued to said 156 shares and no more. That by said action of said Board one hundred and fifty-six shares has been fixed as the total number of shares of said corporation.

FOURTH-- That the total capital stock of the company so fixed has been fully paid in, in cash.

This certificate is made to be recorded in the office of the Secretary of State of the State of Colorado, and a copy thereof to be recorded in the office of the Recorder of Deeds of the county of Weld,

in said State, wherein the business of said company is carried on.

IN WITNESS WHEREOF, the said Asa Sterling, as President, and the said Asa Sterling, Henry A. Irons and Cornelius Rienks, as a majority of the directors of said company, have hereunto set their hands this 18th day of August, A. D., 1902.

Asa Sterling
President of The Lower Latham Reservoir Company.

Asa Sterling

Henry A. Irons

Cornelius Rienks
A Majority of Directors of The Lower Latham Reservoir Company.

STATE OF COLORADO, }
COUNTY OF WELD. } ss.

Asa Sterling, Henry A. Irons and Cornelius Rienks, being each severally duly sworn, on oath each for himself deposes and says: I am a Director of The Lower Latham Reservoir Company, a Colorado Corporation, doing business in Weld county, Colorado. Asa Sterling is President of said corporation. The three affiants constitute a majority of the Board of Directors of said corporation. I have read the above and foregoing certificate of paid-up stock of said Company and well know the contents thereof. All and singular the matters, facts and allegations therein contained are true of my own knowledge.

Asa Sterling

Henry A. Irons

Cornelius Rienks

Subscribed and sworn to before me this 18th day of August, 1902.
I further certify my Notarial Commission expires My Commission Expires Oct. 6, 1904

John L. Davis
Notary Public.

35225

CERTIFICATE OF PAID-UP STOCK OF THE LOWER LATHAM RESERVOIR COMPANY.

.....

.....

DOMESTIC.

FILED in the office of the Secretary of State, of the State of Colorado, on the 29 day of August A. D. 1907 at 9:40 o'clock, a M. Recorded in Book 96 Page 23

David C. Beckwith, Secretary of State.

By [illegible] Deputy.

100

CERTIFICATE OF RENEWAL
OF THE
CERTIFICATE OF INCORPORATION

---

STATE OF COLORADO, )
: ss.
COUNTY OF WELD. )

Greeley, Colorado,
January 13, 1919.

TO WHOM IT MAY CONCERN:

This is to certify that at a special meeting of the stockholders of The Lower Latham Reservoir Company held at Greeley, Colorado, on the 3rd day of January, A. D. 1919, duly called by the stockholders representing at least ten per cent. (10%) of the entire capital stock of the company, the call being published for four weeks in The Greeley Tribune-Republican, a weekly newspaper published at Greeley, State of Colorado, and notice of said meeting having been mailed to each stockholder thirty (30) days prior to this date, there being represented at such meeting 91½ shares of the capital stock of said company out of a total of 156 shares.

That at said meeting a resolution was passed to have extended the corporate existence of this said company for a period of twenty (20) years, from and after the date of the expiration of its corporate life, the same being the 22nd day of August, A. D. 1918, the resolution receiving a majority vote of all the outstanding stock of the company. The president and secretary were authorized to certify this resolution under the corporate seal of the company, to send such certificate to the secretary of state of the State of Colorado, to file duplicate certificates under seal of the company in the office of the Recorder of Deeds of Weld County, Colorado, and in pursuance of such resolution, we do hereby certify the same under the seal of the company.

J. John James.
President.

ATTEST: Albert Kelly
Secretary.

#68791

ASSESSOR'S OFFICE
Weld County, Colorado.

Ok
M.W

To Whom it May Concern:

I hereby certify that I am the duly elected and qualified Assessor of the County of Weld, State of Colorado, and, as such, have direct charge of the tax schedules of said Weld County and further,

That The Lower Latham Reservoir Co a corporation duly organized and existing under and by virtue of the laws of the State of Colorado, being an organization of farmers for their mutual agricultural benefit and not for profit, possessing no income and handling no moneys except assessment on the Capital stock for maintenance expense, is not subject to taxation in this county, and is not taxed.

Lou E Hanna
Assessor of Weld County, Colorado.

Subscribed and sworn to before me this 16th day of February, A. D. 1921.

My commission expires December 31, 1922

Notary Public.

-115-50

Feb 18-21
Dan Grade
E D L

Attach to #68791

Assessor's Certificate

In re,

The Lower Latham

Reservoir Company

FILED in the office of the Secretary of State of the State of Colorado, this 17 day of February A. D. 1921, at 2:50 o'clock P.M.
Recorded in Book ..... Page .....
CARL S. [illegible]
By Sadie Lawrence
Filing Clerk Leahy. Fees $10.

Indexed by
JAS

5-115-50

Feb. 14-1919
Grace Watters Clerk

Received by
J. Maloney
for McN 5 F 1919
Compared by
Casey and Smith

INDEXED BY
FL

63791

CERTIFICATE OF RENEWAL

of the

CERTIFICATE OF INCORPORATION

of

THE LOWER LATHAM RESERVOIR COMPANY.

****

# DOMESTIC

FILED in the office of the Secretary of State, of the State of Colorado, on the 13 day of Feb. A. D. 1919 at 3:10 o'clock P. M.
Recorded in Book 17 Page 317
JAMES B. NOLAND, Secretary of State.
By [signature] Deputy.
Filing Clerk [illegible] Fee [illegible]

CD-20.00 11315

This document has been inspected and properly Entered on the Records of The Flat Tax Department.
OK RK
Date July 25, 1968
[signature] Clerk

CERTIFICATE
OF
CERTIFICATE OF INCORPORATION

State of Colorado, )
) ss.
County of Weld. )

Greeley, Colorado

August 6, 1938

This is to certify that at a special meeting of the stockholders of the Lower Latham Reservoir Company held at Greeley, Colorado, on the 6th day of August, A.D., 1938, duly called by the stockholders representing at least ten per cent. (10%) of the entire capital stock of the company, the call being published for four weeks in The Greeley Tribune-Republican, a weekly newspaper published at Greeley, State of Colorado, and notice of said meeting having been mailed to each stockholder thirty (30) days prior to this date, there being represented at such meeting ninety four shares of the capital stock of said company out of a total of 156 shares.

That at said meeting a resolution was passed to have extended the corporate existence of this said company perpetually from and after the date of the expiration of its corporate life, the same being the 22nd day of August, A.D., 1938, the resolution receiving a majority vote of all the outstanding stock of the company. The president and secretary were authorized to certify this resolution under the corporate seal of the company, to send such certificate to the Secretary of State of the State of Colorado, to file duplicate certificate under seal of the company in the office of the Recorder of Deeds of Weld County, Colorado, and in pursuance of such resolution, we do hereby certify the same under the seal of the company.

E. C. Johnson

President

Attest:

Frances G. Lage

Secretary

103433

# Certificate of Renewal

The Lower Latham Reservoir Company

AUG-10-38 00149 A (4) — 3.50

## DOMESTIC

This document has been inspected and properly Entered on the Records of The Flat Tax Department

Date Aug 11 1938

E. A. Stephens Clerk

RECORDED

BOOK 419 PAGE 369

FILED in the office of the Secretary of State, of the State of Colorado, on the 10 day of Aug A. D. 1938, at 9:00 o'clock A.M.

GEORGE E. SAUNDERS
Secretary of State

Filing Clerk ..... Fees 3.50

Old Age Pension Fund .....

This document has been inspected and properly Entered on the Records of The Flat Tax Department

O K

Date July 25, 1968

Clerk

SS: Form NP a

ELECTION TO ACCEPT
the Colorado Nonprofit Corporation Act

FILED in the office of the Secretary of State of the State of Colorado
BYRON A. ANDERSON
Secretary of State MAY 30 1973

1710

Pursuant to the provisions of the Colorado Nonprofit Corporation Act, the undersigned corporation elects to adopt the provisions of the Colorado Nonprofit Corporation Act and does hereby state that:

258436

1. The name of the corporation is The Lower Latham Reservoir Company
2. All required reports have been or will be filed, and all fees, taxes & penalties due to the State of Colorado accruing under any act to which the corporation has been subject have been paid.
3. On the 18th day of August, 1898, the directors of the (members OR stockholders OR directors) corporation, a quorum being present, voted to accept the Colorado Nonprofit Corporation Act.
(the acceptance is authorized, by at least 2/3 of the votes of the members, OR 2/3 of the votes of the stockholders, OR by a majority vote of the directors, which were present at such meeting)
4. The corporation followed the requirements of the law under which it was organized.
5. The address of the registered office in Colorado is 909 Tenth Avenue, Greeley, Colorado, 80631 Weld County and the name of its registered agent at such address is M. E. H. Smith
6. Following is the name and address of the officers and directors.

| NAME | TITLE | ADDRESS |
|---|---|---|
| Johnny R. Bain | President & Director | Route 1, Kersey, Colorado |
| Mr. Victor R. Klein | Director | P.O. Box 188, Kersey, Colo. |
| Mr. Ronald Herbst | Director | Route 1, Box 282 Kersey, Colorado |
| Mr. Andrew Hoy, Jr. | Director | Route 4, Box 195E Greeley, Colorado |
| Mr. Roy L. Kohler | Director | P.O. Box 6, Kersey, Colo. |

7. The attached copy of incorporation is true and correct. Filed with Secretary of State
8. Issued shares of stock are 156 authorized.

| NUMBER OF SHARES AUTHORIZED | NUMBER OF SHARES ISSUED AND OUTSTANDING |
|---|---|
| 156 | 156 |

M. E. H. Smith, 909 Tenth Avenue, Greeley, Colorado - Secretary
9. All issued and outstanding shares of stock have been delivered to the corporation to be cancelled.
10. The authority of the corporation to issue shares of stock shall hereby be terminated.

Its President

M. E. H. Smith
Its secretary

STATE OF COLORADO
ss.
COUNTY OF WELD

The foregoing instrument was acknowledged before me this 25th day of May, 1973, by Johnny R. Bain, President, and M. E. H. Smith, Secretary.
(insert names of such officers, as signed above, titles, & correct name of corporation)
In witness whereof I have hereunto set my hand and seal.

My commission expires My Commission expires May 1, 1976

Notary Public

Note: In 7. if the documents of this corporation are on file in the office of the Secretary of State of Colorado, type the words "not applicable" in the space provided.

In 8. if the corporation is formed (and most non-profit are) without authorized capital stock type the word "not" in the space provided. In 31-24-27 the law provides "Except for corporations organized for the acquisition and distribution of water to their stockholders, a corporation shall not have or issue shares of stock."

Submit this Form in the original typed & one carbon copy
Fee $5.00

RECORDED
ROLL 238 PAGE 1717

File Card Made
B.R.

98-1-[illegible]

FILED

11 MAR '76

STATE OF COLORADO
DEPT. OF STATE

299813

SS- FORM 8P1
(Rev 6/73)

# STATEMENT OF CHANGE OF REGISTERED OFFICE OR REGISTERED AGENT, OR BOTH,

To the Secretary of State
of the State of Colorado

Pursuant to the provisions of the Colorado Corporation Act, the undersigned corporation, organized under the laws of the State of Colorado submits the following statement for the purpose of changing its registered office or its registered agent, or both, in the State of Colorado:

First: The name of the corporation is The Lower Latham Reservoir Company

Second: The address of its REGISTERED OFFICE is 909 Tenth Avenue, Greeley, Colorado 80631

Third: The name of its REGISTERED AGENT is Charles B. Dickson

Fourth: The address of its registered office and the address of the business office of its registered agent, as changed will be identical.

Fifth: The address of its place of business in Colorado is 909 Tenth Avenue, Greeley, Colorado 80631

The Lower Latham Res. Co (Note 1)

By [signature] (Note 2)
Its President

STATE OF COLORADO
County of Weld

Before me, M. E. H. Smith a Notary Public in and for the said County and State, personally appeared John R. Rein who acknowledged before me that he is the President (President) (Vice-President) of The Lower Latham Reservoir Company a Colorado (State of Incorporation) corporation, that he signed the foregoing, and that the statements contained therein are true.

In witness whereof I have hereunto set my hand and seal this 5th day of March, A. D. 19 76.

My commission expires: February 15, 1977

M. E. H. Smith
Notary Public

Notes: 1. Exact corporate name of corporation making the statement.
2. Signature and title of officer signing for the corporation - must be President or Vice-President except for nonprofit.
3. Signature of Notary Public must be exactly as shown on Notarial Seal, and must agree with notarial commission.
4. This document must be typewritten.

SUBMIT ONE COPY

$5.00

RECORDED
ROLL 314 PAGE 565

03 12

STATE OF COLORADO

# STATEMENT OF CHANGE OF REGISTERED OFFICE AND/OR REGISTERED AGENT

661

PLEASE TYPE OR PRINT CLEARLY

[1] The exact Corporate Name current Registered Office & current Registered Agent are

CHARLES [illegible]

[illegible] REGISTERED AGENT [illegible]

LOWER LATHAM RESERVOIR COMPANY

[illegible]

[illegible] DENVER

FILED

25 FEB '77

FEB 24 1977

STATE OF COLORADO
DEPT. OF STATE

318234

The Corporation named herein makes the following statement:

[2] The State or Country of incorporation is Colorado

[3] The complete street address of the Corporation's REGISTERED OFFICE shall be changed to

1010 12th street Greeley Colo 80631

[4] The name of the Corporation's SUCCESSOR REGISTERED AGENT IS

SAME

☒ N/A [5] The address of the Corporation's Registered Office and the address of the Corporation's Registered Agent as changed will be identical

[6] The complete street address of the Corporation's principal place of business in Colorado is

1010 12th street Greeley Colo 80631

[7] If this statement is executed by the Registered Agent) A copy of this statement has been forwarded to the corporation

STATE OF Colorado )
) ss
COUNTY OF Weld )

Pursuant to the provisions of Title 7 C.R.S. 1973 I Charles B. Dickson the Sec (Title) of The Lower Latham Reservoir Company (Corporate Name) Colorado (State or Country of Incorporation)

corporation being duly sworn or affirmed deposes and declares that this statement has been examined by me and to the best of my knowledge and belief is true correct and complete

Corporate Name Lower Latham Reservoir Company

By Charles B. Dickson & Johnny R Ru (Authorized Signature)

Title Sec / Registered agent ~~President~~ (President, Vice President or ~~Registered Agent~~)

Subscribed and sworn to before me this 24 day of January 19 77

My commission expires 2-1-78

Daniel W. Smith
Notary Public

RECORDED
ROLL 365 PAGE 661

SS Form DFI
Rev 1976

Filing Fee $5.00

# ILLEGIBILITY FLASHER

This flasher indicates that illegibility was due to the poor condition of the ink or paper when microfilmed.

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MAR 14 9 SUBMIT ONE
Filing fee $5.00
DEPARTMENT OF STATE
STATE OF COLORADO

FILED 143

# STATEMENT OF CHANGE OF REGISTERED OFFICE OR REGISTERED AGENT, OR BOTH,

14 MAR '77

STATE OF COLORADO
DEPT. OF STATE
319573

Notes: 1. Exact corporate name of corporation making the statement.
2. Signature and title of officer signing for the corporation, must be President or Vice-President.
3. Signature of Notary Public must be exactly as shown on Notarial Seal, and must agree with notarial commission.
4. This document must be typewritten.

To the Secretary of State
of the State of Colorado

Pursuant to the provisions of the Colorado Corporation Act, the undersigned corporation, organized under the laws of the State of Colorado submits the following statement for the purpose of changing its registered office or its registered agent, or both, in the State of Colorado:

First: The name of the corporation is The Lower Latham Reservoir Company

Second: The address of its REGISTERED OFFICE is 1010 12th Street, Greeley, Colorado 80631 P O Box 1904

Third: The name of its REGISTERED AGENT is Charles B. Dickson

Fourth: The address of its registered office and the address of the business office of its registered agent, as changed, will be identical.

Fifth: The address of its place of business in Colorado is same.

*Sixth: REGARDING FOREIGN CORPORATIONS: THIS STATEMENT MAY BE EXECUTED BY THE REGISTERED AGENT WHEN IT INVOLVES ONLY A REGISTERED ADDRESS CHANGE. A COPY OF THIS STATEMENT HAS BEEN FORWARDED TO THE CORPORATION BY THE REGISTERED AGENT.

The Lower Latham Reservoir Company (Note 1)

By Johnny R. Reis (Note 2)
Its President
Its Registered Agent*

STATE OF COLORADO
County of WELD

Before me, M E H Smith, a Notary Public in and for the said County and State, personally appeared Johnny R. Reis who acknowledged before me that he is the President (President) (Vice President) of The Lower Latham Reservoir Company, a Colorado (State of Incorporation) corporation, that he signed the foregoing, and that the statements contained therein are true.

In witness whereof I have hereunto set my hand and seal this 22nd day of February, A. D. 19 77.

My commission expires [illegible]

John M. Smith
Notary Public

RECORDED
ROLL 370 PAGE 143

SS FORM DF 1
(Rev. 7-76)

SHEPARD
File Card No.

# STATE OF COLORADO
# STATEMENT OF CHANGE OF REGISTERED OFFICE AND/OR REGISTERED AGENT

PLEASE TYPE OR PRINT CLEARLY • • • • • • PLEASE READ INSTRUCTIONS ON REVERSE SIDE

[1] The exact Corporate Name, current Registered Office & current Registered Agent are

CHARLES B. DICKSON
AGENT FOR - LOWER LATHAM RESERVOIR COMPANY
LTD.
1129 - 9TH AVE., 1302
GREELEY, CO 80631

FOR OFFICE USE ONLY

491428 8172

**NOTICE OF DELINQUENCY**
AUGUST 31, 1982
YOUR 1982 CORPORATE REPORT AND FEE ARE DELINQUENT. SEE NOTICE ON INSIDE FRONT COVER FOR INSTRUCTIONS AND CONSEQUENCES OF FAILURE TO FILE.

The Corporation named herein makes the following statement

[2] The State or Country of incorporation is Weld County, Colorado

[3] The complete street address of the Corporation's REGISTERED OFFICE shall be changed to:

P.O. Box 398; Kersey, CO 80644 406 4th St.

[4] The name of the Corporation's SUCCESSOR REGISTERED AGENT IS

Charles B. Dickson

[5] The address of the Corporation's Registered Office and the address of the Corporation's Registered Agent, as changed, will be identical.

[6] The complete street address of the Corporation's principal place of business in Colorado is:

406 4th St. Kersey, CO 80644

STATE OF Colorado )
)ss
COUNTY OF Weld )

Pursuant to the provisions of Title 7, C.R.S. 1973, I, Philip Schlagel (Name of President or a Vice-President), the president (Title) of Lower Latham Reservoir Co. (Corporate Name), a Weld County (State or Country of Incorporation) corporation, being duly sworn or affirmed, deposes and declares that this statement has been examined by me and to the best of my knowledge and belief, is true, correct and complete.

Corporate Name: Lower Latham Reservoir Co.

By: Philip Schlagel (Authorized Signature)

President ____ Vice-President

COMPUTER UPDATE COMPLETE
HS

Subscribed and sworn to before me this 7th day of September 19 82

My commission expires 6-27-86

Sandra Vonnest
Notary Public

P.O. Box 405; Kersey, CO 80644
Address

8729 8171

Form DFI
Rev. 1982

SUBMIT THIS STATEMENT WITH PAYMENT TO:
CORPORATE REPORT SECTION
DEPARTMENT OF STATE
P.O. BOX 5861
DENVER, CO 80217-5861

Filing Fee $5.00

Ee

COLORADO DEPARTMENT OF STATE

STATEMENT OF

FILING FEE: $5.00

CORPORATE I.D. NUMBER

F DN 0027097

FOR OFFICE USE ONLY

D 1

CHANGE of REGISTERED OFFICE and/or REGISTERED AGENT

COMPLETE THIS FORM ONLY IF THE AGENT NAME AND/OR ADDRESS IN BOX G ARE TO BE CHANGED FOR THE CORPORATION NAMED IN THAT BOX.

FILED
COLO. DEPT. OF STATE
3976 11 8-9

A NAME OF NEW REGISTERED AGENT

Charles B. Dickson
(name)

B ADDRESS OF NEW REGISTERED OFFICE

FIRM OR BLDG.

1025 9th Avenue - Suite 302
STREET ADDRESS

CITY Greeley CO ZIP CODE 80631

C STATE OR COUNTRY OF INCORPORATION

Colorado

D I UNDERSTAND THAT COLORADO LAW REQUIRES THAT THE CORPORATION'S REGISTERED OFFICE AND THE BUSINESS ADDRESS OF THE CORPORATION'S REGISTERED AGENT, AS CHANGED, MUST BE IDENTICAL

E DECLARATION AND NOTARIZATION

STATE Colorado COUNTY Weld

PURSUANT TO THE PROVISIONS OF TITLE 7, CRS 1973, I, Paul Hoshiko, Jr.
(NAME OF PERSON SIGNING THIS STATEMENT)

HAVING BEEN DULY SWORN, DECLARE THAT THIS STATEMENT IS TRUE, COMPLETE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

SIGNED [signature] (PRESIDENT OR OTHER OFFICER)

SUBSCRIBED AND SWORN TO BEFORE ME ON February 6, 1980
(DATE)

[signature]
NOTARY PUBLIC

MY COMMISSION EXPIRES ON March 7, 1983
(DATE)

COMPUTER UPDATE COMPLETE

AB

G THE EXACT CORPORATE NAME, CURRENT REGISTERED OFFICE AND CURRENT REGISTERED AGENT ARE

CHARLES B. DICKSON (03/14/77)
AGENT FOR -
LOWER LATHAM RESERVOIR COMPANY
(THE)
1010 - 12TH STREET
P. O. BOX 1904
GREELEY, CO 80631

DO NOT ALTER THIS INFORMATION

MAIL TO:
COLORADO DEPARTMENT OF STATE
P.O. BOX 5861
DENVER, CO. 80217

022912

# APPENDIX B

## BYLAWS OF
## THE LOWER LATHAM RESERVOIR COMPANY

# THE BYLAWS OF THE LOWER LATHAM RESERVOIR COMPANY

Originally passed and adopted by the Board of Trustees of said Company on the 18th day of August, A.D. 1898 and amended by the Board of Trustees on the 20th day of December, 1977, on the 10th day of October, 2002, on the 15th day of June, 2004, on the 12th day of August, 2004, on the 14th day of July, 2005, and on the 19th day of December, 2009 to take the place of all previous Bylaws.

## ARTICLE I
## Subscriptions of Stock

Stock in the Company of the par value of One Hundred Dollars ($100.00) per share, shall be opened to subscribers until the 1st day of November, 1898, only to those persons who are now stockholders or equity owners of stock in the Lower Latham Ditch Company and only on the same ratio as their ownership of stock in said Company. Subsequent to November 1st, 1898, if the entire two hundred (200) shares are not then subscribed the shares then unsubscribed shall be open to subscription by such persons, without reference to said limitation of ratio and subject to such conditions as the Board of Trustees may then designate. At no time shall more than two hundred (200) shares or certificates therefore be recognized or outstanding.

## ARTICLE II
## Board of Trustees

Section 1. How Constituted. Following the Annual Stockholders meeting of January 9, 1954, three stockholders will be elected to the Board of Trustees at the annual stockholders meeting in 1955; two (2) in 1956, and then so alternate in future years, each stockholder to be elected to the Board of Trustees for a term of two (2) years; the two members receiving high votes in the 1954 election to be considered elected to terms of two (2) years.

Section 2. Vacancies. Death, permanent disability, accepted resignation, permanent change of residence outside of Colorado, sale or transfer of all interest in stock of the Company, thirty (30) days delinquency in paying assessments on subscriptions after maturity thereof, on the part of any director, shall create a vacancy in his office as such director, which vacancy shall be at one filled by election by the remaining members of the Board of Trustees of some stockholder or subscriber to stock, to fill said vacancy, to hold office until the next annual stockholders meeting and until his successor is duly elected and accepts office. To elect a director to fill a vacancy, three Trustees must concur.

Section 3. Organization. The first Board of Trustees as soon as practicable after the certification of the corporation is filed, and each succeeding Board of Trustees, immediately after the election thereof, shall meet and organize by election from its own membership a president, a vice president, and without

reference to membership in the board or interest in stock, a secretary, treasurer and superintendent, which officers shall hold office until their successors are elected and qualify, subject to change at any time by the Board of Trustees at its pleasure.

Section 4. Powers. The Board of Trustees shall have full power to transact all the business of the Company except such as is herein or by the statutes of the State of Colorado required to be performed by the stockholders; to pass and adopt all bylaws necessary and expedient to transact the affairs of the Company; to appoint or remove at will any and all officers, employees, and agents of the Company; to prescribe their duties and fix their compensation; to control all the Company's property, approve all bonds given to the Company, authorize all contracts, direct the execution of all works, determine what property shall be purchased and sold, pass upon and audit all bills, levy and cause to be collected all assessments on subscriptions to stock, necessary to carry out the objects and purposes for which the Company is organized and to forfeit and authorize the sale of all stock or subscriptions to stock delinquent on account of unpaid assessments.

Section 5. Meetings. Regular meetings of the Board of Trustees shall be held each month at a time and location agreed upon by the Board of Trustees, in the County of Weld, State of Colorado. For such regular meetings, no notice need be given. At any regular meeting, a majority of the Trustees shall constitute a quorum for the transaction of any business except the expulsion of a director or election to fill a vacancy. Any regular meeting of the Board of Trustees may be adjourned to a time certain without any notice being given of the adjourned meeting.

Special meetings of the Board of Trustees may be held at the time upon call of the president or of any two Trustees, on two (2) days notice being given by mail to each director, provided a special meeting at which all the members are present shall be valid without notice; and, provided further, that a special meeting at which at least four (4) members of the Board of Trustees are present, and concur in the action taken shall be valid without notice. A special meeting without notice, at which three (3) Trustees are present, shall also be valid, provided the absent Trustees subsequently give their written consent to the action of such meeting.

## ARTICLE III
## Meeting of Stockholders

Section 1. The annual meeting of the stockholders or subscribers to stock of this Company for the election of a Board of Trustees and such other business as may properly come before such meeting, shall be held in the Town of Kersey, County of Weld, State of Colorado, commencing immediately following the annual meeting of the Lower Latham Ditch Company, or at such other place as may be designated in the notice of the annual stockholders meeting. Notice of such meeting shall be given by the secretary at least ten

(10) days prior to the date set for such meeting. A majority of the outstanding shares of the Company shall be present at such meeting in person or proxy to constitute a quorum, provided a lesser number may have power to adjourn to a time certain, not less than thirty (30) days and no more than sixty (60) days, in which case legal notice must be given of the adjourned meeting as required by law. At any stockholders meeting the owner of each share of stock shall on account thereof, be entitled to one (1) vote. When stock is mortgaged or pledged, or otherwise used as collateral security, the owner of the equity shall be authorized to vote the same, provided if the equity owner is not presenting person or by proxy, then it shall be deemed that the mortgagee, pledgee, trustee, or holder of the legal title to said stock has empowered the secretary to vote said stock by proxy as he may see fit.

At regular or adjourned annual stockholders meeting a Board of Trustees shall be elected for the ensuing corporate year and until their successors are elected and qualified. An assessment shall be made on each share of stock of the Company to keep the property of the Company in repair, and for superintendence, maintenance and other lawful purposes for which funds are required.

At all meetings of the stockholders the president of the Board of Trustees shall preside and the secretary of the board shall act as secretary, if present.

In the absence of the president, the vice-president shall preside. In the absence of both president and vice-president the meeting shall select a chairman to act. In the absence of the secretary of the Board of Trustees the meeting shall elect a secretary for said meeting. At such meeting the election of Trustees shall be by ballot and as required by statute.

Section 2. Votes. Each stockholder and subscriber of stock, not delinquent in payment of assessments, shall be entitled to vote as provided above.

Section 3. Order of Business. At all annual meetings, the order of business shall be as follows:

1st. Reading and approval of the minutes of the last annual stockholders meeting, and of all the special meetings of the stockholders subsequent.
2nd. Report of president.
3rd. Report of secretary.
4th. Report of treasurer.
5th. Election of Board of Trustees.
6th. After the stock is fully paid up the levy of an assessment for the ensuing year, for superintendence, maintenance and other lawful purposes permitted by statute.
7th. Any other business which may properly come before the meeting.

Section 4. Special meetings. Special meetings of stockholders may be called by the Board of Trustees, by resolution passed at any regular meeting thereof, or may otherwise be called as provided by statute in that behalf. Notice of special stockholders meeting shall be given by the secretary or president in the same manner and for the

same time required for annual stockholders meeting. Business transacted at the special meeting of the stockholders shall be limited to what is specified in the call and notice. In event for any reason, the regular annual meeting of stockholders is not held; special meeting may be called to transact the same business as at any annual stockholders meeting.

## ARTICLE IV
## Officers and Duties of Trustees

Section 1. President. The president shall be Chief Executive Officer of the Company; he shall sign all official papers and documents of the Company, preside at all meetings of the Board of Trustees and stockholders, and, under the directions of the Board of Trustees, have general supervision of the business of the Company. He may attend to such other duties as the Board of Trustees may authorize. He shall prepare a report of his official acts for the Board of Trustees and for the stockholders and present the same at each annual election, and at other times when requested.

Section 2. Vice President. The vice president shall act in the place of the president and have and exercise all the powers of the president during the absence or inability of the president to discharge the duties of his office.

Section 3. Secretary. The secretary shall keep a record of the proceedings of the Board of Trustees and of the Company, shall keep the stock book and seal of the Company, shall attest his signature and seal of the Company all official documents and certificates of stock issued, shall keep a complete set of books, showing all of the accounts, property and transactions of the Company; shall carefully examine all bills and accounts due or against the Company; shall prepare vouchers for all such bills as he finds correct against the Company and present them to the Board of Trustees for their action, shall certify all bills and vouchers audited by the Board of Trustees, shall collect assessments and money due the Company and pay the same over to the treasurer, taking his receipt for the same; and shall make a report of the business transacted by him annually, or oftener if so required by the president or Board of Trustees and exhibit and explain the same to the Board of Trustees. He shall also act as corresponding officer of the Company, shall mail notices of all meetings of the Board of Trustees requiring notice, of all stockholders meetings, of all assessments and other like matters. His signature to such notices may, in his discretion be printed or signed. He shall note on the record book of the Company the fact of mailing all formal notices, designating the day of such mailing, which record shall be prima-facie evidence that such notices have been mailed.

Section 4. Treasurer. The treasurer shall be the custodian of and receive all moneys, bonds, notes and other securities of the Company, shall give bonds in such sum as the Board of Trustees may require for the safe keeping and proper accounting for the same; shall pay out money only upon proper vouchers, certified by the secretary and president; shall transfer securities only upon order of the president and Trustees of the Company, and make a report annually or as often as required by the president of Board of Trustees.

Section 5. Superintendent. The superintendent of the Company, under the instructions of the Board of Trustees and of the president, shall superintend and supervise the work of construction of the reservoir, inlet and outlet ditches and all other structures of the Company, shall attend to the proper distribution of water from the reservoir of the Company to stockholders or others having the right to use the same.

Section 6. Bonds. The secretary and the treasurer shall each give bonds for the faithful discharge of the duties of their respective offices, in such penal sum as the Board of Trustees may from time to time require.

## ARTICLE V
## Certificates of Stock

Section 1. Certificates to subscribers to stock shall be issued to all subscribers who have paid twenty five percent (25%) or more of the par value of the stock to which they have subscribed; said certificates shall contain a clause of showing that the same are assessable up to the par value of said stock on call of the Board of Trustees and thereafter, pursuant to vote of the stockholders as permitted by law. Said certificates shall all be on a similar form, shall be numbered consecutively, shall state the number of shares controlled by the holder thereof, the par value of said shares when fully paid up, the total number of shares authorized to be issued and shall contain the name of the legal holder of said stock, shall be signed by the president and secretary of the Company and under the seal of the Company.

Section 2. Certificates of paid-up stock shall be issued when the stock is fully paid upon surrender of the certificate to subscriber to stock of which it takes the place. Said certificates shall be on the form provided by the Company, shall be consecutively numbered, be signed by the president and secretary and attested by the seal of the Company.

Section 3. Certificates of stock may be transferred by the holder thereof in person or by duly authorized attorney, or in the event of his death by his legal representative. Transfers shall in the first instance be by endorsement on the certificate, with authority to cancel the certificate and to re-issue new certificate or certificates to the new owner or owners. No transfer endorsed on any certificate shall be valid, except as between the parties thereto, until

the same shall have been noted in proper form on the books of the Company. In case of a transfer the old certificate shall be cancelled before a new certificate or certificates in lieu thereof shall be issued, provided that on satisfactory proof of loss of an old certificate and filing of indemnity bond, a new certificate may be issued without formal cancellation of the old. Provided however, duplicate certificates be issued when a stockholder complies with the requirements of Colorado Revised Statutes 1973 7-42 Section 113 through 117 as amended. In such case the evidence of loss or destruction of old certificate and approval of indemnity bond must be had by action of the Board of Trustees before issuance of new certificate. It is required that a surety bond of Fifty Thousand Dollars ($50,000.00) be obtained for each share of lost stock.

Section 4. No transfer of shares for uses on land not historically irrigated by water of this reservoir (hereinafter “new land”) or for uses not historically made (hereinafter “new uses”) shall be permitted, except by and upon orders and approval of the Board of Trustees. If a person acquiring stock (hereinafter the “applicant”) expresses an intent to use the purchased shares for new uses or upon new lands, the secretary of this Company shall suspend the re-issuance of certificates pending review by the Board of Trustees. The applicant shall submit an application to the Board of Trustees describing the new uses and/or locations that is sufficiently detailed to permit the Board of Trustees to determine whether the proposed uses will be detrimental to the operation of the Company’s system, in violation of the Company’s water rights decrees or these bylaws, or otherwise injurious to the stockholders and the Company as a whole. The Board of Trustees shall review any such application in a timely manner, and, if the Board of Trustees determines that the application cannot be granted as presented, it shall allow the applicant an opportunity to revise its plan to address the board’s concerns. The Board of Trustees is authorized to engage engineering and legal help to assist in its review of the application, and any fees thereby generated which would not have been incurred but for the application shall be borne by the applicant. The Board of Trustees shall seek to have dismissed any application pending before the Division 1 Water Court seeking a change of the water rights represented by stock in the Company for which the Company has not given prior approval as provided herein.

Section 5. If any shareholder shall sell, assign, transfer or otherwise alienate (hereinafter “transfer”) such shareholder’s shares of stock in the Lower Latham Reservoir Company (where after the “company”) and use of the shares will be for other than the irrigation of lands historically served by the company, then the company will no longer deliver any water represented by any shares in the company to the lands that were historically irrigated by the transferred shares. The only exception to this policy is if the board of directors is satisfied that the new share water to be delivered to the lands historically irrigated was historically used on other lands under the company’s system which have now been dried up, and if such dried up acreage is equal

to or greater in size than the irrigated acreage to which the transferred shares provided water.

Section 6. No transfer of any stock or certificate of stock on the books of the Company shall be recognized, either as an absolute transfer or for collateral security, until all assessments and dues thereon shall have been paid. A stock ledger shall be kept by the secretary, as required by law.

Section 7. When stock is transferred as security for indebtedness of a stockholder, wherever practicable, the old certificate shall be surrendered and a new certificate issued to the holder of the security, or to a trustee or the public trustee, as the case may be, in which the word “trustee”, “mortgagee’, or “pledgee”, as the case may be, wherever feasible shall be expressed after the name of the legal holder. In such cases when the secretary is advised, he shall note on the margin of the certificate in red ink, the name of the equity owner, and if practicable shall note on the stub of said certificate also the name of the equity owner and the name of the person holding the indebtedness secured where such holder is different from the legal holder of the certificate, and the amount of indebtedness secured. In such case, the equity owner of the stock so noted shall be authorized to vote the stock at stockholders meetings whether in person or by proxy, but in case of his absence, the mortgagee, pledgee, or trustee having the legal title will be deemed to have empowered the secretary of the Company to vote such shares by proxy for him.

In case of the pledge of any shares of stock the parties concerned may, if they prefer, instead of surrendering the certificate for cancellation cause the certificate to be shown to the secretary, with endorsement thereon of the pledge, whereupon it shall be the duty of the secretary, if said stock be not surrendered for cancellation, to make memorandum on the certificate stub and the stock ledger of the Company, showing to whom and for what amount the said stock has been pledged.

Stubs of certificates shall be kept, corresponding to the certificates, and the equity owner thereof, shall be the person authorized to receive notices of assessments and meetings of stockholders; provided notices of assessments shall also be mailed as provided above.

Section 8. In the event shares of stock are regularly attached or levied on and sold on execution against the owner of stock, the purchaser at execution sale or other judicial sale shall be entitled to receive new certificate of stock upon leaving with the secretary, his sheriff’s or other official certificate of purchase, in all cases where the secretary is satisfied there has been no valid transfer of said stock by the execution debt prior to the levy.

Provided however, that pursuant to Colorado Revised Statutes 1973 7-42-105 as amended, it is lawful for this Company to purchase its own stock.

The purchaser of any such stock, whether fully paid up or not, at public or private sale, shall take such stock to the same terms and subject to the same

liabilities for subsequent assessments and dues as the original subscriber to the stock.

Section 9. Certificates of stock shall only be issued in amounts of one-half share or greater. All certificates of stock issued prior to September 2, 1987 evidencing ownership in any fraction of less than one-half share will entitle the holder thereof to such a fraction of a share, but in no event will the Company subsequently issue new certificates of stock evidencing a new division or further division of any stock for less than one-half share. Stock presently held in multiples of less than one share must be transferred as is.

## ARTICLE VI
## Assessment on stock and collection thereof

Section 1. When from time to time it shall be deemed expedient, the Board of Trustees may levy an assessment upon the unpaid capital stock in such amount as they shall deem proper. Such assessments shall be payable at such time as the Board of Trustees may direct, not less than ten (10) days from the date of the levy, and said assessments shall draw interest at twenty-four per cent (24%) per annum from the date they are due, until paid.

Section 2. The secretary shall notify each stockholder as early as possible of each assessment after the same is levied and demand payment thereof by delivery of a written notice of such assessment to each stockholder, severally, or by depositing in the U.S. Post Office such written notice and demand, properly stamped and addressed to the several stockholders at their last known post office address.

Section 3. Assessments on paid up stock for maintenance, superintendence and payments of necessary debts of the Company may be ordered by the stockholders of the Company at a meeting thereof pursuant to the statute in that behalf.

Section 4. No stockholder who is delinquent in the payment of assessments levied thereon, shall during the period of his delinquency, be permitted to draw any water either in person or by his privies in interest. The secretary shall furnish to the superintendent and the president of the Company, a list of all stockholders who are delinquent in paying assessments.

## ARTICLE VII
## Forfeiture of stock subscriptions

Section 1. The Board of Trustees may forfeit and sell the shares of any stockholder who becomes delinquent in the payment of any assessment. Forfeiture shall be done in the manner following:

A. All shares of stock upon which any assessment or any installment thereof so made and levied shall not have been fully paid when due

shall be considered delinquent, and the secretary of this Company shall, as soon as conveniently possible after the last installment of such assessment becomes due, make demand upon the delinquent stockholders so in default for the amount due on all the shares of stock upon which said assessment, together with interest as aforesaid, has not been fully paid, which said demand shall be made either in person or by written or printed notice and duly mailed to the last known address of each such delinquent stockholder at least thirty (30) days prior to the time when said delinquent stock shall be forfeited and sold, which said notice shall also state the time when and place where such delinquent stock will be sold unless the amount due thereon, including attorney fees and costs, interest and cost of advertising, is paid before the time fixed for such sale.

The secretary shall, also, as soon as conveniently possible after the last installment of said assessment is due, make a list of all the shares of stock on which the assessments have not been fully paid, together with interest, giving the names of the delinquent stockholders as shown upon the books of the Company, the number of the delinquent certificates, the number of shares, and the amount of such assessment remaining unpaid, and shall, if directed by the Board of Trustees, have the same advertised by publication at least once a week for three (3) consecutive weeks in a daily or weekly newspaper published in the Town of Kersey or in the City of Greeley, Weld County, Colorado, the first publication thereof to be a least thirty (30) days prior to the date fixed in such notice for such sale which said notice shall also state the time and place at which such shares of stock shall be forfeited and sold.

If the owner or owners of such stock shall fail to pay the amount due upon such shares, together with the accrued interest thereon, all attorney fees and costs and the cost of advertising, before the time fixed in such notice for such sale, said delinquent stock shall be forfeited, and the secretary shall proceed to sell at public auction at the time and place designated in said notice to the highest bidder for cash in hand the said delinquent stock, or so many shares of the stock belonging to each such delinquent stockholder as may be necessary to pay the amount of his delinquent assessments, together with interest and the cost of advertising as aforesaid. If the price for which the necessary share or shares shall be sold shall exceed the amount due, with interest and costs of advertising, such excess shall be paid to the delinquent stockholder. No sale of delinquent stock shall take place within less than three (3) months from the date the assessment was made.

B. The Company may become the purchaser of any stock forfeited and sold as aforesaid for the failure to pay assessments, and if at any such sale there shall be no other bids made for such delinquent stock, the secretary of this Company shall bid the same is in the name of the

Company for the amount due thereon, including interest, attorney fees and costs and cost of advertising.

A new certificate or certificates shall be delivered to the purchaser, and the certificate of the delinquent stockholder shall be canceled on the books of the Company. If the outstanding certificate or certificates of stock so forfeited and sold be not surrendered, it shall be the duty of the secretary to mark on the stub thereof "Canceled," reciting thereon the fact of such forfeiture and sale and the issuance of such new certificate or certificates.

C. The remedies herein provided for the withholding of water and for forfeiture of stock in the collection of such assessments are cumulative and shall be in addition to every other remedy now or hereafter existing. They shall not affect or impair the right of the Company to maintain an action in court against the stockholder to recover any installment of any assessment which shall be delinquent, plus all attorney fees and costs for the collection thereof or to take such other action to enforce or collect such assessment as shall be by law provided.

D. If any of the above provisions or procedures for the forfeiture and sale of stock on which assessments are delinquent should be contrary to law, as it may then exist, then such provisions or procedures shall not be followed, but instead those provisions or procedures as required or allowed by law shall be utilized in regard to declaring the forfeiture and sale of such stock.

## ARTICLE VIII
## Delivery of Water

Section 1. The water stored in the reservoir of this Company shall be divided equally according to their stock holdings among those stockholders and subscribers to stock of this Company, their tenants and privies in interest, who are not delinquent in payment of assessments duly levied and called.

Section 2. The time of delivery of water from said reservoir shall be under the control of the superintendent of the Company, subject to instructions of the Board of Trustees and the president as executive officer of said Board of Trustees. So far as practicable, the Board of Trustees shall be guided by the wish of the stockholders as to the time of the delivery.

When any stockholder is dissatisfied with the distribution of water from the reservoir under supervision of the superintendent, he may report the same to the president or to the Board of Trustees for investigation and rectification of his cause of complaint, if on investigation, it be found that the same requires action.

## ARTICLE IX
## Miscellaneous Provisions

Section 1. Inspection of Records. The books and papers and other records of this Company kept by its secretary and treasurer shall at all times during reasonable business hours be open to inspection by the Board of Trustees or any of the stockholders of this Company. The Board of Trustees may however withhold confidential legal documents from any stockholder, person or party in an adversarial relationship to the Company.

Section 2. Contracts. No contract by any officer shall be binding on the Company without authorization or subsequent ratification by the Board of Trustees.

Section 3. Compensation. The Board of Trustees and officers of the Company, other than the superintendent, secretary, and treasurer, shall serve without compensation, except Fifty Dollars ($50.00) each for attending each meeting, provided they shall be allowed their reasonable traveling expenses when actually engaged in the business of the Company; and further provided that when some special duty requiring unusual expenditure of time shall be required of any director by order of the Board of Trustees, the Board of Trustees shall have power to approve and fix compensation for such special duty.

The secretary's compensation shall be annually fixed by the Board of Trustees and shall be payable in monthly installments.

The treasurer's salary shall be annual fixed by the Board of Trustees and shall be payable in semi-annual installments.

The superintendent's compensation shall be in such reasonable sum as the Board of Trustees from time to time prescribe, and shall be limited to the time actually employed by him in performance of his duties and shall be payable monthly.

Section 4. Seal. The corporate seal of the Company shall be an impression stamp with a die seal as follows:

## ARTICLE X
## Amendments to Bylaws

Section 1. Amendments. These Bylaws may be amended at the regular meeting of the Board of Trustees; provided the affirmative votes of at least four (4) Trustees shall be required to adopt any Bylaw or any amendment thereto; provided further that when voting on Bylaws or amendments thereto, an aye and nay vote shall be taken and recorded.

## ARTICLE XI
## Indemnification of Officers, Trustees, and Others

Section 1. Indemnification by Company. That the Company shall indemnify any person who was or is an involuntary party or is threatened to be made a party to any threatened, pending or contemplated action, suit or proceeding, whether civil, criminal, administrative, or investigative (other than an action by or in the right of the Company) by reason of the fact that he is or was a director, officer, employee, fiduciary or agent of the Company or is or was serving, at the request of the Company as a director, officer, employee, fiduciary or agent of another Company, partnership, joint venture, trust or other enterprise, against expenses (including attorney fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by him in connection with such action, suit, or proceeding, if he acted in good faith and in a manner he reasonably believed to be in the best interest of the Company and, with respect to any criminal action or proceeding had no reasonable cause to believe his conduct was unlawful. The termination of any action, suit, or proceeding by judgments, order, settlement, or conviction, or upon a plea of nolo contendere or its equivalent shall not of itself create a resumption that the person did not act in good faith and in a manner which he reasonably believed to be in the best interest of the Company and, with respect to any criminal action or proceeding, had reasonable cause to believe his conduct was unlawful.

Section 2. No Indemnification Upon Negligence or Misconduct. That the Company shall indemnify any person who was or is a party defendant or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the Company to procure a judgment in its favor by reason of the fact that he is or was a director, officer, employee, fiduciary or agent of another Company, partnership, joint venture, trust or other enterprise against expenses (including attorney fees) actually and reasonably incurred by him in connection with the defense or settlement or such action or suit if he acted in good faith and a manner he reasonably believed to be in the best interest of the Company; but no indemnification shall be made in respect to any claim, issue, or matter as to which such person has been adjudged to be liable for negligence or misconduct in the performance of his duty to the Company unless and only to the extent that the court in which such action or suit was brought determines upon application that despite the adjudication such person is fairly and reasonably entitled to indemnification for such expenses which such court deems proper.

Section 3. Indemnification Upon Successful Defense. To the extent that a director, officer, employee, fiduciary or agent of the Company has been successful on the merits in defense of any action, suit or proceeding referred to in Section 1. or 2. of this Bylaw or in defense of any claim, issue, or matter therein, he

shall be indemnified against expenses (including attorney fees) actually and reasonably incurred by him in connection therewith.

Section 4. Determination by the Board of Trustees. Any indemnification under this Bylaw (unless ordered by a court) shall be made by the Company only as authorized in a specific case upon determination that indemnification of the director, officer, employee, fiduciary or agent is proper in the circumstances because he has met the applicable standard of conduct set forth in Section 1. or 2. above. Such determination shall be made by the Board of Trustees by a majority vote of a quorum consisting of Trustees who were not parties to such action, suit, or proceeding, or if such a quorum is not obtainable, or, even if obtainable, if a quorum of disinterested Trustees so directs, by independent legal counsel in written opinion.

Section 5. Payment in Advance. The Company may pay for or reimburse the reasonable expenses incurred by a director, officer, fiduciary, employee or agent who is a party to a proceeding in advance of final disposition of the proceeding if:

a. The party seeking indemnification furnishes to the Company a written affirmation demonstrating a good faith belief that the party has met the standard of conduct described in Section 1. and 2. of this Bylaw;
b. The party seeking indemnification furnishes to Company a written undertaking, executed personally or on the party's behalf, to repay the advance if it is ultimately determined that the party did not meet the standard of conduct; and
c. A determination is made that the facts then known to those making the determination would not preclude indemnification under this Bylaw.

Section 6. Inurement for the Benefit of Heirs. That the indemnification provided by this Bylaw shall not be deemed exclusive of any other rights to which those indemnified may be entitled to under any other Bylaw, agreement, vote of shareholders or disinterested Trustees, or otherwise any procedure provided for by any of the foregoing, both as to action in his official capacity and as to action in another capacity while holding such office, and shall continue as to a person who has ceased to be a director, officer, employee, fiduciary or agent and shall insure to the benefit of heirs, executors, and administrators of such a person.

Section 7. Insurance. That the Company may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee, fiduciary or agent of the Company or who is or was serving at the request of the Company as a director, officer, employee, fiduciary or agent of another Company, partnership, joint venture, trust, or other enterprise against any liability asserted against him and incurred by him in any such capacity or arising out of this status as such, whether or not the Company would have the power to indemnify him against such liability under provisions of this Bylaw.

## ARTICLE XII
## Changes of Water Rights

Section 1. Application – Review – Standard. Any stockholder ("applicant") desiring a change of water right as defined in the Water Right Determination and Administration act of 1969, Colorado Revised Statutes 37-92-101 through 37-92-603, including, but not limited to, a change in point of diversion or place of use of any water that the applicant is entitled to receive as a result of stock ownership must first make a written application to the Board of Trustees of the Company. A change of water right shall include the use of water the shareholder is entitled to as a result of stock ownership as augmentation water in a plan for augmentation or exchange. The request should detail the requested change and include adequate terms, and conditions to prevent injury to the Company and its shareholders. If, in the opinion of the Board of Trustees, such change may be approved without injury to the Company and all of its stockholders, the Board of Trustees shall then approve the change application subject to necessary terms and conditions. The basis for any determination by the Board of Trustees shall be placed in the minutes of the meeting of the Board of Trustees, and a copy of that portion of the minutes shall be promptly sent to the applicant. In evaluating whether the requested change of water rights can be made without injury to the Company and its shareholders, the Company may obtain an engineering and legal analysis of the requested change by the applicant and the terms and conditions offered by the applicant.

Section 2. Timely Review. The Company shall evaluate the application for change of water right within a reasonable amount of time.

Section 3. Board Approval Required. No application for approval of a change of water right or plan for augmentation as described above may be made to the District Court for Water Division No. 1, State of Colorado ("Water Court") unless the same has been submitted to the Company and has either been approved or denied by the Board of Trustees. If the Company has approved an application, the applicant must include terms and conditions at least as stringent as those approved by the Company in an application to the District Court for Water Division No. 1,State of Colorado.

Section 4. Applicant Pays Costs. An applicant for change of water right must reimburse the Company for the Company's reasonable costs and fees, including but not limited to a charge for time spent by the Trustees and Company employees and/or agents in analyzing the application to the Company and in any judicial litigation that follows. This specifically includes a challenge to the Company's denial of an application. Prior to analyzing the proposed change, the Company shall obtain an estimate of the costs. The Company shall make said estimate of cost within thirty (30) days of

submission of an application and the applicant shall have thirty (30) days after receipt of the estimate from the Company to make the deposit. The Company shall not take final action on any application until, and unless, the applicant makes said deposit. If the estimate and deposit needs to be adjusted by further payment or reimbursement, said adjustment shall be made upon the completion of the analysis. In no event shall the Company be required to finally approve or disapprove the application until all fees incurred by the Company are reimbursed.

Section 5. Changed water must first be stored in the Lower Latham Reservoir. Any changed water must first be delivered to the Lower Latham Reservoir, and thereafter stored in such reservoir, before it can be used for any changed purpose. This requirement also applies to any unchanged water which may be approved for use in a substitute water supply plan. This amendment is to be immediately effective on the date of its passage, being August 12, 2004.

# APPENDIX C

## LOWER LATHAM RESERVOIR DECREES
## LATHAM AUGMENTATION DECREE

RESERVOIR NO. 13

THE LOWER LATHAM RESERVOIR

That said reservoir, as set forth in the findings herein, is entitled to Reservoir Priorities Nos. 14 and 17 . It is claimed by The Lower Latham Reservoir Company, a corporation. It is located in Weld County, upon all or parts of Sections 22,26, 27, 34, 35, Township 5 North, and of Sections 2, 3, 4, 5, Township 4, North, all in Range 65 West. It derives its supply of water from the South Platte river. Its inlet is the Union Ditch, which has its headgate on the east bank of said river at about the northeast corner of Section 18, Township 4 North, of Range 66 West. Its outlet is on the north side of the reservoir, from which a ditch runs to the Lower Latham canal for distribution. This reservoir is used for storing water for irrigation purposes.

It is hereby adjudged and decreed that there be allowed to flow into said reservoir from said river, for the use aforesaid, for the benefit of the parties lawfully entitled thereto, under and by virtue of appropriation by original construction and use and Reservoir Priority No. 14 to date from June 23,1898, the amount that said reservoir will hold at a storage depth of 13 feet above the top of its outlet tube estimated at 198,400,000 4325 cubic feet; and further by first enlargement and use and Reservoir Priority No. 17 to date from June 24,1900, the amount said reservoir will hold between the depths of 13 feet and 14.5 feet above the top of its outlet tube, estimated at 62,300,000 cubic 1430 feet. Said priorities are to be diverted through the Union 5755 Ditch at a rate of not to exceed 183 cubic feet per second, and

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RESERVOIR NO. 13

LOWER LATHAM RESERVOIR.

* * * - - - -

That said reservoir, as set forth in the findings herein, is entitled to Reservoir Priority No. 56. It is claimed by The Lower Latham Reservoir Company, a corporation. It is located in Weld County, upon all or parts of Sections 22, 26, 27, 34, 36, Township 5 North, and of Sections 2, 3, 4, 5, Township 4 North, all in Range 65 West. It derives its supply of water from the South Platte River. Its inlet is the Union Ditch, which has its headgate on the east bank of said river at about the northeast corner of Section 18, Township 4 North of Range 66 West. Its outlet is on the north side of the reservoir, from which a ditch runs to the Lower Latham Canal for distribution.

It is hereby adjudged and decreed that there be allowed to flow into said reservoir from said river, for the use aforesaid, for the benefit of the parties lawfully entitled thereto, under and by virtue of enlarged use by refilling, and Reservoir Priority No. 56, to date from August 7, 1915, to be diverted through its inlet at the rate of 183 cubic feet per second, and to be diverted only after said reservoir has been completely filled once each season, the amount of 95,000,000 cubic feet of water. 2181. AF

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|---|---|
| **DISTRICT COURT, WATER DIVISION NO. 1, COLORADO**<br><br>Court Address: 901 9th Avenue, Greeley, CO 80631-1113<br>Mailing Address: P.O. Box 2038, Greeley, CO 80632-2038 |  |
| **CONCERNING THE APPLICATION FOR WATER RIGHTS OF:**<br><br>**Applicant: The Lower Latham Reservoir Company**<br><br>**IN WELD COUNTY.** | COURT USE ONLY<br><br>Consolidated Case Nos.: 03CW047/06CW291 |

**Findings of Fact, Conclusions of Law, and Decree of the Water Court**

This matter comes before the court for consideration upon two separate applications of the Lower Latham Reservoir Company for adjudication of conditional water rights, approval of a change of water rights, and approval of a plan for augmentation. All matters contained in the application having been reviewed, and testimony and evidence having been taken as necessary, the Court, being fully advised in the premises, hereby enters the following Findings of Fact, Conclusions of Law and Decree.

## I. FINDINGS OF FACT

1. Applicant. Applicant is the Lower Latham Reservoir Company, 300 E. 16th Street, Greeley, CO 80631.

2. Applications. Applicant filed its original application in Case No. 03CW047 on January 31, 2003 seeking approval of a change of water rights and plan for augmentation. Applicant amended its application by amendments filed with the Court on July 7, 2003, April 2, 2004, and November 30, 2007. Applicant filed its original application in Case No. 06CW291 on December 29, 2006 seeking a change of water rights, and amended it on November 30, 2007, and February 9, 2010. By order of the Court dated March 22, 2010, Case Nos. 03CW047 and 06CW291 were consolidated. The applications and amendments are hereinafter referred to as the "Application." By order of the Court dated September 12, 2012, the Court approved Applicant's withdrawal of its claims to change the water rights represented by 15.19 shares in the Greeley Irrigation Company.

3. Notice and Jurisdiction. All notices required by law of the filing of the applications have been fulfilled, and the Court has jurisdiction over the subject matter of the applications and over all persons and property affected by them, irrespective of whether they or its owners have appeared. The water and lands that are the subjects of the Applications are not located in a designated ground water basin.

4. Statements of Opposition. Statements of opposition were filed by the following parties: East Cherry Creek Valley Water & Sanitation District; the Farmers Reservoir and Irrigation Company; Irrigationists Association, Water District 1; Rocky Mountain Energy Center; Ron and Marsha Baker; Herman and Dorothy Peterson; the City of Boulder; the City of Greeley; the Henrylyn Irrigation District; the Fort Morgan Reservoir & Irrigation Company; the Greeley Irrigation Company; Centennial Water and Sanitation District; the Bijou Irrigation Company and the Bijou Irrigation District; the City of Aurora; the Central Colorado Water Conservancy District and the Groundwater Management Subdistrict of the Central Colorado Water Conservancy District; the Union Ditch Company; the State and Division Engineers; the Harmony Ditch Company; the City of Englewood; South Adams County Water and Sanitation District; United Water and Sanitation District; the Town of LaSalle; and the North Sterling Irrigation District. The Union Ditch Company withdrew its statement of opposition on April 30, 2004. The Irrigationists Association withdrew its statement of opposition on March 11, 2009. Rocky Mountain Energy Center, LLC, Ron and Marsha Baker, and Herman and Dorothy Peterson withdrew their statement of opposition on June 10, 2010.

5. Summaries of Consultation. The Division Engineer for Water Division 1 filed summaries of consultation in Case No. 03CW047 on June 25, 2003, October 20, 2003, and March 14, 2008. The Division Engineer for Water Division 1 filed summaries of consultation in Case No. 06CW291 on March 22, 2007, March 14, 2008, and May 27, 2010. Applicant served copies of the summaries of consultation on the objectors. The Court has duly considered the summaries of consultation.

6. Stipulations and Settlements. Stipulations or settlements were entered into between the Applicant and the following objectors:

6.1. Henrylyn Irrigation District by stipulation dated March 23, 2012, and approved by the Court by order dated April 16, 2012;

6.2. City of Englewood by stipulation dated March 26, 2012, and approved by the Court by order dated April 16, 2012;

6.3. The Central Colorado Water Conservancy District and the Ground Water Management Subdistrict of the Central Colorado Water Conservancy District by stipulation dated October 24, 2012, and approved by the Court by order dated November 5, 2012;

6.4. An amended stipulation with the Central Colorado Water Conservancy District and the Ground Water Management Subdistrict of the Central Colorado Water Conservancy District executed on November 9, 2012, and approved by the Court by order dated November 17, 2012;

6.5. Bijou Irrigation Company and the Bijou Irrigation District by stipulation dated November 13, 2012, and approved by the Court by order on November 17, 2012;

6.6. East Cherry Creek Water and Sanitation District by stipulation dated November 9, 2012, and approved by the Court by order dated November 17, 2012;

6.7. Fort Morgan Reservoir and Irrigation Company by stipulation dated November 15, 2012, and approved by the Court by order dated November 17, 2012;

6.8. Greeley Irrigation Company by stipulation dated November 12, 2012, and approved by the Court order dated November 17, 2012;

6.9. South Adams County Water and Sanitation District by stipulation dated November 15, 2012, and approved by the Court by order dated November 17, 2012.

6.10. City of Boulder by stipulation dated November 15, 2012, and approved by the Court on November 17, 2012.

6.11. Centennial Water and Sanitation District by stipulation dated November 15, 2012, and approved by the Court by order dated November 17, 2012;

6.12. Harmony Ditch Company by stipulation dated November 13, 2012, and approved by the Court by order dated November 17, 2012;

6.13. North Sterling Irrigation District by stipulation dated November 14, 2012, and approved by the Court by order dated November 17, 2012;

6.14. Town of LaSalle dated November 16, 2012, and approved by the Court by order Dated November 20, 2012;

6.15. United Water and Sanitation District by stipulation dated November 19, 2012, and approved by the Court by order dated November 20, 2012;

6.16. City of Greeley by stipulation dated November 21, 2012, and approved by the Court by order dated November 22, 2012; and

6.17. Farmers Reservoir and Irrigation Company by stipulation dated November 21, 2012, and approved by the Court by order dated November 22, 2012.

7. Change of Water Rights. Applicant has requested in the application filed in Case No. 06CW291, as amended, approval of a change of water rights represented by 29.5 shares out of a total 200 outstanding shares in the Lower Latham Ditch Company (the "LLDC Shares"). With respect to the LLDC Shares, the Court makes the following findings:

7.1. *LLDC Water Rights.* The Lower Latham Ditch Company ("LLDC") owns the water rights originally decreed to the Lower Latham Ditch in Civil Action No. 6009, District Court, Arapahoe County on April 28, 1883, and the water right decreed to the Lower Latham Drain in Civil Action No. 54658, District Court, City and County of Denver, entered August 2, 1918. The water rights owned by the LLDC and changed herein (collectively referred to herein as the "LLDC Water Rights") are more particularly described as follows:

| Appropriation Date | Structure | Amount (cfs) | Applicant's Pro-Rata Portion (cfs) |
|---|---|---|---|
| May 12, 1869 | Lower Latham Ditch | 20.40 | 3.01 |
| December 12, 1874 | Lower Latham Ditch | 35.77 | 5.28 |
| November 14, 1877 | Lower Latham Ditch | 97.68 | 14.41 |
| October 24, 1881 | Lower Latham Ditch | 133.88 | 19.75 |
| March 1, 1889 | Lower Latham Drain | 35.00 | 5.16 |

The flow rates above under the "Applicant's Pro-Rata Portion" are set forth herein solely for the purpose of recording the change of water rights in the water rights tabulation and are not intended to serve as a term and condition governing the delivery or use of the LLDC Shares.

7.2. *Historical Use of LLDC Shares.* Applicant has completed a parcel-specific analysis of the historical use of its LLDC Shares, and the Court finds the analysis and the resulting quantification, as described below, to be reasonable and accurate:

7.2.1. *Study Period.* The study period used in Applicant's analysis of the historical use of the LLDC Shares was 1950 through 2000. The Court finds this study period to be representative of historical use.

7.2.2. *Acreage.* The LLDC Shares and certain other water supplies were historically used to irrigate the 11 farms described below in ¶7.2.2.1 through ¶7.2.2.11, the approximate locations of which are shown on **Exhibit A.** Other water rights historically used on these lands that are not changed by this Decree included water delivered from the Lower Latham Reservoir pursuant to shares in the Lower Latham Reservoir Company owned by LLDC shareholders, water delivered pursuant to shares in the Union Ditch Company and the Box Elder Lateral Ditch Company

owned by LLDC shareholders, and wells diverting ground water tributary to the South Platte River, which wells are the subject of the plan for augmentation decreed herein. The use of these sources was considered supplemental to the supply of water from the LLDC Shares and, therefore, was not explicitly quantified in Applicant's historical use analysis of its LLDC Shares. The maximum irrigated area on these 11 farms was 1,526.8 acres, of which 1,449.6 acres are attributable to the LLDC Shares, as set forth in **Exhibit B**.

7.2.2.1. *Berryman Farm.* The Berryman Farm is located in portions of the NE ¼ of Section 20, Township 5 North, Range 64 West of the 6th P.M., Weld County, Colorado. This farm was historically irrigated with water attributable to 3 of the LLDC Shares, 3 shares of Lower Latham Reservoir Company ("LLRC"), and two wells (WDID 206845 and 206830). Applicant has recorded dry-up covenants for the entire farm.

7.2.2.2. *DeJong Farm.* The DeJong Farm is located in portions of the SW ¼ of Section 13, Township 5 North, Range 65 West of the 6th P.M., Weld County, Colorado. This farm was historically irrigated with water attributable to 2 of the LLDC Shares, 2 shares of LLRC, and a well (WDID 206449). Applicant has a recorded dry-up covenant for the entire farm.

7.2.2.3. *Kersey East Farm.* The Kersey East Farm is located in portions of the N ½ of Section 22, Township 5 North, Range 64 West of the 6th P.M., Weld County, Colorado, immediately east of the Town of Kersey. This farm was historically irrigated with water attributable to 1 of the LLDC Shares, another share of the LLDC not being changed herein, 2 shares of LLRC, and two wells (WDID 207778 and 207779). P&H Joint Venture (P&H) retains ownership of the 1 share of LLDC not being changed herein and continues to irrigate approximately 38.4 acres of the farm located north of Highway 34 and a portion of the share retained by P&H is leased to Dennis Klein to irrigate approximately 3.8 acres of his land in the northwest corner of the historically irrigated lands. For the remainder of the historically irrigated land, Applicant has a recorded dry-up covenant, or the land has been dried up by development of Highway 34.

7.2.2.4. *Kersey West Farm.* The Kersey West Farm is located in portions of the N ½ of Section 21, Township 5 North, Range 64 West of the 6th P.M., Weld County, Colorado. This farm was historically irrigated with water attributable to 4 of the LLDC Shares and 5 shares of LLRC. Beginning in 1996, portions of the farm were dried-up through development of the Platte Valley High School and associated facilities and the development of residential areas. A

portion of the farm is currently owned by the Platte Valley School District and the Town of Kersey. This land continues to be irrigated with a well. Water can no longer be delivered to this field from the Lower Latham Ditch due to development of the lands and abandonment of the headgate and farm lateral from the Lower Latham Ditch. Applicant has a recorded dry-up covenant on portions of the lands.

7.2.2.5.*Klein Farm.* The Klein Farm is located in portions of the S ½ of Section 16, Township 5 North, Range 64 West of the 6th P.M., Weld County, Colorado. This farm was historically irrigated with water attributable to 5 of the LLDC Shares, 6.875 shares of LLRC, and two wells (WDID 107180 and 107183). A portion of the farm was dried up as a result of the expansion and re-alignment of Highway 34 through the farm during 1996. Applicant is currently the sole owner of the farm which has no dry-up covenant.

7.2.2.6.*Nissen-Luppens Farm.* The Nissen-Luppens Farm is located in portions of the S ½ of Section 12, Township 5 North, Range 65 West of the 6th P.M., Weld County, Colorado. This farm was historically irrigated with water attributable to 3.5 of the LLDC Shares and 3.25 shares of LLRC. In 1995, the property was subdivided into 2 parcels identified as the Nissen parcel and Luppens parcel. The water supplies maintained at the Nissen parcel included 2.5 shares of Applicant, while 1 share of Applicant was maintained at the Luppens parcel. Applicant has a recorded dry-up covenant for both parcels of this farm.

7.2.2.7.*Rothe Farm.* The Rothe Farm includes two parcels of land, the Rothe East Farm and Rothe West Farm, that are physically separated by approximately 1 mile. Together, the parcels were historically irrigated with water attributable to 4 of the LLDC Shares, 3 shares of LLRC, and two wells (WDID 108161 and 108162). The Rothe East Farm is located in portions of the E ½ of Section 36, Township 5 North, Range 64 West of the 6th P.M., Weld County, Colorado. The Rothe West Farm is located in portions of the SW ¼ of Section 2, Township 4 North, Range 64 West of the 6th P.M., Weld County, Colorado. Approximately 105.1 acres of the Rothe West Farm are located south of the Lower Latham Ditch while 29.6 acres are located north of the Lower Latham Ditch. All of the Rothe West Farm lands north of the Lower Latham Ditch were historically irrigated by the subject LLDC Shares and a total of 82.4 acres south of the Lower Latham Ditch were historically irrigated by the subject LLDC Shares. Approximately 22.7 acres of irrigated land south of the Lower Latham Ditch could not be irrigated with LLDC Shares

and were irrigated strictly with well water. Applicant is currently the sole owner of the farm which has no dry-up covenant.

7.2.2.8. *Schmidt Farm.* The Schmidt Farm is located in portions of the W ½ of Section 18, Township 5 North, Range 64 West of the 6th P.M., Weld County, Colorado. This farm was historically irrigated with water attributable to 2 of the LLDC Shares, 2 shares of LLRC, and a well (WDID 205989). Applicant has a recorded dry-up covenant for the entire farm.

7.2.2.9. *Shelf of Four Farm.* The Shelf of Four Farm is located in portions of the E ½ of Section 31, Township 5 North, Range 63 West of the 6th P.M., Weld County, Colorado. This farm was historically irrigated with water attributable to 1 of the LLDC Shares, 1 share of LLRC, 1 share of Box Elder Ditch Company, and a well (WDID 106454). Applicant has a recorded dry-up covenant for the entire farm.

7.2.2.10. *Shelf of Seven Farm.* The Shelf of Seven Farm is located in portions of the W ½ of Section 1, Township 4 North, Range 64 West of the 6th P.M., Weld County, Colorado. This farm was historically irrigated with water attributable to 3 of the LLDC Shares, 1 additional LLDC share not changed herein, 1.5 shares of LLRC, and a well (WDID 108264). This farm was formerly owned by Herbert Pankow, who divided the farm in 2005 and sold a portion to Shelf of Greeley Seven. Mr. Pankow retained 1 share of LLDC not being changed herein and 1.5 shares of LLRC for irrigation of approximately 32.5 acres of the retained land. Applicant has a recorded dry-up covenant for the entire farm, excluding the area retained by Mr. Pankow.

7.2.2.11. *Vetting Farm.* The Vetting Farm is located in portions of the SW ¼ of Section 14 and the NW ¼ of Section 23, Township 5 North, Range 65 West of the 6th P.M., Weld County, Colorado. This farm was historically irrigated with water attributable to 1 of the LLDC Shares, 1 share of Union Ditch Company, and a well (WDID 108264). Applicant has a recorded dry-up covenant for the entire farm.

7.2.3. *Diversions.* The capacity of the Lower Latham Ditch is 247 cfs. Diversions from the South Platte River pursuant to the LLDC Shares over the study period averaged 5,787.92 acre-feet annually, or 196.20 acre-feet per share. The diversion season for the LLDC Shares was historically limited to the period from March 29 through November 15.

7.2.4. *Ditch Loss and Farm Headgate Deliveries.* Over the study period losses from the Lower Latham Ditch averaged 20 percent of total river diversions. Over the study period farm headgate deliveries attributable to the LLDC Shares averaged 4,630.3 acre-feet, with a maximum annual delivery of 6,296 acre-feet. Monthly farm headgate deliveries did not exceed the following acre-foot amounts from April through October:

| Apr | May | Jun | Jul | Aug | Sep | Oct |
|---|---|---|---|---|---|---|
| 629 | 1,087 | 1,251 | 1,820 | 1,578 | 847 | 449 |

7.2.5. *Historical irrigation practices and efficiencies.* Applicant calculated the farm irrigation efficiencies using a procedure referred to as the "Farm Irrigation Rating Index" or "FIRI" for each individual farm to determine the maximum seasonal farm irrigation efficiencies for flood (controlled), furrow, and surface (non-furrow) irrigated parcels; there were no farms which utilized sprinkler irrigation for the LLDC Shares. Using the FIRI procedure, Applicant determined that the maximum farm irrigation efficiencies for the farms that were historically irrigated with water attributable to the LLDC Shares were as follows:

| Farm | Furrow | Surface (non-furrow) | Flood (controlled) |
|---|---|---|---|
| Berryman | 61% | 57% | - |
| DeJong | 61% | 57% | - |
| Kersey East | 57% | - | - |
| Kersey West | 58% | 55% | - |
| Klein | 64% | 60% | - |
| Nissen-Luppens | 58% | 54% | - |
| Rothe | 61% | 57% | - |
| Schmidt | 62% | 57% | - |
| Shelf of Four | 58% | 54% | 46% |
| Shelf of Seven | 61% | 57% | - |
| Vetting | 60% | 56% | - |

7.2.6. *Historical stream depletions.* The net depletion to the flows of the South Platte River by exercise of the LLDC Shares historically varied from year to year. Over the study period the net depletions to the flows of the South Platte River attributable to the LLDC Shares averaged 1,793.0 acre-feet per year, or 60.8 acre-feet per share.

7.2.7. *Location of historical return flows.* For each individual farm, return flows from the use of water attributable to the LLDC Shares historically accrued to the South Platte River in the locations described in **Exhibit C**, and on an aggregate basis for all of the LLDC Shares return flows historically accrued to the South Platte River within the administrative reaches described in ¶14.3.1 in the following percentages:

| | Surface Return Flows | Subsurface Return Flows |
|---|---|---|
| Admin Reach A | 0.4% | 0.5% |
| Admin Reach B | 10.9% | 8.7% |
| Admin Reach C | 37.4% | 83.1% |
| Admin Reach D | 1.3% | 0.4% |
| Admin Reach E | 50% | 7.3% |

7.2.8. *Amount and timing of historical return flows.* Return flows from irrigation historically consisted of a surface component and a subsurface component, depending on several factors for each individual farm. Applicant estimated timing of historical subsurface return flows to the South Platte River and/or Box Elder Creek using the Glover Method, as described in ¶32.1 of this Decree. The resulting aggregate historical return flow pattern was as follows:

| | Nov | Dec | Jan | Feb | Mar | Apr |
|---|---|---|---|---|---|---|
| Surface Return Flows[/a] | - | - | - | - | - | 21.0% |
| Subsurface Return Flows[/b] | 4.3% | 3.5% | 3.0% | 2.5% | 2.1% | 2.4% |
| | May | Jun | Jul | Aug | Sep | Oct |
| Surface Return Flows[/a] | 17.1% | 13.3% | 12.9% | 12.5% | 12.4% | 15.6% |
| Subsurface Return Flows[/b] | 3.2% | 4.0% | 5.3% | 6.1% | 5.9% | 5.2% |

[/a] Expressed as percent of total monthly farm headgate deliveries.

[/b] Expressed as percent of total annual farm headgate deliveries for the previous 12 months.

7.3. *Proposed change.* Applicant proposes to change the decreed use of the LLDC Shares from irrigation to irrigation, augmentation, recharge, replacement, and substitution and exchange purposes, and storage in Lower Latham Reservoir for subsequent use for the same purposes. Specifically, this decree authorizes Applicant to use the LLDC Shares as a source of replacement water in the plan for augmentation decreed herein. Applicant's rights to reuse and successive use of the water diverted pursuant to the LLDC Shares shall be limited to the diversion by exchange of Excess Recharge Accretions determined in accordance with ¶ 29.3 from the delivery of the LLDC Shares to recharge structures as provided for herein. Excess Recharge Accretions attributable to

the LLDC Shares may also be stored in Lower Latham Reservoir by operation of the exchange to Lower Latham Reservoir described in ¶10 and the internal ditch operations described in ¶14.3.6 below.

8. Conditional ground water rights. Applicant has requested confirmation and adjudication of conditional water rights for two wells (hereinafter "Augmentation Wells") to be used for augmentation pursuant to the plan for augmentation decreed herein. With respect to the water rights requested by Applicant the Court finds the following:

8.1. *Jurgens Well 1-12253.*

8.1.1. Location. The Jurgens Well 1-12253 is an existing well located in the SW ¼ of Section 8, Township 5 North, Range 64 West, 6th P.M., at a distance of 1,565 feet from the west section line and 198 feet from the south section line of said Section 8.

8.1.2. Depth. 48 feet.

8.1.3. Source. Ground water tributary to the South Platte River.

8.1.4. Date of appropriation. November 30, 2007.

8.1.5. Amount. 2.67 cfs, CONDITIONAL.

8.1.6. Use. Augmentation and replacement of depletions from wells included in the plan for augmentation decreed herein.

8.2. *Jurgens Well 3-6606.*

8.2.1. Location. The Jurgens Well 3-6606 is an existing well located in the SE ¼ of Section 8, Township 5 North, Range 64 West, 6th P.M., at a distance of 2,624 feet from the east section line and 193 feet from the south section line of said Section 8.

8.2.2. Depth. 67 feet.

8.2.3. Source. Ground water tributary to the South Platte River.

8.2.4. Date of appropriation. November 30, 2007.

8.2.5. Amount. 1.56 cfs, CONDITIONAL.

8.2.6. Use. Augmentation and replacement of depletions from wells included in the plan for augmentation decreed herein.

8.3. *Use of the Augmentation Wells.* Applicant proposes to use the water diverted pursuant to the water rights decreed for the Augmentation Wells in the plan for augmentation approved herein by making surface deliveries of water from such Augmentation Wells to the South Platte River via an adjacent unnamed delivery channel. The approximate location of the Augmentation Wells and the unnamed delivery channel are identified on **Exhibit D**.

9. Conditional surface water right. Applicant requests confirmation and adjudication of a surface water right (hereinafter "Latham Augmentation Right") to be diverted at the existing headgate of the Lower Latham Ditch and delivered to recharge structures as provided for in this Decree. With respect to the Latham Augmentation Right the Court finds the following:

9.1. Name of structure used for diversion: Lower Latham Ditch.

9.2. Location: The location of the diversion is the location of the existing headgate of the Lower Latham Ditch on the east bank of the South Platte River in the NW ¼ of the NE ¼ of Section 31, Township 5 North, Range 65 West, 6th P.M.

9.3. Source: South Platte River.

9.4. Date of appropriation: November 30, 2007.

9.5. Amount: 180 cfs, CONDITIONAL.

9.6. Use: Augmentation and replacement of depletions from wells included in the plan for augmentation approved herein by delivering water diverted under the Latham Augmentation Right to recharge structures pursuant to ¶32.9 to generate accretions, and such accretions will either be placed to direct use or use by substitution and exchange in the appropriative rights of substitution and exchange decreed herein. Applicant's rights to reuse and successively use the water diverted pursuant to the this water right shall be limited to the diversion by exchange of Excess Recharge Accretions from the delivery of this water right to recharge sites determined in accordance with ¶29.3. Excess Recharge Accretions attributable to this water right may also be stored in Lower Latham Reservoir by operation of the exchange to Lower Latham Reservoir described in ¶10 below.

10. Appropriative rights of substitution and exchange. Applicant requests confirmation and adjudication of appropriative rights of substitution and exchange (hereinafter "Latham

Exchange Rights"). With respect to the Latham Exchange Rights, the Court finds the following:

10.1. *Exchange reaches.* The exchange reaches for the Latham Exchange Rights are described by the following Exchange From Points and Exchange To Points. An exchange matrix showing the exchanges is attached hereto as **Exhibit E**:

10.1.1. Exchange From Points:

10.1.1.1. A point on the South Platte River immediately upstream from the Patterson Ditch river headgate located in the NE¼ of the NE¼ of Section 21, Township 5 North, Range 65 West, 6th P.M.

10.1.1.2. A point on the South Platte River immediately upstream from the Highland Ditch (aka Plumb Ditch) river headgate in the E ½ of Section 14, Township 5 North, Range 65 West, 6th P.M.

10.1.1.3. A point on the South Platte River immediately upstream from the Empire Inlet Canal River Headgate in the SW ¼ of the SW ¼ of Section 19, Township 5 North, Range 63 West, 6th P.M.

10.1.1.4. A point on the South Platte River immediately upstream from the Riverside Inlet Canal river headgate in the SW ¼ of the SW ¼ of Section 20, Township 5 North, Range 63 West, 6th P.M.

10.1.1.5. A point on the South Platte River immediately upstream from the Bijou Canal river headgate in the NE ¼ of the NE ¼ of Section 13, Township 4 North, Range 63 West, 6th P.M.

10.1.2. Exchange To Points:

10.1.2.1. The river headgate of the Lower Latham Ditch located in the NW ¼ of the NE ¼ of Section 31, Township 5 North, Range 65 West, 6th P.M.

10.1.2.2. The Lower Latham Reservoir, located in parts of Section 34, and Section 35, Township 5 North, Range 65 West, and Sections 2 and 3, Township 4 North, Range 65 West, 6th P.M.

10.2. *Source*: The Latham Exchange Rights will appropriate exchange potential in the South Platte River and the Beebe Draw in the exchange reaches described in ¶10.1.

10.3. *Date of appropriation*: November 30, 2007.

10.4. *Amounts*:

10.4.1. For exchanges to the Lower Latham Ditch: 35 cfs, CONDITIONAL.

10.4.2. For exchanges to the Lower Latham Reservoir: 21 cfs, CONDITIONAL.

10.5. *Sources of substitute water supply*: The sources of substitute water supply for the Latham Exchange Rights are Excess Recharge Accretions (as defined in ¶29.3) derived from water diverted pursuant to the LLDC Shares and the Latham Augmentation Right, and the UDC Shares (*see* ¶14.2.6.2), as well as water delivered directly to the Cache la Poudre and/or South Platte River attributable to the GIC Shares (*see* ¶14.2.6.1). Applicant shall not use the UDC Shares (*see* ¶14.2.6.2) or the GIC Shares (*see* ¶14.2.6.1) in the Latham Exchange Rights unless and until they have been approved for such use by a decree of this Court or, if available pursuant to the terms of C.R.S. §37-92-308(4), a substitute water supply plan approved by the State Engineer, and added to the augmentation plan pursuant to ¶32.3.

10.6. *Use*: Augmentation and replacement of depletions from wells included in the plan for augmentation approved herein.

11. Water available for appropriation. The Court finds that there is water available for appropriation pursuant to the conditional water rights claimed by Applicant.

12. Applicant's need for its claimed water rights. Applicant intends to divert the Latham Augmentation Right, when in priority, and utilize it as the primary source of water for the plan for augmentation decreed herein by delivering the water to recharge structures to generate recharge accretions in the South Platte River pursuant to ¶32.9. The Latham Exchange Rights are necessary to help ensure Applicant's ability to fully utilize the water rights decreed herein as sources of substitute supply for the Latham Exchange Rights. Without the Latham Augmentation Right and the Latham Exchange Rights, Applicant's members' wells risk full or partial curtailment during periods when Applicant's other sources alone are insufficient to replace out-of-priority depletions from such wells. Applicant therefore has demonstrated a need for the water rights sufficient to establish a non-speculative intent to divert and put to beneficial use the conditional water rights decreed herein.

13. Can and Will. The Court finds that Applicant has demonstrated continued intent and progress toward finalizing the water rights for the Augmentation Wells, Latham Augmentation Right and the Latham Exchange Rights and that it can and will divert the

waters needed to exercise those rights, and that Applicant can and will put the water to beneficial use.

14. Plan for Augmentation.

14.1. *Overview and purpose of the plan for augmentation.* Applicant has proposed a detailed plan for augmentation to provide water to the South Platte River to replace out-of-priority depletions caused by past and future diversions of ground water from the wells listed in **Exhibit F** hereto (the "Member Wells"), and caused by past diversions of ground water from the wells removed from the plan as shown in **Exhibit G** hereto (the "Removed Wells"). The Augmentation Wells identified in ¶8 are "Member Wells" and are included in **Exhibit F**. The plan for augmentation consists of several sources of water with varying degrees of seniority, and the utilization of those sources within individual components of the plan so as to prevent injury to vested water rights that would occur due to operation of the Member Wells but for the operation of the plan for augmentation. The individual components of the plan for augmentation, the sources of water, and the method for determining the amount of water made available to the South Platte River in time, location and amount are described below, and are generally shown on the map attached hereto as **Exhibit H**.

14.2. *Water rights to be used for augmentation.* The sources of augmentation water proposed for the plan are as follows:

14.2.1. *LLDC Shares.* The LLDC Shares described in ¶7 above.

14.2.2. *Latham Augmentation Right.* The Latham Augmentation Right described in ¶9 above.

14.2.3. *Augmentation Wells.* The water rights decreed to the Augmentation Wells described in ¶8 above.

14.2.4. *Longmont Exchange Water.* The City of Longmont has entered into agreements with Applicant since 2003 providing for the release of fully consumable water owned by Longmont into the St. Vrain River which can then be used as a source of augmentation water in this plan. The current agreement, entered into between Applicant and the City of Longmont on October 23, 2012, expires on October 31, 2013. This source of water may continue to be used by Applicant in the future pursuant to future agreements with the City of Longmont provided that Applicant complies with ¶32.3 and may be used in the augmentation plan by releasing the water to the South Platte River, via the St. Vrain River, and applying it directly for

augmentation purposes under this plan, diverting it at the headgate of the Union Ditch for storage in Lower Latham Reservoir, diverting it at the headgate of the Lower Latham Ditch for in-ditch recharge or delivery to the South Platte River at other locations as may be required.

14.2.5. *Latham Exchange Rights.* The Latham Exchange Rights described in ¶10.

14.2.6. *Pending Applications.* The water rights identified in this ¶14.2.6 are not changed by this Decree and are not decreed for use as augmentation sources in this plan for augmentation, but may be added as additional or alternative augmentation sources pursuant to § 37-92-305(8) C.R.S., after Applicant complies with the procedures set forth below in ¶32.3. The amount of water that may become legally available for augmentation purposes from the water rights listed in this paragraph will be determined by the decrees entered in the pending cases listed below.

14.2.6.1. *GIC Shares.* Applicant has pending an application in Case No. 12CW96 seeking a change of use of the water rights represented by 15.19 shares of stock in the Greeley Irrigation Company (the "GIC Shares").

14.2.6.2. *UDC Shares.* Applicant has a pending application in Case No. 06CW292 seeking a change of use of the water rights represented by 13.5 shares in the Union Ditch Company (the "UDC Shares").

14.2.7. *Additional Water Rights.* Applicant may utilize additional sources of augmentation water decreed or approved for such use in the plan for augmentation, subject to the terms and conditions of this Decree, provided that such additional sources of augmentation water are added as replacement sources pursuant to the procedures set forth in ¶32.3.

14.3. *Operational components of the plan for augmentation.* The following operational components of the plan for augmentation constitute the means by which the sources of augmentation water will be utilized to replace depletions to the South Platte River.

14.3.1. *Administrative Reaches.* For purposes of administration and operation of the plan for augmentation, Applicant has identified five reaches of the South Platte River. As used in this Decree the term "administrative reach" or "administrative reaches" refers to the following reaches along the South Platte River, the approximate locations of which are shown on **Exhibit II**:

14.3.1.1. Administrative Reach A: from the river headgate of the Lower Latham Ditch, located in the NW ¼ of the NE ¼ of Section 31, Township 5 North,

Range 65 West, 6th P.M., downstream along the South Platte River to the river headgate of the Patterson Ditch, located in the NE ¼ of the NE ¼ of Section 21, Township 5 North, Range 65 West, 6th P.M., at a point approximately 178 feet west of the east section line and 714 feet south of the north section line of said Section.

The midpoint of this administrative reach is located in the SE ¼ of the NE ¼ of Section 29, Township 5 North, Range 65 West, 6th P.M., at a point approximately 50 feet west of the east section line and 1,528 feet south of the north section line of said Section.

14.3.1.2. Administrative Reach B: from the river headgate of the Patterson Ditch downstream along the South Platte River to the river headgate of the Highland (Plumb) Ditch, located in the SW ¼ of the NW ¼ of Section 13, Township 5 North, Range 65 West, 6th P.M., at a point approximately 425 feet east of the west section line and 1987 feet south of the north section line of said Section.

The midpoint of this administrative reach is located in the NW ¼ of the SW ¼ of Section 14, Township 5 North, Range 65 West, 6th P.M., at a point approximately 240 feet east of the west section line and 1,550 feet north of the south section line of said Section.

14.3.1.3. Administrative Reach C: from the river headgate of the Highland (Plumb) Ditch downstream to the river headgate of the Empire Inlet Canal, located in the SW ¼ of the SW ¼ of Section 19, Township 5 North, Range 63 West, 6th P.M., at a point approximately 1,300 feet east of the west section line and 416 feet north of the south section line of said Section. Reach C includes the confluence of the Cache la Poudre and South Platte rivers.

The midpoint of this administrative reach is located in the SE ¼ of the SW ¼ of Section 9, Township 5 North, Range 64 West, 6th P.M., at a point approximately 2,640 feet east of the west section line and 1,033 feet north of the south section line of said Section.

14.3.1.4. Administrative Reach D: from the river headgate of the Empire Inlet Canal downstream to the river headgate of the Riverside Inlet Canal, located in the SW ¼ of the SW ¼ of Section 20, Township 5 North, Range 63 West, 6th P.M., at a point approximately 310 feet east of the west section line and 654 feet north of the south section line of said Section.

The midpoint of this administrative reach is located in the SW ¼ of the SE ¼ of Section 19, Township 5 North, Range 63 West, 6th P.M., at a point approximately 1,976 feet west of the east section line and 1,120 feet north of the south section line of said Section.

14.3.1.5. Administrative Reach E: from the river headgate of the Riverside Inlet Canal downstream to the river headgate of the Bijou Canal, located in the NE ¼ of the NE ¼ of Section 13, Township 4 North, Range 63 West, 6th P.M., at a point approximately 95 feet west of the east section line and 604 feet south of the north section line of said Section. Reach E includes the confluence of Box Elder Creek and the South Platte River.

The midpoint of this administrative reach is located in the NW ¼ of the SE ¼ of Section 34, Township 5 North, Range 63 West, 6th P.M., at a point approximately 1,461 feet west of the east section line and 1,751 feet north of the south section line of said Section.

14.3.2. *Direct Replacements.* Direct replacements are replacements made directly to the river via an approved measuring device, which are credited directly to the augmentation plan after appropriate deductions for transit losses. The presently identified and approved locations of direct replacements are specified below. Nothing herein shall be construed to create or enlarge Applicant's right to use any of the land or structures described in ¶¶14.3.2.1-14.3.2.9 below. Applicant may seek to add additional points of direct replacement pursuant to ¶32.11.4, and so long as such replacements are made in accordance with this decree.

14.3.2.1. *23rd Avenue Spillway.* The 23rd Avenue Spillway is an existing structure that delivers water from the Greeley Canal No. 3 to the Cache la Poudre River at a point located in the NE ¼ of the SE ¼ of Section 1, Township 5 North, Range 66 West at a point approximately 1,050 feet West of the East section line and 2,450 feet North of the South section line of said Section 1, and which discharges to the river at a point in the SW ¼ of the NW ¼ of Section 31, Township 6 North, Range 65 West approximately 200 feet East of the West section line and 2,500 feet South of the North section line of said Section 31. Applicant shall not use the 23rd Avenue Spillway under this Decree unless and until the GIC Shares have been approved for augmentation use by a decree of this Court or a substitute water supply plan approved pursuant to C.R.S. §37-92-308(4) and the GIC Shares have been added to the augmentation plan pursuant to ¶32.3.

14.3.2.2. *16th Street Return Structure.* The 16th Street Return Structure is an existing structure that delivers water from the Greeley Canal No. 3 to the Cache la Poudre River at a point located in the NW ¼ of the SE ¼ of Section 10, Township 5 North, Range 65 West at a point approximately 1,950 feet West of the East section line and 2,600 feet South of the North section line of said Section 10, and which releases to the river at a point located in the NE ¼ of the NE ¼ of Section 10, Township 5 North, Range 65 West approximately 50 feet West of the East section line and 1,100 feet South of the North section line of said Section 10. Applicant shall not use the 16th Street Return Structure under this Decree unless and until the GIC Shares have been approved for augmentation use by a decree of this Court or a substitute water supply plan approved pursuant to C.R.S. §37-92-308(4) and the GIC Shares have been added to the augmentation plan pursuant to ¶32.3.

14.3.2.3. *Jackson Spillway.* The Jackson Spillway is an existing structure that may in the future have the ability to deliver water from the Greeley Canal No. 3 to the South Platte River at a point in the SW ¼ of Section 15, Township 5 North, Range 65 West. Applicant will not use this structure for delivery of augmentation water until it has been approved for such use by the Division Engineer. Applicant shall not use the Jackson Spillway under this Decree unless and until the GIC Shares have been approved for augmentation use by a decree of this Court or a substitute water supply plan approved pursuant to C.R.S. §37-92-308(4) and the GIC Shares have been added to the augmentation plan pursuant to ¶32.3.

14.3.2.4. *City of Longmont WWTP Outfall and Spring Gulch.* Water derived from the Longmont Exchange Water is delivered to the St. Vrain in the at the City of Longmont WWTP Outfall in the SE ¼ of the NW ¼ of Section 11, Township 2N, Range 69W, and the confluence of the St. Vrain River and Spring Gulch in the SE ¼ of Section 7, Township 5 North, Range 65 West.

14.3.2.5. *Union Ditch Return Structure.* The Union Ditch Return Structure diverts water from the Union Ditch in the NE ¼ of Section 32, Township 5 North, Range 65 West, and returns the water to the South Platte River in the NW ¼ of Section 28, Township 5 North, Range 65 West. Applicant shall not use the Union Ditch Return Structure under this Decree unless and until the UDC Shares have been approved for augmentation use by a decree of this Court or a substitute water supply plan approved pursuant to C.R.S. §37-92-308(4) and the GIC Shares have been added to the augmentation plan pursuant to ¶32.3.

14.3.2.6. *Powell Spillway.* Water carried in the Lower Latham Ditch may be released to the Powell Spillway in the SW ¼ of the NW ¼ of Section 23 Township 5 North, Range 65 West. The Powell Spillway then discharges water into the South Platte River in the NE ¼ of the SW ¼ of Section 14, Township 5 North, Range 65 West.

14.3.2.7. *Gibbs Spillway.* Water carried in the Lower Latham Ditch may be released to the South Platte River via the Gibbs Spillway which discharge point to the South Platte River is located in the NW ¼ of the NW ¼ of Section 28, Township 5 North, Range 65 West.

14.3.2.8. *WCR 69 Spillway.* Water carried in the Lower Latham Ditch may be released to the South Platte River via the WCR 69 Spillway. The WCR 69 Spillway discharges into the Empire Inlet Canal on the south side of the canal in the NW ¼ of Section 11, Township 4 North, Range 63 West, 6th P.M., and such water would be discharged from the Empire Inlet Canal to an unnamed channel to the South Platte River, which discharge point to the South Platte River is located on the north side of the canal in the S ½ of Section 12, Township 4 North, Range 63 West, 6th P.M.

14.3.2.9. *Box Elder Creek Return Structure.* The Lower Latham Ditch crosses the channel of Box Elder Creek in the SE ¼ of Section 2, Township 4 North, Range 64 West, where water in the Lower Latham Ditch may be discharged into said creek. Water from Box Elder Creek discharges into the Empire Inlet Canal on the south side of the canal in the NW1/4 of Section 29, Township 5 North, Range 63 West, and such water would be discharged from the Empire Inlet Canal to an unnamed channel to the South Platte River, which discharge point to the South Platte River is located on the north side of the canal in the NE ¼ of Section 29, Township 5 North, Range 63 West, 6th P.M.

14.3.3. *Recharge Structures.* Applicant has constructed recharge structures for purposes of recharging the alluvial aquifer and generating recharge accretions to the South Platte River. The presently constructed recharge structures are described on **Exhibit I**. Such recharge operations shall be pursuant to the terms and conditions of this Decree, including but not limited to ¶32.9.

14.3.4. *Lower Latham Reservoir Augmentation Pool.* Subject to the terms and conditions of this Decree, water may be stored in the Lower Latham Reservoir at times when there is available capacity in the reservoir attributable to the sources approved for such storage in this Decree. The water stored in the Lower Latham Reservoir from such sources is referred to herein as the "Lower Latham Reservoir Augmentation

Pool." Applicant will separately account for each individual water right in the Lower Latham Reservoir Augmentation Pool. Any carryover of such water in the Lower Latham Reservoir Augmentation Pool from year to year is subject to the terms and conditions of this Decree including, but not limited to, ¶32.10.

14.3.5. *River Exchange Operations.* Applicant will operate exchanges pursuant to the Latham Exchange Rights, when in priority and pursuant to the terms and conditions of this Decree in order to recapture Excess Recharge Accretions as determined in accordance with ¶29.3. The exchanges will operate to divert water by exchange at the Lower Latham Ditch headgate or the Lower Latham Reservoir for subsequent use for augmentation of depletions under the plan for augmentation approved herein.

14.3.6. *Internal Ditch Operations.* Applicant manages its internal ditch and reservoir operations in cooperation with the Lower Latham Ditch Company, for the purposes of storing water available under its LLDC Shares in Lower Latham Reservoir as part of the Lower Latham Reservoir Augmentation Pool, and to deliver water attributable to its Lower Latham Reservoir Augmentation Pool to a location up-ditch from the Lower Latham Reservoir Outlet. Applicant has not sought, and this Decree does not establish, any priority date for these internal ditch exchanges. These internal ditch exchanges are described in more detail below:

14.3.6.1. *Internal Ditch Exchanges to Lower Latham Reservoir.* Exchanges of water to the Lower Latham Reservoir will operate by delivering water attributable to the LLDC Shares and the UDC Shares (see ¶14.2.6.2) to shareholders in the Lower Latham Reservoir Company in lieu of deliveries of water attributable to the water rights decreed to Lower Latham Reservoir ("Reservoir Water") and, in exchange, water attributable to the Reservoir Water that was consequently not delivered out of the reservoir shall be attributed to Applicant's LLDC Shares and included in the Lower Latham Reservoir Augmentation Pool.

14.3.6.1.1. *Additional Terms and Conditions.* Applicant may operate the ditch exchanges described above pursuant to the following terms and conditions:

14.3.6.1.1.1. The daily amount of water that may be exchanged to the Lower Latham Reservoir shall be limited on a daily basis to the lesser of (1) the amount of water that would otherwise be released to LLRC shareholders but for operation of the internal ditch exchange, or (2) Applicant's pro-rata portion of LLDC deliveries (14.75% of

diversions less ditch loss and as limited by ¶30.2). The ditch exchange operation to store water in Lower Latham Reservoir shall only operate using water available under the LLDC Shares and UDC Shares as the source of substituted supply in lieu of reservoir releases.

14.3.6.1.1.2. Applicant's shareholders receiving water attributable to its LLDC Shares and UDC Shares under the ditch exchange shall only use such water for irrigation purposes.

14.3.6.1.1.3. The ditch exchange described above shall only be operated at such times as and to the extent that a continuous live flow of water exists in the Latham Reservoir Outlet Canal between the outlet from Lower Latham Reservoir, in the SE ¼ of the NW ¼ of Section 35, Township 5 North, Range 65 West, 6th P.M., at a point approximately 1,554 feet east of the west section line and 1,940 feet south of the north section line of said Section (or from the seep and spill from Lower Latham Reservoir, in the NW ¼ of the SW ¼ of Section 35, Township 5 North, Range 65 West, 6th P.M., at a point approximately 53 feet east of the west section line and 2,198 feet north of the south section line of said Section), and the Latham Reservoir Outlet Canal's intersection with the Latham Ditch, in the SW ¼ of the SE ¼ of Section 22, Township 5 North, Range 65 West, 6th P.M., at a point approximately 1,529 feet west of the east section line and 432 feet north of the south section line of said Section.

14.3.6.1.1.4. Applicant shall not use the UDC Shares (*see* ¶14.2.6.2) in the internal ditch exchanges described herein unless and until they have been approved for such use by a decree of this Court or, if available pursuant to the terms of C.R.S. §37-92-308(4), a substitute water supply plan approved by the State Engineer, and added to the augmentation plan pursuant to ¶32.3.

14.3.6.2. *Internal Ditch Exchange from Lower Latham Reservoir.* The exchange of water from the Lower Latham Reservoir will operate by delivering water attributable to the Lower Latham Reservoir Augmentation Pool to the Lower Latham Ditch and, in exchange, Applicant will take deliveries of an equal amount of water at a location up-ditch from the Lower Latham Reservoir Outlet.

14.3.6.2.1. *Exchange-From Point*: The exchange-from point is the Latham Reservoir Outlet Canal's intersection with the Latham Ditch.

14.3.6.2.2. *Exchange-To Point*: The exchange-to point is the Gibbs Spillway, described in ¶14.3.2.7.

14.3.6.2.3. *Additional Terms and Conditions.* Applicant may operate the ditch exchange described above pursuant to the following terms and conditions:

14.3.6.2.3.1. The daily amount of water that may be exchanged shall be limited to the measured amount released from Lower Latham Reservoir, less transit losses incurred between the outlet from Lower Latham Reservoir and the Latham Reservoir Outlet Canal's intersection with the Latham Ditch.

14.3.6.2.3.2. The ditch exchange described above shall only be operated at such times as and to the extent that a continuous live flow of water exists in the Lower Latham Ditch between the Latham Reservoir Outlet Canal's intersection with the Latham Ditch, and the Gibbs Spillway.

15. Calculation of Depletions. Applicant has proposed a method of calculating the time, location and amount of depletions from its Member Wells, described below and in subsequent provisions in this Decree, which the Court finds to be reasonable and accurate.

15.1. *Covered Wells and Diversions.* The future diversions of ground water covered by the plan for augmentation pursuant to this Decree are the diversions of ground water on or after November 1, 2012 from the Member Wells shown in **Exhibit F**. Additionally, the plan will replace ongoing out-of-priority depletions caused by diversions of ground water from the wells listed in **Exhibit G**, which wells were removed from the plan for augmentation, ground water diversions from which occurred during the period in which the wells were included in the plan for augmentation. The locations of the Member Wells are shown on the map attached hereto as **Exhibit J**.

15.2. *Wells included in other augmentation plans.* Of the 92 Member Wells, 46 are included in the plan for augmentation approved by the Court in Case No. 02CW335, which is operated by the Groundwater Management Subdistrict of the Central Colorado Water Conservancy District (which wells will be referred to herein as the "GMS-Latham Wells"). The GMS-Latham Wells are identified in **Exhibit F**. For

purposes of this decree reference to the "Member Wells" shall be inclusive of the GMS-Latham Wells.

15.3. *Location of depletions from Member Wells.* Depletions to the South Platte River from pumping of the Member Wells impact the South Platte River in the five administrative reaches of the river as described in ¶14.3.1, as indicated in **Exhibit F**.

15.4. *Pre-November 1, 2012 ground water diversions and resulting ongoing depletions.* Current and future depletions by administrative reach from pumping of the Member Wells and the Removed Wells that occurred from March 15, 1974 through October 31, 2012 are shown in **Exhibit K** for non-GMS-Latham Wells and that occurred from January 1, 2006 through October 31, 2012 for the GMS-Latham Wells are shown in **Exhibit L** (for GMS-Latham Wells), including pumping of the GMS-Latham Wells that will not be covered under the augmentation plan decreed in Case No. 02CW335. **Exhibits K** and **L** were developed using the following assumptions and/or parameters:

15.4.1. *General methodology.* Applicant estimated well pumping by determining the shortfall in consumptive irrigation demand that was not met by surface water supplies on the farms served by the Member Wells, and the shortfall was assumed to be met from ground water pumping from the Member Wells.

15.4.1.1. *Winter soil moisture.* The fraction of gains from winter soil moisture, available to the crops, was limited to 60 percent based upon available published literature.

15.4.1.2. *Past use – Member Wells.* All diversions of ground water from the Member Wells from March 15, 1974 through October 31, 2012 for non-GMS-Latham Wells and that occurred from January 1, 2006 through October 31, 2012 for the GMS-Latham Wells were determined and included in the totals.

15.4.1.3. *Past use – removed wells.* All diversions of ground water from the Removed Wells during 2003, 2004, 2005, 2006 and 2007 were determined and the ongoing depletions from such pumping were included in the totals.

15.4.1.4. *Past use – Augmentation Wells.* No diversions from any of the Augmentation Wells have occurred as of the date of this decree and, therefore, no depletions for the Augmentation Wells are included in **Exhibits F** and **G**.

15.5. *Amount of Consumptive Use from Pumping Beginning November 1, 2012.* The amount of consumptive use from pumping of ground water by Member Wells under

this Decree that occurs beginning November 1, 2012 shall be determined using a Presumed Depletion Factor applied to surface, sprinkler and drip irrigated parcels as described in ¶32.5 below.

## II. CONCLUSIONS OF LAW

16. Incorporation of Findings of Fact. The foregoing Findings of Fact in Section I of this Decree are incorporated herein to the extent they constitute conclusions of law.

17. Notice and Jurisdiction. Full and adequate notice of the claims adjudicated herein has been given in the manner required by law. The Court has jurisdiction of the subject matter of the applications, and all persons affected hereby, whether they have appeared or not, pursuant to §37-92-203(1), §37-92-302 and §37-92-304, C.R.S.

18. Water Rights Contemplated by Law. The application for water rights is contemplated by law and satisfies the requirements of §37-92-101 *et seq.*, including but not limited to §§37-92-103, 37-92-302, 37-92-305(1), 37-92-305(9) and 37-92-305(12) C.R.S. The appropriations for the water rights were lawfully initiated on the dates shown in the Findings of Fact, and were pursued with reasonable diligence from the date of initiation. Applicant has established that the conditional water rights described herein can and will be beneficially used and the projects can and will be completed with diligence within a reasonable time.

19. Exchanges Contemplated by Law. The application for approval of the appropriative rights of exchange is contemplated by law and satisfies the requirements of C.R.S. §§ 37-80-120, 37-92-101 et seq., including but not limited to §§37-92-302, 37-92-305(3), 37-92-305(5), and 37-92-305(9). The appropriative rights of exchange can and will be diligently completed and water diverted and beneficially used under the exchanges for the purposes set forth in this decree within a reasonable time. Operation of the appropriative rights of exchange will not injuriously affect any owner of or person entitled to use water under a vested water right or decreed conditional water right, so long as operated and administered in accordance with the terms of this decree. Applicant's internal ditch exchanges described in ¶14.3.6 are contemplated by law. C.R.S. §37-93-104; *City of Thornton v. Bijou Irrigation Dist.*, 926 P.2d 1, 52 (Colo. 1996). No water right or priority is awarded to said internal ditch exchanges.

20. Change of Water Rights Contemplated by Law. The application for change of water rights described in ¶7 above is contemplated by law and satisfies the requirements of §37-92-101 *et seq.*, C.R.S., including but not limited to §§37-92-302, and 37-92-305(3).

21. Plan for Augmentation Contemplated by Law. The plan for augmentation decreed herein is contemplated by law and satisfies the requirements of §37-92-101 *et seq.*, C.R.S., including

but not limited to §§37-92-302, 37-92-305(3), 37-92-305(5), 37-92-305(8) and 37-92-305(12). Operation of the plan for augmentation will not injuriously affect any owner of or person entitled to use water under a vested water right or decreed conditional water right, so long as operated and administered in accordance with the terms of this decree.

22. Burden of Proof. Applicant has met its burden of proof and, therefore, is entitled to a decree approving its claims for conditional water rights, change of water rights, and plan for augmentation subject to the terms and conditions of this Decree.

23. Administrability. The water rights, change of water rights, exchanges and plan for augmentation decreed herein are administrable by the officials of the State of Colorado.

## III. DECREE OF THE WATER COURT

24. Incorporation of Findings of Fact and Conclusions of Law. The foregoing Findings of Fact set forth in Section I and the Conclusions of Law set forth in Section II of this Decree are incorporated herein.

25. Stipulations and Settlements. The Stipulations entered into between the Applicant and the objectors are approved by the Court.

26. Confirmation of Conditional Water Rights. The conditional water rights described herein for the Latham Augmentation Right, the Augmentation Wells, and the Latham Exchange Rights are hereby confirmed, adjudicated and decreed subject to the terms and conditions of this Decree.

27. Terms and Conditions Related to Operation of the Augmentation Wells. The use of the Augmentations Wells and the water rights decreed thereto, identified in ¶8, shall be subject to the following additional terms and conditions:

    27.1. Applicant's use of the Augmentation Wells shall be limited to times when all other sources of augmentation water are inadequate to replace depletions under the plan for augmentation approved herein, and only if Applicant is able to fully replace all out-of-priority depletions resulting from use of the Augmentation Wells using augmentation supplies other than the Augmentation Wells.

    27.2. Applicant shall include the Augmentation Wells as structures to be augmented pursuant to the augmentation plan decreed herein, and all diversions from the Augmentation Wells shall be considered to be fully consumed with no return flows.

27.3. Water diverted from the Augmentation Wells shall be measured using a continuous recorder installed on each well approved by the Division Engineer. To the extent the Augmentation Wells are used both for irrigation purposes and augmentation purposes, the wells shall be equipped with two continuous flow meters so as to separately measure the dates and amounts of water used for each purpose, and this shall be reflected in the records for the wells. The meters for the Augmentation Wells shall be read daily.

27.4. The daily volume pumped from each Augmentation Well shall be lagged to the South Platte River using the Glover Method described in ¶32.1 and the Glover parameters for each well shown in **Exhibit F**.

27.5. There shall be no credit for replacement water pumped from the Augmentation Wells and delivered into the unnamed delivery channel identified in ¶8.3 unless, prior to the delivery of such replacement water and during the entire period of delivery, the unnamed delivery channel has a live flow between the point at which such replacement water is discharged from an Augmentation Well into the unnamed delivery channel and the South Platte River. The unnamed delivery channel shall not be considered to have a live flow for purposes of this paragraph if it would not have a live flow but for the delivery of replacement water by Applicant or any other person.

27.6. Transit losses shall be assessed pursuant to ¶35.3 on any replacement water pumped from the Augmentation Wells that is delivered to the unnamed delivery channel identified in ¶8.3 from the point at which such replacement water is discharged from the pipeline into the unnamed delivery channel to the South Platte River.

28. Terms and conditions related to diversion of the Latham Augmentation Right. Applicant may divert and utilize the Latham Augmentation Right, subject to the following terms and conditions necessary to ensure that such diversions do not result in material injury to vested water rights or conditional water rights:

28.1. *Volumetric Limitation.* Diversions attributable to the Latham Augmentation Right shall not exceed 5,500 acre-feet in any one year, or a total of 12,400 acre-feet in any consecutive 20-year period. During the first 10 years (Year 1 through Year 10) after entry of this Decree, combined diversions attributable to the Latham Augmentation Right shall not exceed 6,200 acre-feet, and during the following nine years (Year 11 through Year 19), combined diversions attributable the Latham Augmentation Right shall not exceed 5,580 acre-feet. Once any of these limitations have been reached, and irrespective of whether such diversions were made under free river conditions or pursuant to a call by said rights, the volumetric limits shall be deemed satisfied, and no further diversions shall be allowed under said rights. To the extent not already in

place, Applicant shall equip the headgate of the Lower Latham Ditch with a continuous recording measurement device. The amount of water diverted pursuant to the Latham Augmentation Right shall be recorded on a daily basis and reported to the Division Engineer and the State Engineer monthly or more frequently if they so request.

28.2. *Prior approval from water commissioner.* Prior to diverting water pursuant to the Latham Augmentation Right Applicant shall contact the water commissioner to confirm that the Latham Augmentation Right is in priority and to obtain approval to divert the Latham Augmentation right pursuant to the terms of this Decree.

28.3. *Accounting and reporting.* Applicant shall maintain daily records of all diversions pursuant to the Latham Augmentation Right and provide such records to the water commissioner and Division Engineer monthly or more frequently if he so requests.

28.4. *Ditch capacity.* Applicant shall only divert water pursuant to the Latham Augmentation Right at times when there is capacity in the Lower Latham Ditch in excess of the water diverted pursuant to the senior Lower Latham Ditch direct flow rights described in ¶7.1.

28.5. *Additional Terms.* Applicant and its successors in interest are and shall be prohibited from diverting water under the Latham Augmentation Right with the intention or for the purpose of creating a permanent supply of water for use by any other person or entity. However, at times it may not be possible for Applicant to match the timing of the recharge accretions attributable to the Latham Augmentation Right with the timing of the augmentation and historical return flow obligations under this Decree. Therefore, to the extent that accretions occur to the South Platte River from water delivered to recharge pursuant to the terms and conditions of this Decree at times when they are not needed to replace depletions from the wells included in this Decree or to satisfy the historical return flow obligations associated with the LLDC Shares, and if Applicant does not have a water supply need to use such accretions as a substitute supply for the Latham Exchange Rights ("Surplus Recharge Accretions"), then Applicant may lease such Surplus Recharge Accretions, for a period not to exceed one year at a time to other persons or entities for use in other augmentation plans, or for use under substitute water supply plans approved by the State Engineer pursuant to §37-92-308(4), C.R.S., or successor statutes. If Surplus Recharge Accretions are used by any other water user or users in five separate years, such other water user or users shall be required to apply to the Court for, and obtain, a decree or decrees authorizing the use of such Surplus Recharge Accretions in order for such uses to continue. Use of Surplus Recharge Accretions in other augmentation plans and in substitute water supply plans approved by the State Engineer pursuant to §37-

92-308(4), C.R.S., or successor statues shall be made only in a manner and to the extent consistent with this Decree and the decrees for the other augmentation plans. To the extent the terms of the decrees in these other plans are less restrictive than the terms herein, the terms of this Decree shall control.

29. Terms and Conditions Related to Operation of the Latham Exchange Rights. Applicant may operate the exchanges represented by the Latham Exchange Rights, subject to the following additional conditions and limitations necessary to ensure that such diversions do not result in material injury to vested rights:

29.1. *Volumetric Limitation.* Diversions attributable to the Latham Exchange Rights shall not exceed 1,300 acre-feet in any one year, or a total of 18,800 acre-feet in any consecutive 20-year period. During the first 10 years (Year 1 through Year 10) after entry of this decree, combined diversions attributable to the Latham Exchange Rights shall not exceed 9,400 acre-feet, and during the following nine years (Year 11 through Year 19), combined diversions attributable the Latham Exchange Rights shall not exceed 8,460 acre-feet. Once any of these limitations have been reached, the volumetric limits shall be deemed satisfied, and no further diversions shall be allowed under said rights. The amount of water diverted pursuant to the Latham Exchange Rights shall be recorded on a daily basis and reported to the Division Engineer and the State Engineer monthly or more frequently if they so request.

29.2. *Additional Terms.* The restrictions in ¶28.5 shall also apply to water diverted pursuant to the Latham Exchange Rights.

29.3. *Excess Recharge Accretions Required.* In determining the amount of Excess Recharge Accretions derived from water diverted pursuant to the LLDC Shares and the Latham Augmentation Right, the amount of: (1) out-of-priority well depletions from the wells included in the plan for augmentation decreed herein during the month ("Well Depletions"), (2) the amount of return flow obligations associated with the LLDC Shares during each month ("Return Flow Obligations"), and (3) the amount of recharge accretions accruing to the South Platte River during the month from operation of the recharge operations under this Decree ("Recharge Accretions"), shall be divided by the number of days in the month to determine the daily Well Depletions, the daily Return Flow Obligations and the daily Recharge Accretions. The amount that may be used as a substitute supply as Excess Recharge Accretions under the Latham Exchange Rights shall be the difference between the daily Recharge Accretions and the sum of the daily Well Depletions and daily Return Flow Obligations. The Latham Exchange Rights shall only operate on days when the daily Recharge Accretions are greater than the sum of the daily Well Depletions and the

daily Return Flow Obligations, and the daily Excess Recharge Accretions shall not be carried over for use on any later day.

29.4. *Exchanges Must be in Priority and Operated Without Injury.* The Latham Exchange Rights shall only operate at such times when the Latham Exchange Rights are in priority and all water rights, including other decreed exchanges, senior to the Latham Exchange Rights and located between the exchange-from point(s) and the exchange-to point are satisfied with the remaining flows available to them or are out-of-priority.

29.5. *Prior approval by water commissioner.* The Latham Exchange Rights decreed herein shall be exercised within the priority system. Applicant shall not operate the Latham Exchange Rights unless Applicant has given the water commissioner at least 48 hours notice of the intent to operate the exchange, the water commissioner has determined there is sufficient exchange potential to operate the exchange and such operation will not result in injury to other water rights, the water commissioner has current daily accounting from Applicant and is able to verify that there are Excess Recharge Accretions pursuant to ¶29.3, and the water commissioner has given approval for the operation of the exchange. The amount of water diverted at the exchange-to points shall not be greater than the amount of substitute supply water available to Applicant at the exchange from points. Pursuant to C.R.S. §37-80-120(3), any substitute supply for the rights of exchange shall be of a quality and continuity to meet the requirements of use to which senior appropriations have normally been put.

29.6. *Live stream.* Water may only be diverted by the Latham Exchange Rights at such times as and to the extent that a continuous live stream exists between the Exchange From and Exchange To points used in the exchange both prior to and during the entire period that the exchange is operated. For purposes of this Decree, "live stream" shall mean that a flow of not less than 0.5 cfs exists between the Exchange To Point and the Exchange From Point(s). Additionally, an exchange may be operated only when all water rights, including other appropriative rights of exchange, located in the reach of the exchange with priorities senior to November 30, 2007, are either: 1) satisfied to the extent of their calls; 2) electing to not divert water; or 3) out of priority.

29.7. *Ditch capacity.* Applicant shall only divert water pursuant to the Latham Exchange Rights at times when there is capacity in the Lower Latham Ditch in excess of the water diverted pursuant to the senior Lower Latham Ditch direct flow rights, or, with respect to water stored in Lower Latham Reservoir, at times when there is capacity in the reservoir.

29.8. *Accounting and reporting.* Applicant shall maintain daily records of all diversions pursuant to the Latham Exchange Rights and provide such records to the water commissioner and Division Engineer monthly or more frequently if requested by the Division Engineer.

29.9. *Additional Terms and Conditions – Exchange to Lower Latham Reservoir.* Applicant's exchange of excess recharge credits to the Lower Latham Reservoir shall be limited on a daily basis to the lesser of the excess recharge credits and the calculated inflow to the reservoir from the Morrison Seepage Ditch, as provided for in ¶32.10.

30. Terms and conditions of approval of change of LLDC Shares. With respect to the requested change of water right, the following additional terms and conditions shall apply.

30.1. *Diversion Season.* Applicant shall limit its diversions pursuant to the LLDC Shares to the period from April 1 through October 31 of each year.

30.2. *Volumetric limitations.* Applicant's future deliveries of water pursuant to the LLDC Shares, calculated as 14.75% of total diversions attributable to the LLDC Water Rights less ditch loss and returns of unused water under ¶30.8 below, shall be limited to 92,481 acre-feet in any consecutive 20-year period, not to exceed 6,296 acre-feet in any single year. Applicant's future deliveries of water pursuant to the LLDC Shares shall further be limited to 46,240 acre-feet the first 10 years after entry of this Decree (Years 1 through 10), and 41,616 acre-feet in the subsequent 9 years (Years 11 through 19). Applicant shall further limit its monthly deliveries to the following acre-foot amounts:

| Month | Maximum Delivery Limits | Cumulative 20-year Rolling Total Delivery Limits | Year 1 through 10 Cumulative Total Delivery Limits | Year 11 through 19 Cumulative Total Delivery Limits |
|---|---|---|---|---|
| Jan | 0 | 0 | 0 | 0 |
| Feb | 0 | 0 | 0 | 0 |
| Mar | 0 | 0 | 0 | 0 |
| Apr | 629 | 4,531 | 2,265 | 2,039 |
| May | 1,087 | 10,635 | 5,317 | 4,786 |
| Jun | 1,251 | 15,097 | 7,548 | 6,793 |
| Jul | 1,820 | 25,152 | 12,576 | 11,318 |
| Aug | 1,578 | 22,157 | 11,078 | 9,971 |
| Sep | 847 | 10,765 | 5,382 | 4,843 |
| Oct | 449 | 4,147 | 2,074 | 1,866 |
| Nov | 0 | 0 | 0 | 0 |
| Dec | 0 | 0 | 0 | 0 |

30.3. *Return flow obligations.* Applicant's future use of water diverted pursuant to the LLDC Shares will incur a daily return flow obligation based on a percentage of the total volume actually delivered to Applicant on a daily and annual basis. Applicant's return flow obligations shall be calculated and delivered to the South Platte River as follows:

30.3.1. *Surface return flow obligations.* Applicant shall deliver to the South Platte River from sources described in ¶30.3.4 an amount of water equal to the following percentages multiplied by each day's total deliveries, calculated as 14.75% of total diversions attributable to the LLDC direct flow rights less ditch loss and returns of unused water under ¶30.8 below, within the same day in which deliveries occur.

| | Nov | Dec | Jan | Feb | Mar | Apr |
|---|---|---|---|---|---|---|
| Surface Return Flows[/a] | - | - | - | - | - | 21.0% |
| | May | Jun | Jul | Aug | Sep | Oct |
| Surface Return Flows[/a] | 17.1% | 13.3% | 12.9% | 12.5% | 12.4% | 15.6% |

[/a] Expressed as percent of total monthly farm headgate deliveries.

30.3.2. *Subsurface return flow obligations.* Applicant shall deliver to the South Platte River from sources described in ¶30.3.4 an amount of water equal to the following percentages multiplied by the total delivery from the previous 12 months calculated as 14.75% of total diversions attributable to the LLDC direct flow rights less ditch loss and returns of unused water under ¶30.8 below. Monthly results shall be divided by the number of days in that month to determine the daily return flow obligation.

| | Nov | Dec | Jan | Feb | Mar | Apr |
|---|---|---|---|---|---|---|
| Subsurface Return Flows[/b] | 4.3% | 3.5% | 3.0% | 2.5% | 2.1% | 2.4% |
| | May | Jun | Jul | Aug | Sep | Oct |
| Subsurface Return Flows[/b] | 3.2% | 4.0% | 5.3% | 6.1% | 5.9% | 5.2% |

[/b] Expressed as percent of total annual farm headgate deliveries for the previous 12 months.

30.3.3. *Location of return flow obligations.* Applicant shall meet its return flow obligations on a daily basis by delivering water to the South Platte River in the following percentages above the calling right in each administrative reach, or further downstream as long as the water is made available to the next downstream calling water right:

| | Surface Return Flows | Subsurface Return Flows |
|---|---|---|
| Admin Reach A | 0.4% | 0.5% |
| Admin Reach B | 10.9% | 8.7% |
| Admin Reach C | 37.4% | 83.1% |
| Admin Reach D | 1.3% | 0.4% |
| Admin Reach E | 50.0% | 7.3% |

30.3.4. *Sources of water to replace return flow obligations.* Applicant's return flow obligations hereunder may be met with water delivered to the river from the sources described above in ¶14.2, except for the Augmentation Wells. Any additional sources shall be added as replacement sources pursuant to the procedures set forth in ¶32.3.

30.3.5. *Replacement of return flows.* By agreement with the State and Division Engineers, Applicant shall deliver water to satisfy its return flow obligations pursuant to the terms and conditions decreed herein, except during times of free river when Applicant will not be obligated to make such return flows. The State and Division Engineers and Applicant disagree as to whether Applicant is obligated to make such return flows when there is a valid call, including from a decreed exchange for water from a location at or downstream of the point where such return flows historically accrued to the South Platte River and such call is junior to February 16, 2010. Applicant and the State and Division Engineers acknowledge that, in the future, District Court, Water Division No. 1 may determine that a similarly situated party seeking a change of its water rights is not obligated to make such corresponding return flows pursuant to a call junior to that party's date of notice of its change in water rights. In such an event, Applicant reserves the right to petition the Court under its retained jurisdiction for the limited purpose of modifying the decree to conform to such a ruling. Prior to any such modification, Applicant shall file with the Court and serve on the parties in this case a petition to invoke this retained jurisdiction summarizing the requested modification in return flow obligations. The Division Engineer and the parties shall have sixty (60) days to file an objection. The Court shall retain jurisdiction of this matter to resolve any objection filed.

30.4. *Disposition of the LLDC Shares.* In the event sale, lease or other disposition of any of the LLDC Shares or of the water available thereto is proposed, Applicant shall provide written notice of such sale, lease or disposition to the Court and the Objectors. The Objectors shall have thirty five (35) days from the date of service of

such notice to file objections to the proposed sale, lease or disposition. In the event no objection is filed, Applicant may proceed with the proposed sale, lease or disposition as described in the notice. In the event an objection is filed, the Court shall promptly hear the matter, and shall either disallow sale, lease or disposition of the LLDC Shares or allow their sale, lease or disposition on such terms and conditions as it deems necessary to prevent injury. The Court retains perpetual jurisdiction to review the sale, lease or disposition of any portion of the LLDC Shares and the water available thereto. The sale, lease or disposition of the LLDC Shares or the water available thereunder, the result of which is not to affect in any way their use as augmentation and replacement sources under this Decree, is not subject to the notice requirements of this paragraph or the Court's retained jurisdiction.

30.5. *Dry-up.* The lands that were historically irrigated with water attributable to the LLDC Shares are shown on **Exhibit A** and further described in ¶7.2.2 and **Exhibit B** (the "historically irrigated lands"). In order to prevent an expansion of use caused by the change of the LLDC Shares, Applicant must demonstrate dry-up of 49.14 acres per share and a total of 1,449.6 acres of the historically irrigated lands, or the dry-up of lands other than the historically irrigated lands pursuant to this paragraph, in order to claim credit for all of the historical consumptive use associated with the LLDC Shares. Applicant has obtained and recorded dry-up covenants for a total of 773.5 acres of the historically irrigated lands. In addition, Applicant owns 625.0 acres of the historically irrigated lands and has and will discontinue irrigating said land with water deriving from the LLDC Water Rights. The historically irrigated lands for which Applicant has recorded dry-up covenants and the historically irrigated lands owned by Applicant for which Applicant has recorded covenants running with the land restricting the delivery of water for irrigation attributable to the LLDC Water Rights to said lands shall be considered the "permanently dried up" acreage. For purposes of this Decree, the historically irrigated lands for which Applicant has not recorded dry-up covenants for, and which lands (1) are not irrigated, or (2) are irrigated only with water diverted pursuant to either a change of water right for which all return flow obligations are made or augmentation plan approved by the Water Court for Water Division 1, are referred to herein as lands that are "dried up in fact." At the time of entry of this Decree the total number of acres that are dried up in fact is 718.6 acres. The historically irrigated lands that have been permanently dried up and that are dried up in fact as of entry of this decree are also shown on **Exhibit A.** If and when dry-up covenants are recorded for the historically irrigated lands dried up in fact or if such lands are permanently dried up due to development of such lands, such lands shall be considered permanently dried up for purposes of this Decree upon approval of the Division Engineer.

30.5.1. *Acreage requirements.* Until such time as a total of 1,449.6 acres of the historically irrigated lands have been permanently dried up, by April 1st of each year, Applicant shall submit to the Division Engineer and the Objectors a report regarding the dry-up of historically irrigated acreage on the farms identified in **Exhibit A** documenting the amount of land that is dried up in fact and any additional lands permanently dried up. Such report shall be submitted with the Annual Operating Plan required in ¶33.1 and shall identify the lands to be irrigated using the LLDC Shares. A total of 49.14 acres of dry-up for the entire irrigation season will be required per LLDC Share used for augmentation by Applicant.

30.5.2. *No other LLDC water on dried up lands – exception.* Lands that have been designated as having been dried up under this provision shall not be irrigated with water attributable to the LLDC Water Rights unless such water derives from other shares in the LLDC that have been approved for such use by the Court or by the State Engineer pursuant to C.R.S. §37-92-308(4) or successor statute.

30.5.3. *Lands that may be credited as dried up.* The only lands that may be credited as dried up for purposes of this decree as of entry of this decree are the historically irrigated lands. In the event that Applicant seeks to designate dry-up of acreage that is required by this paragraph outside of the historically irrigated acreage, Applicant shall first file a petition with this Court, with notice to the Division Engineer and all opposers. Such a petition shall set forth the lands for which Applicant is claiming dry-up, the water supplies historically used to irrigate such lands, and the means by which Applicant has secured such dry-up. The Division Engineer and the opposers shall have 63 days to file objections to such petition, and any disputes over the petition shall be resolved by the Court under its continuing jurisdiction. No such claimed dry-up lands outside of the historically irrigated lands shall be used under this decree unless and until the court enters an order or decree approving such use.

30.5.4. *Dry-up Report.* By November 15th of each year, Applicant shall submit to the Division Engineer and the Objectors a report documenting the dry-up of the historically irrigated acreage on the farms identified above for the entire prior irrigation season, including accounting of the permanent dry-up acreage and the acreage dried up in fact and the source of irrigation, if any, on any historically irrigated acreage (the "Dry-Up Report"). The Dry-Up Report shall be prepared by an individual having personal knowledge of the dry-up of the historically irrigated acreage on the farms identified above for the entire prior irrigation season. The Dry-Up Report shall also include a determination of Applicant's claimed augmentation credits for the LLDC Shares for the prior irrigation season. The Division Engineer shall review the Dry-Up Report and Applicant's determination of augmentation credits and evaluate whether Applicant's determination of

augmentation credits is correct. If the Division Engineer determines that Applicant's determination of augmentation credits is not correct, the Division Engineer shall file a notice with the Court of such determination. Applicant shall adjust the augmentation credits for the LLDC Shares in conformity with the Division Engineer's determination. Any party that disagrees with Applicant's or the Division Engineer's determination of augmentation credits for the LLDC Shares may seek review within 91 days of such determinations from the Court under the retained jurisdiction provisions contained in this decree. In any such proceeding, Applicant shall have the burden of proof.

30.6. *Use of LLDC Shares for Irrigation.* For deliveries of water pursuant to the LLDC Shares used for irrigation, such deliveries shall be subject to the volumetric limitations and return flow obligations set forth in this Decree, and Applicant shall receive no credit for return flows from such use of the LLDC Shares.

30.7. *Supplemental Supplies.* The historical water supplies available to the 11 farms described in ¶7.2.2.1 through ¶7.2.2.11 included water other than water attributable to the LLDC Shares changed herein. Any future change of water right proceeding involving such supplemental water supplies shall assume that water attributable to the LLDC Shares was applied and used first for irrigation on said farms, before allocating any historical use to such supplemental supplies.

30.8. *Delivery of LLDC Shares in Excess of Demands or Volumetric Limitations.* Applicant shall, on a daily basis, take delivery of its full pro-rata portion of total river headgate diversions attributable to the LLDC Water Rights, less ditch loss as determined by the LLDC but no less than 20% of total diversions. All water available to Applicant attributable to the LLDC Shares that Applicant either elects not to use or is unable to use because of operation of the volumetric limits in this Decree shall be returned immediately to the South Platte River through a structure described in ¶14.3.2 that is available for use under this Decree, and such water returned to the river shall not be used by the Applicant or any other Lower Latham Ditch Company shareholder.

31. Approval of Change of Water Rights. Subject to the terms and conditions of this Decree, the requested change of water rights to the uses described above is hereby APPROVED.

32. Terms and conditions of approval of the plan for augmentation. With respect to the plan for augmentation, the following additional terms and conditions shall apply.

32.1. *Use of the Glover Methodology.* The analytical equations described by Glover (Glover, Robert E., 1977, *Transient Ground Water Hydraulics*, Water Resources

Publications) and others describe computations that may be used to determine the timing of depletions to a river from diversions of alluvial ground water from a well, and accretions to a river from recharge and return flows. The method to be used for applying the analytical equations described by Glover (referred to herein as the "Glover Methodology") for purposes of this Decree shall represent a parallel no-flow boundary that requires the following parameters: (1) a boundary condition for the alluvial aquifer indicating that the boundary constitutes a "no-flow" condition; (2) the width (feet) of the aquifer on the side of the river where the well is located, commonly referred to as "W", (3) the distance (feet) from the river to the location of the well, commonly referred to as "X"; (4) the harmonic mean of transmissivity (gallons per day per foot) values of the aquifer along the distance "X", commonly referred to as "T"; and (5) the specific yield (dimensionless) of the aquifer, commonly referred to as "S". The "alluvial aquifer" setting of the Integrated Decision Support Alluvial Water Accounting System ("AWAS"), or another program which incorporates the Glover Methodology, shall be used for purposes of applying the Glover Methodology as required by this Decree. The X, W and T values for the Member Wells are shown **in Exhibit F.** The X, W and T values for the farms are shown in **Exhibit M.**

32.2. *Depletions to be replaced.* The depletions to be replaced pursuant to the plan for augmentation decreed herein include: (1) the depletions shown in **Exhibit K** and **Exhibit L** from the past use of Member Wells and Removed Wells; (2) depletions from future ground water diversions from the Member Wells listed in **Exhibit F.** The addition to, removal from, or replacement of a well in the plan for augmentation shall be subject to the following terms and conditions.

32.2.1. *Addition of Wells.* If Applicant seeks to add a well to the plan for augmentation, either as a new well, a replacement well greater than 200 feet from the well to be replaced, a supplemental well, or an alternate point of diversion for an existing well, Applicant shall file an application with the Water Court to add the well to the plan. A well may be added to the plan under such appropriation date and priority as the Court may determine, so long as the well is operated and used, and out of priority depletions are replaced, on terms and conditions at least as restrictive as decreed herein. The methods for determining depletions from past and future pumping for a well added to the plan shall be determined at the time the Applicant seeks to add the well to the plan. Out of priority depletions from the use of the well that will occur after the court decree adding the well to the plan, whether or not the depletions result from pumping before or after the date the Court allows the well to be added to the plan, shall be replaced by the Applicant under the terms and conditions of this decree and any additional terms and conditions ordered by the Court in connection with adding the well. Nothing in this Decree shall be interpreted to authorize a well

to be operated before it is added to this Decree. No well shall be added except upon Court order or decree.

32.2.2. *Deletion of a Member Well.* Applicant shall replace all out-of–priority depletions from Member Wells, pursuant to the terms of this Decree, until and unless a decree or order of this Court authorizes deletion of a Member Well from the plan for augmentation. Applicant or the owner of a Member Well may file an application in the Water Court, with notice as required by law, seeking the deletion of the Member Well from the plan for augmentation and proposing terms and conditions on which said application should be granted. Alternatively, Applicant or the owner of a Member Well may seek to delete a Member Well from the plan by filing a petition with the Water Court, with notice as required by law, setting forth: (1) the location of the well; (2) the well's permit number and decretal information; (3) the future depletions anticipated as a result of the well's pumping under the plan for augmentation approved herein. The Court retains perpetual jurisdiction to consider the terms and conditions on which such petition may be granted including, but not limited to, terms and conditions requiring replacement of ongoing depletions resulting from the use of the Member Well prior to the date the Court allows the Member Well to be deleted from the plan for augmentation. All parties to this case shall have 63 days after the date of proper service of adequate notice of the petition in which to respond to the petition and to request a hearing on the petition. Applicant shall have 21 days after service of any response in which to file a reply.

32.2.3. *Replacement, Supplemental or Alternate Point of Diversion Wells.* Any well that is constructed with a valid well construction permit issued by the Office of the State Engineer as a replacement well to a Member Well may also be augmented by the plan provided the replacement well is located within 200 feet of the replaced well, and the replaced well is properly abandoned. The Member Well information shall be updated with the new permit number and well location. Any well constructed as an alternate point of diversion or supplemental well for a Member Well, or a replacement well located more than 200 feet from the replaced well, may also be augmented by this plan provided it is added to the plan pursuant to ¶32.2.1 of this Decree.

32.3. *Addition of Water rights to the plan for augmentation.* The water rights approved for augmentation use in this plan at the time the Decree is entered are those water rights listed in ¶14.2. In addition, the Court authorizes Applicant to use supplies of augmentation water of limited duration, and additional and alternative sources for replacement of depletions from the wells included in this augmentation plan if such sources are decreed or lawfully available for such use, are part of a substitute water supply plan approved pursuant to C.R.S. §37-92-308, or successor statutes, or an

interruptible supply agreement approved under C.R.S. §37-92-309. This paragraph sets forth the procedure under which these sources may be used in this plan. These procedures are adequate to prevent injury to other water rights that might otherwise result from the addition of these sources to this plan.

32.3.1. *Additional Water Rights Separately Decreed or Lawfully Available for Augmentation Use.* If a water right is decreed or lawfully available for augmentation use and not already approved for such use under this Decree, Applicant shall give at least 35 days advance written Notice of Use of Water Right for Augmentation to the Court, the Division Engineer and all the Objectors herein which shall: (1) describe the water right by name and decree, if any; (2) describe the annual and monthly amount of water available to Applicant from the water right; (3) describe the location or locations at which the water will be delivered to the stream; (4) provide evidence that the claimed amount of water will not be used by another person; and (5) provide the manner in which Applicant will account for use of the augmentation credits. No water right may be used unless the Division Engineer approves of its use, with a copy of such approval to be provided to Objectors, and no such approval may be issued by the Division Engineer if the Notice of Use required hereunder is not given in advance of the proposed use of such additional water or water rights. The Division Engineer shall take no action with respect to the Notice of Use until at least 35 days have passed since the date of service of the Notice of Use on the objectors. If an objection to the Notice of Use is filed with the Court, Applicant shall not use the water right in the plan for augmentation unless and until its use is approved by the Court and the Division Engineer shall take no further action regarding the Notice of Use. The Division Engineer shall not approve use of such water rights retroactively to the date of the Notice of Use and may not approve use of such water rights that would occur during any time period prior to the date the copy of such approval is provided to Objectors. The Court retains perpetual jurisdiction to review the use of additional water rights under this paragraph.

32.3.2. *Additional Water Rights – Temporary Administrative Approval.* If a water right is not decreed or otherwise lawfully available for augmentation use, and Colorado statutes or other governing authority provide a mechanism for using such water right without the need of a decree or well permit, Applicant shall provide written notice to the Objectors herein of its request for approval of the State Engineer pursuant to §37-92-308 or §37-92-309, C.R.S., or other applicable statute. Such notice shall be in addition to any notice required by the applicable statute. Applicant 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. The State

Engineer may not approve use of such water rights retroactively to the date of written notice to Objectors required hereunder and may not approve use of such water rights that would occur during any time period prior to the date a copy of the State Engineer's approval is provided to Objectors. The Court retains perpetual jurisdiction to review the use of additional water rights under this paragraph.

32.3.3. *Agreements for Additional Sources of Replacement Water Required.* Applicant shall not use additional augmentation supplies pursuant to this ¶32.3 unless Applicant has a written agreement with the owner(s) of the additional augmentation supplies allowing Applicant to do so or other document evidencing a right to the water. A copy of any such agreement or document shall be provided with the written notice to the Objectors and the Division Engineer and/or State Engineer required in ¶32.3.1 and ¶32.3.2.

32.4. *Metering.* Each Member Well shall be equipped with a totalizing flow meter. A Member Well without a flow meter shall not be pumped. Flow meters shall be maintained in working order. Flow meters shall be tested and certified as accurate at least once every four years by a registered professional engineer or other qualified person as approved in advance by the Division of Water Resources. In the event a flow meter malfunctions, the amount of water pumped during the time of malfunction shall be estimated based on power records for the well, by calculating the acre-feet pumped per kilowatt hour consumption for the prior month of pumping and multiplying that number times the kilowatt hours for the time period the flow meter malfunctioned. Applicant shall repair or replace a malfunctioning flow meter within 30 days of the time the malfunction is discovered. If not replaced within such time period, use of the Member Well shall cease until the malfunctioning flow meter is repaired or replaced.

32.5. *Consumptive Use Determination.* The quantity of depletions resulting from all pumping by the Member Wells that occurs at any time after November 1, 2012 shall be determined using the Presumptive Depletion Factor method. Using the Presumptive Depletion Factor method, the total amount of consumptive use of water pumped from each Member Well in any month for irrigation and non-irrigation uses shall be the total amount of metered pumping multiplied by the appropriate Presumptive Depletion Factor.

32.5.1.1. *Presumptive Depletion Factors - Irrigation.* The Presumptive Depletion Factors for flood irrigation, sprinkler irrigation, and drip irrigation shall be 0.60, 0.80 and 1.00, respectively.

32.5.1.2. *Presumptive Depletion Factors – Non-Irrigation.* The Presumptive Depletion Factor for non-irrigation uses shall be 1.0.

32.6. *Determination of Depletions.* The amount of the depletions affecting the South Platte River shall be the total amount pumped from each Member Well less total return flows. Total pumping from the Member Wells shall be shall be lagged back to the river using the Glover methodology described in ¶32.1. Total return flows from well pumping shall be equal to the amount pumped less the consumptive use of ground water. Return flows consist of a surface and subsurface component from each farm, and the initial percentages of surface and subsurface return flows for each farm which shall be used by Applicant in computing return flows are shown in **Exhibit M**. The Glover parameters to be used for lagging the subsurface component of return flows are also shown in **Exhibit M**. Any surface return flow component attributed to the ground water withdrawals shall be calculated monthly, and assumed to return to the river in the same month in which it was withdrawn distributed evenly on a daily basis. The subsurface return flow component of ground water withdrawals shall be lagged back to the river using the Glover methodology described in ¶32.1. Return flows from the use of Member Wells shall be assumed to return to the river in the administrative reaches in the percentages shown in **Exhibit N**. Depletions calculated as specified herein shall be calculated on a monthly basis, distributed and replaced evenly on a daily basis.

32.6.1. *Changes to the Surface/Subsurface Return Flow Percentages.* In the Annual Operating Plan described in ¶33.1, Applicant shall include an updated version of **Exhibit M**, with the percentages of surface return flows ("SF") and subsurface return flows ("SSF") for each farm based on the irrigation use for the year described in the Annual Operating Plan. Such percentages shall be determined based on the following: A farm irrigated with sprinkler or drip irrigation shall have the following percentages: SF = 0%, SSF = 100%. A farm irrigated with flood irrigation located less than 0.5 mile from the South Plate River or Box Elder Creek shall have the following percentages: SF = 50%, SSF = 50%. A farm irrigated with flood irrigation located between 0.5 and 1 mile from the South Plate River or Box Elder Creek shall have the following percentages: SF = 20%, SSF = 80%. A farm irrigated with flood irrigation located greater than 1 mile from the South Platte River or Box Elder Creek shall have the following percentages: SF = 0%, SSF = 100%.

32.7. *Latham-GMS Wells.* This plan for augmentation shall operate independently from the plan for augmentation decreed in Case No. 02CW335. All depletions caused by pumping of the Latham-GMS Wells following entry of this decree shall be determined and replaced under the terms and conditions of this decree. The Latham-

GMS Wells shall not pump under the decree in Case No. 02CW335 unless and until a Latham-GMS Well is deleted from this plan for augmentation pursuant to ¶32.2.2 and such well is subsequently authorized to pump under the decree in Case No. 02CW335. In addition, Applicant shall replace those ongoing depletions caused by pumping of the Latham-GMS Wells shown in **Exhibit L** which includes all depletions from pumping of the Latham-GMS Wells after 2005 as described in ¶15.4 above. Ongoing depletions from pumping of the Latham-GMS Wells in 2005 and prior shall be replaced under the terms and conditions of the decree in Case No. 02CW335, except that in the event that GMS is not in compliance with the terms of the decree in Case No. 02CW335, and is not fully replacing depletions associated with pre-2006 pumping of the Latham-GMS Wells, Applicant shall replace any unreplaced out-of-priority depletions that are occurring or that will occur from such past operation of the Latham-GMS Wells . The foregoing requirements shall also apply to any wells in the decree in Case No. 02CW335 that are added to this plan for augmentation in the future pursuant to ¶32.2.1.

32.8. *Replacements.* Applicant shall on a daily basis, and in compliance with the terms and conditions of this Decree, replace depletions resulting from future pumping of Member Wells and the post-pumping depletions from the Member Wells and Removed Wells set forth in **Exhibits K** and **L** in the time, location and amount required by this Decree.

32.8.1. *Time.* Depletions from Member Wells and the Removed Wells shall be replaced during times when the depletions affect the South Platte River or its tributaries and there is a valid call for water or an adjudicated exchange operating at or downstream of the point of depletion that is senior to the depleting well's water right. Unless accounting is provided for individual wells, depletions from Member Wells shall be considered out-of-priority during all times there is a valid downstream call from water rights or exchanges senior to the priority date of the most junior Member Well being covered by this plan for augmentation. The priority dates for the Member Wells are set forth in **Exhibit O**.

32.8.2. *Location.* Depletions from Member Wells and Removed Wells shall be assumed to affect the South Platte River in the administrative reaches identified for each well in **Exhibit F** for the Member Wells and **Exhibit G** for the Removed Wells. Applicant shall replace stream depletions at or above the location of the depletions, unless the calling water right is located downstream of one of the identified depletion locations and all decreed exchanges (1) that operate wholly or partially within the reach of the South Platte River between the location of the depletions and the location of the downstream calling water right and (2) that would be able to operate in the absence of such depletions, are satisfied, in which case Applicant may

replace its out-of-priority depletions at any location above the calling water right instead of at or above the point of depletion.

32.8.3. *Amount.* The amount of depletions to be replaced for each Member Well and Removed Well at any given time shall be determined pursuant to ¶¶15.4 and 32.5-32.6 herein.

32.9. *Recharge Operations.* Applicant proposes to deliver certain water to various recharge structures. The water delivered to such recharge structures will be allowed to percolate into the aquifer to generate accretions to the South Platte River.

32.9.1. *Water Rights Approved for Recharge.* The water rights approved by this Decree for delivery to the recharge structures described below, are the LLDC Shares and the Latham Augmentation Right (together "Recharge Rights"). In addition, the UDC Shares (*see* ¶14.2.6.2) and GIC Shares (*see* ¶14.2.6.1) may be delivered to the recharge structures and accounted for pursuant to the terms of this Decree provided that the decree entered in Case No. 06CW292 for the UDC Shares and the decree entered in Case No. 12CW96 for the GIC Shares permit such use, or until such time as these decrees are entered, if available pursuant to the terms of C.R.S. §37-92-308(4), such use is authorized by a substitute water supply plan approved by the State Engineer and the GIC Shares and UDC Shares are added to the augmentation plan pursuant to ¶32.3.

32.9.2. *Recharge Structures.* Applicant has identified recharge structures that are identified on **Exhibit I**, which sets forth information pertaining to each of the recharge structures. The approximate locations of the recharge ponds and the ditches used to fill them are shown on **Exhibit H**. The defined reaches of the Smith Lateral Ditch, defined reaches of the Lower Latham Ditch, and the measurement structures located between each ditch reach are shown on **Exhibit H**.

32.9.3. *Additional or modified recharge ponds.* Applicant may modify a recharge pond or add new recharge ponds to be served by the Recharge Rights so long as the Division Engineer approves in writing the modification of the existing recharge pond or new recharge pond prior to its use. Prior to the use of any new or modified recharge pond, Applicant shall provide notice of the new or modified recharge pond to the Division Engineer and Objectors at least sixty three (63) days before Applicant intends to use the new or modified recharge pond. Such notice shall include at least the following information: (1) a description of the proposed modification of any existing recharge pond; (2) the location of any new recharge pond; (3) the increased or new capacity of the recharge pond; (4) information regarding determination of the surface area for the new or modified recharge pond

as required by ¶32.9.5 of this Decree; (5) whether the accretions will affect the South Platte River or a tributary or drain to the South Platte River and the percentage of accretions accruing to each administrative reach from the recharge pond; (6) the Glover parameters which Applicant proposes to use to determine the effect of the increased or new accretions to the South Platte River; and (7) whether there will be an increase in consumptive use of ground water caused by use of the recharge pond. All terms and conditions applicable to the six recharge ponds approved in this Decree shall also apply to any new or modified recharge pond added hereunder. The Court retains perpetual jurisdiction to resolve any dispute regarding the approval, use or operation of any new or modified recharge pond.

32.9.4. *Monitoring of Additional Recharge Ponds.* Prior to delivery of water into any recharge pond other than the Recharge Ponds described in **Exhibit 1** ("Added Pond"), Applicant shall drill a test bore in the Added Pond to determine the depth of the water table below the ground surface. Applicant shall maintain records of the depth of the water table below the ground surface for each Added Pond and shall provide such records to the Division Engineer and Objectors within 35 days of such drilling. With respect to any Added Pond that is located in areas where the water table is determined to be within 10 feet of the ground surface based on the drilling of the test bore required by this paragraph, Applicant shall be required to conduct a survey of the existing vegetation growth down-gradient from the Added Pond prior to initial delivery of water into the Added Pond. The length of the surveyed area shall begin at the down gradient edge of the Added Pond and extend down gradient no less than twice the length of the longest diameter of the Added Pond. The width of the surveyed area shall be no less than twice the length of the longest diameter of the Added Pond. The survey shall include observations of vegetation in the surveyed area from May through September, which shall be made monthly or more frequently. Applicant shall conduct an identical follow-up survey five (5) years from the date of the initial survey required by this paragraph. Applicant shall provide the Division Engineer and all Objectors with a copy of the information pertaining to both the initial survey(s) and the follow-up survey(s) required by this paragraph within 35 days of the completion of the same. In the event the follow-up survey indicates increased vegetation growth within the surveyed area, Applicant shall file with the Court and serve on the Division Engineer and the Objectors, a petition, in writing, containing either: (1) a proposal to reduce the water level or to reduce accretions claimed from that Added Pond; or (2) evidence that neither the recharge deliveries to that Added Pond nor the water level need to be reduced to prevent recharge water from being consumed. The Division Engineer and the Objectors shall file any objections to Applicant's petition within 91 days of the date of service of such petition. If objections to the petition are filed, the Court shall conduct such proceedings as are necessary, including a hearing, to resolve the

objections and Applicant shall not be entitled to make any further deliveries of water to the affected Added Pond until such time as the objections are resolved. If no objections to the petition are filed, Applicant shall be entitled to make further deliveries of water to the affected Added Pond in accordance with the petition. The Court retains perpetual jurisdiction to resolve any disputes regarding this paragraph and whether the water delivered to the Added Ponds is being consumed rather than resulting in accretions to the South Platte River.

32.9.5. *Measuring Devices and Surface Area of Recharge Ponds.* Prior to the delivery of water to a recharge pond, Applicant shall install a continuous recording device capable of measuring and recording the amount of water delivered to the recharge pond on a daily basis. Each measuring device must be at least as accurate as a Parshall flume. If the recharge pond has the capability to release water, the outlet shall likewise be equipped with a continuous recording measuring device to measure outflows from the recharge pond on a daily basis. Applicant shall install a staff gauge at the lowest surface elevation in each recharge pond. All staff gauges must be readable from a readily accessible location adjacent to the recharge pond. All measuring devices required by this paragraph must be approved by the Water Commissioner prior to operation of the recharge pond. Any modified recharge pond or new recharge pond under ¶32.9.3 shall have installed measuring devices that comply with this paragraph. Each recharge pond shall be surveyed prior to use, and a stage-area-capacity curve delivered to the Division Engineer and all Objectors. In the event any party, other than the Division Engineer, objects to the determination of the maximum number of surface acres associated with delivery of water into the recharge pond or calculation of the relationship between the depth of the water in the recharge site and the exposed surface acres, the objection shall be filed with the Court within 63 days after service of the survey and stage-area-capacity curve on the Division Engineer and all parties to this case. The Court retains perpetual jurisdiction to resolve any dispute regarding the determination of surface area hereunder.

32.9.6. *Volume of Recharge from Recharge Ponds.* The net monthly volume of water recharged to the alluvial aquifer at each recharge pond shall be determined by measuring the amount of water delivered to that recharge pond by use of a continuous recording measuring device, and by subtracting: (1) the amount of water that flowed out of the recharge pond, if any, measured by use of a continuous recording measuring device; (2) the amount of water that was lost to evaporation, as determined by the method described in ¶32.9.7 of this Decree; (3) the amount of water lost to consumptive use due to vegetation located in the recharge pond, as determined by the method described in ¶32.9.8 of this Decree; (4) the amount of water retained in the recharge pond that has not yet percolated into the ground, as

determined using staff gauge data and the stage-area-capacity curve for the recharge structure. The staff gauge data shall be used to determine: (1) the volume of the water in the recharge pond; and (2) the exposed surface area of water, in acres.

32.9.7. *Evaporation.* Daily losses to evaporation from the recharge ponds shall be calculated based upon exposed surface area on a given day as determined (in acres) by observations of staff gage readings at a frequency of not less than one week and for intervening days obtained by interpolation. Exposed surface area for each recharge pond shall be computed using the stage-area-capacity curve for the recharge pond. Evaporation losses from each recharge pond shall be calculated by multiplying the surveyed surface area for the recharge pond by the rate of daily net evaporation for the exposed water surface. Applicant shall calculate the real time net evaporation from each recharge structure from data obtained from the CoAgMET Kersey station, or if data from that station is not available, from the CoAgMET LaSalle station. If data from the CoAgMET Kersey and LaSalle stations are not available, then Applicant shall use data from the next nearest CoAgMET station, which currently is the Greeley (GLY04) station. If for any reason data from the CoAgMET Kersey station, LaSalle station, and next nearest station are not available, Applicant shall use the average monthly evaporation loss values in Table 1 below, which are in inches per acre per month of exposed surface area, and divide the same by the number of days in the month for an average daily evaporation loss value. Real time net evaporation shall be determined on a daily basis as follows: Gross evaporation shall be computed by multiplying daily standard alfalfa reference crop evapotranspiration (ETr) published for the applicable CoAgMET station, in inches, by 1.2 to determine monthly gross pan evaporation in inches. Gross pan evaporation will then be multiplied by a pan coefficient of 0.7 to obtain daily gross pond evaporation in inches. Daily net pond evaporation will be computed as gross pond evaporation minus effective precipitation, where effective precipitation is total daily precipitation, in inches, multiplied by 0.7.

**TABLE 1**

| Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1.35 | 1.575 | 2.475 | 4.05 | 5.4 | 6.525 | 6.75 | 6.075 | 4.5 | 3.15 | 1.8 | 1.35 |

32.9.8. *Evapotranspiration.* Evapotranspiration losses from vegetation located within each recharge pond shall be assessed only to the extent there is vegetation within the confines of the recharge pond. The daily volume of water lost to evapotranspiration shall be calculated by multiplying the number of acres of the recharge pond covered with vegetation in a given month by the following factors (in feet) during the two

months following any month in which water is in the recharge pond, to arrive at an amount in acre-feet consumed by such vegetation.

**TABLE 2**

| Apr | May | Jun | Jul | Aug | Sept | Oct |
|---|---|---|---|---|---|---|
| 0.08 | 0.16 | 0.27 | 0.40 | 0.35 | 0.22 | 0.08 |

32.9.9. *Lagging Recharge Accretions.* The timing of accretions to the South Platte River from the recharge ponds shall be calculated using the Glover Methodology described in ¶32.1, and the Glover parameters for each pond in **Exhibit I.**

32.9.10. *Accounting for Sources of Water Delivered to Recharge Sites.* Applicant shall separately record deliveries to the recharge ponds attributable to each of the Recharge Rights, and shall track the accretions attributable to each of the Recharge Rights separately in its accounting.

32.9.11. *Limitations on Use of Recharge Ponds.* The recharge ponds shall only be used for deliveries of water from the Recharge Rights. All other uses of the recharge ponds are prohibited including, without limitation, storage of water for future use or for irrigation purposes.

32.9.12. *Right to Use Recharge Ponds Required.* The recharge ponds are located on lands owned or controlled by Applicant, or upon which Applicant owns an easement or contractual agreement with the owner of the recharge pond allowing Applicant to use the particular recharge pond. If Applicant does not have an easement to use all or any portion of a recharge pond described herein, Applicant shall not use the recharge pond until it has an agreement with the owner of the land where the recharge pond is located allowing Applicant to deliver water diverted under the water rights decreed herein to the recharge pond.

32.9.13. *Terms and Conditions of In-Ditch Recharge.* In-ditch recharge using the Smith Lateral Ditch and Lower Latham Ditch shall be subject to the following terms and conditions.

32.9.13.1. *Ditch Reaches.* The reaches of the Smith Lateral Ditch and Lower Latham Ditch are described in **Exhibit I** ("ditch reaches").

32.9.13.2. *Volume of Recharge from ditch reaches.* The daily amount of water recharged to the alluvial aquifer from each of the ditch reaches shall be determined by: (1) measuring the daily amount of recharge water delivered into each ditch reach as determined by use of a continuous recording measuring device; (2) subtracting the amount of water that flowed out of or was discharged from each ditch reach as determined by use of a continuous recording measuring device; (3) subtracting the amount of water that was lost to evaporation from each ditch reach in accordance with ¶32.9.7 above, based upon the surface areas set forth for each ditch reach in **Exhibit I,** for any day in which Applicant claims recharge from the ditch reach, and (5) subtracting any other outflows from each ditch reach. The measuring devices for the ditch reaches are also identified and described on **Exhibit H**.

32.9.13.3. *Calculation of lagged net recharge.* Accretions from the ditch reaches shall be calculated in accordance with the Glover Methodology described in ¶32.1 above, utilizing the Glover parameters for each ditch reach shown in **Exhibit I**.

32.9.13.4. *No Credit for In-Ditch Recharge When Any Other Water in Ditch Reaches.* Applicant shall not be entitled to claim recharge accretions resulting from ditch seepage from the Smith Lateral Ditch or Lower Latham Ditch when water other than water attributable to the Recharge Rights ("Other Water") is being simultaneously carried in the Smith Lateral and/or the Lower Latham Ditch. If no Other Water is being simultaneously carried with water from the Recharge Rights in the Lower Latham Ditch, Applicant may claim recharge accretions from seepage losses from the Lower Latham Ditch, even though Other Water is being carried in the Smith Lateral Ditch. If no Other Water is being simultaneously carried with water from the Recharge Rights in the Smith Lateral Ditch, Applicant may claim recharge accretions from seepage losses from the Smith Lateral Ditch, even though Other Water is being carried in the Lower Latham Ditch. If any ditch reach in either the Lower Latham Ditch or Smith Lateral Ditch is lined or piped or partially lined or piped in the future, no recharge accretions from seepage losses may be claimed for that ditch reach while the lining or piping is in place.

32.10. *Storage in Lower Latham Reservoir.* The water year for Lower Latham Reservoir shall be November 1 through October 31. Applicant shall account for the amount of water diverted to Lower Latham Reservoir whether in priority or out-of-priority, via the Union Ditch and the Morrison Seepage Ditch on a daily basis, and provide such accounting to the Division Engineer on at least a monthly basis or more frequently if requested by the Division Engineer. Applicant shall read and record Lower Latham

Reservoir's staff gage measurements daily and shall use the measurements to calculate the daily total volume of water in storage and the corresponding water surface area in Lower Latham Reservoir. Net evaporation shall be determined using the method described in ¶32.9.7. The administration and accounting for Lower Latham Reservoir will be based on a mass balance to calculate and account for all unmeasured inflows, including inflows from the Morrison Seepage Ditch. Any water stored in Lower Latham Reservoir and remaining in the reservoir on October 31 of any year shall be considered carryover storage for the new water year against the fill of the reservoir under the water rights decreed thereto ("Reservoir Rights"). Water attributable to the Lower Latham Reservoir Augmentation Pool identified in ¶14.3.4 that is in storage at the end of any water year shall not automatically count against the annual fill of the Reservoir Rights in the new water year. However, once the Reservoir Rights are filling in priority during the new water year and there is insufficient capacity in the reservoir for additional water, Applicant shall have the option of: (1) booking over water attributable to the Lower Latham Reservoir Augmentation Pool and counting it against the Reservoir Rights, or (2) choosing not to book over such water, in which case the Reservoir Rights shall be deemed filled, or (3) releasing such water from Lower Latham Reservoir. Any such water that is booked over shall be considered to be and accounted for as Reservoir Rights water and counted against the Reservoir Rights in Applicant's accounting. Any booking over shall be at rates and times when water is legally and physically available for diversion under the Reservoir Rights from the South Platte River or the Beebe Draw. Additionally, any water stored in the Lower Latham Reservoir by operation of the Latham Exchange Rights on inflows to the reservoir from the Morrison Seepage Ditch shall count against the fill of the Lower Latham Reservoir water rights to the extent the reservoir rights are in priority and otherwise entitled to store such water.

32.11. *Direct Replacements.* The locations of direct replacement to the South Platte River approved herein are the augmentation stations as described in ¶14.3.2, and the Augmentation Wells as described in ¶8.3. Any augmentation station shall be equipped with a measuring device capable of continuous recording. The following additional terms and conditions shall also apply to the delivery of augmentation and/or replacement water to the South Platte River:

32.11.1. *Pipeline.* If water is conveyed from an augmentation station or Augmentation Wells from the location of measurement to the South Platte River in a sealed pipeline, no other measurement shall be required and the amount of augmentation credit will be equivalent to the measured discharge at the augmentation station or Augmentation Well.

32.11.2. *Ditch, drain or tributaries.* Applicant shall measure the amount of augmentation water that is conveyed from an augmentation station to the South Platte River in a ditch, drain or tributary (excluding for purposes of this provision the Gibbs Spillway (¶14.3.2.7) the Box Elder Creek Return Structure (¶14.3.2.9), the Powell Spillway (¶14.3.2.6), the Union Ditch Return Structure (¶14.3.2.5) and the unnamed tributary (¶8.3)) at or as near as practicable to the location at which the water is placed into the river. The amount of augmentation credit received by Applicant shall be the lesser of a) the measurement at the location at which the water is placed into the river, or b) the measurement at the point where the water is discharged to the ditch, drain or unnamed tributary, reduced by transit losses due to evaporation and evapotranspiration, which amount will be determined by the Division Engineer. For purposes of calculating the amount of augmentation credit received by Applicant from water delivered to the South Platte River via the Gibbs Spillway, the Box Elder Creek Return Structure, the Powell Spillway, the Union Ditch Return Structure or the unnamed tributary described in ¶8.3 (because these ditches, drains and unnamed tributaries have continuous live flow), Applicant shall measure the water at the location where the water is delivered to the ditch, drain or unnamed tributary, which amount shall be reduced by appropriate transit losses. The Division Engineer shall determine such transit losses, but in no event shall the transit losses be less than 0.25% per mile. The distance between the point of measurement and the South Platte River for the Gibbs Spillway, the Box Elder Creek Return Structure, the Powell Spillway, and the Union Ditch Return Structure is set forth in the following Table.

| | Open Channel Distance from Flume to S. Platte River (mi) |
|---|---|
| Union Ditch Return | 0.8 |
| Gibbs Spillway | 0.1 |
| Powell Spillway | 0.5 |
| Box Elder Return | 5.0 |

With respect to the WCR 69 Spillway and the Box Elder Creek Return Structure the following additional terms shall apply:

32.11.2.1. *WCR 69 Spillway.* For the WCR 69 Spillway, Applicant shall be required to contemporaneously measure water at the point where water is delivered into WCR 69 Spillway, and at a point following its release from the Empire Inlet Canal at a point immediately upstream of the confluence of the outlet channel from the Empire Inlet Canal to which the release is made with the South Platte River. The amount of water that Applicant may claim for use as

replacement water in this augmentation plan shall be the lesser of the two contemporaneous measurements, reduced by transit losses due to evaporation and evapotranspiration, which amount will be determined by the Division Engineer. In order for augmentation and return flow replacement water released through the WCR 69 Spillway to reach the South Platte River, it would have to first be run through a portion of the Empire Inlet Canal, which is owned by the Bijou Irrigation District, and then delivered out of said Canal to the South Platte River. Applicant does not currently have an agreement with the Bijou Irrigation District for the use of the Empire Inlet Canal for these purposes, and before using it for the delivery of water pursuant to this decree, Applicant must obtain that right as set forth in ¶42. Also, Applicant acknowledges that as part of obtaining any right of access to use the Empire Inlet Canal in this manner, additional measuring structures will be needed in order to measure and deliver water released through the WCR 69 Spillway for delivery through the Empire Inlet Canal to the South Platte River, and those measuring structures must be approved by both the Bijou Irrigation District and the Division Engineer, and shall be installed and maintained at the cost of the Applicant and without any increased maintenance or operating cost to the Bijou Irrigation District.

32.11.2.2. *Box Elder Creek Return Structure.* For the Box Elder Creek Return Structure, Applicant shall be required to measure water at the point where water is delivered into Box Elder Creek, and, if deemed necessary by the Bijou Irrigation District, at a point following its release from the Empire Inlet Canal at a point immediately upstream of the confluence of the outlet channel from the Empire Inlet Canal to which the release is made with the South Platte River. If the measurement following release from the Empire Inlet Canal is deemed necessary by the Bijou Irrigation District, the amount of water which Applicant may claim for use as replacement water in this augmentation plan shall be the lesser of: (a) the measurement at the measurement structure following release from the Empire Inlet Canal, or (b) the measurement at the location at which the water is delivered into Box Elder Creek reduced by transit losses due to evaporation and evapotranspiration, as set forth in ¶32.11.2. In order for augmentation and return flow replacement water released through the Box Elder Creek Return Structure to reach the South Platte River, it would have to first be run down approximately 5.0 miles of Box Elder Creek, then through a portion of the Empire Inlet Canal, which is owned by the Bijou Irrigation District, and then delivered out of said Canal to the South Platte River. Applicant does not currently have an agreement with the Bijou Irrigation District for the use of the Empire Inlet Canal for these purposes, and before using it for the delivery of water pursuant to this Decree,

Applicant must obtain that right as set forth in ¶42. Also, Applicant acknowledges that as part of obtaining any right of access to use the Empire Inlet Canal in this manner, additional measuring structures may be needed in order to measure and deliver water released through the Box Elder Creek Return Structure for delivery through the Empire Inlet Canal to the South Platte River, and those measuring structures must be approved by both the Bijou Irrigation District and the Division Engineer, and shall be installed and maintained at the cost of the Applicant and without any increased maintenance or operating cost to the Bijou Irrigation District.

32.11.2.3. Applicant shall provide notice of any such agreements for the use of the WCR 69 Spillway, the Box Elder Creek Return Structure and the Empire Inlet Canal and the type and location of any proposed measuring structures to the Division Engineers and Objectors at least sixty-three (63) days prior to first operating under such an agreement. The notice required by this paragraph shall include a copy of the agreement. Notwithstanding anything in ¶32.11.2 and its subparagraphs, Objectors shall be entitled to file an objection to Applicant's use of the WCR 69 Spillway, the Box Elder Creek Return Structure, and/or the Empire Inlet Canal pursuant to the noticed agreement, including, but not limited to, whether an additional measurement structure or structures will or will not be constructed and whether the agreement contains sufficient terms and conditions to ensure that water will be delivered through the Empire Inlet Canal to the South Platte River in the amounts claimed. If any Objector files a Notice of Objection to the agreement within thirty-five (35) days of service of the notice required by this paragraph, Applicant shall not operate under the agreement until it is approved by the Court. If no Notice of Objection is timely filed, and the Division Engineer does not object, Applicant may begin to operate under the agreement after completion of the 63-day notice period. The Court shall retain perpetual jurisdiction to resolve any objections filed under ¶32.11.2.3.

32.11.3. *Canal No. 3 Return Structures.* Applicant agrees that the Greeley Irrigation Company ("GIC") owns and/or operates the following Structures: (1) the F Street structure, (2) the 23rd Avenue structure, (3) the 16th Street structure, or (4) any other structure approved by the Company. It is the GIC's policy that GIC shall reasonably determine the delivery location of GIC replacement water for augmentation purposes at any given time based on operations of the ditch, with consideration being given to the delivery location requested by the shareholder and the needs of the Company, its shareholders and Greeley; provided, however, that the Company will coordinate with the River Commissioner to deliver augmentation water to the structure necessary to satisfy a downstream administrative call. GIC

and the City of Greeley (Greeley) are cotenant owners of the Canal No. 3. Nothing in this decree is intended to modify the cotenant ownership interests of Greeley and GIC in the Canal No. 3, or any specific agreement between Greeley and GIC relating to Canal No. 3.

32.11.4. *Additional Augmentation Stations.* In the event Applicant seeks to deliver water directly to the South Platte River via an augmentation station not approved herein, it shall first file with the Court and serve on the Division Engineer and Objectors a notice at least sixty-three (63) days prior to first operating such an augmentation station identifying the location of the augmentation station, the equipment and infrastructure present at the site, and the means of delivery to the South Platte River, including any transit losses to be assessed en route to the South Platte River. If any Objector files a Notice of Objection within thirty-five (35) days of service of the notice required by this paragraph, Applicant shall not operate the augmentation station until it is approved by the Court. The Court shall retain perpetual jurisdiction to resolve any dispute regarding additional augmentation station.

33. Annual Operating Plan, Pumping Quota, and Projection.

33.1. *Annual Operating Plan.* Prior to April 1 of each year, Applicant shall submit an Annual Operating Plan to the Division Engineer and the Objectors. The Annual Operating Plan shall include, at minimum: (1) the projection, as described in ¶33, (2) the Pumping Quota for the Member Wells, as described in ¶33.3, (3) all information required by this Decree for calculating well depletions and return flows for the year of the Annual Operating Plan, (4) the report described in ¶30.5, (5) an updated version of **Exhibit M** described in ¶32.6.1, and (6) a description of which of the Historically Irrigated Lands, if any, will be irrigated with the LLDC Shares in the coming irrigation season.

33.2. *Projection.* On or before April 1 of each year, Applicant shall make an annual projection and monthly projection, by administrative reach, of the projected depletions from Member Wells, Removed Wells and Augmentation Wells, the projected supply of augmentation water for replacing out-of-priority depletions, the projected return flow obligations associated with the LLDC Shares and the source of water to be used to replace the projected return flow obligations. The projection year shall be April 1 through March 31. Such projection shall forecast depletions and augmentation supplies to replace depletions on a monthly basis for a period of five years, and shall forecast return flow obligations and replacement supplies to replace return flow obligations on a monthly basis for a period of five years. The purpose of the projection is to demonstrate that Applicant will have sufficient augmentation

supplies during the projection period to replace all depletions from prior and current year well pumping to be replaced under this plan for augmentation and sufficient replacement supplies to replace all return flow obligations during the entire projection period. The projection will be used to limit the pumping of the Member Wells and Augmentation Wells under this augmentation plan. The annual and monthly projections required hereunder shall be submitted on the Projection and Quota spreadsheet attached hereto as **Exhibit P**. The projection and quota spreadsheet is not decreed by this Decree and may be changed from time to time so long as all information required by this Decree is included in the spreadsheet, Objectors are given 30 days advance written notice of proposed changes and all changes are approved by the Division Engineer after providing an opportunity for Objectors to comment on the proposed changes. The initial projection and each revised projection shall be provided to the Division Engineer and to Objectors in electronic format, in an Excel spreadsheet - or comparable format if technology changes - with cell formulas included, on April 1 of each year and as often as it is updated thereafter. If a projection is not submitted by April 1, all well pumping under the plan for augmentation and all use of the LLDC Shares shall cease until the projection is submitted.

33.2.1. *Information required.* The annual and monthly projections shall include the following information by administrative reach:

33.2.1.1. *Depletions from previous pumping.* All depletions associated with pumping the Member Wells and Removed Wells before November 1, 2012, from **Exhibits K** and **L**. All depletions associated with pumping of the Member Wells and the Augmentation Wells, that has occurred from November 1, 2012 to the date of the projection, calculated pursuant to ¶¶32.5-32.6.

33.2.1.2. *Projected well pumping and depletions.* The amount of Member Well and Augmentation Well pumping that can occur in Year 1 of the projection and resulting depletions that will occur from such pumping over the five-year projection period, calculated pursuant to the provisions of ¶33.3. Pumping of the Member Wells and Augmentation Wells shall be projected in Year 1 of the projection only.

33.2.1.3. *Projected recharge accretions.* The amount of accretions expected to accrue to the river during the projection period as a result of the actual delivery of water to recharge structures under the Recharge Rights pursuant to ¶32.9 which occurred prior to the date of the projection.

33.2.1.4. *Projected Use of LLDC Shares.* The amount of deliveries of water under the LLDC Shares to be used for direct replacement, deliveries to recharge, and irrigation.

33.2.1.5. *Return flow obligations.* The amount of return flow obligations associated with previous and projected use of the LLDC Shares under this Decree. Return flow obligations associated with previous use of the LLDC Shares shall be calculated pursuant to ¶30.3 based on actual deliveries. Return flow obligations associated with the projected use of the LLDC Shares shall be calculated pursuant to ¶30.3 based on deliveries projected under ¶33.2.2.2.

33.2.1.6. *Additional or alternate supplies.* Any additional or alternate supplies or credits that have been authorized for use in the plan pursuant to ¶32.3 of this Decree, the amounts of which are known at the time the projection is made, that the Applicant has secured for any part or all of the projection period.

33.2.1.7. *Estimated transit loss.* Estimated transit loss shall be assumed as 0.5% per mile unless transit loss is increased in the South Platte River by the Division Engineer for all water users in the area of one or more of the administrative reaches.

33.2.2. *Projection limitations and assumptions.*

33.2.2.1. *Period of call.* The projection shall be completed assuming that a call senior to the priorities of the water rights for the Member Wells will occur continuously for all years of the projection and that all depletions from Member Well, Augmentation Well and Removed Well pumping and all return flow obligations associated with the LLDC Shares must be replaced at all times throughout the projection period.

33.2.2.2. *Projected deliveries of the LLDC Shares.* Projected deliveries attributable to the LLDC Shares shall be limited to the monthly amounts shown in **Exhibit Q.**

33.2.2.3. *Projected Deliveries of GIC Shares and UDC Shares.* If Applicant is authorized to operate the GIC Shares identified in ¶14.2.5.1 or the UDC Shares identified in ¶14.2.5.2 under substitute water supply plans approved by the State Engineer pursuant to §37-92-308(4), C.R.S., with respect to the applications filed in Case Nos. 12CW96 and 06CW292, and Applicant adds the GIC Shares or UDC Shares to the plan for augmentation pursuant to ¶32.3.2, the amounts shown in **Exhibit Q** shall be used in the projection to

project the dry-year yields of the GIC Shares and UDC Shares. Applicant will request a final determination regarding the dry-year yields of the GIC Shares and UDC Shares in Case Nos. 12CW96 and 06CW292 and, if final decrees are entered in those cases, will seek to add the GIC Shares and UDC Shares to the plan for augmentation pursuant to ¶32.3.1.

33.2.2.4. *Projected Augmentation Well Pumping.* Pumping the Augmentation Wells shall be projected only at such times as all other augmentation sources are projected to be insufficient to replace depletions and only to the extent all out-of-priority depletions from the use of the Augmentation Wells themselves can be replaced for the entire projection period with augmentation supplies other than Augmentation Well pumping. Augmentation Well pumping may only be projected during the current projection year (April through March) of the projection. No Augmentation Well pumping shall be projected in years following the current calendar year of the projection. Projected Augmentation Well deliveries shall not exceed physical delivery capacity and shall only include amounts for the Augmentation Wells owned by Applicant or for which Applicant has a signed agreement, and only for the term of that agreement. Applicant shall project appropriate transit losses for the delivery of water pumped from Augmentation Wells to the point of delivery to the South Platte River.

33.2.2.5. *Projection of delivery for leased water rights.* Projected deliveries of leased water supplies shall be based on the amount to which Applicant has a fixed and definite delivery right, which may be updated on a monthly basis if and when additional leased supplies are obtained.

33.2.3. *Periodic updates.* Applicant shall complete a periodic update of the annual and monthly projections based on actual to date operations of all wells and augmentation supplies included in the projection and use of the LLDC Shares and replacement supplies for replacement of associated return flow obligations for any month in which: (1) projected augmentation supplies or supplies to replace return flow obligations will be less than in the April 1 projection or the most recent periodic update; or (2) actual depletions will be more than in the April 1 projection or the most recent periodic update; (3) Pumping Quota is transferred between Member Wells pursuant to paragraph ¶33.3, or (4) Applicant has sold or transferred a replacement source relied upon in a previous projection. Applicant shall complete any periodic update not later than the end of the month following the occurrence of the event that causes the update to be required and shall, in the same month a periodic update is completed, submit the update to the Division Engineer and to Objectors in electronic format, in an Excel spreadsheet - or comparable format if

technology changes - with cell formulas included. Applicant may update the annual projection at other times it deems appropriate and shall submit each update to the Division Engineer, Water Commissioner and Objectors in electronic format, in an Excel spreadsheet - or comparable format if technology changes - with cell formulas included.

33.3. *Well Pumping Restrictions.* In order to ensure that actual ground water use from the Member Wells, and the resulting depletions therefrom, does not exceed the projected available augmentation supplies, Applicant shall specify an annual pumping limitation for each well ("Pumping Quota").

33.3.1. *Member Well Pumping Quota.* No later than April 1 of each year, Applicant shall set a Pumping Quota for each Member Well that specifies an acre-foot amount of water that may be pumped by each Member Well during the current year. The Pumping Quota shall be limited in accordance with the annual projection developed under ¶33.2 and may be adjusted monthly based on the amount of actual well depletions and augmentation water supplies. Not later than April 1 of each year, or on such earlier date as the annual projection is completed, and at other times as Applicant determines necessary or desirable, Applicant shall notify Member Well owners of the Pumping Quota that shall be allowed for each of that owner's Member Wells during the projection period. Applicant shall at the same time provide the Pumping Quota information to the Division Engineer and the Objectors as part of the Annual Operating Plan. Pumping Quotas may differ by well. Each Member Well owner shall limit annual pumping of such Member Well during the current projection year (April 1 of the current year to March 31 of the following calendar year) to the amounts allowed by the Pumping Quota for such Member Well and updates to the Pumping Quota for such Member Well. Monthly flow meter readings for each Member Well shall be provided by Applicant to the Division Engineer and/or Water Commissioner so that it can be determined whether the annual Pumping Quota for any Member Well or the plan as a whole has been exceeded. Pumping Quotas allocated to Member Wells may be transferred from one Member Well to another Member Well pursuant to this paragraph, provided also that such transfer would not result in depletions in any administrative reach in excess of the augmentation supplies available in any administrative reach, and that such transfer is reflected in the updated projection required in ¶33.2.3(3) and the updated accounting required in this paragraph. Any such transfer shall first be approved by the Applicant and notice of such approval shall be provided to the Division Engineer and the Objectors as soon as is practicable but no later than 7 days after the transfer is approved by the Applicant. Such notice shall include, at a minimum, information about identities of the Member Wells that are involved in the transfer, any increase or decrease in depletions within any administrative reach

resulting from the transfer of the Pumping Quota, the adjusted pumping limit for the Member Wells to and from which the Pumping Quota is transferred, an updated projection, updated accounting forms, and any additional or changed replacement supplies necessitated by the transfer of the Pumping Quota. Any such transfer must be shown as a separate line item in the projection and on the accounting. If any Objector files with the Court an objection to a notice of the transfer within thirty-five (35) days of service of the notice, the transfer shall thereafter not be effective until it is approved by the Court. The Court shall retain perpetual jurisdiction to resolve any dispute regarding the transfer of pumping quotas.

33.4. *Unreplaced Obligations.* The pumping of Member Wells shall at all times be limited to the pumping allowed by the projection set forth in ¶33. If at any time the projected depletions from Member Well pumping that must be replaced under this Decree and the return flow obligations associated with the LLDC Shares exceed the amount of projected augmentation and replacement supplies in any administrative reach, Applicant shall immediately do one or both of the following:

33.4.1. *Reduction of Projected Pumping and Depletions.* Applicant shall immediately limit or fully curtail well pumping so that Applicant replaces all out-of-priority depletions from Member Wells, Removed Wells, and Augmentation Wells, and all return flow obligations associated with the LLDC Shares in time, location and amount under the terms and conditions of this Decree. Applicant may allocate reduced pumping between Member Wells. The amount of pumping curtailment for each Member Well shall be determined by Applicant in accordance with Applicant's Bylaws, Rules and Regulations and Policies, so long as Applicant at all times curtails well pumping sufficiently to replace all out-of-priority depletions and return flow obligations in time, location and amount under the terms and conditions of this Decree.

33.4.2. *Additional Water Right*s. To the extent that full curtailment of pumping of Member Wells and Augmentation Wells, does not result in full replacement of depletions and return flow obligations, Applicant shall secure by purchase or lease water rights in accordance with ¶32.3 that will be sufficient in time, location and amount to replace all projected depletions and return flow obligations.

34. Accounting and Reporting Procedures.

34.1. *Credit Allotted to Augmentation Sources.* Deliveries of water available to the LLDC Shares shall be measured through the structures identified in ¶14.3.2 that are available for use in this plan for augmentation and recorded daily. Augmentation and replacement water will be administered past ditch river headgates in accordance with

¶35.2 by the Division Engineer. Conveyance of any augmentation and replacement supplies in the South Platte River or tributaries thereto shall be assessed transit losses as described in ¶35.3. Applicant shall coordinate with the Division Engineer to assure proper administration and accounting of the augmentation and replacement supplies and Surplus and Excess Recharge Accretions.

34.2. *Frequency of Reporting.* Reporting to the Division Engineer of Applicant's operations under this Decree will be done on a monthly basis. Accounting for Applicant's operations under this Decree will be done on a daily basis, and all accounting for each month's operation will be completed and sent to the Division Engineer, and to the Objectors upon request, in the same electronic format no later than the 15th day of the following month. To the extent that the Division Engineer makes the accounting accessible to the public in an online database Applicant shall not be required to separately provide the accounting to the Objectors unless an Objector specifically requests the accounting. Applicant shall also provide the Annual Operating Plan described in ¶33.1 no later than April 1 and the Fall Dry Up Report described in ¶30.5 no later than November 15. Preliminary accounting forms are attached hereto and incorporated herein by reference as **Exhibit R**. The final accounting forms have not yet been approved by the Division Engineer and must be approved by the Division Engineer. Applicant shall provide to the Objectors notice of the proposed final accounting forms and shall submit them to the Division Engineer within 28 days of entry of this Decree. Any Objector may submit comments concerning the proposed final accounting forms to the Division Engineer within 63 days of entry of this Decree. The final accounting forms are not decreed herein and, after approval by the Division Engineer, may be changed from time to time with 35 days advance written notice to all Objectors and the approval of the Division Engineer. The Division Engineer shall not approve the final accounting forms or changes to the final accounting forms until after Objectors have had an opportunity to comment on the final accounting forms or any subsequent proposed changes to the final accounting forms. The final accounting forms and any subsequently approved changed accounting forms shall include, at minimum, all information included in **Exhibit R** and all information required by this Decree.

34.3. *Minimum Terms.* Applicant's accounting under this Decree shall include, at a minimum, the information included in the accounting forms attached as **Exhibit R** and the following information by administrative reach:

- The meter readings, volume of water pumped, type of irrigation, consumptive use of ground water, daily surface and ground water return flows, and corresponding daily depletions for each well, which shall be recorded,

accounted for daily and reported monthly along with the resulting daily augmentation obligation associated with said pumping;

- The diversions of the water rights decreed herein recorded daily and reported monthly;
- Deliveries for all uses made of the LLDC Shares and the historical return flow obligations, which shall be accounted for daily and reported monthly;
- All deliveries of LLDC Shares water to the South Platte River pursuant to ¶30.8;
- Tracking of compliance with all volumetric limits;
- The calling water right and its priority and location which shall be recorded daily and reported monthly;
- The amount of deliveries of each water source to each recharge structure including in-ditch recharge, which shall be measured and accounted for daily and reported monthly;
- The amount of recharge pond evaporation, water lost to evapotranspiration of vegetation in the recharge ponds, and water remaining in each recharge pond for each source of water, which shall be accounted for daily and reported monthly;
- The amount of recharge accretions for each water source for each recharge structure, which shall be accounted for daily and reported monthly;
- The amount of any additional or alternative augmentation supplies, which shall be accounted for daily and submitted monthly;
- Daily accounting of depletions, accretions, return flow obligations, deliveries and net river balance for each river administrative reach.
- Excess or shortfall of replacement water on each day by river administrative reach.
- Daily accounting of return flow obligations and consumptive uses for the LLDC Shares.
- Daily accounting of lagged recharge accretions from each recharge pond from prior years' recharge deliveries and current years' recharge deliveries.
- Daily accounting of net stream depletions for each well from prior years' pumping and current years' pumping.
- Daily accounting of augmentation releases used to replace stream depletions and return flow obligations.

- Daily accounting of all inflows, outflows, losses, and storage contents by account for the Lower Latham Reservoir.
- Daily accounting of the exchange from and exchange to amounts and the source of substitute supply used in the exchange.
- Daily accounting of the internal exchanges described in ¶14.3.6.
- Daily outflows from each recharge structure (ponds and ditch reaches) including releases, evaporation, and vegetation consumptive use.
- Daily storage contents in each recharge pond.
- Transit losses assessed on a daily basis on water conveyed in a ditch or stream for replacement purposes.

35. Duties of the State Engineer.

35.1. *Curtailment.* The State Engineer and Division Engineer shall administer this Decree in accordance with the terms and conditions set forth herein. The State Engineer shall curtail all out-of-priority diversions the depletions from which are not so replaced as to prevent injury to vested water rights, pursuant to §37-92-305(8), C.R.S.

35.2. *Delivery of Replacement Supplies.* The Division Engineer with the approval of the State Engineer shall administer the movement of water involved in this augmentation plan. The State and Division Engineers shall at all times ensure that water in excess of the amount needed to replace out-of-priority depletions and required return flows within each administrative reach will be passed downstream of the administrative reaches, including past any water rights which are drying up the stream, to the extent such excess amount is required to replace out-of-priority depletions and required return flows at a downstream location. In order to prevent injury to other water rights, State water officials must be capable of administering Applicant's replacement water past headgates on the South Platte River at times when those headgates would otherwise be legally entitled to divert all available flow in or "sweep" the river. Applicant shall not receive credit for replacement of depletions to the South Platte River unless bypass or measurement structures are in place to allow State water officials to ensure that Applicant's replacement water is delivered past the headgates. In the event that delivery past dry-up points requires the use of a structure for which an agreement with a third party is required, Applicant shall be responsible for securing the agreement. Pursuant to C.R.S. §37-84-113, if required by the State and Division Engineer or his representative, Applicant shall install and maintain suitable and proper measuring or other devices to ensure proper administration of this Decree, including but not limited to the State and Division Engineer's administration obligations pursuant to this ¶35.

35.3. *River and Ditch Transit Losses.* When water for augmentation or replacement purposes is transported in the South Platte River or its tributaries for any of the functions, purposes or uses authorized by this Decree, the Division Engineer or his designated representative shall assess reasonable losses resulting from such transportation when determining the amount of water available for such uses by Applicant in the same manner as for other water users on the South Platte River. Transit losses shall be assessed based on the actual distance between the point where the augmentation or replacement water is delivered to the stream and the locations of the out-of-priority depletions or return flow obligations to be replaced. For the purposes of assessing transit losses within the administrative reaches, the midpoint of each administrative reach, identified in ¶14.3.1, shall be used.

36. Enforcement. Applicant shall maintain summaries of Member Well and Augmentation Well meter readings, and shall immediately report to the State and Division Engineer any Member Well that pumps more than the amount authorized by Applicant. If the well owner refuses to cease pumping, Applicant shall take action under its Bylaws, Rules, Regulations and Policies to prevent further pumping. Upon notice, the Division Engineer may also issue orders to cease pumping to the Member Well Owner. Applicant shall be required to replace any depletions caused by Member Well pumping, even pumping it does not authorize, unless the depletions are replaced pursuant to another decreed augmentation plan or substitute water supply plan approved by the State Engineer pursuant to C.R.S. § 37-92-308(4), or successor statutes

37. *Post-pumping Depletions*. Depletions from pumping of Member Wells, including the Augmentation Wells, continue for a period of time after well pumping has ceased. In addition to any other requirement to replace well depletions under this Decree, Applicant shall, in accordance with the terms and conditions of this Decree, replace all out-of-priority depletions that occur after pumping of any Member Well or Augmentation Well ceases. The augmentation supplies to replace such depletions under this Decree shall be those water rights described in this Decree or any other augmentation supplies which may have been added under the terms and conditions of this Decree. Applicant shall be required to operate and use such water rights in order to assure that all post-pumping depletions will be replaced in accordance with this Decree. The Court retains perpetual jurisdiction over this plan for augmentation to determine whether all such post-pumping depletions are being and will be replaced under the terms and conditions of this Decree.

38. Additional augmentation plans. Owners of Member Wells, or agents therefor, may develop additional augmentation plans to support pumping beyond the amount allowed by this Decree. In such event the amount of water to be pumped and actually pumped under each plan must be projected and accounted for.

39. Approval of Plan for Augmentation. Subject to the terms and conditions of this decree the requested plan for augmentation is hereby APPROVED.

40. Measuring devices. In addition to the measuring devices expressly required herein, Applicant shall install and maintain such additional meters, gauges, or other measuring devices required by the Water Commissioner or Division Engineer, and shall report at reasonable times to the Water Commissioner and/or Division Engineer the readings of such additional meters, gauges, or other measuring devices pursuant to §37-92-502(5)(a), C.R.S.

41. Administration by the State and Division Engineers. The State Engineer and Division Engineer shall administer this Decree in accordance with the terms and conditions set forth herein.

42. Use of Structures. Nothing in this Decree shall be construed to create any right of Applicant to utilize land or structures owned by parties other than Applicant for the diversion or carriage of water, nor be construed to enlarge any right to use lands, structures or facilities currently possessed by Applicant. Applicant may utilize existing water diversion, carriage and storage structures only to the extent it then has acquired the right to use such structure from the appropriate entities, by purchase, by exercise of the power of eminent domain, or by other appropriate means. Similarly, Applicant may utilize land for the construction and operation of such structures only to the extent that it has acquired the right to use such land from the appropriate entities, by purchase, by exercise of the power of eminent domain, or by other appropriate means. Nothing in this decree determines the existence or scope of Applicant's right, if any, to exercise the power of eminent domain against any specific entity that owns structures or facilities within which the Applicant may seek to acquire rights in the future.

43. Incorporation of Exhibits. **Exhibits A** through **R** are incorporated by reference into this Decree as though set forth fully herein.

44. Binding Effect of Decree. Applicant shall record this Decree with the clerk and recorder for Weld County within 10 days after the expiration of the right of all parties to appeal, and shall file a certificate with the Court specifying the date of recording and the recording information. The terms and conditions of this Decree shall bind, and be enforceable against, Applicant, the owners of the Member Wells and their successors and assigns and against those persons or entities who contract with Applicant for use of water that may be available under the Recharge Right and/or the Exchange and their successors and assigns. Nothing in this paragraph is intended to affect the exercise of any remedy that may be available to any person affected by the failure of Applicant to comply with the terms and conditions of this Decree.

45. Adoption of Rules and Regulations and Other Requirements. Applicant shall adopt rules and regulations, bylaws and policies that are consistent with, and that will permit Applicant to fully comply with the terms and conditions of this Decree and shall enforce such rules and regulations and policies against the owners of the wells included in this plan for augmentation and the LLDC Shares, and their successors and assigns. Applicant shall provide copies of the applicable rules and regulations or other documents to the Division Engineer and the Objectors in this matter. The Court retains perpetual jurisdiction to consider whether the rules and regulations or other requirements adopted by the Applicant from time to time are consistent with and permit Applicant to fully to comply with, the terms and conditions of this Decree.

46. No Precedent. There was no trial in this matter and no issues were litigated. The Findings of Fact, Conclusions of Law and Decree were completed as the result of substantial discussions, negotiations and compromises by, between and among Applicant and the several Objectors pertaining to all parts of the findings, conclusions 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 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 be allowed in any other matter, case or dispute. All parties stipulate and agree that they do not intend the findings, conclusions, judgment and decree to have the effect of precedent or preclusion on any factual or legal issue in any other matter. 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, judgment and Decree.

47. Validity of Well Permits. Pursuant to C.R.S. §37-90-137(1), any increased or extended use of a well that occurred on or after May 17, 1965 must occur pursuant to a valid well permit issued pursuant to C.R.S. § 37-90-137(2). Entry of this Decree does not validate any expansion of use that may have occurred for any Member Well, nor does it establish that each Member Well is operating in compliance with its permit and/or decree.

48. Retained Jurisdiction. Pursuant to the provisions of C.R.S. §37-92-304(6), this Court retains jurisdiction over this case for all purposes for a period of ten (10) years from the date of this Decree. In addition, the Court shall retain perpetual jurisdiction with regard to the issues addressed by ¶¶30.3.5, 30.4, 30.5.3, 30.5.4, 32.2.2, 32.3 (and its subparagraphs), 32.9.3, 32.9.4, 32.9.5, 32.11.2.3, 32.11.4, 33.3.1, 37, and 45. Any person, including the State and

Division Engineers, may invoke retained jurisdiction within the general retained jurisdiction period or under perpetual jurisdiction, by filing a petition to do so with this Court. Such petition shall be filed under the caption and case number of this case and shall be served on counsel of record for all parties. Any petition to invoke retained jurisdiction shall set forth with particularity the factual basis and the alleged injury or decree dispute or violation upon which the requested reconsideration is premised, together with proposed decree language modifications or other relief offered by the petitioning party to remedy the alleged injury or address the decree dispute or violation. Responses to the petition shall be filed no later than 91 days after the date of service of the petition. The petitioning party shall have the initial burden of going forward to establish the prima facie facts alleged in the petition, but Applicant shall have the ultimate burden of proof to show either that the alleged injury, decree dispute or decree violation has not occurred or will not occur, or to propose additional terms and conditions which will prevent the injury from occurring or address the decree dispute or decree violation

49. Diligence. The conditional water rights awarded herein are continued in full force and effect until the last day of November, 2018. If the Applicant desires to maintain such conditional water rights, an application for finding of reasonable diligence shall be filed on or before the last day of November, 2018, or a showing made on or before such date that the conditional water rights have become absolute by reason of the completion of the appropriation.

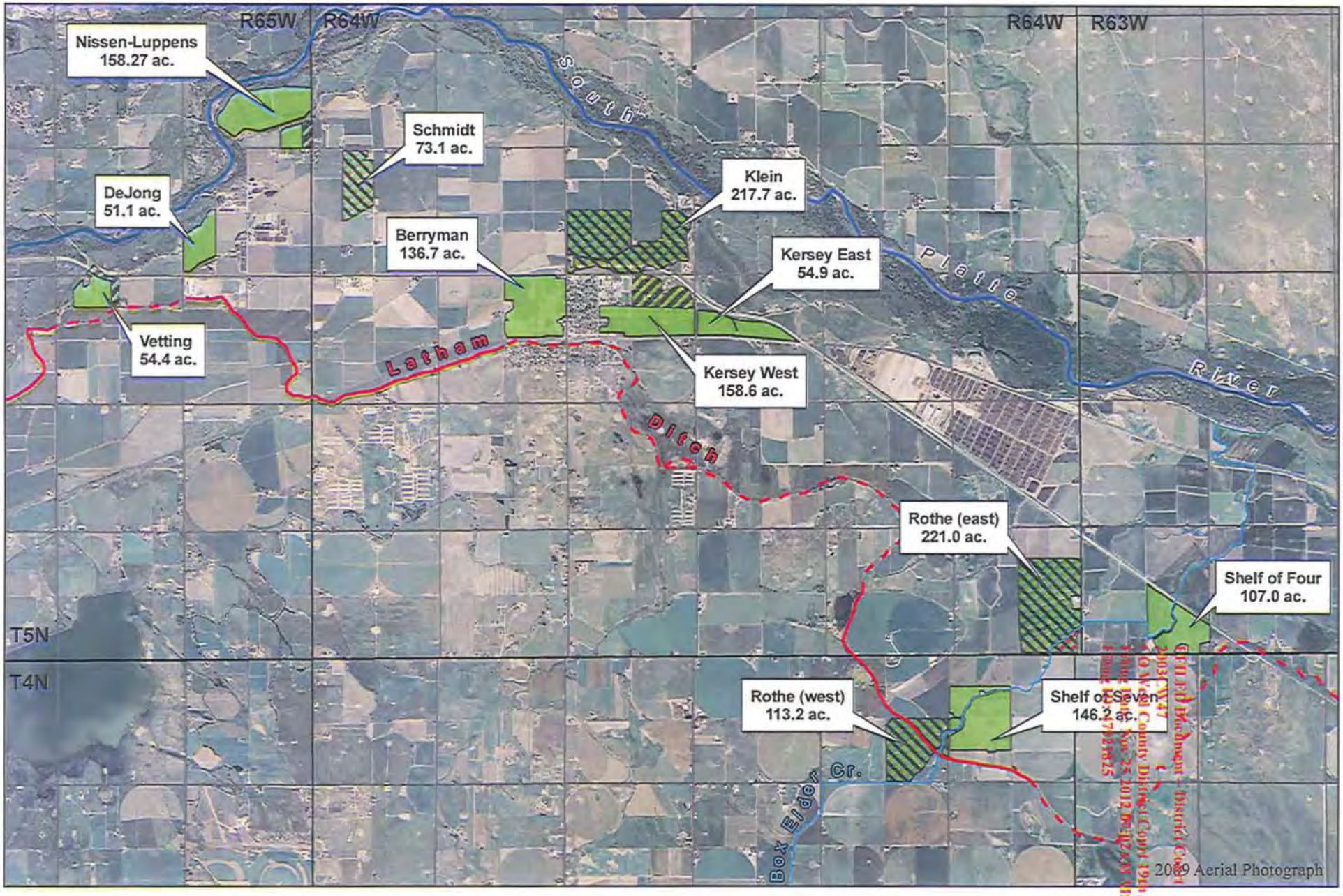
50. Priorities. The priorities herein awarded to Applicant for the conditional water rights were filed in the Water Court in the year of 2007 and shall be administered as having been filed in that year; and shall be junior to all priorities filed in previous years. As between all rights, filed in the same calendar year, priority shall be determined by historical date of appropriation and not affected by date of the entry of ruling.

DATED this 25th day of November, 2012

BY THE COURT:

James Hartmann

James F. Hartmann
Water Judge
Water Division No. 1
State of Colorado

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**DRY-UP LEGEND:**
- Dry-up Covenant
- Dry-up "In-fact"
- LLRC Owned

# Exhibit A

LOWER LATHAM RESERVOIR Co.
Dry-up of Irrigated Lands

TYPICAL SECTION GRID

0 0.25 0.5 1 Miles

| | |
|---|---|
| Date: | 8-2-2012 |
| Drawn By: | DS |
| Scale: | as shown |
| Job No: | 09-200 |

**EXHIBIT B**

LLDC Change of Use - Dry-up Summary

Case No. 03CW047 / 06CW291

| | Dry-Up Requirement | | | | | Dry-up Available | | | |
|---|---|---|---|---|---|---|---|---|---|
| Farm Name | Maximum Irrigated Area during Historical Study Period (acres)[9] | Avg Annual Pro-rata River Diversions - LLDC and LLRC shares (acre-feet) | Avg Annual Pro-rata River Diversions - LLDC shares only (acre-feet) | Percent of Total Pro-rata River Diversions attributable to LLDC shares (%) | Portion of Historical Irrigated Area Attributed to LLDC Shares (acres)[10] | Dry-up Area Identified in Dry-up Covenants (acres) | Dry-Up Area "in-fact" (acres) | Dry-up Area for LLRC Owned Lands (acres) | Total Dry-Up Area (acres) |
| Berryman | 136.7 | 623.4 | 588.6 | 94.4% | 129.1 | 136.7 | 0.0 | 0.0 | 136.7 |
| DeJong [1] | 51.1 | 415.6 | 392.4 | 94.4% | 48.3 | 55.9 | 0.0 | 0.0 | 51.1 |
| Kersey East [2] | 54.9 | 207.8 | 196.2 | 94.4% | 51.8 | 62.2 | 0.0 | 0.0 | 54.9 |
| Kersey West [3] | 158.6 | 842.7 | 784.8 | 93.1% | 147.7 | 83.0 | 75.7 | 0.0 | 158.6 |
| Klein | 217.7 | 1,060.7 | 981.0 | 92.5% | 201.3 | 0.0 | 0.0 | 217.7 | 217.7 |
| Nissen-Luppens [4] | 159.2 | 724.4 | 686.7 | 94.8% | 150.9 | 154.4 | 3.9 | 0.0 | 158.3 |
| Rothe | 334.2 | 819.6 | 784.8 | 95.8% | 320.0 | 0.0 | 0.0 | 334.2 | 334.2 |
| Schmidt [5] | 73.1 | 415.6 | 392.4 | 94.4% | 69.0 | 0.0 | 0.0 | 73.1 | 73.1 |
| Shelf of Four [6] | 107.0 | 207.8 | 196.2 | 94.4% | 101.0 | 102.3 | 4.7 | 0.0 | 107.0 |
| Shelf of Seven [7] | 179.9 | 601.6 | 588.6 | 97.8% | 178.0 | 146.2 | 0.0 | 0.0 | 146.2 |
| Vetting [8] | 54.4 | 196.2 | 196.2 | 100.0% | 54.4 | 45.0 | 9.4 | 0.0 | 54.4 |
| Total | 1,526.8 | 6,115.3 | 5,787.9 | - | 1,449.6 | 785.6 | 93.6 | 625.0 | 1,492.2 |



Notes:

[1] The total dry-up was adjusted to not exceed the maximum irrigated acreage for the historical study period.

[2] Max irrigated acreage for Kersey East was 109.8, which was irrigated with 2 shares. The pro-rata acreage for 1 share (owned by the LLRC) is shown above. The total dry-up was adjusted to not exceed the maximum irrigated acreage for the historical study period.

[3] Regardless of existing covenants, LLDC water can no longer be delivered to this parcel due to the headgate being abandoned and the lateral no longer in service.

[4] The current owners of land claimed as dry-up "in-fact" do not own LLDC water. The LLDC has control over future delivery to this farm.

[5] LLRC currently owns the property and has a covenant from the prior land owner.

[6] The entire parcel is dried up. Dry-up "in-fact" represents the acreage not included in the covenant.

[7] Dry-up covenant includes lands that are not owned by Shelf of Seven. Acreage was reduced accordingly, reflective of the LLRC's 3 shares.

[8] Dry-up "in-fact" includes lands that were removed from irrigation for the re-alignment of US-34 and that which was developed for home sites (prior to Mr. Vetting's tenure).

[9] Historical study period for LLDC change of use = 1950-2000.

[10] Portion of irrigated area attributed to LLDC shares determined from the average annual pro-rata river diversions associated with LLDC shares only.

**EXHIBIT C**

**Information for LLDC Change of Use Farms**

Case No. 03CW047 / 06CW291

| Farm | Legal Description of Historical Returns | River/Stream | Percent of Surface Return Flows by Administrative Reach | | | | | Percent of Subsurface Return Flows by Administrative Reach | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Reach A | Reach B | Reach C | Reach D | Reach E | Reach A | Reach B | Reach C | Reach D | Reach E |
| Berryman | SW ¼, Section 14, T.5.N., R.64 W., 6th P.M. | South Platte River | - | - | - | - | - | - | 15% | 85% | - | - |
| DeJong | NW ¼, Section 13, T.5.N., R.65 W., 6th P.M. | South Platte River | - | 50% | 50% | - | - | - | 50% | 50% | - | - |
| Kersey East | NW ¼, Section 15, T.5.N., R.64 W., 6th P.M. | South Platte River | - | - | - | - | - | - | - | 100% | - | - |
| Kersey West | NW ¼, Section 15, T.5.N., R.64 W., 6th P.M. | South Platte River | - | - | - | - | - | - | - | 100% | - | - |
| Klein | SW ¼, Section 14, T.5.N., R.65 W., 6th P.M. | South Platte River | - | - | - | - | - | - | - | 100% | - | - |
| Nissen-Luppens | NE ¼, Section 16, T.5.N., R.64 W., 6th P.M. | South Platte River | - | - | 100% | - | - | - | - | 100% | - | - |
| Rothe | SE ¼, Section 36, T.5.N., R.64 W., 6th P.M.<br>SE ¼, Section 2, T.4.N., R.64 W., 6th P.M. | Box Elder Creek | - | - | 28% | 7% | 67% | - | - | 26% | 7% | 67% |
| Schmidt | NE ¼, Section 12, T.5.N., R.65 W., 6th P.M. | South Platte River | - | - | - | - | - | - | 20% | 80% | - | - |
| Shelf of Four | SE¼, Section 31, T.5.N., R.63 W., 6th P.M. | Box Elder Creek | - | - | 5% | 20% | 75% | - | - | 5% | 20% | 75% |
| Shelf of Seven | NW ¼, Section 1, T.4.N., R.64 W., 6th P.M. | Box Elder Creek | - | - | - | - | 100% | - | - | - | - | 100% |
| Vetting | SW ¼, Section 14, T.5.N., R.65 W., 6th P.M. | South Platte River | 15% | 75% | 10% | - | - | 15% | 75% | 10% | - | - |
| | Weighted Percentage for Administrative Reaches = | | 0.4% | 10.9% | 37.4% | 1.3% | 50.0% | 0.5% | 8.7% | 83.1% | 0.4% | 7.3% |

| | | | |
|---|---|---|---|
| Lower Latham Reservoir Company | **Exhibit D**<br>Augmentation Well Delivery | Date: 7-19-2012<br>Drawn By: RVP<br>Scale: 1 inch = 500 feet<br>Job No: 09-200 | clearWATERsolutions |

**EXHIBIT E**

**Exchange Matrix**

Case No. 03CW047 / 06CW291

| *All values in cfs* | | | **Exchange-To Points** | |
|---|---|---|---|---|
| | | | **1** | **2** |
| | | | *Lower Latham River Headgate (NW1/4 NE1/4 Section 31, T5N, R65W)* | *Lower Latham Reservoir (Sections 34 & 35, T5N, R65W and Sections 2 & 3, T4N, R65W)* |
| **Exchange-From Points** | **A** | *South Platte River immediately upstream from the Patterson Ditch River Headgate (NE1/4 NE1/4 Section 21, T5N, R65W)* | 35 | - |
| | **B** | *South Platte River immediately upstream from the Highland Ditch (aka Plumb Ditch) River Headgate (E1/2 Section 14, T5N, R65W)* | 35 | 21 |
| | **C** | *South Platte River immediately upstream from the Empire Ditch River Headgate (SW1/4 SW1/4 Section 19, T5N, R63W)* | 35 | 21 |
| | **D** | *South Platte River immediately upstream from the Riverside Inlet Canal River Headgate (SW1/4 SW1/4 Section 20, T5N, R63W)* | 35 | 21 |
| | **E** | *South Platte River immediately upstream from the Bijou Canal River Headgate (NE1/4 NE1/4 Section 13, T4N, R63W)* | 35 | 21 |

**Notes:**

(1) All legal locations are within Weld County, Colorado; Township referenced from the 6th Principal Meridian.

**EXHIBIT F**

**Participating Wells in the LLRC Augmentation Plan**

Case No. 03CW047 / 06CW291

| Well Name | Well Permit No. | WDID | CMS-Latham Well? | Glover Parameters | | | | | Percent of Depletions by Administrative Reach | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | W (ft) | B (ft) | T (gal/day-ft) | S | X (ft) | Reach A | Reach B | Reach C | Reach D | Reach E |
| 70 Ranch (Axelson) | 1361 | 205730 | Yes | 9,234 | 2,027 | 217,989 | 0.20 | 7,207 | - | 20% | 80% | - | - |
| 70 Ranch (Clyncke) | 6631 | 108281 | No | 3,601 | 1,985 | 135,977 | 0.20 | 1,616 | - | - | 40% | 10% | 50% |
| AJR Farms (Main) | 6416 | 206609 | No | 10,595 | 8,288 | 104,414 | 0.20 | 2,306 | - | 50% | 50% | - | - |
| AJR Farms (NE) | 2932 | 205188 | Yes | 11,097 | 9,064 | 108,977 | 0.20 | 2,033 | - | 50% | 50% | - | - |
| AJR Farms (W) | 6416 | 206610 | No | 10,261 | 7,797 | 102,268 | 0.20 | 2,464 | - | 50% | 50% | - | - |
| Bihain | 1-20380 | 105729 | Yes | 9,171 | 1,880 | 218,976 | 0.20 | 7,291 | - | - | 80% | 5% | 15% |
| Bihain | 2-20389 | 105730 | Yes | 9,217 | 2,117 | 220,817 | 0.20 | 7,100 | - | - | 95% | 5% | - |
| Borys | 13255 | 205067 | No | 12,806 | 11,022 | 115,398 | 0.20 | 1,784 | - | - | 100% | - | - |
| Buderus (N) | 7167 | 106451 | No | 6,765 | 2,027 | 128,580 | 0.20 | 4,739 | - | - | - | - | 100% |
| Buderus (S) | 7166 | 106450 | No | 6,488 | 1,368 | 119,717 | 0.20 | 5,120 | - | - | - | - | 100% |
| Centennial Valley Ranch (Ayres/Big Viper) | 7169 | 106453 | Yes | 8,610 | 7,042 | 223,693 | 0.20 | 1,568 | - | - | 5% | 20% | 75% |
| Centennial Valley Ranch (Campbell) | 15932 | 108260 | Yes | 10,207 | 10,062 | 187,090 | 0.20 | 145 | - | - | - | - | 100% |
| Centennial Valley Ranch (Corliss) | 13949 | 107942 | Yes | 8,966 | 4,788 | 286,592 | 0.20 | 4,178 | - | - | - | - | 100% |
| Centennial Valley Ranch (Rein) | 15950 | 108259 | Yes | 9,674 | 9,654 | 207,408 | 0.20 | 20 | - | - | - | - | 100% |
| Chestnut Farms | 5854 | 107208 | No | 6,673 | 1,174 | 73,511 | 0.20 | 5,899 | - | - | 100% | - | - |
| Chestnut Farms | 5855 | 107209 | No | 7,997 | 2,498 | 96,310 | 0.20 | 5,499 | - | - | 100% | - | - |
| Danks (N) | 13960 | 108172 | Yes | 8,406 | 6,361 | 170,981 | 0.20 | 2,045 | - | - | - | - | 100% |
| Danks (S) | 7168 | 106452 | Yes | 9,436 | 5,163 | 157,772 | 0.20 | 4,275 | - | - | - | - | 100% |
| Desperado Dairy (Bosch) | 8840 | 205878 | Yes | 10,749 | 9,083 | 103,940 | 0.20 | 1,666 | - | 50% | 50% | - | - |
| Duell | 12972 | 205583 | Yes | 9,057 | 1,550 | 213,814 | 0.20 | 7,507 | - | 15% | 85% | - | - |
| Dunn | 11604 | 205020 | No | 13,754 | 10,382 | 116,874 | 0.20 | 3,372 | - | 25% | 75% | - | - |
| ECCV (NHF 70 Ranch) | 15508 | 106169 | No | 4,779 | 164 | 77,124 | 0.20 | 4,615 | - | - | - | - | 100% |
| ECCV (NHF 70 Ranch) | 15510 | 106175 | No | 6,203 | 604 | 92,041 | 0.20 | 5,599 | - | - | - | - | 100% |
| ECCV (NHF 70 Ranch) | 15507 | 106176 | No | 4,673 | 1,945 | 136,479 | 0.20 | 2,728 | - | - | - | - | 100% |
| ECCV (NHF 70 Ranch) | 15506 | 106177 | No | 4,956 | 1,469 | 130,090 | 0.20 | 3,487 | - | - | - | - | 100% |
| ECCV (NHF 70 Ranch) | 15509 | 106178 | No | 3,849 | 976 | 105,030 | 0.20 | 2,873 | - | - | - | - | 100% |
| Foos | 15879 | 108665 | Yes | 10,755 | 7,592 | 119,094 | 0.20 | 3,163 | - | - | 100% | - | - |
| Frank | 6836 | 106575 | Yes | 10,519 | 4,719 | 114,075 | 0.20 | 5,800 | - | - | - | - | 100% |
| Frank | 5885 | 106578 | Yes | 10,532 | 6,659 | 109,659 | 0.20 | 3,873 | - | - | - | - | 100% |
| Frank | 5886 | 106580 | Yes | 10,744 | 5,572 | 122,142 | 0.20 | 5,172 | - | - | - | - | 100% |
| Gibbs | 1537 | 206355 | No | 15,153 | 13,989 | 191,212 | 0.20 | 1,164 | 85% | 15% | - | - | - |
| Gilham | 6289 | 105554 | No | 9,924 | 4,787 | 113,107 | 0.20 | 5,137 | - | 20% | 80% | - | - |
| Greeley Shelf of Four (LJM Buderus) | 3316 | 106454 | No | 5,594 | 4,050 | 175,020 | 0.20 | 1,544 | - | - | 5% | 20% | 75% |
| Hergenreder | 10104 | 107765 | Yes | 8,389 | 2,365 | 223,465 | 0.20 | 6,024 | - | - | - | - | 100% |
| Hergenreder (Sr) | 1787 | 106911 | Yes | 6,122 | 3,159 | 181,312 | 0.20 | 2,963 | - | - | - | - | 100% |
| Hoshiko (Galsick) | 11651 | 205226 | Yes | 10,666 | 6,282 | 107,888 | 0.20 | 4,384 | - | 45% | 55% | - | - |
| Hoshiko (Gunther) | 8225 | 106733 | No | 10,597 | 5,649 | 266,819 | 0.20 | 4,948 | - | 10% | 90% | - | - |
| Hoshiko (Herbst) | 16121 | 106894 | No | 9,343 | 1,770 | 173,904 | 0.20 | 7,573 | - | - | 100% | - | - |
| Hoshiko (Rothe) | 506 | 108169 | Yes | 3,961 | 2,633 | 133,354 | 0.20 | 1,328 | - | - | - | - | 100% |
| Hoshiko (Schlagel) | 8672 | 108279 | Yes | 5,676 | 2,058 | 146,266 | 0.20 | 3,618 | - | - | 40% | 10% | 50% |
| Hoshiko (Solis) | 11669 | 208150 | No | 10,413 | 4,691 | 256,125 | 0.20 | 5,722 | - | 10% | 90% | - | - |
| Howard (E) | 12017 | 207984 | Yes | 12,525 | 5,702 | 108,686 | 0.20 | 6,823 | - | 20% | 80% | - | - |
| Howard (W) | 11611 | 206822 | Yes | 10,996 | 5,704 | 108,687 | 0.20 | 5,292 | - | 20% | 80% | - | - |
| JBS Five Rivers (Cogburn E) | 6571 | 107943 | Yes | 8,775 | 2,673 | 142,366 | 0.20 | 6,102 | - | - | 50% | 20% | 30% |
| JBS Five Rivers (Cogburn W) | 6571 | 108168 | Yes | 8,243 | 1,557 | 182,052 | 0.20 | 6,686 | - | - | 80% | 5% | 15% |
| Klein J (Centennial) | 5964 | 205044 | Yes | 8,414 | 3,139 | 108,651 | 0.20 | 5,275 | 10% | 20% | 70% | - | - |
| Klein J (N) | 12985 | 207638 | No | 14,197 | 9,642 | 116,421 | 0.20 | 4,555 | - | - | - | - | 100% |
| Klein J (N) | 4183 | 207639 | No | 13,778 | 11,851 | 128,316 | 0.20 | 1,927 | - | - | - | - | 100% |
| Klein L | 8718 | 206827 | No | 9,219 | 3,366 | 118,481 | 0.20 | 5,853 | 10% | 20% | 70% | - | - |
| Klein L | 8720 | 206837 | No | 9,140 | 3,312 | 117,657 | 0.20 | 5,828 | 10% | 20% | 70% | - | - |
| Klein W | 12743 | 108252 | No | 9,247 | 7,736 | 359,820 | 0.20 | 1,511 | - | - | 100% | - | - |
| Klein W | 10103 | 206843 | No | 9,088 | 5,187 | 346,149 | 0.20 | 3,901 | - | - | 100% | - | - |
| Klein, W | 5659 | 107184 | No | 9,044 | 6,023 | 345,354 | 0.20 | 3,021 | - | - | 100% | - | - |
| Ledford | 11365 | 107429 | No | 9,197 | 4,193 | 237,578 | 0.20 | 5,004 | - | - | 100% | - | - |
| LLRC (Cecil farms) | 12735 | 205991 | Yes | 10,160 | 4,215 | 192,941 | 0.20 | 5,865 | - | 10% | 90% | - | - |
| LLRC (F Klein) | 13463 | 107160 | No | 8,925 | 3,437 | 324,034 | 0.20 | 5,488 | - | - | 100% | - | - |
| LLRC (F Klein) | 13464 | 107163 | No | 8,931 | 3,631 | 333,635 | 0.20 | 5,300 | - | - | 100% | - | - |
| LLRC (Jurgens) * | 12253-R | 107064 | No | 12,552 | 8,307 | 278,823 | 0.20 | 4,245 | - | - | 100% | - | - |
| LLRC (Jurgens) * | 8606-R | 107066 | No | 11,547 | 8,166 | 312,223 | 0.20 | 3,381 | - | - | 100% | - | - |
| LLRC (Rothe Farm A) | 11292 | 108162 | No | 4,127 | 2,790 | 139,526 | 0.20 | 1,337 | - | - | 40% | 10% | 50% |
| LLRC (Rothe W) | 5965 | 108161 | No | 3,749 | 3,670 | 117,212 | 0.20 | 79 | - | - | - | - | 100% |
| LLRC (Schmidt) | 11605 | 205989 | No | 13,733 | 9,224 | 111,777 | 0.20 | 4,509 | - | 20% | 80% | - | - |
| Lorenz Farms | 13982 | 207034 | No | 12,200 | 8,631 | 151,036 | 0.20 | 3,569 | 30% | 60% | 10% | - | - |
| Lorenz Farms | 13985 | 207045 | No | 12,227 | 11,965 | 168,887 | 0.20 | 262 | 15% | 85% | - | - | - |
| McGauley | 11845 | 207451 | No | 10,315 | 6,000 | 108,296 | 0.20 | 4,316 | 10% | 35% | 55% | - | - |
| Millage (Schlagel) | 10100 | 106260 | No | 8,554 | 1,798 | 163,920 | 0.20 | 6,756 | - | - | 80% | 5% | 15% |
| Millage Bros | 1512 | 108775 | Yes | 3,637 | 3,477 | 153,624 | 0.20 | 160 | - | - | - | - | 100% |
| Mowery | 8719 | 206836 | No | 7,981 | 1,568 | 115,183 | 0.20 | 6,413 | 10% | 20% | 70% | - | - |
| P&H Joint Venture | 11534 | 207778 | Yes | 5,847 | 1,497 | 69,882 | 0.20 | 4,350 | - | - | 100% | - | - |
| P&H Joint Venture | 11538 | 207779 | Yes | 6,153 | 1,359 | 72,481 | 0.20 | 4,794 | - | - | 100% | - | - |
| Pankow (N) | 6230 | 107690 | No | 10,612 | 9,865 | 111,777 | 0.20 | 747 | - | - | - | - | 100% |
| Park | 12316 | 107896 | Yes | 8,079 | 2,359 | 225,316 | 0.20 | 5,720 | - | - | - | - | 100% |
| Park | 21014 | 107897 | Yes | 8,081 | 2,533 | 234,526 | 0.20 | 5,548 | - | - | - | - | 100% |
| Peterson | 11886 | 107951 | No | 10,880 | 8,198 | 285,701 | 0.20 | 2,682 | - | - | 15% | 20% | 65% |
| Puype (Gunther) | 11399 | 206452 | No | 13,327 | 7,361 | 105,813 | 0.20 | 5,966 | - | 20% | 80% | - | - |

**EXHIBIT F**

**Participating Wells in the LLRC Augmentation Plan**

**Case No. 03CW047 / 08CW291**

| Well Name | Well Permit No. | WDID | GMS-Latham Well? | Glover Parameters | | | | | Percent of Depletions by Administrative Reach | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | W (ft) | B (ft) | T (gal/day-ft) | S | X (ft) | Reach A | Reach B | Reach C | Reach D | Reach E |
| 70 Ranch (Axelson) | 1361 | 205730 | Yes | 9,234 | 2,027 | 217,989 | 0.20 | 7,207 | - | 20% | 80% | - | - |
| Puype (Gunther) | 11844 | 207453 | No | 14,233 | 7,328 | 115,509 | 0.20 | 6,995 | - | 20% | 80% | - | - |
| Rein | 13958 | 108072 | Yes | 9,761 | 8,634 | 149,078 | 0.20 | 1,127 | - | - | - | - | 100% |
| Rothe (Home) | 13071 | 108160 | Yes | 8,350 | 7,795 | 150,334 | 0.20 | 555 | - | - | 5% | 20% | 75% |
| Rothe (Home) | 13073 | 108163 | Yes | 4,856 | 4,806 | 156,007 | 0.20 | 50 | - | - | 5% | 20% | 75% |
| Rothe (N of Home) | 10836 | 108166 | Yes | 5,805 | 4,473 | 171,029 | 0.20 | 1,332 | - | - | 5% | 20% | 75% |
| Rothe (N of US34 E) | 15931 | 108253 | Yes | 11,494 | 10,029 | 325,832 | 0.20 | 1,465 | - | - | - | 10% | 90% |
| Rothe (N of US34-E) | 04137 | 108254 | Yes | 6,424 | 6,267 | 252,003 | 0.20 | 157 | - | - | - | 10% | 90% |
| Rothe (N of US34-W) | 11057 | 108164 | Yes | 10,877 | 8,843 | 311,575 | 0.20 | 2,034 | - | - | 15% | 20% | 65% |
| Rothe (N of US34-W) | 16392 | 108255 | Yes | 10,891 | 7,353 | 289,029 | 0.20 | 3,538 | - | - | 15% | 20% | 65% |
| Sandin | 4482 | 206832 | Yes | 10,266 | 5,568 | 111,031 | 0.20 | 4,698 | 10% | 35% | 55% | - | - |
| Schaumberg | 10990 | 206696 | Yes | 13,278 | 6,181 | 207,989 | 0.20 | 7,095 | - | 10% | 90% | - | - |
| Siebring | 12021 | 108733 | Yes | 7,411 | 4,742 | 217,544 | 0.20 | 2,669 | - | - | - | - | 100% |
| Siebring Trust (N) | 12019 | 108353 | Yes | 7,116 | 5,934 | 260,981 | 0.20 | 1,182 | - | - | - | 10% | 90% |
| Siebring Trust (S) | 11526 | 108352 | Yes | 6,781 | 5,397 | 217,254 | 0.20 | 1,384 | - | - | 55% | 5% | 40% |
| Van Wyke | 4303 | 108734 | Yes | 5,531 | 5,489 | 212,597 | 0.20 | 42 | - | - | - | - | 100% |
| Weico Farms (C Sparrow) | 11491 | 106179 | No | 8,086 | 2,420 | 225,793 | 0.20 | 5,666 | - | - | - | - | 100% |

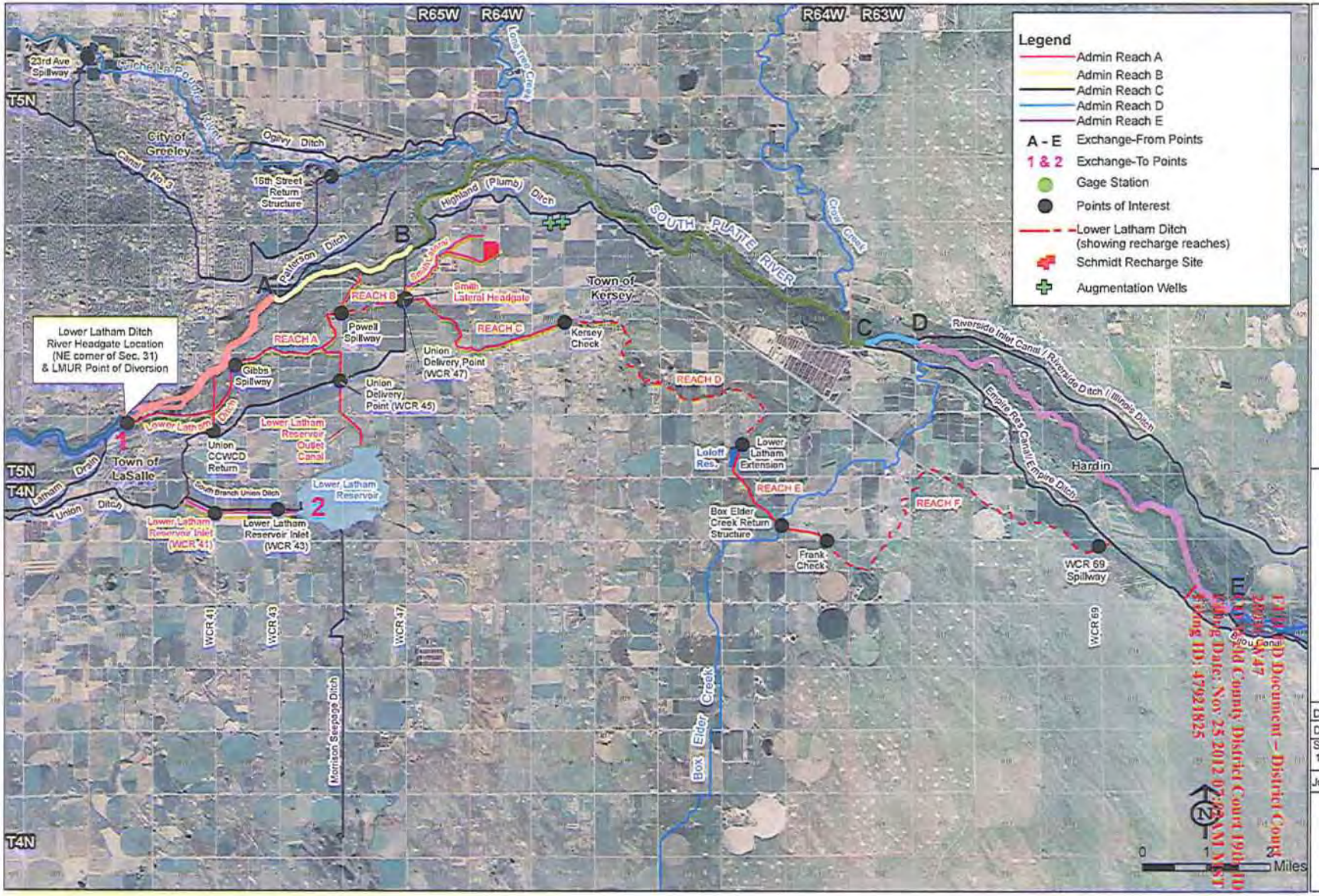
* Indicates an augmentation well

## EXHIBIT G

**Wells Removed from LLRC Augmentation Plan**

Case No. 03CW047 / 06CW291

| Well Name | Well Permit No. | WDID | Years Active in LLRC SWSP | Percent of Depletions by Administrative Reach | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | Reach A | Reach B | Reach C | Reach D | Reach E |
| Berryman Farms | 4481 | 206845 | 2003 - 2006 | - | 15% | 85% | - | - |
| Berryman Farms | 11524 | 206830 | 2003 - 2005 | - | 15% | 85% | - | - |
| DeJong | 20033 | 206449 | 2003 - 2007 | - | 50% | 50% | - | - |
| Eckhardt (Pritchard) | 523 | 108033 | - | NA | NA | NA | NA | NA |
| Lorenz Farms | 13983 | 207038 | - | NA | NA | NA | NA | NA |
| Lorenz Farms | 13984 | 207042 | - | NA | NA | NA | NA | NA |
| Magnuson | 6170 | 208655 | - | NA | NA | NA | NA | NA |
| Shelf of Greeley Seven (Pankow) | 6838 | 108264 | 2003 - 2006 | - | - | - | - | 100% |






clearWATERsolutions

**Exhibit H**

Replacement Plan Detail

Lower Latham Reservoir Company

| | |
|---|---|
| Date: | 9-26-2011 |
| Drawn By: | MLH |
| Scale: | 1 inch = 1.4 miles |
| Job No: | 09-200 |

**EXHIBIT I**

**List of Recharge Structures**

Case No. 93CW047 / 86CW231

| Name of Recharge Structure | Legal Description of Structure Location | Length (feet) | Width (feet) | Surface Area (acres) | Glover Parameters | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | | | | | W (ft) | B (ft) | T (gpd-ft) | S | X (ft) |
| **SCHMIDT RECHARGE FACILITY** | | | | | | | | | |
| North Sedimentation Pond | | - | - | 0.372 * | | | | | |
| South Sedimentation Pond | | - | - | 0.288 * | | | | | |
| Pond No.1 | SE ¼ NW ¼ Section 18, T5N, R64W | - | - | 1.679 * | 8,670 | 3,370 | 130,700 | 0.20 | 5,300 |
| Pond No.2 | | - | - | 1.693 * | | | | | |
| Pond No.3 | | - | - | 1.692 * | | | | | |
| Pond No.4 | | - | - | 1.713 * | | | | | |
| **SMITH LATERAL DITCH** | | | | | | | | | |
| Lateral Headgate to Bifurcation | Sections 13, 24, T5N, R65W | 6,050 | 12.0 | 1.67 | | | | | |
| Bifurcation to N. Headgate | Sections 13, T5N, R65W; Section 18, T5N, R64W | 2,325 | 11.5 | 0.61 | 10,781 | 7,381 | 154,000 | 0.20 | 3,400 |
| Bifurcation to S. Headgate | Sections 13, T5N, R65W; Section 18, T5N, R64W | 3,295 | 8.0 | 0.61 | | | | | |
| **LOWER LATHAM IN-DITCH RECHARGE** | | | | | | | | | |
| Reach A | Sections 21, 22, 27, 28, 29, T5N, R65W | 24,365 | 24.0 | 13.42 | 16,600 | 14,140 | 175,000 | 0.20 | 2,460 |
| Reach B | Section 25, T5N, R65W | 5,245 | 24.0 | 2.89 | 12,000 | 8,150 | 150,000 | 0.20 | 3,850 |
| Reach C | Section 24, T5N, R65W; Sections 19, 24, T5N, R64W | 17,275 | 22.0 | 8.72 | 9,940 | 2,910 | 123,000 | 0.20 | 7,030 |
| Reach D | Sections 20, 21, 26, 27, 28, 35, T5N, R64W | 25,230 | 22.0 | 13.25 | 8,050 | 10 | 96,300 | 0.20 | 8,050 |
| Reach E | Section 35, T5N, R64W; Sections 1, 2, T4N, R64W | 12,420 | 18.0 | 5.13 | 9,050 | 4,850 | 113,800 | 0.20 | 4,200 |
| Reach F | Section 12, T4N, R64W; Sections 3-7, 10, 11, T4N, R63W; Section 32, T5N, R63W | 32,790 | 14.0 | 10.54 | 7,980 | 1,740 | 150,000 | 0.20 | 5,240 |

* Indicates a maximum value based upon the stage and storage relationship for each individual pond

| Name of Recharge Structure | Legal Description of Point of Accretions | Percent of Accretions by Administrative Reach | | | | |
|---|---|---|---|---|---|---|
| | | Reach A | Reach B | Reach C | Reach D | Reach E |
| **SCHMIDT RECHARGE FACILITY** | | | | | | |
| North Sedimentation Pond | | | | | | |
| South Sedimentation Pond | | | | | | |
| Pond No.1 | Section 13, T5N, R65W | - | 20% | 80% | - | - |
| Pond No.2 | | | | | | |
| Pond No.3 | | | | | | |
| Pond No.4 | | | | | | |
| **SMITH LATERAL DITCH** | | | | | | |
| Lateral Headgate to Bifurcation | Section 13, T5N, R65W | - | 30% | 70% | - | - |
| Bifurcation to N. Headgate | | | | | | |
| Bifurcation to S. Headgate | | | | | | |
| **LOWER LATHAM IN-DITCH RECHARGE** | | | | | | |
| Reach A | South Platte River Administrative Reach A, B, C | 70% | 25% | 5% | - | - |
| Reach B | South Platte River Administrative Reach A, B, C | 15% | 65% | 20% | - | - |
| Reach C | South Platte River Administrative Reach A, B, C | 10% | 30% | 60% | - | - |
| Reach D | South Platte River Administrative Reach C, E | - | - | 90% | - | 10% |
| Reach E | South Platte River Administrative Reach C, E | - | - | 10% | - | 90% |
| Reach F | South Platte River Administrative Reach E | - | - | - | - | 100% |

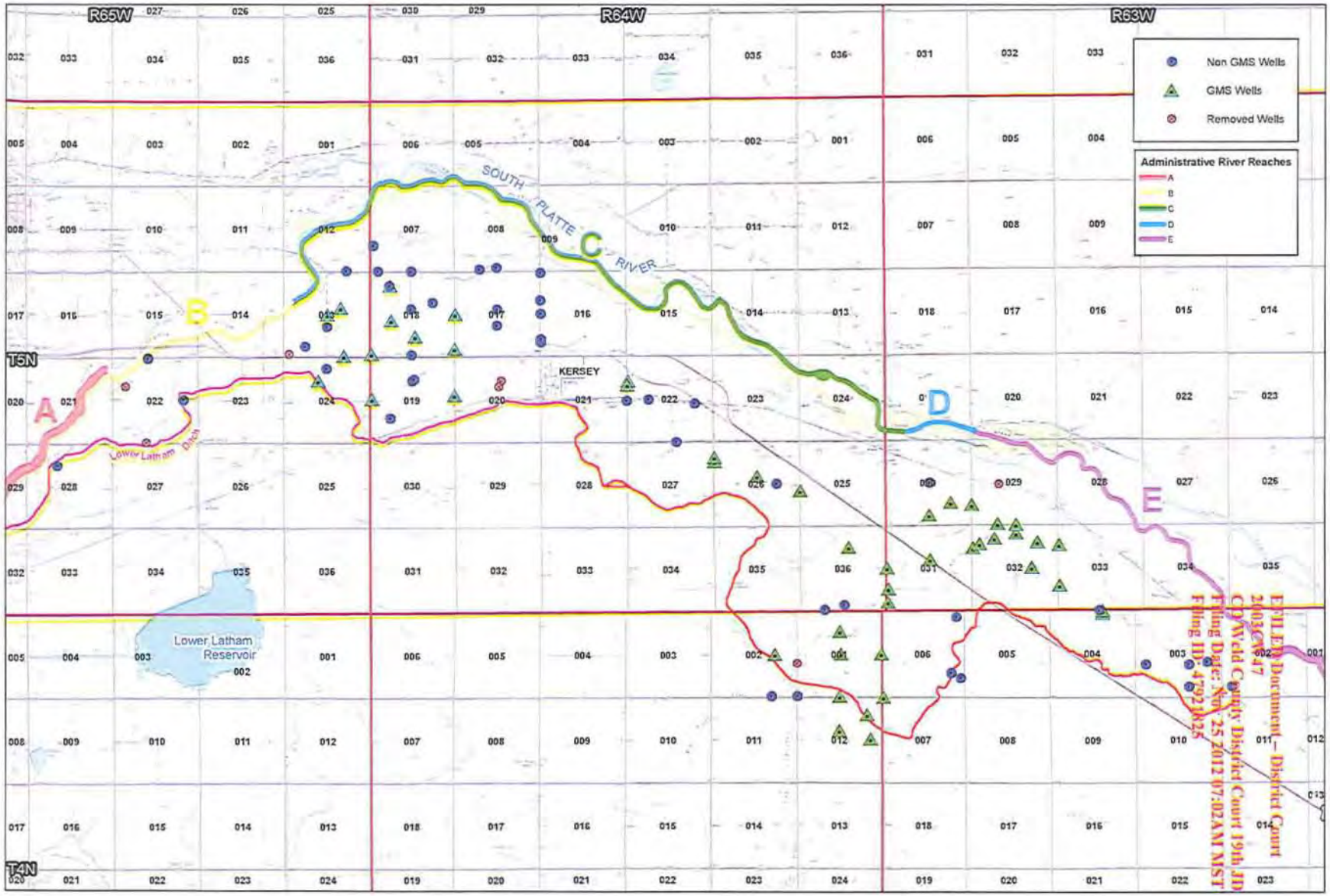



Exhibit J
LLRC Augmentation Plan Wells

Lower Latham
Reservoir Company

| | |
|---|---|
| Date: | Sept 2011 |
| Drawn By: | DS |
| Scale: | (as shown) |
| Job No: | 09-200 |

N

0 0.5 1
Miles

# EXHIBIT K

**Historical Well Depletions/Accretions through December 2020 for Pumping through October 31, 2012 (acre-feet)**

**NON-GMS LATHAM WELLS**

Case No. 03CW047 / 06CW291

| | Historical Well Depletions/Accretions (ac-ft) | | | | | |
|---|---|---|---|---|---|---|
| Month | Admin Reach A | Admin Reach B | Admin Reach C | Admin Reach D | Admin Reach E | Total |
| Nov-12 | -2.60 | -8.75 | -41.76 | -0.39 | -34.17 | -87.68 |
| Dec-12 | -2.32 | -7.35 | -36.68 | -0.26 | -28.36 | -74.98 |
| Jan-13 | -2.02 | -6.22 | -31.57 | -0.19 | -23.22 | -63.21 |
| Feb-13 | -1.63 | -4.92 | -25.02 | -0.13 | -17.59 | -49.29 |
| Mar-13 | -1.62 | -4.85 | -24.46 | -0.13 | -16.57 | -47.64 |
| Apr-13 | -1.42 | -4.24 | -20.96 | -0.12 | -13.68 | -40.41 |
| May-13 | -1.32 | -3.96 | -19.18 | -0.11 | -12.18 | -36.76 |
| Jun-13 | -1.17 | -3.54 | -16.48 | -0.10 | -10.25 | -31.53 |
| Jul-13 | -1.10 | -3.36 | -15.09 | -0.09 | -9.27 | -28.92 |
| Aug-13 | -1.00 | -3.10 | -13.46 | -0.08 | -8.17 | -25.82 |
| Sep-13 | -0.89 | -2.78 | -11.55 | -0.07 | -6.99 | -22.28 |
| Oct-13 | -0.84 | -2.64 | -10.61 | -0.07 | -6.47 | -20.64 |
| Nov-13 | -0.75 | -2.37 | -9.07 | -0.06 | -5.61 | -17.86 |
| Dec-13 | -0.71 | -2.27 | -8.31 | -0.05 | -5.22 | -16.56 |
| Jan-14 | -0.64 | -2.08 | -7.35 | -0.05 | -4.76 | -14.88 |
| Feb-14 | -0.53 | -1.76 | -5.97 | -0.04 | -3.96 | -12.20 |
| Mar-14 | -0.55 | -1.80 | -5.77 | -0.04 | -4.05 | -12.21 |
| Apr-14 | -0.48 | -1.60 | -4.97 | -0.03 | -3.65 | -10.73 |
| May-14 | -0.45 | -1.53 | -4.49 | -0.03 | -3.49 | -9.99 |
| Jun-14 | -0.39 | -1.36 | -3.78 | -0.02 | -3.20 | -8.75 |
| Jul-14 | -0.37 | -1.30 | -3.38 | -0.02 | -3.11 | -8.18 |
| Aug-14 | -0.35 | -1.20 | -2.93 | -0.02 | -2.92 | -7.42 |
| Sep-14 | -0.31 | -1.09 | -2.52 | -0.02 | -2.70 | -6.64 |
| Oct-14 | -0.29 | -1.02 | -2.20 | -0.01 | -2.67 | -6.19 |
| Nov-14 | -0.25 | -0.92 | -1.78 | -0.01 | -2.43 | -5.39 |
| Dec-14 | -0.23 | -0.86 | -1.58 | -0.01 | -2.42 | -5.09 |
| Jan-15 | -0.21 | -0.78 | -1.30 | -0.01 | -2.32 | -4.61 |
| Feb-15 | -0.18 | -0.65 | -0.99 | -0.01 | -2.04 | -3.86 |
| Mar-15 | -0.18 | -0.64 | -0.86 | -0.01 | -2.17 | -3.88 |
| Apr-15 | -0.15 | -0.58 | -0.67 | -0.01 | -2.03 | -3.44 |
| May-15 | -0.14 | -0.55 | -0.52 | -0.01 | -2.01 | -3.23 |
| Jun-15 | -0.12 | -0.49 | -0.35 | 0.00 | -1.88 | -2.84 |
| Jul-15 | -0.11 | -0.48 | -0.27 | 0.00 | -1.90 | -2.75 |
| Aug-15 | -0.10 | -0.42 | -0.13 | 0.00 | -1.83 | -2.49 |
| Sep-15 | -0.08 | -0.36 | -0.04 | 0.00 | -1.71 | -2.19 |
| Oct-15 | -0.08 | -0.33 | 0.09 | 0.00 | -1.72 | -2.04 |
| Nov-15 | -0.07 | -0.29 | 0.11 | 0.00 | -1.60 | -1.85 |
| Dec-15 | -0.06 | -0.27 | 0.18 | 0.00 | -1.59 | -1.74 |
| Jan-16 | -0.05 | -0.25 | 0.30 | 0.00 | -1.55 | -1.55 |
| Feb-16 | -0.05 | -0.23 | 0.30 | 0.00 | -1.41 | -1.40 |
| Mar-16 | -0.04 | -0.22 | 0.35 | 0.00 | -1.49 | -1.41 |
| Apr-16 | -0.03 | -0.19 | 0.41 | 0.00 | -1.40 | -1.21 |
| May-16 | -0.03 | -0.19 | 0.43 | 0.00 | -1.39 | -1.18 |
| Jun-16 | -0.01 | -0.15 | 0.44 | 0.00 | -1.32 | -1.04 |
| Jul-16 | -0.01 | -0.13 | 0.46 | 0.00 | -1.32 | -1.01 |
| Aug-16 | -0.01 | -0.12 | 0.52 | 0.00 | -1.29 | -0.90 |
| Sep-16 | 0.00 | -0.09 | 0.51 | 0.00 | -1.19 | -0.77 |
| Oct-16 | 0.00 | -0.08 | 0.52 | 0.00 | -1.20 | -0.76 |
| Nov-16 | 0.00 | -0.07 | 0.53 | 0.00 | -1.11 | -0.65 |
| Dec-16 | 0.00 | -0.05 | 0.57 | 0.00 | -1.11 | -0.59 |

| | Historical Well Depletions/Accretions (ac-ft) | | | | | |
|---|---|---|---|---|---|---|
| Month | Admin Reach A | Admin Reach B | Admin Reach C | Admin Reach D | Admin Reach E | Total |
| Jan-17 | 0.00 | -0.05 | 0.57 | 0.00 | -1.08 | -0.55 |
| Feb-17 | 0.00 | -0.05 | 0.46 | 0.00 | -0.96 | -0.52 |
| Mar-17 | 0.00 | -0.03 | 0.54 | 0.00 | -1.03 | -0.52 |
| Apr-17 | 0.01 | -0.03 | 0.55 | 0.00 | -0.96 | -0.43 |
| May-17 | 0.01 | -0.01 | 0.59 | 0.00 | -0.96 | -0.37 |
| Jun-17 | 0.01 | -0.02 | 0.55 | 0.00 | -0.92 | -0.36 |
| Jul-17 | 0.02 | 0.00 | 0.57 | 0.00 | -0.92 | -0.33 |
| Aug-17 | 0.02 | 0.00 | 0.56 | 0.00 | -0.88 | -0.30 |
| Sep-17 | 0.02 | 0.00 | 0.52 | 0.00 | -0.82 | -0.29 |
| Oct-17 | 0.02 | 0.00 | 0.55 | 0.00 | -0.82 | -0.25 |
| Nov-17 | 0.02 | 0.00 | 0.52 | 0.00 | -0.79 | -0.25 |
| Dec-17 | 0.02 | 0.01 | 0.53 | 0.00 | -0.79 | -0.23 |
| Jan-18 | 0.02 | 0.01 | 0.51 | 0.00 | -0.75 | -0.21 |
| Feb-18 | 0.02 | 0.03 | 0.47 | 0.00 | -0.65 | -0.12 |
| Mar-18 | 0.02 | 0.03 | 0.51 | 0.00 | -0.72 | -0.16 |
| Apr-18 | 0.02 | 0.03 | 0.47 | 0.00 | -0.66 | -0.14 |
| May-18 | 0.02 | 0.04 | 0.49 | 0.00 | -0.67 | -0.11 |
| Jun-18 | 0.02 | 0.05 | 0.49 | 0.00 | -0.64 | -0.08 |
| Jul-18 | 0.02 | 0.04 | 0.50 | 0.00 | -0.64 | -0.07 |
| Aug-18 | 0.02 | 0.04 | 0.46 | 0.00 | -0.62 | -0.10 |
| Sep-18 | 0.02 | 0.04 | 0.43 | 0.00 | -0.59 | -0.10 |
| Oct-18 | 0.02 | 0.04 | 0.43 | 0.00 | -0.59 | -0.10 |
| Nov-18 | 0.02 | 0.05 | 0.39 | 0.00 | -0.54 | -0.08 |
| Dec-18 | 0.02 | 0.04 | 0.41 | 0.00 | -0.54 | -0.07 |
| Jan-19 | 0.02 | 0.05 | 0.41 | 0.00 | -0.53 | -0.05 |
| Feb-19 | 0.01 | 0.04 | 0.38 | 0.00 | -0.46 | -0.04 |
| Mar-19 | 0.01 | 0.05 | 0.41 | 0.00 | -0.50 | -0.03 |
| Apr-19 | 0.01 | 0.04 | 0.40 | 0.00 | -0.46 | -0.01 |
| May-19 | 0.01 | 0.04 | 0.39 | 0.00 | -0.46 | -0.03 |
| Jun-19 | 0.01 | 0.03 | 0.35 | 0.00 | -0.44 | -0.05 |
| Jul-19 | 0.01 | 0.03 | 0.35 | 0.00 | -0.44 | -0.06 |
| Aug-19 | 0.01 | 0.03 | 0.34 | 0.00 | -0.43 | -0.04 |
| Sep-19 | 0.02 | 0.04 | 0.33 | 0.00 | -0.41 | -0.03 |
| Oct-19 | 0.01 | 0.03 | 0.32 | 0.00 | -0.41 | -0.04 |
| Nov-19 | 0.02 | 0.04 | 0.31 | 0.00 | -0.38 | -0.01 |
| Dec-19 | 0.02 | 0.05 | 0.33 | 0.00 | -0.36 | 0.01 |
| Jan-20 | 0.02 | 0.04 | 0.32 | 0.00 | -0.37 | 0.00 |
| Feb-20 | 0.02 | 0.04 | 0.27 | 0.00 | -0.34 | -0.01 |
| Mar-20 | 0.02 | 0.04 | 0.29 | 0.00 | -0.35 | 0.00 |
| Apr-20 | 0.01 | 0.04 | 0.28 | 0.00 | -0.31 | 0.02 |
| May-20 | 0.02 | 0.04 | 0.28 | 0.00 | -0.32 | 0.02 |
| Jun-20 | 0.01 | 0.04 | 0.25 | 0.00 | -0.30 | 0.00 |
| Jul-20 | 0.01 | 0.03 | 0.24 | 0.00 | -0.30 | -0.01 |
| Aug-20 | 0.01 | 0.03 | 0.25 | 0.00 | -0.30 | -0.01 |
| Sep-20 | 0.01 | 0.04 | 0.25 | 0.00 | -0.27 | 0.03 |
| Oct-20 | 0.01 | 0.04 | 0.25 | 0.00 | -0.27 | 0.03 |
| Nov-20 | 0.01 | 0.03 | 0.21 | 0.00 | -0.27 | -0.02 |
| Dec-20 | 0.01 | 0.03 | 0.21 | 0.00 | -0.27 | -0.02 |

**EXHIBIT L**

**Historical Well Depletions/Accretions through December 2020 for Pumping through October 31, 2012 (acre-feet)**

**GMS LATHAM WELLS**

Case No. 03CW047 / 06CW291

| | Historical Well Depletions/Accretions (ac-ft) | | | | | |
|---|---|---|---|---|---|---|
| Month | Admin Reach A | Admin Reach B | Admin Reach C | Admin Reach D | Admin Reach E | Total |
| Nov-12 | -1.09 | -10.56 | -57.49 | -1.11 | -28.32 | -98.57 |
| Dec-12 | -0.94 | -8.73 | -51.88 | -0.91 | -23.44 | -85.90 |
| Jan-13 | -0.80 | -7.30 | -45.51 | -0.74 | -19.68 | -74.03 |
| Feb-13 | -0.63 | -5.78 | -36.66 | -0.56 | -15.34 | -58.96 |
| Mar-13 | -0.62 | -5.59 | -36.49 | -0.52 | -14.92 | -58.14 |
| Apr-13 | -0.52 | -4.64 | -31.81 | -0.43 | -12.71 | -50.31 |
| May-13 | -0.48 | -4.44 | -29.82 | -0.37 | -11.73 | -46.84 |
| Jun-13 | -0.41 | -3.98 | -26.26 | -0.31 | -10.14 | -41.10 |
| Jul-13 | -0.37 | -3.74 | -24.77 | -0.27 | -9.50 | -38.65 |
| Aug-13 | -0.33 | -3.45 | -22.64 | -0.23 | -8.66 | -35.31 |
| Sep-13 | -0.28 | -3.09 | -20.11 | -0.19 | -7.66 | -31.32 |
| Oct-13 | -0.25 | -2.95 | -19.11 | -0.17 | -7.33 | -29.81 |
| Nov-13 | -0.21 | -2.66 | -17.06 | -0.14 | -6.51 | -26.59 |
| Dec-13 | -0.19 | -2.53 | -16.25 | -0.13 | -6.27 | -25.37 |
| Jan-14 | -0.17 | -2.36 | -14.99 | -0.11 | -5.80 | -23.43 |
| Feb-14 | -0.13 | -2.02 | -12.53 | -0.09 | -4.90 | -19.67 |
| Mar-14 | -0.12 | -2.07 | -12.90 | -0.09 | -5.10 | -20.28 |
| Apr-14 | -0.10 | -1.88 | -11.58 | -0.07 | -4.61 | -18.24 |
| May-14 | -0.09 | -1.79 | -11.14 | -0.06 | -4.48 | -17.55 |
| Jun-14 | -0.07 | -1.65 | -9.97 | -0.05 | -4.06 | -15.79 |
| Jul-14 | -0.06 | -1.57 | -9.58 | -0.05 | -3.97 | -15.23 |
| Aug-14 | -0.04 | -1.49 | -8.91 | -0.05 | -3.75 | -14.24 |
| Sep-14 | -0.03 | -1.34 | -8.04 | -0.04 | -3.43 | -12.89 |
| Oct-14 | -0.02 | -1.30 | -7.71 | -0.04 | -3.32 | -12.39 |
| Nov-14 | -0.01 | -1.19 | -6.98 | -0.03 | -3.04 | -11.25 |
| Dec-14 | 0.00 | -1.14 | -6.69 | -0.02 | -2.96 | -10.82 |
| Jan-15 | 0.00 | -1.09 | -6.26 | -0.02 | -2.82 | -10.19 |
| Feb-15 | 0.01 | -0.93 | -5.29 | -0.02 | -2.43 | -8.66 |
| Mar-15 | 0.01 | -0.95 | -5.49 | -0.02 | -2.56 | -9.00 |
| Apr-15 | 0.02 | -0.88 | -5.00 | -0.01 | -2.32 | -8.20 |
| May-15 | 0.02 | -0.83 | -4.81 | -0.01 | -2.26 | -7.89 |
| Jun-15 | 0.03 | -0.77 | -4.37 | -0.01 | -2.07 | -7.19 |
| Jul-15 | 0.03 | -0.75 | -4.21 | -0.01 | -2.05 | -6.99 |
| Aug-15 | 0.03 | -0.71 | -3.95 | -0.01 | -1.94 | -6.57 |
| Sep-15 | 0.03 | -0.65 | -3.60 | -0.01 | -1.78 | -6.00 |
| Oct-15 | 0.04 | -0.63 | -3.51 | -0.01 | -1.74 | -5.85 |
| Nov-15 | 0.04 | -0.57 | -3.14 | 0.00 | -1.61 | -5.28 |
| Dec-15 | 0.04 | -0.55 | -3.07 | 0.00 | -1.59 | -5.18 |
| Jan-16 | 0.04 | -0.52 | -2.89 | 0.00 | -1.52 | -4.89 |
| Feb-16 | 0.04 | -0.46 | -2.52 | 0.00 | -1.33 | -4.28 |
| Mar-16 | 0.04 | -0.46 | -2.54 | 0.00 | -1.38 | -4.35 |
| Apr-16 | 0.04 | -0.43 | -2.32 | 0.00 | -1.27 | -3.98 |
| May-16 | 0.04 | -0.40 | -2.25 | 0.00 | -1.24 | -3.84 |
| Jun-16 | 0.04 | -0.38 | -2.07 | 0.00 | -1.14 | -3.55 |
| Jul-16 | 0.04 | -0.35 | -2.00 | 0.00 | -1.13 | -3.44 |
| Aug-16 | 0.04 | -0.34 | -1.88 | 0.00 | -1.08 | -3.26 |
| Sep-16 | 0.04 | -0.31 | -1.73 | 0.00 | -0.98 | -2.98 |
| Oct-16 | 0.04 | -0.30 | -1.69 | 0.00 | -0.96 | -2.91 |
| Nov-16 | 0.04 | -0.28 | -1.53 | 0.00 | -0.88 | -2.64 |
| Dec-16 | 0.04 | -0.27 | -1.50 | 0.00 | -0.89 | -2.62 |

| | Historical Well Depletions/Accretions (ac-ft) | | | | | |
|---|---|---|---|---|---|---|
| Month | Admin Reach A | Admin Reach B | Admin Reach C | Admin Reach D | Admin Reach E | Total |
| Jan-17 | 0.04 | -0.27 | -1.44 | 0.00 | -0.83 | -2.50 |
| Feb-17 | 0.04 | -0.22 | -1.20 | 0.00 | -0.71 | -2.09 |
| Mar-17 | 0.04 | -0.23 | -1.28 | 0.00 | -0.75 | -2.22 |
| Apr-17 | 0.04 | -0.21 | -1.16 | 0.00 | -0.67 | -2.00 |
| May-17 | 0.04 | -0.20 | -1.15 | 0.00 | -0.67 | -1.99 |
| Jun-17 | 0.03 | -0.20 | -1.06 | 0.00 | -0.64 | -1.86 |
| Jul-17 | 0.03 | -0.18 | -1.05 | 0.00 | -0.62 | -1.82 |
| Aug-17 | 0.03 | -0.16 | -0.96 | 0.00 | -0.58 | -1.66 |
| Sep-17 | 0.03 | -0.16 | -0.89 | 0.00 | -0.54 | -1.55 |
| Oct-17 | 0.03 | -0.16 | -0.89 | 0.00 | -0.52 | -1.53 |
| Nov-17 | 0.03 | -0.14 | -0.79 | 0.00 | -0.49 | -1.39 |
| Dec-17 | 0.03 | -0.13 | -0.76 | 0.00 | -0.49 | -1.35 |
| Jan-18 | 0.03 | -0.14 | -0.77 | 0.00 | -0.46 | -1.33 |
| Feb-18 | 0.03 | -0.11 | -0.64 | 0.00 | -0.39 | -1.11 |
| Mar-18 | 0.03 | -0.11 | -0.68 | 0.00 | -0.42 | -1.18 |
| Apr-18 | 0.03 | -0.11 | -0.60 | 0.00 | -0.39 | -1.07 |
| May-18 | 0.02 | -0.11 | -0.60 | 0.00 | -0.38 | -1.06 |
| Jun-18 | 0.02 | -0.10 | -0.55 | 0.00 | -0.35 | -0.97 |
| Jul-18 | 0.02 | -0.09 | -0.52 | 0.00 | -0.34 | -0.93 |
| Aug-18 | 0.02 | -0.07 | -0.49 | 0.00 | -0.34 | -0.88 |
| Sep-18 | 0.02 | -0.08 | -0.46 | 0.00 | -0.32 | -0.84 |
| Oct-18 | 0.02 | -0.08 | -0.45 | 0.00 | -0.32 | -0.82 |
| Nov-18 | 0.02 | -0.07 | -0.42 | 0.00 | -0.29 | -0.75 |
| Dec-18 | 0.02 | -0.06 | -0.41 | 0.00 | -0.28 | -0.73 |
| Jan-19 | 0.02 | -0.05 | -0.38 | 0.00 | -0.26 | -0.67 |
| Feb-19 | 0.02 | -0.06 | -0.34 | 0.00 | -0.23 | -0.60 |
| Mar-19 | 0.02 | -0.05 | -0.34 | 0.00 | -0.22 | -0.59 |
| Apr-19 | 0.02 | -0.06 | -0.33 | 0.00 | -0.22 | -0.59 |
| May-19 | 0.02 | -0.05 | -0.32 | 0.00 | -0.22 | -0.57 |
| Jun-19 | 0.02 | -0.05 | -0.28 | 0.00 | -0.20 | -0.51 |
| Jul-19 | 0.02 | -0.04 | -0.27 | 0.00 | -0.19 | -0.48 |
| Aug-19 | 0.01 | -0.03 | -0.27 | 0.00 | -0.17 | -0.46 |
| Sep-19 | 0.01 | -0.03 | -0.25 | 0.00 | -0.16 | -0.43 |
| Oct-19 | 0.01 | -0.03 | -0.23 | 0.00 | -0.16 | -0.40 |
| Nov-19 | 0.01 | -0.03 | -0.24 | 0.00 | -0.16 | -0.41 |
| Dec-19 | 0.01 | -0.03 | -0.23 | 0.00 | -0.16 | -0.40 |
| Jan-20 | 0.01 | -0.03 | -0.22 | 0.00 | -0.15 | -0.38 |
| Feb-20 | 0.01 | -0.03 | -0.21 | 0.00 | -0.15 | -0.37 |
| Mar-20 | 0.01 | -0.03 | -0.20 | 0.00 | -0.16 | -0.38 |
| Apr-20 | 0.01 | -0.03 | -0.19 | 0.00 | -0.13 | -0.34 |
| May-20 | 0.01 | -0.03 | -0.18 | 0.00 | -0.13 | -0.32 |
| Jun-20 | 0.01 | -0.02 | -0.17 | 0.00 | -0.12 | -0.30 |
| Jul-20 | 0.01 | -0.02 | -0.16 | 0.00 | -0.12 | -0.29 |
| Aug-20 | 0.01 | -0.01 | -0.13 | 0.00 | -0.12 | -0.26 |
| Sep-20 | 0.01 | -0.01 | -0.13 | 0.00 | -0.09 | -0.22 |
| Oct-20 | 0.01 | -0.01 | -0.13 | 0.00 | -0.09 | -0.22 |
| Nov-20 | 0.01 | -0.01 | -0.10 | 0.00 | -0.10 | -0.20 |
| Dec-20 | 0.01 | -0.01 | -0.10 | 0.00 | -0.09 | -0.19 |

## EXHIBIT M

**Surface/Subsurface Return Flow Factors and Groundwater Return Flow Glover Parameters for Member Farms**

Case No. 03CW047 / 06CW291

| Farm Name | Farm No. | Surface Return Flow Factor (SF) | Subsurface Return Flow Factor (SSF) | Farm Glover Parameters | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | W (ft) | B (ft) | T (gal/day-ft) | S | X (ft) |
| 70 Ranch (Axelson) | 7812 | 0 | 1 | 12,497 | 6,684 | 110,081 | 0.20 | 5,813 |
| 70 Ranch (Clyncke) | 7846 | 0.20 | 0.80 | 3,976 | 1,126 | 115,114 | 0.20 | 2,650 |
| AJR Farms (Main) | 2812.2 | 0.20 | 0.80 | 11,342 | 7,485 | 109,604 | 0.20 | 3,857 |
| AJR Farms (NE) | 2812.1 | 0.20 | 0.80 | 12,253 | 8,818 | 107,497 | 0.20 | 3,435 |
| AJR Farms (W) | 2811 | 0.50 | 0.50 | 10,458 | 8,568 | 100,039 | 0.20 | 1,890 |
| Bihain | 337 | 0 | 1 | 8,691 | 2,020 | 217,061 | 0.20 | 6,671 |
| Borys | 501 | 0.50 | 0.50 | 12,805 | 11,448 | 116,924 | 0.20 | 1,357 |
| Buderus (N) | 766 | 0.02 | 0.98 | 6,099 | 3,882 | 167,241 | 0.20 | 2,217 |
| Buderus (S) | 767 | 0.01 | 0.99 | 7,009 | 2,296 | 132,438 | 0.20 | 4,713 |
| Centennial Valley Ranch (Alles/Big Wiper) | 2369.1 | 0.00 | 1.00 | 8,872 | 7,737 | 222,999 | 0.20 | 1,135 |
| Centennial Valley Ranch (Campbell) | 2369.3 | 0.50 | 0.50 | 5,544 | 5,036 | 188,535 | 0.20 | 508 |
| Centennial Valley Ranch (Corliss) | 2369.4 | 0.08 | 0.92 | 8,344 | 4,811 | 276,102 | 0.20 | 3,533 |
| Centennial Valley Ranch (Rein) | 2369.2 | 0.11 | 0.89 | 5,710 | 3,317 | 178,194 | 0.20 | 2,393 |
| Chestnut Farms | 1028 | 0 | 1 | 9,589 | 303 | 120,500 | 0.20 | 9,286 |
| Danks (N) | 1363 | 0.50 | 0.50 | 8,412 | 5,883 | 166,319 | 0.20 | 2,529 |
| Danks (S) | 1362 | 0.05 | 0.95 | 8,608 | 4,615 | 159,739 | 0.20 | 3,993 |
| Desperado Dairy (Bosch) | 612 | 0.50 | 0.50 | 11,477 | 10,096 | 181,708 | 0.20 | 1,381 |
| Duell | 1521 | 0 | 1 | 11,219 | 1,913 | 238,968 | 0.20 | 9,306 |
| Dunn | 1612 | 0.20 | 0.80 | 13,985 | 10,712 | 121,729 | 0.20 | 3,273 |
| ECCV (NHF 70 Ranch) | 7979 | 0.20 | 0.80 | 4,388 | 1,042 | 110,482 | 0.20 | 3,346 |
| Foos | 2061 | 0.11 | 0.89 | 10,524 | 7,045 | 136,033 | 0.20 | 3,479 |
| Frank | 7764 | 0 | 1 | 10,770 | 4,748 | 123,307 | 0.20 | 6,022 |
| Gibbs | 2202 | 0.50 | 0.50 | 15,077 | 12,574 | 181,708 | 0.20 | 2,503 |
| Gillham | 2416 | 0 | 1 | 12,893 | 4,804 | 111,168 | 0.20 | 8,089 |
| Greeley Shelf of Four (LJM Buderus) | 799 | 0.50 | 0.50 | 5,194 | 4,688 | 189,736 | 0.20 | 506 |
| Hergenreder | 2674 | 0 | 1 | 8,225 | 2,632 | 233,205 | 0.20 | 5,593 |
| Hergenreder (Sr) | 2771 | 0 | 1 | 6,098 | 1,998 | 151,457 | 0.20 | 4,100 |
| Hoshiko (Geisick) | 3013 | 0 | 1 | 10,688 | 6,634 | 106,990 | 0.20 | 4,054 |
| Hoshiko (Gunther) | 2917 | 0.20 | 0.80 | 9,849 | 6,492 | 311,716 | 0.20 | 3,357 |
| Hoshiko (Herbst) | 3035 | 0 | 1 | 9,784 | 1,923 | 191,402 | 0.20 | 7,861 |
| Hoshiko (Rothe) | 3152 | 0.50 | 0.50 | 3,319 | 1,340 | 132,277 | 0.20 | 1,979 |
| Hoshiko (Schlagel) | 3048 | 0.20 | 0.80 | 6,278 | 2,393 | 150,637 | 0.20 | 3,885 |
| Hoshiko (Solis) | 3017 | 0 | 1 | 9,408 | 3,976 | 307,962 | 0.20 | 5,432 |
| Howard (E) | 3316 | 0 | 1 | 14,089 | 6,092 | 107,424 | 0.20 | 7,997 |
| Howard (W) | 3313 | 0 | 1 | 11,620 | 5,685 | 110,313 | 0.20 | 5,935 |
| JBS Five Rivers (Cogburn E) | 5343 | 0 | 1 | 7,938 | 1,789 | 127,307 | 0.20 | 6,149 |
| JBS Five Rivers (Cogburn W) | 5345 | 0 | 1 | 8,317 | 2,291 | 192,573 | 0.20 | 6,026 |
| Klein J (Centennial) | 3518 | 0 | 1 | 11,096 | 3,508 | 114,787 | 0.20 | 7,588 |
| Klein J (N) | 3512 | 0.20 | 0.80 | 14,448 | 11,025 | 127,069 | 0.20 | 3,423 |
| Klein L | 3617 | 0 | 1 | 12,239 | 3,201 | 118,820 | 0.20 | 9,038 |
| Klein W | 3701 | 0 | 1 | 8,370 | 6,177 | 363,495 | 0.20 | 2,193 |
| Ledford | 3927 | 0 | 1 | 9,620 | 3,483 | 221,353 | 0.20 | 6,137 |
| LLRC (Cecil farms) | 7216 | 0 | 1 | 11,502 | 4,435 | 224,722 | 0.20 | 7,067 |
| LLRC (F Klein) | 7224 | 0 | 1 | 7,168 | 3,665 | 275,907 | 0.20 | 3,503 |
| LLRC (Jurgens) | 7299.1 | 0.50 | 0.50 | 9,998 | 8,161 | 364,210 | 0.20 | 1,837 |
| LLRC (Rothe Farm A) | 7248 | 0.50 | 0.50 | 4,398 | 3,574 | 133,688 | 0.20 | 824 |
| LLRC (Rothe W) | 7299.2 | 0.50 | 0.50 | 3,936 | 3,460 | 124,020 | 0.20 | 476 |
| LLRC (Schmidt) | 7212 | 0 | 1 | 13,862 | 8,623 | 110,336 | 0.20 | 5,239 |
| Lorenz Farms | 4107 | 0.50 | 0.50 | 11,949 | 10,407 | 124,894 | 0.20 | 1,542 |
| McCauley | 4414 | 0 | 1 | 10,583 | 5,420 | 107,235 | 0.20 | 5,163 |
| Millage (Schlagel) | 4741 | 0 | 1 | 8,772 | 1,475 | 114,807 | 0.20 | 7,297 |

## EXHIBIT M

**Surface/Subsurface Return Flow Factors and Groundwater Return Flow Glover Parameters for Member Farms**

Case No. 03CW047 / 06CW291

| Farm Name | Farm No. | Surface Return Flow Factor (SF) | Subsurface Return Flow Factor (SSF) | Farm Glover Parameters | | | | |
|---|---|---|---|---|---|---|---|---|
| | | | | W (ft) | B (ft) | T (gal/day-ft) | S | X (ft) |
| Millage Bros | 4657 | 0.50 | 0.50 | 4,275 | 3,620 | 154,907 | 0.20 | 655 |
| Mowery | 4819 | 0 | 1 | 11,256 | 1,072 | 121,888 | 0.20 | 10,184 |
| P&H Joint Venture | 7127 | 0.20 | 0.80 | 9,186 | 5,036 | 243,240 | 0.20 | 4,150 |
| Pankow (N) | 4958 | 0.50 | 0.50 | 10,786 | 9,108 | 120,937 | 0.20 | 1,678 |
| Park | 5077 | 0 | 1 | 7,636 | 1,430 | 157,799 | 0.20 | 6,206 |
| Peterson | 5512 | 0.47 | 0.53 | 11,193 | 9,914 | 281,876 | 0.20 | 1,279 |
| Puype (Gunther) | 2512 | 0 | 1 | 14,305 | 7,853 | 114,827 | 0.20 | 6,452 |
| Rein | 8057 | 0.43 | 0.57 | 8,622 | 7,889 | 165,874 | 0.20 | 733 |
| Rolhe (Home) | 5901 | 0.50 | 0.50 | 6,795 | 6,149 | 194,974 | 0.20 | 646 |
| Rolhe (N of Home) | 5902 | 0.50 | 0.50 | 8,344 | 5,706 | 196,499 | 0.20 | 2,638 |
| Rothe (N of US34-E) | 5904 | 0.50 | 0.50 | 7,649 | 6,912 | 297,380 | 0.20 | 737 |
| Rothe (N of US34-W) | 5903 | 0.50 | 0.50 | 10,879 | 8,846 | 307,147 | 0.20 | 2,033 |
| Sandin | 6015 | 0 | 1 | 10,397 | 4,207 | 111,133 | 0.20 | 6,190 |
| Schaumberg | 6116 | 0 | 1 | 12,908 | 6,826 | 226,076 | 0.20 | 6,080 |
| Siebring | 6356 | 0.20 | 0.80 | 7,928 | 4,547 | 214,602 | 0.20 | 3,381 |
| Siebring Trust (N) | 6456 | 0.50 | 0.50 | 8,610 | 6,955 | 320,920 | 0.20 | 1,655 |
| Siebring Trust (S) | 6556 | 0.50 | 0.50 | 6,616 | 4,522 | 209,191 | 0.20 | 2,094 |
| Van Wyke | 6856 | 0.50 | 0.50 | 5,676 | 4,755 | 199,388 | 0.20 | 921 |
| Wetco Farms (C Sparrow) | 6676 | 0 | 1 | 8,068 | 738 | 134,892 | 0.20 | 7,330 |
| Wetco Farms (C Sparrow) | 6699 | 0 | 1 | 10,138 | 0 | 69,994 | 0.20 | 10,138 |

**EXHIBIT N**

**Distribution of Groundwater Return Flow Accretions (Subsurface and Surface) by Admin Reach**

Case No. 03CW047 / 06CW291

| | Subsurface Groundwater Return Flow Distribution | | | | | Surface Groundwater Return Flow Distribution | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| LLRC Well Farm | Admin Reach A | Admin Reach B | Admin Reach C | Admin Reach D | Admin Reach E | Admin Reach A | Admin Reach B | Admin Reach C | Admin Reach D | Admin Reach E |
| 70 Ranch (Axelson) | - | 20% | 80% | - | - | - | 20% | 80% | - | - |
| 70 Ranch (Clyncke) | - | - | 40% | 10% | 50% | - | - | 40% | 10% | 50% |
| AJR Farms (Main) | - | 50% | 50% | - | - | - | 50% | 50% | - | - |
| AJR Farms (NE) | - | 25% | 75% | - | - | - | 25% | 75% | - | - |
| AJR Farms (W) | - | 50% | 50% | - | - | - | 50% | 50% | - | - |
| Bihain | - | - | 80% | 5% | 15% | - | - | 80% | 5% | 15% |
| Borys | - | - | 100% | - | - | - | - | 100% | - | - |
| Buderus (N) | - | - | - | - | 100% | - | - | - | - | 100% |
| Buderus (S) | - | - | - | - | 100% | - | - | - | - | 100% |
| Centennial Valley Ranch (Alles/Big Wiper) | - | - | 5% | 20% | 75% | - | - | 5% | 20% | 75% |
| Centennial Valley Ranch (Campbell) | - | - | - | - | 100% | - | - | - | - | 100% |
| Centennial Valley Ranch (Corliss) | - | - | - | - | 100% | - | - | - | - | 100% |
| Centennial Valley Ranch (Rein) | - | - | - | - | 100% | - | - | - | - | 100% |
| Chestnut Farms | - | - | 100% | - | - | - | - | 100% | - | - |
| Danks (N) | - | - | - | - | 100% | - | - | - | - | 100% |
| Danks (S) | - | - | - | - | 100% | - | - | - | - | 100% |
| Desperado Dairy (Bosch) | - | 25% | 75% | - | - | - | 25% | 75% | - | - |
| Duell | - | 15% | 85% | - | - | - | 15% | 85% | - | - |
| Dunn | - | 5% | 95% | - | - | - | 5% | 95% | - | - |
| ECCV (NHF 70 Ranch) | - | - | - | - | 100% | - | - | - | - | 100% |
| Foos | - | - | - | - | 100% | - | - | - | - | 100% |
| Frank | - | - | - | - | 100% | - | - | - | - | 100% |
| Gibbs | 85% | 15% | - | - | - | 85% | 15% | - | - | - |
| Gillham | - | 20% | 80% | - | - | - | 20% | 80% | - | - |
| Greeley Shelf of Four (LJM Buderus) | - | - | 5% | 20% | 75% | - | - | 5% | 20% | 75% |
| Hergenreder | - | - | - | - | 100% | - | - | - | - | 100% |
| Hergenreder (Sr) | - | - | - | - | 100% | - | - | - | - | 100% |
| Hoshiko (Geisick) | - | 10% | 90% | - | - | - | 10% | 90% | - | - |
| Hoshiko (Gunther) | - | 45% | 55% | - | - | - | 45% | 55% | - | - |
| Hoshiko (Herbst) | - | - | 100% | - | - | - | - | 100% | - | - |
| Hoshiko (Rothe) | - | - | - | - | 100% | - | - | - | - | 100% |
| Hoshiko (Schlagel) | - | - | 40% | 10% | 50% | - | - | 40% | 10% | 50% |
| Hoshiko (Solis) | - | 10% | 90% | - | - | - | 10% | 90% | - | - |
| Howard (E) | - | 20% | 80% | - | - | - | 20% | 80% | - | - |
| Howard (W) | - | 20% | 80% | - | - | - | 20% | 80% | - | - |
| JBS Five Rivers (Cogburn E) | - | - | 50% | 20% | 30% | - | - | 50% | 20% | 30% |
| JBS Five Rivers (Cogburn W) | - | - | 80% | 5% | 15% | - | - | 80% | 5% | 15% |
| Klein J (Centennial) | 10% | 20% | 70% | - | - | 10% | 20% | 70% | - | - |
| Klein J (N) | - | 5% | 95% | - | - | - | 5% | 95% | - | - |
| Klein I | 10% | 20% | 70% | - | - | 10% | 20% | 70% | - | - |
| Klein W | - | - | 100% | - | - | - | - | 100% | - | - |
| Ledford | - | - | 100% | - | - | - | - | 100% | - | - |
| LLRC (Cecil farms) | - | 10% | 90% | - | - | - | 10% | 90% | - | - |
| LLRC (F Klein) | - | - | 100% | - | - | - | - | 100% | - | - |
| LLRC (Jurgens) | - | - | 100% | - | - | - | - | 100% | - | - |
| LLRC (Rothe Farm A) | - | - | 40% | 10% | 50% | - | - | 40% | 10% | 50% |
| LLRC (Rothe W) | - | - | - | - | 100% | - | - | - | - | 100% |
| LLRC (Schmidt) | - | 20% | 80% | - | - | - | 20% | 80% | - | - |
| Lorenz Farms | 15% | 80% | 5% | - | - | 15% | 80% | 5% | - | - |
| McCauley | 10% | 35% | 55% | - | - | 10% | 35% | 55% | - | - |
| Milage (Schlagel) | - | - | 80% | 5% | 15% | - | - | 80% | 5% | 15% |
| Milage Bros | - | - | - | - | 100% | - | - | - | - | 100% |
| Mowery | 10% | 20% | 70% | - | - | 10% | 20% | 70% | - | - |
| P&H Joint Venture | - | - | 100% | - | - | - | - | 100% | - | - |
| Pankow (N) | - | - | - | - | 100% | - | - | - | - | 100% |
| Park | - | - | - | - | 100% | - | - | - | - | 100% |
| Peterson | - | - | 15% | 20% | 65% | - | - | 15% | 20% | 65% |
| Puype (Gunther) | - | 20% | 80% | - | - | - | 20% | 80% | - | - |
| Rein | - | - | - | - | 100% | - | - | - | - | 100% |
| Rothe (Home) | - | - | 5% | 20% | 75% | - | - | 5% | 20% | 75% |
| Rothe (N of Home) | - | - | 5% | 20% | 75% | - | - | 5% | 20% | 75% |
| Rothe (N of US34-E) | - | - | - | 10% | 90% | - | - | - | 10% | 90% |
| Rothe (N of US34-W) | - | - | 15% | 20% | 65% | - | - | 15% | 20% | 65% |
| Sandin | 10% | 35% | 55% | - | - | 10% | 35% | 55% | - | - |
| Schaumberg | - | 10% | 90% | - | - | - | 10% | 90% | - | - |

**EXHIBIT N**

**Distribution of Groundwater Return Flow Accretions (Subsurface and Surface) by Admin Reach**

Case No 03CW047 / 06CW291

| | Subsurface Groundwater Return Flow Distribution | | | | | Surface Groundwater Return Flow Distribution | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| LLRC Well Farm | Admin Reach A | Admin Reach B | Admin Reach C | Admin Reach D | Admin Reach E | Admin Reach A | Admin Reach B | Admin Reach C | Admin Reach D | Admin Reach E |
| Siebring | - | - | - | - | 100% | - | - | - | - | 100% |
| Siebring Trust (N) | - | - | - | 10% | 90% | - | - | - | 10% | 90% |
| Siebring Trust (S) | - | - | 55% | 5% | 40% | - | - | 55% | 5% | 40% |
| Van Wyke | - | - | - | - | 100% | - | - | - | - | 100% |
| Welco Farms (C Sparrow) | - | - | - | - | 100% | - | - | - | - | 100% |
| Welco Farms (C Sparrow) | - | - | - | - | 100% | - | - | - | - | 100% |

## EXHIBIT O

**Priority Dates for LLRC Wells**

Case No. 03CW047 / 06CW291

| Well Name | Well Permit No. | WDID | Appropriation Date | Adjudication Date |
|---|---|---|---|---|
| Gillham | 6289 | 105554 | 6/30/1940 | 12/31/1971 |
| Bihain | 1-20389 | 105729 | 8/1/1953 | 12/31/1971 |
| Bihain | 2-20389 | 105730 | 6/1/1954 | 12/31/1971 |
| ECCV (NHF 70 Ranch) | 15508 | 106169 | 5/31/1939 | 12/31/1972 |
| ECCV (NHF 70 Ranch) | 15510 | 106175 | 5/31/1954 | 12/31/1972 |
| ECCV (NHF 70 Ranch) | 15507 | 106176 | 5/31/1954 | 12/31/1971 |
| ECCV (NHF 70 Ranch) | 15506 | 106177 | 6/30/1968 | 12/31/1971 |
| ECCV (NHF 70 Ranch) | 15509 | 106178 | 3/31/1954 | 12/31/1971 |
| Wetco Farms (C Sparrow) | 11491 | 106179 | 7/31/1954 | 12/31/1971 |
| Buderus (S) | 7166 | 106450 | 7/31/1954 | 12/31/1972 |
| Buderus (N) | 7167 | 106451 | 5/31/1955 | 12/31/1972 |
| Danks (S) | 7168 | 106452 | 5/31/1946 | 12/31/1972 |
| Centennial Valley Ranch (Alles/Big Wiper) | 7169 | 106453 | 6/30/1954 | 12/31/1972 |
| Greeley Shelf of Four (LJM Buderus) | 3316 | 106454 | 9/30/1961 | 12/31/1972 |
| Frank | 6835 | 106575 | 3/23/1965 | 12/31/1971 |
| Frank | 5885 | 106578 | 12/31/1935 | 12/31/1972 |
| Frank | 5886 | 106580 | 12/31/1943 | 12/31/1971 |
| Hoshiko (Gunther) | 8225 | 106733 | 5/1/1954 | 12/31/1972 |
| Hoshiko (Herbst) | 16121 | 106894 | 6/10/1938 | 12/31/1972 |
| Hergenreder (Sr) | 1787 | 106911 | 12/31/1935 | 12/31/1971 |
| LLRC (Jurgens) | 12253-R | 107064 | 5/31/1952 | 12/31/1971 |
| LLRC (Jurgens) | 6606-R | 107066 | 6/30/1941 | 12/31/1971 |
| LLRC (F Klein) | 13463 | 107180 | 7/1/1940 | 12/31/1972 |
| LLRC (F Klein) | 13464 | 107183 | 5/17/1955 | 12/31/1972 |
| Klein, W | 5639 | 107184 | 5/20/1964 | 12/31/1972 |
| Chestnut Farms | 5854 | 107208 | 6/30/1945 | 12/31/1971 |
| Chestnut Farms | 5855 | 107209 | 6/15/1954 | 12/31/1971 |
| Ledford | 11365 | 107429 | 8/31/1950 | 12/31/1972 |
| Pankow (N) | 6230 | 107690 | 12/31/1946 | 12/31/1983 |
| Hergenreder | 10104 | 107765 | 4/24/1954 | 12/31/1971 |
| Park | 12316 | 107896 | 9/30/1934 | 12/31/1971 |
| Park | 21014 | 107897 | 12/31/1941 | 12/31/1971 |
| Centennial Valley Ranch (Corliss) | 13949 | 107942 | 5/26/1946 | 12/31/1972 |
| JBS Five Rivers (Cogburn E) | 6531 | 107943 | 5/30/1949 | 12/31/1972 |
| Peterson | 11866 | 107951 | 12/31/1906 | 12/31/1970 |
| Rein | 13958 | 108072 | 12/31/1938 | 12/31/1972 |
| Rothe (Home) | 13071 | 108160 | 12/31/1940 | 12/31/1972 |
| LLRC (Rothe W) | 5965 | 108161 | 3/3/1955 | 12/31/1972 |
| LLRC (Rothe Farm A) | 11292 | 108162 | 3/4/1946 | 12/31/1972 |
| Rothe (Home) | 13073 | 108163 | 5/31/1954 | 12/31/1972 |
| Rothe (N of US34-W) | 11057 | 108164 | 5/31/1954 | 12/31/1972 |
| Rothe (N of Home) | 10836 | 108166 | 6/20/1953 | 12/31/1972 |
| JBS Five Rivers (Cogburn W) | 8571 | 108168 | 6/26/1954 | 12/31/1972 |
| Hoshiko (Rothe) | 806 | 108169 | 6/15/1954 | 12/31/1971 |
| Danks (N) | 13960 | 108172 | 7/1/1936 | 12/31/1972 |
| Klein W | 12743 | 108252 | 6/30/1954 | 12/31/1972 |
| Rothe (N of US34-E) | 15931 | 108253 | 6/30/1948 | 12/31/1972 |
| Rothe (N of US34-E) | 04137 | 108254 | 5/21/1963 | 12/31/1972 |
| Rothe (N of US34-W) | 16392 | 108255 | 7/31/1954 | 12/31/1972 |
| Centennial Valley Ranch (Rein) | 15930 | 108259 | 6/30/1936 | 12/31/1972 |
| Centennial Valley Ranch (Campbell) | 15932 | 108260 | 8/29/1955 | 12/31/1972 |
| Hoshiko (Schlagel) | 8672 | 108279 | 6/9/1954 | 12/31/1971 |
| Millage (Schlagel) | 10100 | 108280 | 4/22/1954 | 12/31/1971 |

| | | | | |
|---|---|---|---|---|
| 70 Ranch (Clyncke) | 6631 | 108281 | 6/23/1954 | 12/31/1972 |
| Siebring Trust (S) | 11526 | 108352 | 5/1/1947 & 12/31/1961 | 12/31/1972 |
| Siebring Trust (N) | 12019 | 108353 | 5/1/1954 | 12/31/1971 |
| Foos | 15879 | 108665 | 7/13/1954 | 12/31/1971 |
| Siebring | 12021 | 108733 | 6/1/1954 | 12/31/1972 |
| Van Wyke | 4303 | 108734 | 7/1/1963 | 12/31/1972 |
| Millage Bros | 1512 | 108775 | 4/30/1955 | 12/31/1972 |
| Dunn | 11604 | 205020 | 7/20/1939 & 7/15/1952 | 12/31/1971 |
| Klein J (Centennial) | 5964 | 205044 | 10/1/1931 | 12/31/1972 |
| Borys | 13255 | 205067 | 4/18/1954 | 12/31/1972 |
| AJR Farms (NE) | 2932 | 205188 | 7/1/1936 | 12/31/1970 |
| Hoshiko (Geisick) | 11651 | 205226 | 12/31/1933 | 12/31/1971 |
| Duell | 12972 | 205583 | 7/29/1955 | 12/31/1970 |
| 70 Ranch (Axelson) | 1361 | 205730 | 10/1/1954 | 12/31/1972 |
| Desperado Dairy (Bosch) | 8640 | 205878 | 4/20/1950 | 12/31/1972 |
| LLRC (Schmidt) | 11605 | 205989 | 5/3/1954 | 12/31/1971 |
| LLRC (Cecil farms) | 12735 | 205991 | 8/31/1935 | 12/31/1971 |
| Gibbs | 1537 | 206395 | 6/30/1953 | 12/31/1970 |
| Puype (Gunther) | 11399 | 206452 | 8/31/1939 | 12/31/1972 |
| AJR Farms (Main) | 6415 | 206609 | 9/10/1940 | 12/31/1971 |
| AJR Farms (W) | 6416 | 206610 | 7/28/1954 | 12/31/1971 |
| Howard (W) | 11611 | 206622 | 12/31/1939 | 12/31/1972 |
| Schaumberg | 10990 | 206696 | 9/21/1935 | 12/31/1972 |
| Klein L | 8718 | 206827 | 5/31/1933 | 12/31/1972 |
| Sandin | 4482 | 206832 | 4/29/1954 | 12/31/1972 |
| Mowery | 8719 | 206836 | 7/1/1935 | 12/31/1972 |
| Klein L | 8720 | 206837 | 5/1/1956 | 12/31/1972 |
| Klein W | 10103 | 206843 | 12/31/1936 | 12/31/1972 |
| Lorenz Farms | 13982 | 207034 | 4/30/1940 | 12/31/1971 |
| Lorenz Farms | 13985 | 207045 | 8/31/1949 | 12/31/1971 |
| McCauley | 11845 | 207451 | 5/31/1956 | 12/31/1972 |
| Puype (Gunther) | 11844 | 207453 | 5/31/1954 | 12/31/1972 |
| Klein J (N) | 12985 | 207638 | 6/1/1954 | 12/31/1972 |
| Klein J (N) | 4183 | 207639 | 5/23/1963 | 12/31/1972 |
| P&H Joint Venture | 11534 | 207778 | 5/31/1930 | 12/31/1971 |
| P&H Joint Venture | 11538 | 207779 | 12/31/1930 | 12/31/1971 |
| Howard (E) | 12017 | 207984 | 8/30/1936 | 12/31/1972 |
| Hoshiko (Solis) | 11869 | 208150 | 6/22/1954 | 12/31/1972 |

**Notes:**

(1) Siebring Trust (N) well has two appropriation dates:

5/1/1947 for 3.11 cfs

12/31/1961 for 1.17 cfs

(2) Dunn well has two appropriation dates:

7/20/1939 for 3.89 cfs

7/15/1952 for 1.23 cfs

**EXHIBIT P**

Projection of Augmentation Plan Operation

YEAR 1 - 5

Sign convention: depletions and obligations (-) / accretions and credits (+)

Amount stored in Augmentation Pool =

(Form to be expanded for remaining five years of projection)

| | | Ref | Admin Reach | # shs | Transit Dist | Year = | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Proj Yr = | 1 | | | | | | | | | | | |
| | | | | | | Days of Call = | 30 | 31 | 30 | 31 | 31 | 30 | 31 | 30 | 31 | 31 | 29 | 31 | |
| | | | | | | | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Total |
| **DEPLETIONS FROM YEAR 1 PUMPING** | | | | | | | | | | | | | | | | | | | |
| **Consumptive Use of Groundwater** | | 1 | | | | | | | | | | | | | | | | | |
| **LLRC Wells** | | | | | | | | | | | | | | | | | | | |
| | Depletions Reach A | 2 | A | | | | | | | | | | | | | | | | |
| | Depletions Reach B | | B | | | | | | | | | | | | | | | | |
| | Depletions Reach C | | C | | | | | | | | | | | | | | | | |
| | Depletions Reach D | | D | | | | | | | | | | | | | | | | |
| | Depletions Reach E | | E | | | | | | | | | | | | | | | | |
| **Augmentation Wells** | | | | | | | | | | | | | | | | | | | |
| | Depletions Reach A | 3 | A | | | | | | | | | | | | | | | | |
| | Depletions Reach B | | B | | | | | | | | | | | | | | | | |
| | Depletions Reach C | | C | | | | | | | | | | | | | | | | |
| | Depletions Reach D | | D | | | | | | | | | | | | | | | | |
| | Depletions Reach E | | E | | | | | | | | | | | | | | | | |
| **DEPLETIONS FROM PRE-PROJECTION PERIOD PUMPING** | | | | | | | | | | | | | | | | | | | |
| **LLRC Wells** | | | | | | | | | | | | | | | | | | | |
| | Depletions Reach A | 4 | A | | | | | | | | | | | | | | | | |
| | Depletions Reach B | | B | | | | | | | | | | | | | | | | |
| | Depletions Reach C | | C | | | | | | | | | | | | | | | | |
| | Depletions Reach D | | D | | | | | | | | | | | | | | | | |
| | Depletions Reach E | | E | | | | | | | | | | | | | | | | |
| | Return Flow Accretions Reach A | 5 | A | | | | | | | | | | | | | | | | |
| | Return Flow Accretions Reach B | | B | | | | | | | | | | | | | | | | |
| | Return Flow Accretions Reach C | | C | | | | | | | | | | | | | | | | |
| | Return Flow Accretions Reach D | | D | | | | | | | | | | | | | | | | |
| | Return Flow Accretions Reach E | | E | | | | | | | | | | | | | | | | |
| **Augmentation Wells** | | | | | | | | | | | | | | | | | | | |
| | Depletions Reach A | 6 | A | | | | | | | | | | | | | | | | |
| | Depletions Reach B | | B | | | | | | | | | | | | | | | | |
| | Depletions Reach C | | C | | | | | | | | | | | | | | | | |
| | Depletions Reach D | | D | | | | | | | | | | | | | | | | |
| | Depletions Reach E | | E | | | | | | | | | | | | | | | | |
| | **Subtotal: LLRC Well Depletions** | | | | | | | | | | | | | | | | | | |
| | Reach A | 7 | A | | | | | | | | | | | | | | | | |
| | Reach B | | B | | | | | | | | | | | | | | | | |
| | Reach C | | C | | | | | | | | | | | | | | | | |
| | Reach D | | D | | | | | | | | | | | | | | | | |
| | Reach E | | E | | | | | | | | | | | | | | | | |
| | **Subtotal: Augmentation Well Depletions** | | | | | | | | | | | | | | | | | | |
| | Reach A | 8 | A | | | | | | | | | | | | | | | | |
| | Reach B | | B | | | | | | | | | | | | | | | | |
| | Reach C | | C | | | | | | | | | | | | | | | | |
| | Reach D | | D | | | | | | | | | | | | | | | | |
| | Reach E | | E | | | | | | | | | | | | | | | | |
| | **Subtotal: All Depletions** | | | | | | | | | | | | | | | | | | |
| | Reach A | 9 | A | | | | | | | | | | | | | | | | |
| | Reach B | | B | | | | | | | | | | | | | | | | |
| | Reach C | | C | | | | | | | | | | | | | | | | |
| | Reach D | | D | | | | | | | | | | | | | | | | |
| | Reach E | | E | | | | | | | | | | | | | | | | |
| **DIRECT RELEASE REPLACEMENTS** | | | | | | | | | | | | | | | | | | | |
| **Gibbs Spillway** | | | | | | | | | | | | | | | | | | | |
| | LLDC shares | 10 | A | | | | | | | | | | | | | | | | |
| | UDC shares | | A | | | | | | | | | | | | | | | | |
| | Longmont Exchange | | A | | | | | | | | | | | | | | | | |
| **Powell Spillway** | | | | | | | | | | | | | | | | | | | |
| | LLDC shares | 11 | B | | | | | | | | | | | | | | | | |
| | UDC shares | | B | | | | | | | | | | | | | | | | |
| | Longmont Exchange | | B | | | | | | | | | | | | | | | | |
| | Augmentation Pool | | B | | | | | | | | | | | | | | | | |
| **Box Elder Return** | | | | | | | | | | | | | | | | | | | |
| | LLDC shares | 12 | D | | | | | | | | | | | | | | | | |
| | UDC shares | | D | | | | | | | | | | | | | | | | |
| | Longmont Exchange | | D | | | | | | | | | | | | | | | | |
| | Augmentation Pool | | D | | | | | | | | | | | | | | | | |
| **WCR 69 Spillway** | | | | | | | | | | | | | | | | | | | |
| | LLDC shares | 13 | E | | | | | | | | | | | | | | | | |
| | UDC shares | | E | | | | | | | | | | | | | | | | |
| | Longmont Exchange | | E | | | | | | | | | | | | | | | | |
| | Augmentation Pool | | E | | | | | | | | | | | | | | | | |
| **23rd Ave Spillway** | | | | | | | | | | | | | | | | | | | |
| | GIC shares | 14 | C | | | | | | | | | | | | | | | | |
| **16th Street Structure** | | | | | | | | | | | | | | | | | | | |
| | GIC shares | 15 | C | | | | | | | | | | | | | | | | |
| **Union-CCWCD Structure** | | | | | | | | | | | | | | | | | | | |
| | UDC shares | 16 | A | | | | | | | | | | | | | | | | |
| **Longmont Exchange** | | | | | | | | | | | | | | | | | | | |
| | Longmont Exchange | 17 | A | | | | | | | | | | | | | | | | |
| | Longmont Exchange | | B | | | | | | | | | | | | | | | | |
| | Longmont Exchange | | C | | | | | | | | | | | | | | | | |
| | Longmont Exchange | | D | | | | | | | | | | | | | | | | |
| | Longmont Exchange | | E | | | | | | | | | | | | | | | | |
| **Augmentation Wells** | | | | | | | | | | | | | | | | | | | |
| | Jurgens Well | 18 | C | | | | | | | | | | | | | | | | |
| | **Subtotal: All Direct Replacements** | | | | | | | | | | | | | | | | | | |
| | Reach A | 19 | A | | | | | | | | | | | | | | | | |

| | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Reach B | | B | | | | | | | | | | | | | | | | | | | | | | |
| | Reach C | | C | | | | | | | | | | | | | | | | | | | | | | |
| | Reach D | | D | | | | | | | | | | | | | | | | | | | | | | |
| | Reach E | | E | | | | | | | | | | | | | | | | | | | | | | |
| **RECHARGE OPERATIONS** | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Schmidt Recharge Site** | | | | | | | | | | | | | | | | | | | | | | | | | |
| | LLDC shares | 20 | | | | | | | | | | | | | | | | | | | | | | | |
| | UDC shares | | | | | | | | | | | | | | | | | | | | | | | | |
| | Augmentation Pool | | | | | | | | | | | | | | | | | | | | | | | | |
| **Smith Lateral Recharge** | | | | | | | | | | | | | | | | | | | | | | | | | |
| | LLDC shares | 21 | | | | | | | | | | | | | | | | | | | | | | | |
| | UDC shares | | | | | | | | | | | | | | | | | | | | | | | | |
| | Augmentation Pool | | | | | | | | | | | | | | | | | | | | | | | | |
| **Lower Latham In-Ditch Recharge** | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Augmentation Pool | 22 | | | | | | | | | | | | | | | | | | | | | | | |
| **ACCRETIONS FROM PRE-PROJECTION PERIOD RECHARGE** | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Schmidt Recharge Site** | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Accretions Reach B | 23 | B | | | | | | | | | | | | | | | | | | | | | | |
| | Accretions Reach C | | C | | | | | | | | | | | | | | | | | | | | | | |
| **Smith Lateral Recharge** | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Accretions Reach B | 24 | B | | | | | | | | | | | | | | | | | | | | | | |
| | Accretions Reach C | | C | | | | | | | | | | | | | | | | | | | | | | |
| **Lower Latham In-Ditch Recharge** | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Accretions Reach A | 25 | A | | | | | | | | | | | | | | | | | | | | | | |
| | Accretions Reach B | | B | | | | | | | | | | | | | | | | | | | | | | |
| | Accretions Reach C | | C | | | | | | | | | | | | | | | | | | | | | | |
| | Accretions Reach D | | D | | | | | | | | | | | | | | | | | | | | | | |
| | Accretions Reach E | | E | | | | | | | | | | | | | | | | | | | | | | |
| **Subtotal: Accretions from Pre-Projection Period Recharge** | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Reach A | 26 | A | | | | | | | | | | | | | | | | | | | | | | |
| | Reach B | | B | | | | | | | | | | | | | | | | | | | | | | |
| | Reach C | | C | | | | | | | | | | | | | | | | | | | | | | |
| | Reach D | | D | | | | | | | | | | | | | | | | | | | | | | |
| | Reach E | | E | | | | | | | | | | | | | | | | | | | | | | |
| **ACCRETIONS FROM PROJECTION PERIOD RECHARGE** | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Schmidt Recharge Site** | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Accretions Reach B | 27 | B | | | | | | | | | | | | | | | | | | | | | | |
| | Accretions Reach C | | C | | | | | | | | | | | | | | | | | | | | | | |
| **Smith Lateral Recharge** | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Accretions Reach B | 28 | B | | | | | | | | | | | | | | | | | | | | | | |
| | Accretions Reach C | | C | | | | | | | | | | | | | | | | | | | | | | |
| **Lower Latham In-Ditch Recharge** | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Accretions Reach A | 29 | A | | | | | | | | | | | | | | | | | | | | | | |
| | Accretions Reach B | | B | | | | | | | | | | | | | | | | | | | | | | |
| | Accretions Reach C | | C | | | | | | | | | | | | | | | | | | | | | | |
| | Accretions Reach D | | D | | | | | | | | | | | | | | | | | | | | | | |
| | Accretions Reach E | | E | | | | | | | | | | | | | | | | | | | | | | |
| **Subtotal: Accretions from Projection Period Recharge** | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Reach A | 30 | A | | | | | | | | | | | | | | | | | | | | | | |
| | Reach B | | B | | | | | | | | | | | | | | | | | | | | | | |
| | Reach C | | C | | | | | | | | | | | | | | | | | | | | | | |
| | Reach D | | D | | | | | | | | | | | | | | | | | | | | | | |
| | Reach E | | E | | | | | | | | | | | | | | | | | | | | | | |
| **RETURN FLOW OBLIGATIONS** | | | | | | | | | | | | | | | | | | | | | | | | | |
| **LLDC shares** | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Obligations Reach A | 31 | A | | | | | | | | | | | | | | | | | | | | | | |
| | Obligations Reach B | | B | | | | | | | | | | | | | | | | | | | | | | |
| | Obligations Reach C | | C | | | | | | | | | | | | | | | | | | | | | | |
| | Obligations Reach D | | D | | | | | | | | | | | | | | | | | | | | | | |
| | Obligations Reach E | | E | | | | | | | | | | | | | | | | | | | | | | |
| **UDC shares** | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Obligations Reach A | 32 | A | | | | | | | | | | | | | | | | | | | | | | |
| **GIC shares** | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Obligations Reach C | 33 | C | | | | | | | | | | | | | | | | | | | | | | |
| **Subtotal: Return Flow Obligations** | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Reach A | 34 | A | | | | | | | | | | | | | | | | | | | | | | |
| | Reach B | | B | | | | | | | | | | | | | | | | | | | | | | |
| | Reach C | | C | | | | | | | | | | | | | | | | | | | | | | |
| | Reach D | | D | | | | | | | | | | | | | | | | | | | | | | |
| | Reach E | | E | | | | | | | | | | | | | | | | | | | | | | |
| **NET RIVER BALANCE** | | | | | | | | | | | | | | | | | | | | | | | | | |
| **Reach A** | | 35 | A | | | | | | | | | | | | | | | | | | | | | | |
| | Excess Available for Reach B - E | 36 | | | | | | | | | | | | | | | | | | | | | | | |
| **Reach B** | | | B | | | | | | | | | | | | | | | | | | | | | | |
| | Excess Available for Reach C - E | | | | | | | | | | | | | | | | | | | | | | | | |
| **Reach C** | | | C | | | | | | | | | | | | | | | | | | | | | | |
| | Excess Available for Reach D - E | | | | | | | | | | | | | | | | | | | | | | | | |
| **Reach D** | | | D | | | | | | | | | | | | | | | | | | | | | | |
| | Excess Available for Reach E | | | | | | | | | | | | | | | | | | | | | | | | |
| **Reach E** | | | E | | | | | | | | | | | | | | | | | | | | | | |

Notes:
(1) Consumptive use of groundwater allowed under projection
(2) LLRC well depletions associated with pumping during Year 1 - for Admin Reaches A-E
(3) Augmentation well depletions associated with pumping during Year 1 - for Admin Reaches A-E
(4) LLRC well depletions associated with pumping prior to projection period - for Admin Reaches A-E
(5) LLRC groundwater return flows associated with pumping prior to projection period - for Admin Reaches A-E
(6) Augmentation well depletions associated with pumping prior to projection period - for Admin Reaches A-E
(7) Subtotal of depletions + accretions for LLRC wells
(8) Subtotal of depletions for augmentation wells
(9) Row (7) + (8)
(10) Replacement sources projected to be run through Gibbs Spillway (after transit loss deductions)
(11) Replacement sources projected to be run through Powell Spillway (after transit loss deductions)
(12) Replacement sources projected to be run through Box Elder Return (after transit loss deductions)
(13) Replacement sources projected to be run through WCR 69 Spillway (after transit loss deductions)
(14) Replacement sources projected to be run through 23rd Ave Spillway (after transit loss deductions)
(15) Replacement sources projected to be run through 16th Street Structure (after transit loss deductions)
(16) Replacement sources projected to be run through Union Structure (after transit loss deductions)
(17) Replacement sources projected to be available from Longmont WWTP (after transit loss deductions)
(18) Replacement sources projected to be available from Burgess Augmentation wells (after transit loss deductions) - year 1 only
(19) Subtotal for all direct replacements - for Admin Reaches A-E
(20) Replacement source deliveries projected to Schmidt Recharge
(21) Replacement source deliveries projected to Smith Lateral Recharge
(22) Replacement source deliveries projected to Latham I-D for Recharge
(23) Recharge accretions from pre-projection period operations (Schmidt Recharge Site) - for Admin Reaches B-C
(24) Recharge accretions from pre-projection period operations (Smith Lateral) - for Admin Reaches B-C
(25) Recharge accretions from pre-projection period operations (Latham I-D Ditch) - for Admin Reaches A-E
(26) Subtotal for accretions from pre-projection period recharge - for Admin Reaches A-E
(27) Recharge accretions from projection period operations (Schmidt Recharge Site) - for Admin Reaches B-C
(28) Recharge accretions from projection period operations (Smith Lateral) - for Admin Reaches B-C
(29) Recharge accretions from projection period operations (Latham I-D Ditch) - for Admin Reaches A-E
(30) Subtotal for accretions from projection period recharge - for Admin Reaches A-E
(31) LLDC shares return flow obligations - for Admin Reaches A-E
(32) UDC shares return flow obligations - for Admin Reach A
(33) GIC shares return flow obligations - for Admin Reach C
(34) Subtotal for return flow obligations - for Admin Reaches A-E
(35) Net River Balance = Accretions + Depletions + Return Flow Obligations - for each Admin Reach A-E
(36) Excess credits available in upstream reach to be used in downstream reach (after transit loss deduction)

## EXHIBIT Q

**Projected Farm Headgate Deliveries for Lower Latham Ditch Company (LLDC), Union Ditch Company (UDC), and Greeley Irrigation Company (GIC) Shares, in *acre-feet***

Case No. 03CW047 / 06CW291

| Ditch System | No. of Shares | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Lower Latham Ditch Company** | 29.5 | 245.7 | 527.7 | 739.5 | 814.5 | 872.2 | 434.5 | 334.9 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3,968.5 |
| *per share* | - | 8.3 | 17.9 | 25.1 | 27.5 | 29.6 | 14.7 | 11.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 134.5 |
| **Greeley Irrigation Company** | 15.19 | 0.0 | 25.8 | 47.9 | 63.8 | 54.5 | 38.5 | 42.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 273.2 |
| *per share* | - | 0.0 | 1.7 | 3.2 | 4.2 | 3.6 | 2.5 | 2.8 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 18.0 |
| **Union Ditch Company** | 13.5 | 66.6 | 150.9 | 193.3 | 185.2 | 197.1 | 148.6 | 45.2 | 0.0 | 0.0 | 0.0 | 0.0 | 34.2 | 1,019.1 |
| *per share* | - | 4.9 | 11.2 | 14.3 | 13.5 | 14.6 | 11.0 | 3.3 | 0.0 | 0.0 | 0.0 | 0.0 | 2.5 | 75.5 |

Notes:

(1) The farm headgate deliveries to be used in the projection for GIC and UDC shares will be determined in separate change case proceedings

(2) The years used to determine these dry-year values are as follows: LLDC – Avg 2000-2002, GIC - 1977, UDC - Avg 2000-2002

EXHIBIT R

MONTHLY ACCOUNTING FORM FOR LOWER LATHAM RESERVOIR CO.

Daily Accounting
(values in cfs, unless shown otherwise)



August 2012 — 31 Days in Month

| Day of Month | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | 27 | 28 | 29 | 30 | 31 | Total AF |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| ***RIVER DEPLETIONS FROM WELL PUMPING*** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lagged Stream Depletions from Well Pumping | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Replacement Obligation for Pre-2011 Pumping | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 2011-2012 Pumping Depletions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Latham SWSP Replacement Obligation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Free River Days | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Well Depletion Replacement Obligation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ***REPLACEMENT SUPPLIES*** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ***LONGMONT EXCHANGE CREDIT*** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Credit Provided at Longmont | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Net Credit Provided at Latham Headgate after Transit Loss | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Delivery into Latham Reservoir by Exchange | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| River Bypass at Latham Headgate (WDID: 022900) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ***GREELEY IRRIGATION CO CREDIT (15.19 shares)*** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Pro-rata Augmentation Deliveries | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Surface Return Flow Obligation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Groundwater Return Flow Obligation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Net CU Credit (Obligation) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Transit Loss to South Platte River (1%) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lease of GIC Credit to Ogilvy Augmentation Co | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Net GIC Replacement Credit (Obligation) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ***UNION DITCH CREDIT*** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diversions into Latham Reservoir | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Diversions into Latham Ditch | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Diversions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Irrigation Diversions | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Augmentation Diversions (13.5 sh) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Surface Return Flow Obligation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Groundwater Return Flow Obligation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Net Credit (Obligation) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Delivery to Recharge via Smith Lateral | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ***LATHAM DITCH CREDIT*** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gross River Headgate Diversions (WDID: 020834) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total River Headgate Diversions pursuant to Latham Decree | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Latham Pro-Rata FHG Diversion (24.5 shares) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Latham Deliveries Claimed for Augmentation Uses | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Surface Return Flow Obligation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Groundwater Return Flow Obligation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Net Credit (Obligation) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Delivery to Recharge via Smith Lateral | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ***RESERVOIR AUGMENTATION RELEASES*** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Measured Release | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Release to River (via Powell) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Release to Recharge in Latham Ditch (WDID: 020834) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Release to Recharge in Smith Lat. (WDID: ) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ***RECHARGE DELIVERIES/ACCRETIONS*** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Recharge Delivery to Latham Ditch Segments | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Delivery to Recharge in Smith Lat. (WDID: ) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Delivery to Recharge in Schmidt Recharge via Smith Lat. (WDID: ) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Recharge Releases Spilled to River | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lagged Recharge Accretion from Latham Ditch | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lagged Recharge Accretion from Schmidt Recharge | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Lagged Recharge Accretion from Smith Lateral | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ***RIVER RETURNS*** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Return at Gibbs Spillway | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Return at Powell Spillway/Metting HG | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Return at Box Elder Creek | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Return at CR69 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Releases to River (Augmentation + Bypass) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Bebee Draw Bypass + Reservoir OTR Release | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Augmentation Release - Union D shares | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Augmentation Release - Latham D shares | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Augmentation Release from Latham Res | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ange/Delivery from Union D. into Latham Reservoir (WDID: 023858) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| tal Exchange from Latham D. into Latham Reservoir (WDID: 023858) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ***TOTAL REPLACEMENTS/RF OBLIGATIONS*** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Gross Deliveries to South Platte River | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Return Flow/Lease Obligations | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Total Well Depletion Replacement Obligation | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ***RIVER BALANCE*** | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Current Month Balance at River | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

# APPENDIX D

## GIBBS FARM RESERVOIR ALTERNATIVE CONCEPTUAL DESIGN AND COST

**OPINION OF COST**

**GIBBS FARM**

**SINGLE POND - SLURRY WALL WITH WELLS**

***Surface Storage Volume = 107 ac-ft; Porosity Storage Volume = 600 ac-ft***

| Item No. | Description | Cost |
|---|---|---|
| 1 | Mobilization/Surveying/Erosion Control | $ 169,758.00 |
| 2 | Reservoir Earthwork | $ 449,636.00 |
| 3 | Sedimentation Pond | $ 47,876.00 |
| 4 | Slurry Wall and Riprap | $ 6,434,476.00 |
| 5 | Spillway | $ 28,271.00 |
| 6 | Outlet Pipe, Operator, Gage Rod | $ 169,034.00 |
| 7 | Pump Station | $ 129,494.00 |
| 8 | Check Structure | $ 183,255.00 |
| 9 | Dewater Wells | $ 479,752.00 |
| | Total Construction | $ 8,091,552.00 |
| | 10% Contingency | $ 809,155.00 |
| | Engineering and Testing | $ 809,155.00 |
| | Total Project | $ 9,709,862.00 |

*Note: Costs from 2016 adjusted to 2025 using CPI increase of 31.8%*

PROPOSED NEW WELL;
DISCHARGE TO RESERVOIRS

APPROXIMATE LOCATION
OF EXISTING O/G WELL
(NOT SURVEYED)

1% ANNUAL CHANCE FLOODPLAIN BOUNDARY
0.2% ANNUAL CHANCE FLOODPLAIN BOUNDARY
FLOODWAY BOUNDARY

CHECK STRUCTURE

ACCESS ROAD;
POTENTIALLY
RE-ROUTE

EXISTING FLUME AND
CHANNEL TO RIVER

EXISTING
IRRIGATION
WELL

ACCESS BERM NOTES:
1. BERM FILL: 4,000 CY
2. DS FACE (RIPRAP): 14,000 SF
3. CREST LENGTH: 300 FT

4646.0

WELL

EXISTING GAS PIPE

PIPE LENGTH: 600 FT ±

CHANNEL LENGTH: 550 FT ±

LIFT STATION

SEDIMENTATION BASIN NOTES:
1. TOP OF BERM ELEV: 4651
2. BOTTOM OF POND ELEV: 4646
3. REQUIRED BERM FILL: 371 C.Y.
4. CUT QUANTITY: 2,260 C.Y.
5. BERM SIDES SLOPED AT 4:1V

PIPE LENGTH 650 FT ±

RESERVOIR NOTES:
1. TOP OF BERM ELEV: 4654
2. BOTTOM OF POND ELEV: 4646
2. POND VOLUME AT 4655: 107 AF
3. REQUIRED BERM FILL: 61,700 C.Y.
4. CUT QUANTITY: 61,900 C.Y.
5. BERM SIDES SLOPED AT 3H:1V
6. STRIPPING AREA: 1,970,000 SF
7. CREST LENGTH: 4300 LF
8. SLURRY WALL: 5600 LF
9. US FACE (RIPRAP): 323,000 SF
10. DS FACE + 20FT: 190,000 SF

ABANDONED
O/G WELL

ACTIVE
O/G WELL

EXISTING DELIVERY
FROM UNION DITCH

EXISTING DELIVERY FROM UNION DITCH

150' 0 75' 150' 300'
( FEET )

| No | Revisions | Date | By |
|---|---|---|---|

Latham Ditch

SINGLE POND – WELLS

Smith Geotechnical &
Engineering Consultants
1225 Red Cedar Circle
Fort Collins, Colorado 80524
(970) 490-2620

| | |
|---|---|
| Drawn | TSC |
| Designed | – |
| Checked | – |
| Approved | – |
| Scale: | |
| 11x17 | AS SHOWN |
| 22x34 | AS SHOWN |
| Date Created | |
| Proj. No. | 15.073 |

No. of Sheets
2

Drawing No.
1

# APPENDIX E

## JURGENS RESERVOIR
## SLURRY WALL CONSTRUCTION DRAWINGS

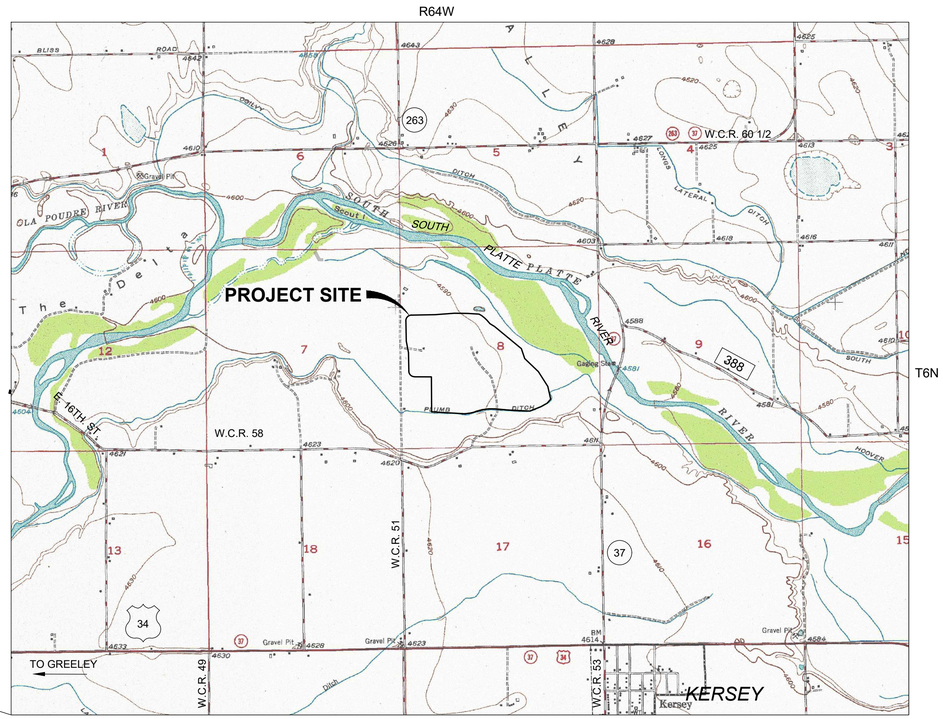
CONSTRUCTION PLANS FOR

# JURGENS FARM SLURRY WALL

*PREPARED FOR:*

**LOWER LATHAM RESERVOIR COMPANY**

8209 W. 20TH. STREET
GREELEY, COLORADO 80634




0 2000 4000
SCALE IN FEET

## *SHEET INDEX:*



HE PERFORMANCE

SAFETY, IN, ON, OR
Y THE APPROPRIATE

VER THE SAFETY OR
NTS, FORMS, OR
, OR OVER THE

: 34" PLANS AND DO

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

CALL 2-BUSINESS DAYS IN ADVANCE BEFORE YOU DIG, GRADE, OR EXCAVATE FOR THE MARKING OF UNDERGROUND MEMBER UTILITIES.

SCHNABEL ENGINEERING ASSUMES NO RESPONSIBILITY FOR EXISTING UTILITY LOCATIONS (HORIZONTAL AND VERTICAL). THE EXISTING UTILITIES SHOWN ON THIS DRAWING HAVE BEEN PLOTTED FROM THE BEST AVAILABLE INFORMATION. IT IS, HOWEVER, THE RESPONSIBILITY OF THE CONTRACTOR TO FIELD VERIFY THE LOCATION OF ALL UTILITIES PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION ACTIVITIES.

| REV | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 1 | CLIENT REVIEW SET | SAR | 6/2/21 |
| 2 | CLIENT REVIEW SET | SAR | 4/27/22 |
| 3 | FOR BID | SAR | 10/4/24 |

IRECK 9/30/2024 10:38:16 AM

DESIGNED BY: SAR
DRAWN BY: ITR
CHECKED BY: SAR

SUSAN A. RAINEY
STATE PROFESSIONAL ENGINEER NO. 26356
DATE:


Schnabel ENGINEERING
600 SOUTH AIRPORT ROAD, BUILDING A, SUITE 205
LONGMONT, COLORADO 80503
PHONE: (303) 651-8400
schnabel-eng.com


PROJECT NAME
JURGENS FARM SLURRY WALL

COVER SHEET

PROJECT: DA126038.00
DATE: AUGUST 2024
SHEET
1 OF 15

**VERTICAL DATUM:**

SITE BENCHMARK: CP 100, FOUND #4 REBAR AT SW PORTION OF THE SITE. ELEVATION:4594.8 (NAVD 1988), ELEVATIONS BROUGHT TO SITE VIA GPS OBSERVATIONS USING TRIMBLE VRS NETWORK.

**HORIZONTAL DATUM:**

COLORADO STATE PLANE COORDINATES NAD 83 DATUM. HORIZONTAL CONTROL BASED UPON GPS OBSERVATIONS.

**NOTES:**

1. THIS DRAWING IS AT MODIFIED STATE PLANE. TO REDUCE TO STATE PLANE COORDINATES, SCALE AT 0.999735370 (1.0002647) ABOUT THE ORIGIN 0,0.

***LEGEND:***

- B-3 — EXPLORATORY BORINGS (BY OTHERS)
- TH-19 — EXPLORATORY BORINGS
- TH-6 WELL — WELL BORINGS
- TP-7 — EXPLORATORY TEST PIT
- EXISTING GAS LINE
- EXISTING GAS LINE
- EXISTING TELEPHONE LINE
- EXISTING WATER LINE
- EXISTING OVERHEAD UTILITIES
- EXISTING ACCESS ROAD
- EXISTING FENCE
- EXISTING CONTOUR MAJOR
- EXISTING CONTOUR MINOR
- PROPOSED CONTOUR MAJOR
- PROPOSED CONTOUR MINOR
- PROPOSED SLURRY WALL ALIGNMENT
- FLOODWAY
- PROPOSED SLURRY WALL ALIGNMENT

TH-5 WELL, B-2C, TH-23, TH-4, B-2A, TH-22, TP-5, TH-21, B-2B, OIL & GAS, DITCH, DIVERSION STRUCTURE, B-2, FENCE, TH-3, ACCESS ROAD, TP-4, MW-3, TH-2, BUILDINGS, TP-6, BUILDING, B-6, B-7, TP-3, B-2D, TH-20, TH-19, ACCESS ROAD, SOUTH PLATTE RIVER, CATTLE GUARD, TH-27, TP-2, FENCE, TH-1, TH-18, TH-17, TP-1, TH-8, MW-2, FENCE, TP-8, TH-25, TP-7, OIL & GAS, OIL & GAS, B-3, DITCH, B-4B, TH-16, TH-13, B-4A, ACCESS ROAD, B-4, DITCH, TH-26, TH-14, TH-10, TH-15, TH-11 WELL, ACCESS ROAD, TH-12, ARB PIPELINE, FLOODWAY, B-4C, TH-9, FLOODPLAIN, SLOUGH DITCH, WCR 58

0 200 400

SCALE IN FEET
CONTOUR INTERVAL=2FT

| REV | DESCRIPTION | DATE | BY |
|---|---|---|---|
| 1 | CLIENT REVIEW SET | 6/2/21 | SAR |
| 2 | CLIENT REVIEW SET | 4/27/22 | SAR |
| 3 | FOR BID | 10/4/24 | SAR |

BHOGNESS 10/7/2024 7:58:36 AM

DESIGNED BY: SAR
DRAWN BY: ITR
CHECKED BY: SAR

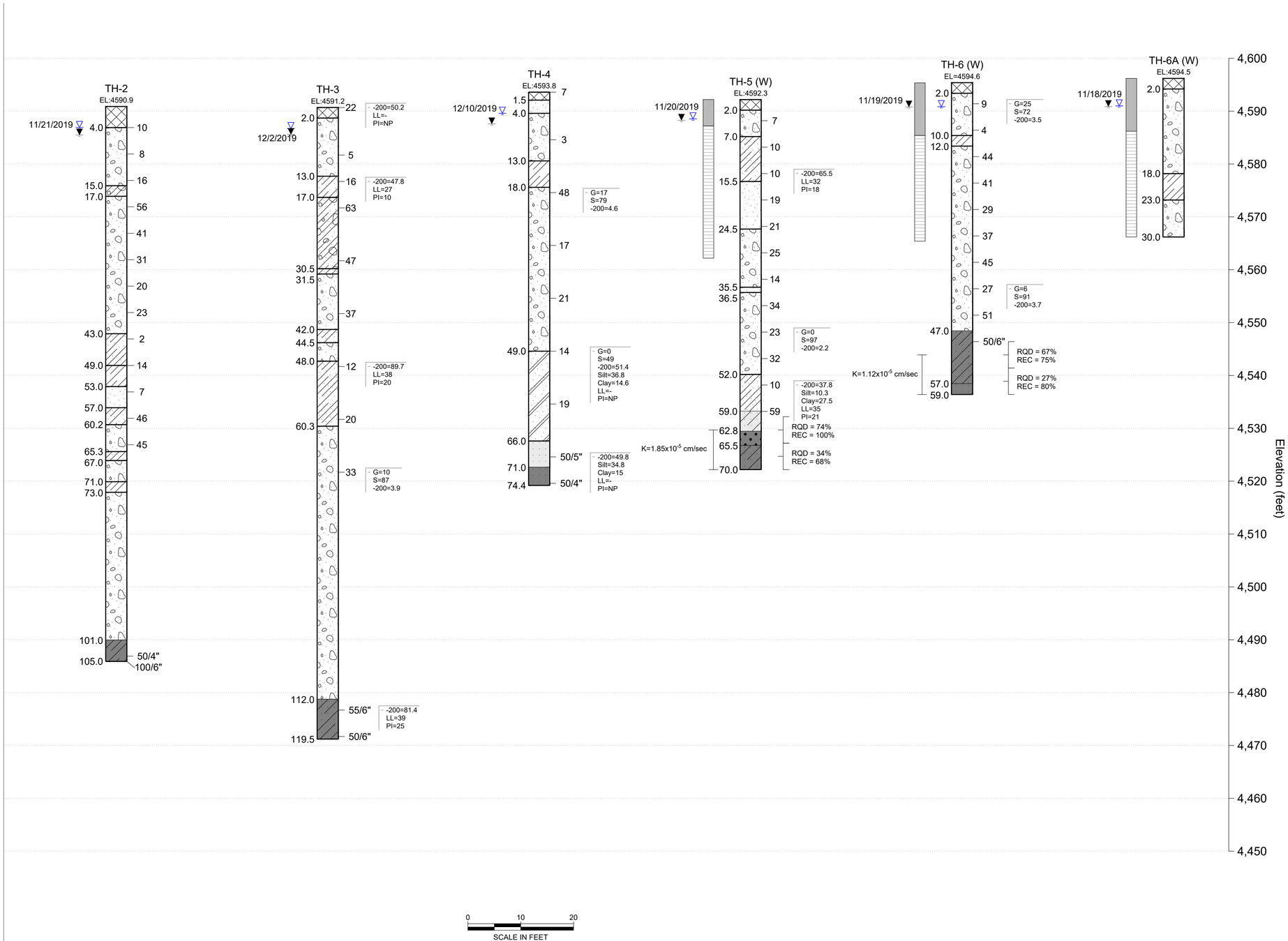
SUSAN A. RAINEY
DATE:
STATE PROFESSIONAL ENGINEER NO. 26356

Schnabel ENGINEERING
600 SOUTH AIRPORT ROAD, BUILDING A, SUITE 205
LONGMONT, COLORADO 80503
PHONE: 303.651.1466
schnabel-eng.com

PROJECT NAME
JURGENS FARM SLURRY WALL

# EXISTING CONDITIONS, TEST HOLES & TEST PITS

PROJECT: DA126038.00
DATE: AUGUST 2024
SHEET
2 OF 15

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|---|---|---|---|
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| 2 | CLIENT REVIEW SET | SAR | 4/27/22 |
| 3 | FOR BID | SAR | 10/4/24 |

IRECK 9/30/2024 10:39:12 AM

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DRAWN BY: ITR
CHECKED BY: SAR

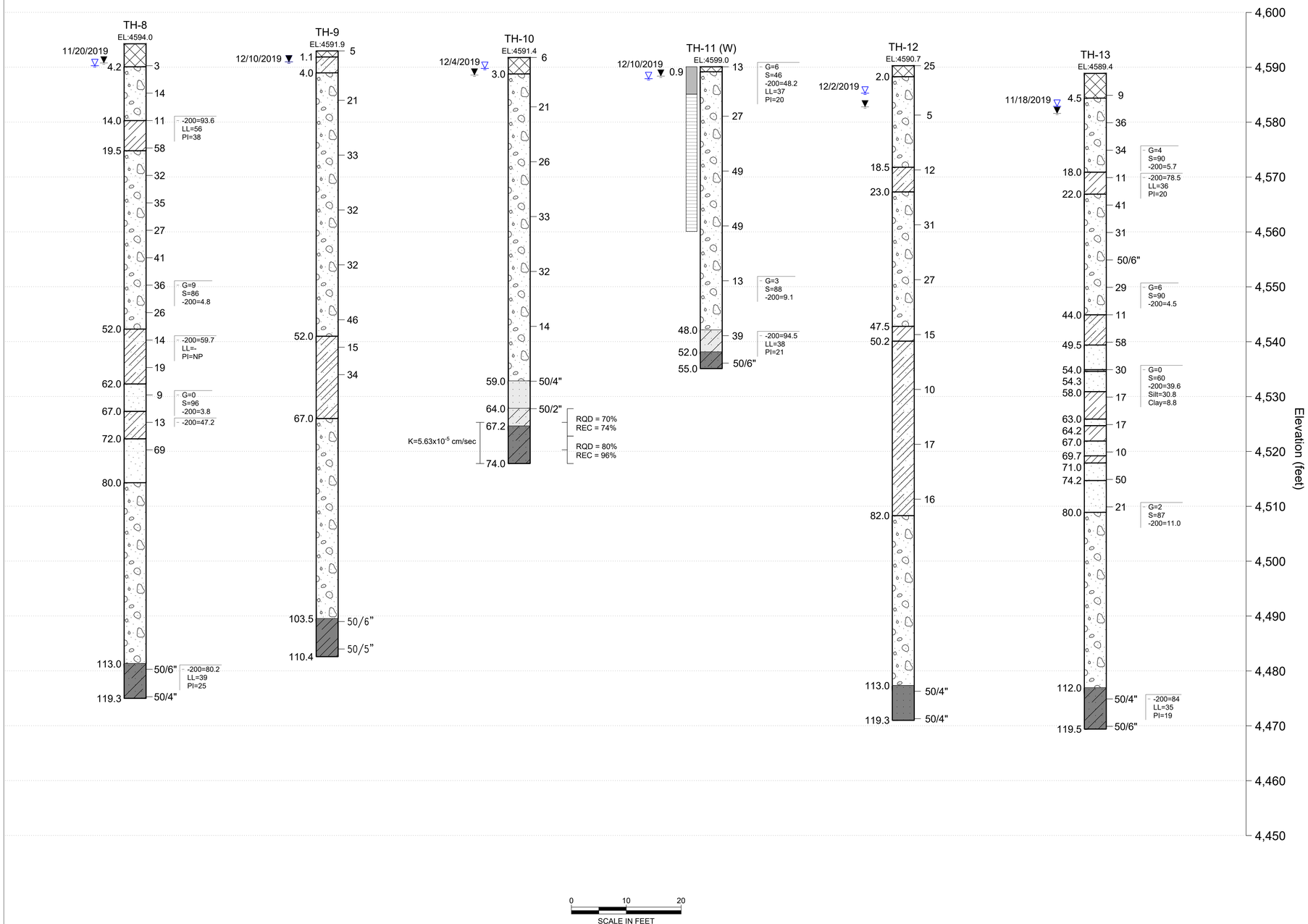
SUSAN A. RAINEY
STATE PROFESSIONAL ENGINEER NO. 26356
DATE:

Schnabel ENGINEERING
600 SOUTH AIRPORT ROAD, BUILDING A, SUITE 205
LONGMONT, COLORADO 80503
PHONE: (303) 485-2466
schnabel-eng.com

PROJECT NAME
JURGENS FARM SLURRY WALL

# SUMMARY LOGS 1

PROJECT: DA126038.00
DATE: AUGUST 2024
SHEET
3 OF 15




| REV | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 1 | CLIENT REVIEW SET | SAR | 6/2/21 |
| 2 | CLIENT REVIEW SET | SAR | 4/27/22 |
| 3 | FOR BID | SAR | 10/4/24 |

IRECK 9/30/2024 10:39:12 AM

DESIGNED BY: SAR
DRAWN BY: ITR
CHECKED BY: SAR

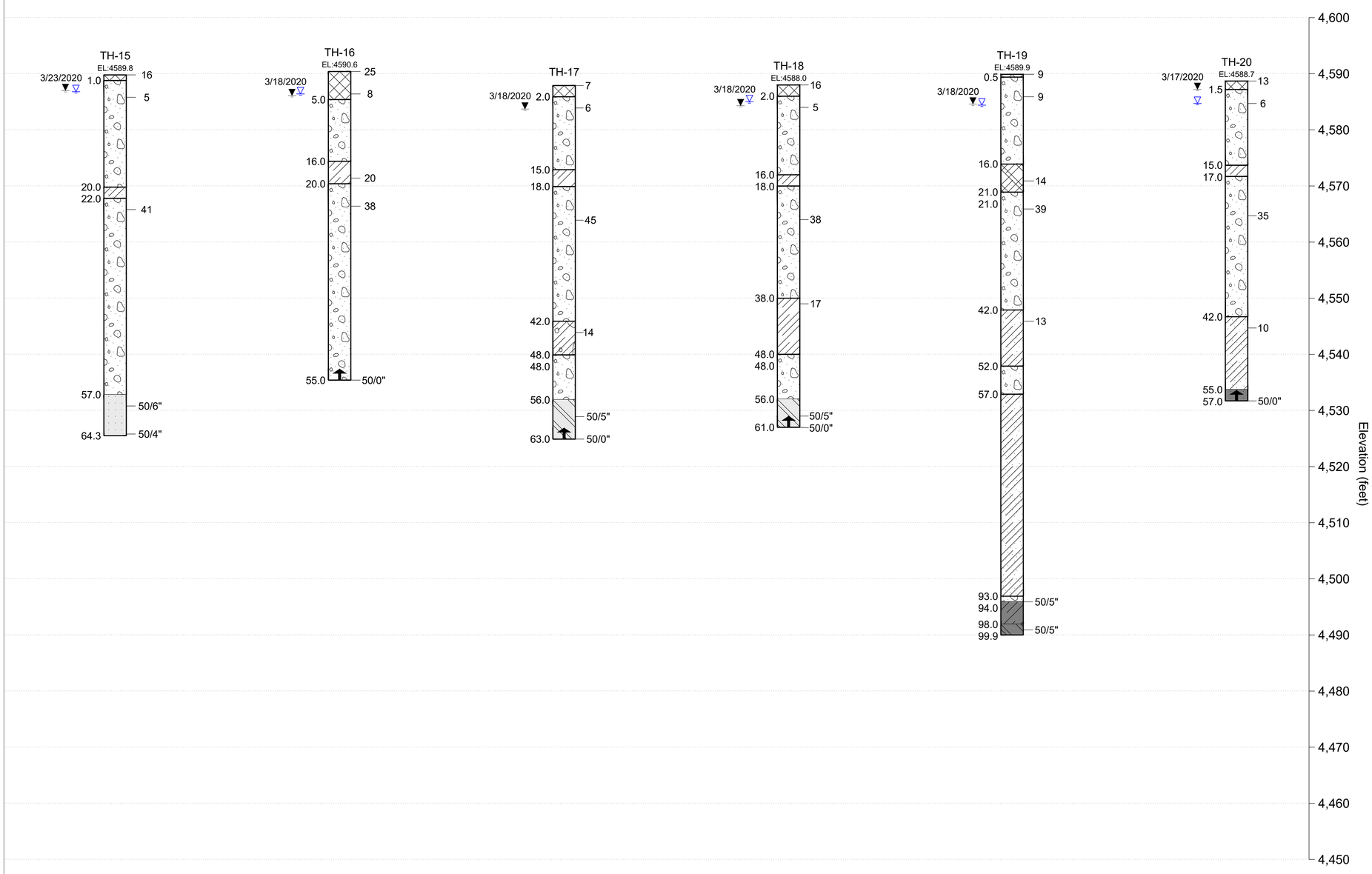
SUSAN A. RAINEY
DATE:
STATE PROFESSIONAL ENGINEER NO. 26356

Schnabel ENGINEERING
600 SOUTH AIRPORT ROAD, BUILDING A, SUITE 205
LONGMONT, COLORADO 80503
PHONE: (303) 485-2488
schnabel-eng.com

PROJECT NAME
JURGENS FARM SLURRY WALL

# SUMMARY LOGS 2

PROJECT: DA126038.00
DATE: AUGUST 2024
SHEET
4 OF 15




| REV | DESCRIPTION | BY | DATE |
|---|---|---|---|
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| 2 | CLIENT REVIEW SET | SAR | 4/27/22 |
| 3 | FOR BID | SAR | 10/4/24 |

IRECK 9/30/2024 10:39:12 AM

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DRAWN BY: ITR
CHECKED BY: SAR

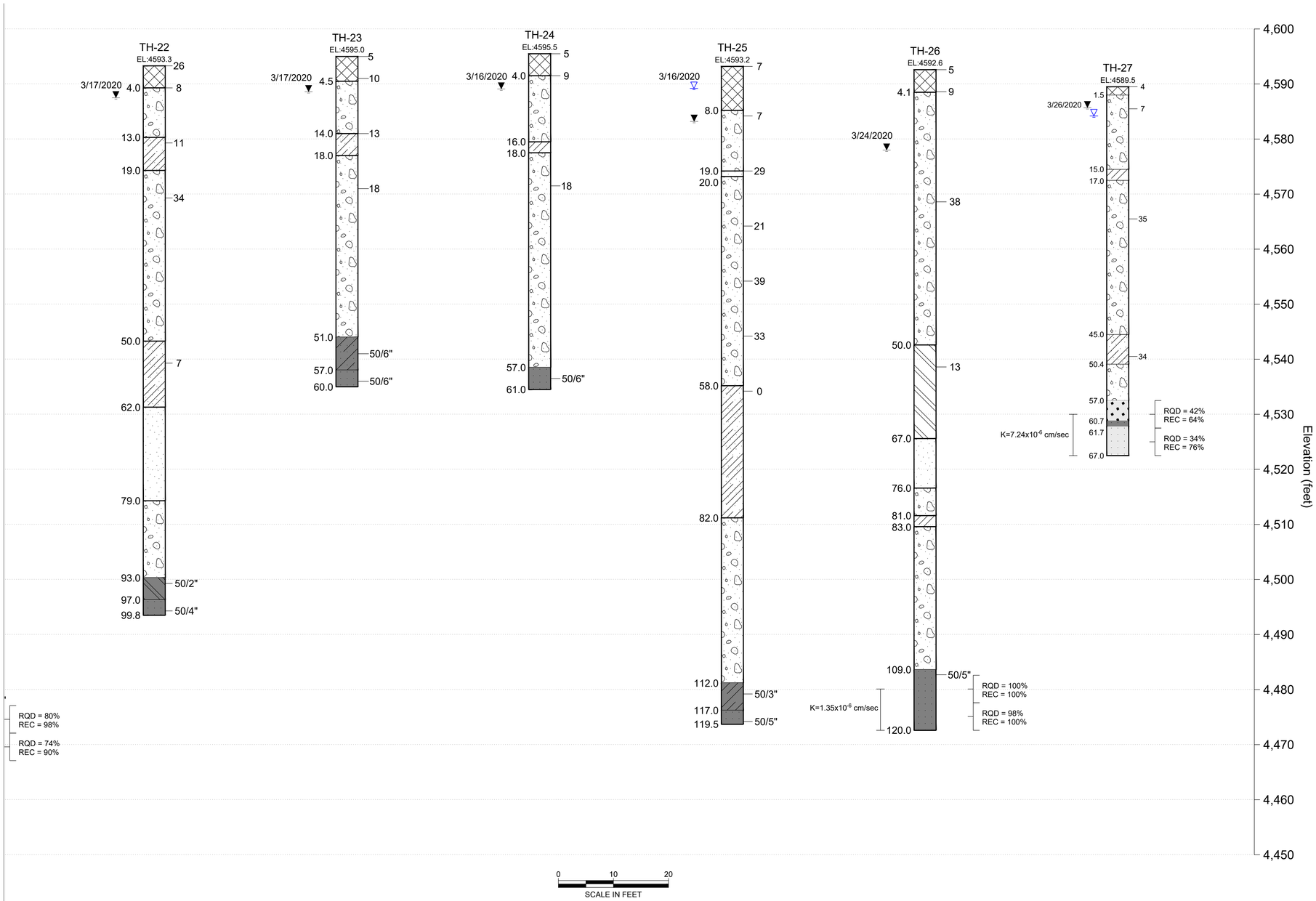
SUSAN A. RAINEY
STATE PROFESSIONAL ENGINEER NO. 26356
DATE:

Schnabel ENGINEERING
600 SOUTH AIRPORT ROAD, BUILDING A, SUITE 205
LONGMONT, COLORADO 80503
PHONE: (303) 485-0900
schnabel-eng.com

PROJECT NAME
JURGENS FARM SLURRY WALL

# SUMMARY LOGS 3

PROJECT: DA126038.00
DATE: AUGUST 2024
SHEET
5 OF 15




| REV | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 1 | CLIENT REVIEW SET | SAR | 6/2/21 |
| 2 | CLIENT REVIEW SET | SAR | 4/27/22 |
| 3 | FOR BID | SAR | 10/4/24 |

IRECK 9/30/2024 10:39:12 AM

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DRAWN BY: ITR
CHECKED BY: SAR

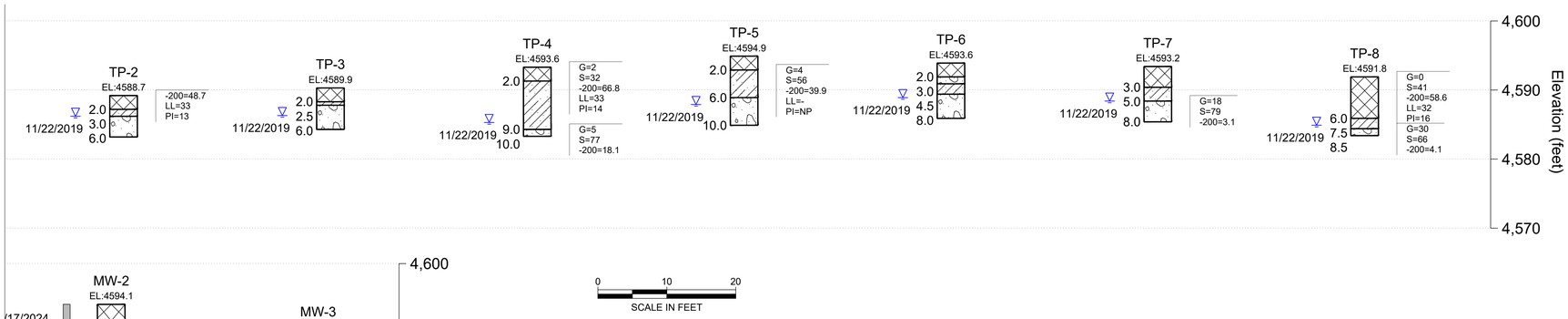
SUSAN A. RAINEY
DATE:
STATE PROFESSIONAL ENGINEER NO. 26356

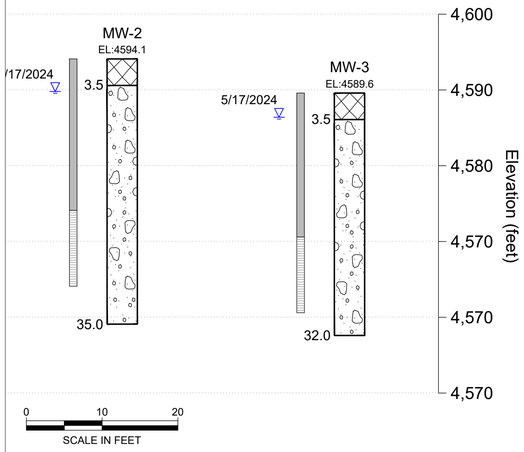
Schnabel ENGINEERING
600 SOUTH AIRPORT ROAD, BUILDING A, SUITE 205
LONGMONT, COLORADO 80503
PHONE: 303.772.1960
schnabel-eng.com

PROJECT NAME
JURGENS FARM SLURRY WALL

# SUMMARY LOGS 4

PROJECT: DA126038.00
DATE: AUGUST 2024
SHEET
6 OF 15




ALLY WITH GRAVEL, LOOSE TO MED. DENSE,
VN (SC, CL, CL-ML)

NGE, VERY HIGH TO LOW PLASTIC,

T, TAN/ORANGE OR BROWN, NON PLASTIC,

MOD. GRADED, MED. DENSE TO DENSE,
C, SP-SC)

TO WET, TAN TO GREY, NON PLASTIC (SP)

NSE, WET, TAN, NON PLASTIC, LOCALLY

LASTIC (ML)

SE, WET, NON PLASTIC (SM)

O VERY DENSE, MOIST TO WET,
D. GRAINED (SP, SC, SM)

LY MOIST, TAN/BROWN WITH ORANGE,
L).

ST TO MOIST, ORANGE WITH GREY,

REY TO DARK GREY, PLASTIC, LOCAL

RY DENSE, SLIGHTLY MOIST TO MOIST, GREY
(SC, SC, SM)

E TO VERY DENSE, SLIGHTLY MOIST, DARK

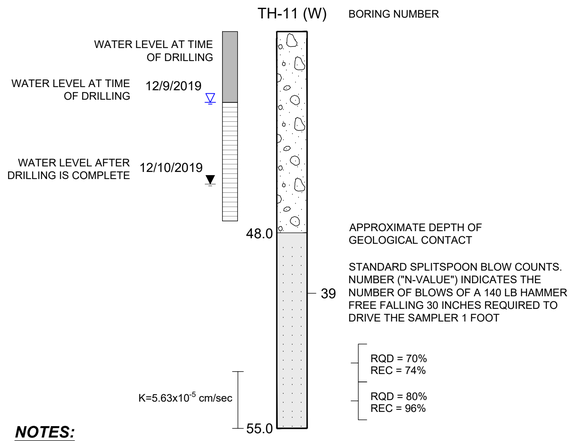
TRONG), SLIGHTLY MOIST, GREY, NONPLASTIC,
ENT, FINE TO MED. GRAINED (SP).

), SLIGHTLY MOIST, GREY, NONPLASTIC,
ENT, FINE TO MED. GRAINED (SP).

LY MOIST, DARK GREY, PLASTIC, LOCAL

ST TO DRY, LIGHT GREY TO DARK GREY, LOW

WHICH AUGER REFUSAL OCCURRED.




## TEST HOLE AND TEST PIT LOCATIONS

| NAME | NORTHING | EASTING | ELEVATION |
|---|---|---|---|
| TH-01 | 1394405.71 | 3260857.36 | 4587.5 |
| TH-02 | 1395306.54 | 3259227.97 | 4590.93 |
| TH-03 | 1395608.99 | 3258857.05 | 4591.22 |
| TH-04 | 1396058.18 | 3257327.39 | 4593.79 |
| TH-05 | 1396548.98 | 3257372.47 | 4592.3 |
| TH-06 | 1395279.95 | 3256076.59 | 4594.58 |
| TH-06A | 1396528.58 | 3256093.27 | 4595.48 |
| TH-07 | 1394663.1 | 3256346.37 | 4594.91 |
| TH-08 | 1394501.78 | 3257005.85 | 4593.98 |
| TH-09 | 1392857.5 | 3257339.81 | 4591.9 |
| TH-10 | 1393626.23 | 3258226.42 | 4591.44 |
| TH-11 | 1393587.31 | 3259116.03 | 4589.97 |
| TH-12 | 1393554.21 | 3260420.24 | 4590.74 |
| TH-13 | 1393826.24 | 3261212.5 | 4589.4 |
| TH-14 | 1393543.15 | 3257734.44 | 4591.5 |
| TH-15 | 1393611.11 | 3258787.95 | 4589.8 |
| TH-16 | 1393814.98 | 3259575.34 | 4590.6 |
| TH-17 | 1394209.46 | 3259994.77 | 4587.9 |
| TH-18 | 1394307.38 | 3260409.56 | 4588 |
| TH-19 | 1394917.77 | 3260180.98 | 4589.9 |
| TH-20 | 1394878.06 | 3259613.66 | 4588.7 |
| TH-21 | 1395870.1 | 3258488.66 | 4592.1 |
| TH-22 | 1396088.77 | 3257907.4 | 4593.3 |
| TH-23 | 1396155.15 | 3256624.36 | 4595 |
| TH-24 | 1395855.67 | 3256267.33 | 4595.5 |
| TH-25 | 1394059.33 | 3256936.98 | 4593.2 |
| TH-26 | 1393581.39 | 3256913.37 | 4592.6 |
| TH-27 | 1394575.64 | 3259936.29 | 4589.5 |
| TP-1 | 1394123.31 | 3260513.3 | 4589.13 |
| TP-2 | 1394458.03 | 3259823.29 | 4588.66 |
| TP-3 | 1394918.19 | 3259084.77 | 4589.9 |
| TP-4 | 1395527.57 | 3258072.2 | 4593.6 |
| TP-5 | 1395903.68 | 3256775 | 4594.85 |
| TP-6 | 1395256.55 | 3257329.35 | 4593.57 |
| TP-7 | 1394027.01 | 3256934.17 | 4593.18 |
| TP-8 | 1394143.87 | 3258752.58 | 4591.78 |

***NOTES:***

1. TH EXPLORATORY BORINGS WERE DRILLED 11/18/19 THROUGH 12/10/19 AND 3/16/20 THROUGH 3/30/20 USING A TRUCK-MOUNTED CME-55 AND CME 75 DRILL RIG. BORINGS WERE DRILLED WITH 4.25-INCH I.D. HOLLOW STEM AUGERS AND 2.5-INCH I.D. HQ CORE RODS. MW-1, 2 AND 3 WERE DRILLED ON 5/17/24 USING A TRUCK-MOUNTED 552 DRILL RIG. BORING WERE DRILLED WITH 4.25-INCH I.D. HOLLOW STEM AUGER WITH A 2-INCH PVC WELL CASING.
2. TEST PITS WERE EXCAVATED ON 11/22/19 WITH A JOHN DEERE 210G LC EXCAVATOR. EXPLORATORY BORINGS WERE DRILLED BY OTHERS IN 2012 & 2013. SUMMARY LOGS WERE NOT INCLUDED.
3. B EXPLORATORY BORINGS WERE DRILLED BY OTHERS IN 2021 & 2013, SUMMARY LOGS NOT INCLUDED.
4. ALL EXPLORATORY LOCATIONS SURVEYED BY LAT40 PROFESSIONAL LAND SURVEYORS ON 12/30/2019 AND 04/07/2020. COORDINATES ARE IN THE MODIFIED COLORADO STATE PLANE NORTH SYSTEM IN FEET, RELATIVE TO THE NAD83 HORIZONTAL DATUM AND NAVD88 VERTICAL DATUM. TO CONVERT TO STATE PLANE SCALE AT 0.999735370 (1.0002647) ABOUT THE ORIGIN 0,0.
5. LINES BETWEEN UNITS REPRESENT APPROXIMATE BOUNDARIES AND MAY BE GRADUAL.
6. GROUNDWATER WAS RECORDED DURING DRILLING AND AFTER DRILLING WAS COMPLETED. GROUNDWATER LEVELS MAY FLUCTUATE SEASONALLY AND SITE DEWATERING OPERATIONS.
7. LAB TESTING:

   G = % GRAVEL BY WEIGHT (>NO.4 SIEVE)
   S = % SAND BY WEIGHT (NO.4>S>NO.200)
   -200 = % BY WEIGHT PASSING THE #200 SIEVE (FINES)
   LL = LIQUID LIMIT
   PI = PLASTICITY LIMIT
   NP = NON PLASTIC

| REV | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 1 | CLIENT REVIEW SET | SAR | 6/2/21 |
| 2 | CLIENT REVIEW SET | SAR | 4/27/22 |
| 3 | FOR BID | SAR | 10/4/24 |

IRECK 9/30/2024 10:39:12 AM

DESIGNED BY: SAR
DRAWN BY: ITR
CHECKED BY: SAR

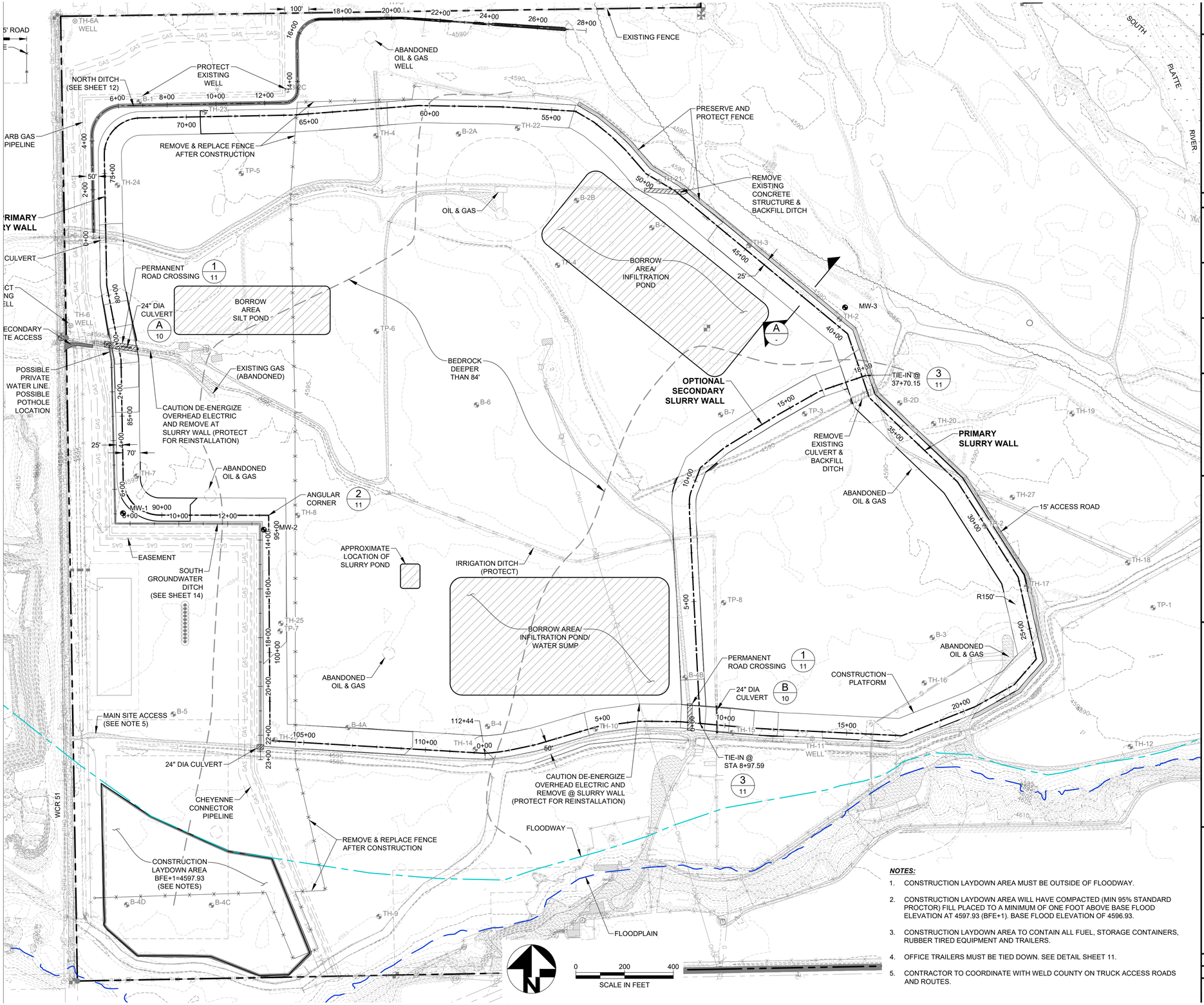
SUSAN A. RAINEY
STATE PROFESSIONAL ENGINEER NO. 26356
DATE:

Schnabel ENGINEERING
600 SOUTH AIRPORT ROAD, BUILDING A, SUITE 205
LONGMONT, COLORADO 80503
PHONE: (303) 651-4460
schnabel-eng.com

PROJECT NAME
JURGENS FARM SLURRY WALL

SUMMARY LOGS 5

PROJECT: DA126038.00
DATE: AUGUST 2024
SHEET
7 OF 15




***NOTES:***

1. CONSTRUCTION LAYDOWN AREA MUST BE OUTSIDE OF FLOODWAY.
2. CONSTRUCTION LAYDOWN AREA WILL HAVE COMPACTED (MIN 95% STANDARD PROCTOR) FILL PLACED TO A MINIMUM OF ONE FOOT ABOVE BASE FLOOD ELEVATION AT 4597.93 (BFE+1). BASE FLOOD ELEVATION OF 4596.93.
3. CONSTRUCTION LAYDOWN AREA TO CONTAIN ALL FUEL, STORAGE CONTAINERS, RUBBER TIRED EQUIPMENT AND TRAILERS.
4. OFFICE TRAILERS MUST BE TIED DOWN. SEE DETAIL SHEET 11.
5. CONTRACTOR TO COORDINATE WITH WELD COUNTY ON TRUCK ACCESS ROADS AND ROUTES.

| REV | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 1 | CLIENT REVIEW SET | SAR | 6/2/21 |
| 2 | CLIENT REVIEW SET | SAR | 4/27/22 |

DESIGNED BY: SAR
DRAWN BY: ITR
CHECKED BY: SAR

SUSAN A. RAINEY
STATE PROFESSIONAL ENGINEER NO. 26356
DATE:

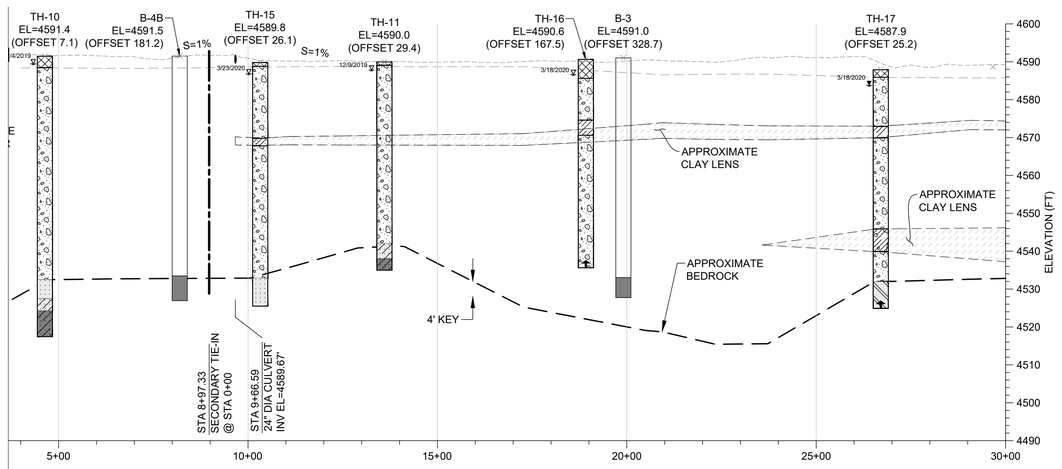
BHOGNESS 10/7/2024 8:10:28 AM

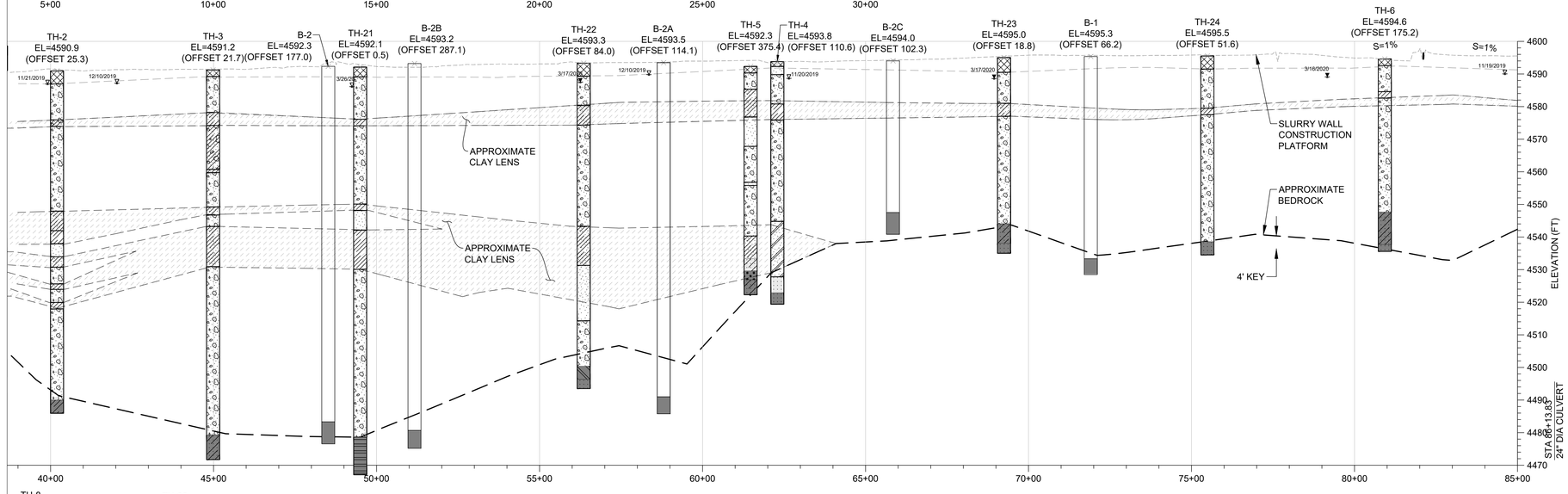
Schnabel ENGINEERING
600 SOUTH AIRPORT ROAD, BUILDING A, SUITE 205
LONGMONT, COLORADO 80503
PHONE: (970) 535-1560
schnabel-eng.com

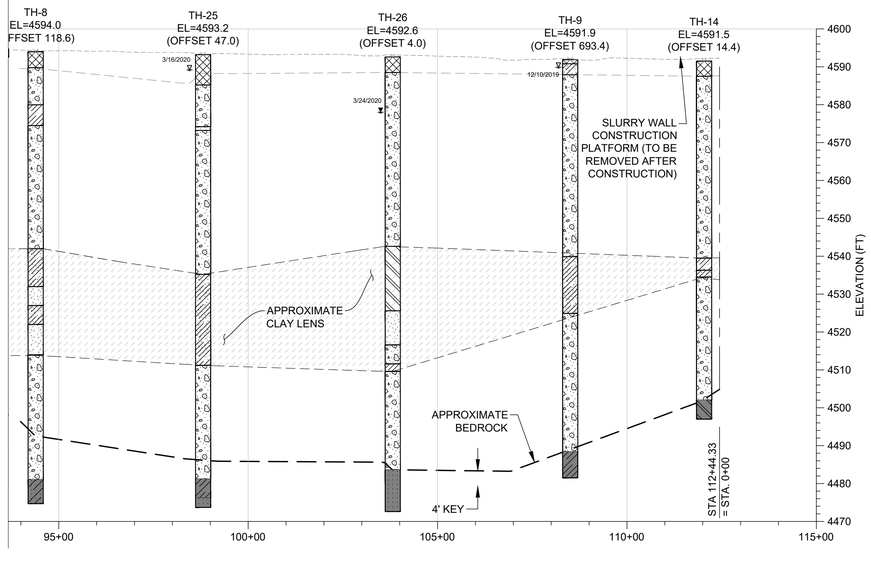
PROJECT NAME
JURGENS FARM SLURRY WALL

# SLURRY WALL PLAN

PROJECT: DA126038.00
DATE: AUGUST 2024
SHEET 8 OF 15





| REV | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 1 | CLIENT REVIEW SET | SAR | 6/2/21 |
| 2 | CLIENT REVIEW SET | SAR | 4/27/22 |

BHOGNESS 10/7/2024 8:10:28 AM

DESIGNED BY: SAR
DRAWN BY: ITR
CHECKED BY: SAR

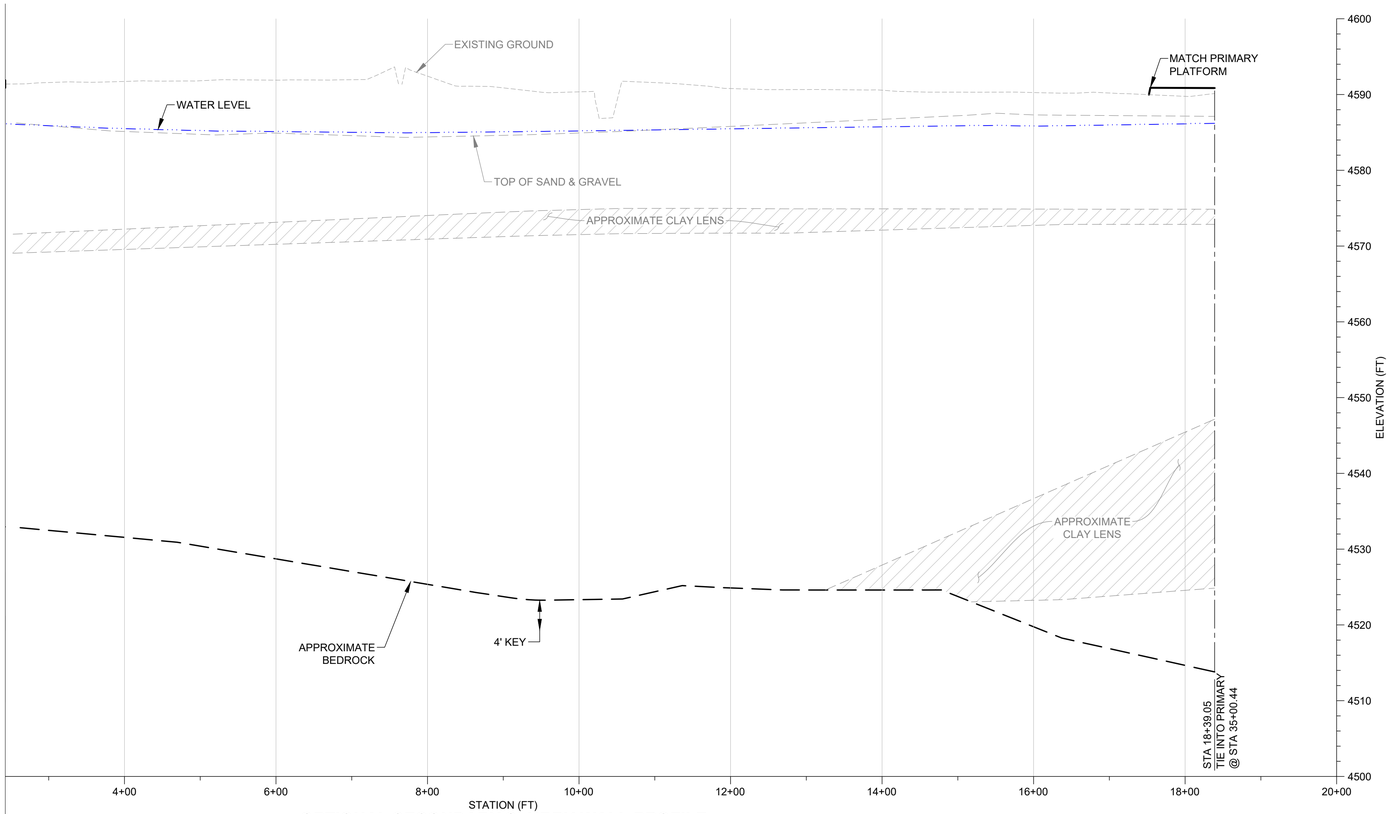
SUSAN A. RAINEY
DATE:
STATE PROFESSIONAL ENGINEER NO. 26356

Schnabel ENGINEERING
600 SOUTH AIRPORT ROAD, BUILDING A, SUITE 205
LONGMONT, COLORADO 80503
PHONE: 303.444.1951
schnabel-eng.com

PROJECT NAME
JURGENS FARM SLURRY WALL

# PRIMARY SLURRY WALL PROFILE

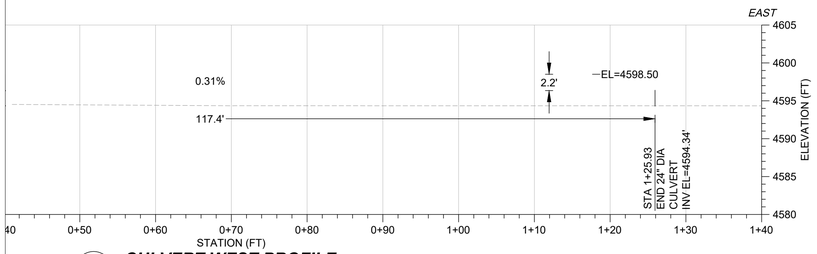
PROJECT: DA126038.00
DATE: AUGUST 2024
SHEET
9 OF 15



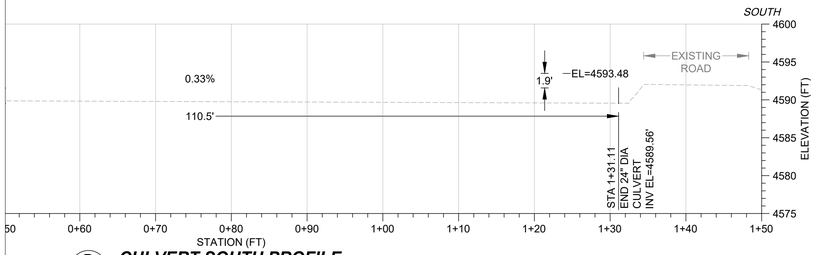

## OPTIONAL SECONDARY SLURRY WALL PROFILE

Vertical Scale (FT) 0 10 20

Horizontal Scale (FT) 0 100 200



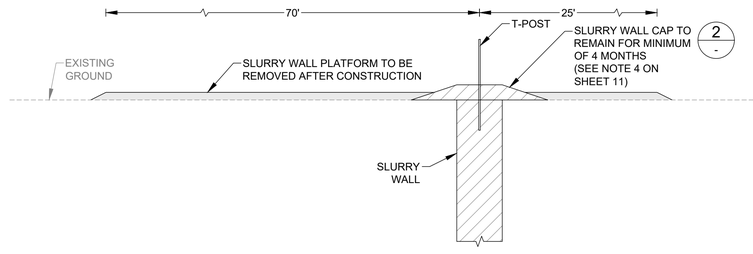

A/8 **CULVERT WEST PROFILE**




B/8 **CULVERT SOUTH PROFILE**

0 10' 20'

SCALE IN FEET




## SLURRY WALL PLATFORM DETAIL

NTS

| REV | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 1 | CLIENT REVIEW SET | SAR | 6/2/21 |
| 2 | CLIENT REVIEW SET | SAR | 4/27/22 |

BHOGNESS 10/7/2024 8:10:28 AM

DESIGNED BY: SAR
DRAWN BY: ITR
CHECKED BY: SAR

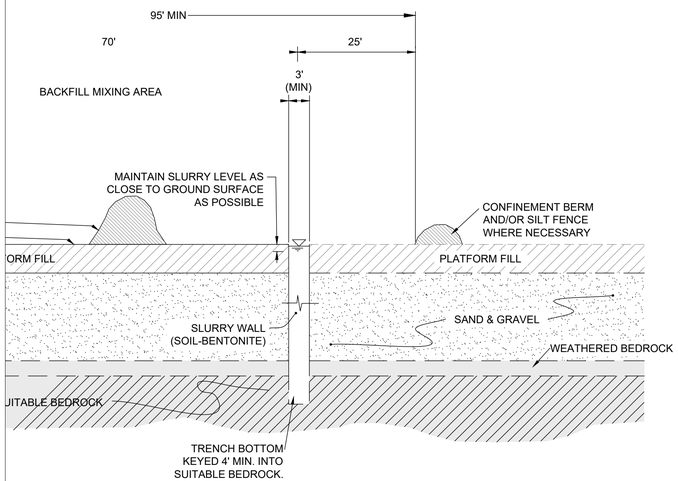
SUSAN A. RAINEY
DATE:
STATE PROFESSIONAL ENGINEER NO. 26356

Schnabel ENGINEERING
600 SOUTH AIRPORT ROAD, BUILDING A, SUITE 205
LONGMONT, COLORADO 80503
PHONE: 303.651.8456
schnabel-eng.com

PROJECT NAME
JURGENS FARM SLURRY WALL

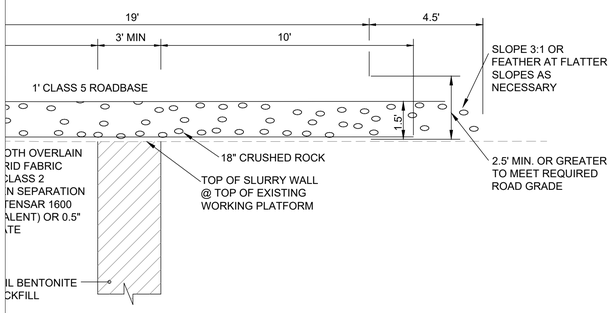
OPTIONAL SECONDARY SLURRY WALL PROFILE

PROJECT: DA126038.00
DATE: AUGUST 2024
SHEET
10 OF 15



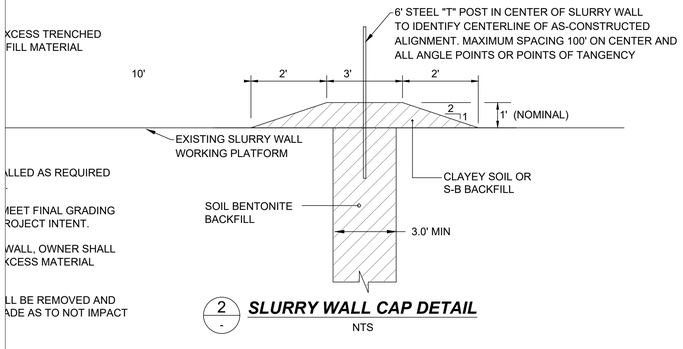

## *TYPICAL SLURRY WALL DETAIL*

NTS



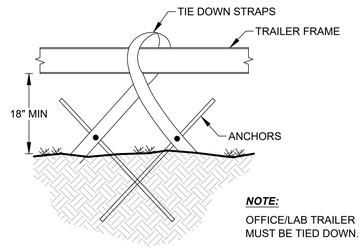

## *MANENT ROAD CROSSING DETAIL*

NTS




2/- ***SLURRY WALL CAP DETAIL***

NTS




***NOTE:***

OFFICE/LAB TRAILER
MUST BE TIED DOWN.

## *TRAILER TIE DOWN DETAIL*

NTS

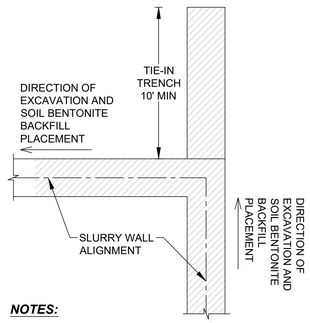
### *PRIMARY SLURRY WALL SUPPLEMENTAL FINES & BENTONITE*

| START STATION | END STATION | CAST OUT % | SUPPLEMENTAL FINES (CY/LF) | DRY BENTONITE APPLICATION RATE (LBS/LIN. FT) | SPACING BETWEEN BAG (3000LB BAG), FT |
|---|---|---|---|---|---|
| 0+00 | 4+00 | 45 | 4.5 | 322 | 9 |
| 4+00 | 15+00 | 50 | 4 | 211 | 14 |
| 15+00 | 32+00 | 20 | 2 | 202 | 15 |
| 32+00 | 36+00 | 30 | 3 | 359 | 8.5 |
| 36+00 | 58+00 | 30 | 4 | 332 | 9 |
| 58+00 | 72+00 | 20 | 2 | 215 | 14 |
| 72+00 | 90+00 | 45 | 3.5 | 176 | 17 |
| 90+00 | 94+00 | 45 | 5 | 401 | 7.5 |
| 94+00 | 99+00 | 30 | 4 | 401 | 7.5 |
| 99+00 | 112+40 | 35 | 4.5 | 322 | 9 |

### *SECONDARY SLURRY WALL SUPPLEMENTAL FINES & BENTONITE*

| START STATION | END STATION | CAST OUT % | SUPPLEMENTAL FINES (CY/LF) | DRY BENTONITE APPLICATION RATE (LBS/LIN. FT) | SPACING BETWEEN BAG (3000LB BAG), FT |
|---|---|---|---|---|---|
| 0+00 | 10+00 | 50 | 4.0 | 211 | 14.0 |
| 10+00 | 18+39 | 20 | 2.0 | 202 | 15.0 |

1. TABLE BASED ON SUPPLEMENTAL FINES WITH AN AVERAGE OF **50%** PASSING THE #200 SIEVE.
2. RATES SHOWN ARE FOR A MINIMUM OF 30% PASSING #200 SIEVE FOR S-B BACKFILL AND MAY REQUIRE ADJUSTMENT.
3. BAG SPACING BASED ON A DRY BENTONITE APPLICATION RATE OF 1% AND MAY BE ADJUSTED BASED ON THE FINAL MIX DESIGN AND THE MINIMUM OF FINES PASSING #200 SIEVE AS APPROVED BY DESIGN ENGINEER.



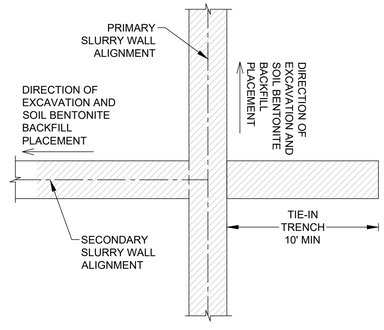

***NOTES:***

1. TIE-IN TAB SHALL BE USED FOR SOIL BENTONITE CUTOFF WALL CONSTRUCTION AS SHOWN ON THE SLURRY WALL PLAN SHEET 8.
2. CONTINUOUS TRENCH WITH FULL DEPTH KEY SHALL EXTEND A MINIMUM OF 10' BEYOND THE INTERSECTION OF APPROXIMATE 90' TURN OF THE CUTOFF WALL.

2/8 ***SLURRY WALL CORNER DETAIL***

0 5' 10'

SCALE IN FEET




3/8 ***SLURRY WALL TIE-IN DETAIL***

0 5' 10'

SCALE IN FEET

| REV | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 1 | CLIENT REVIEW SET | SAR | 6/2/21 |
| 2 | CLIENT REVIEW SET | SAR | 4/27/22 |
| 3 | FOR BID | SAR | 10/4/24 |

BHOGNESS 10/7/2024 8:06:56 AM

DESIGNED BY: SAR
DRAWN BY: ITR
CHECKED BY: SAR

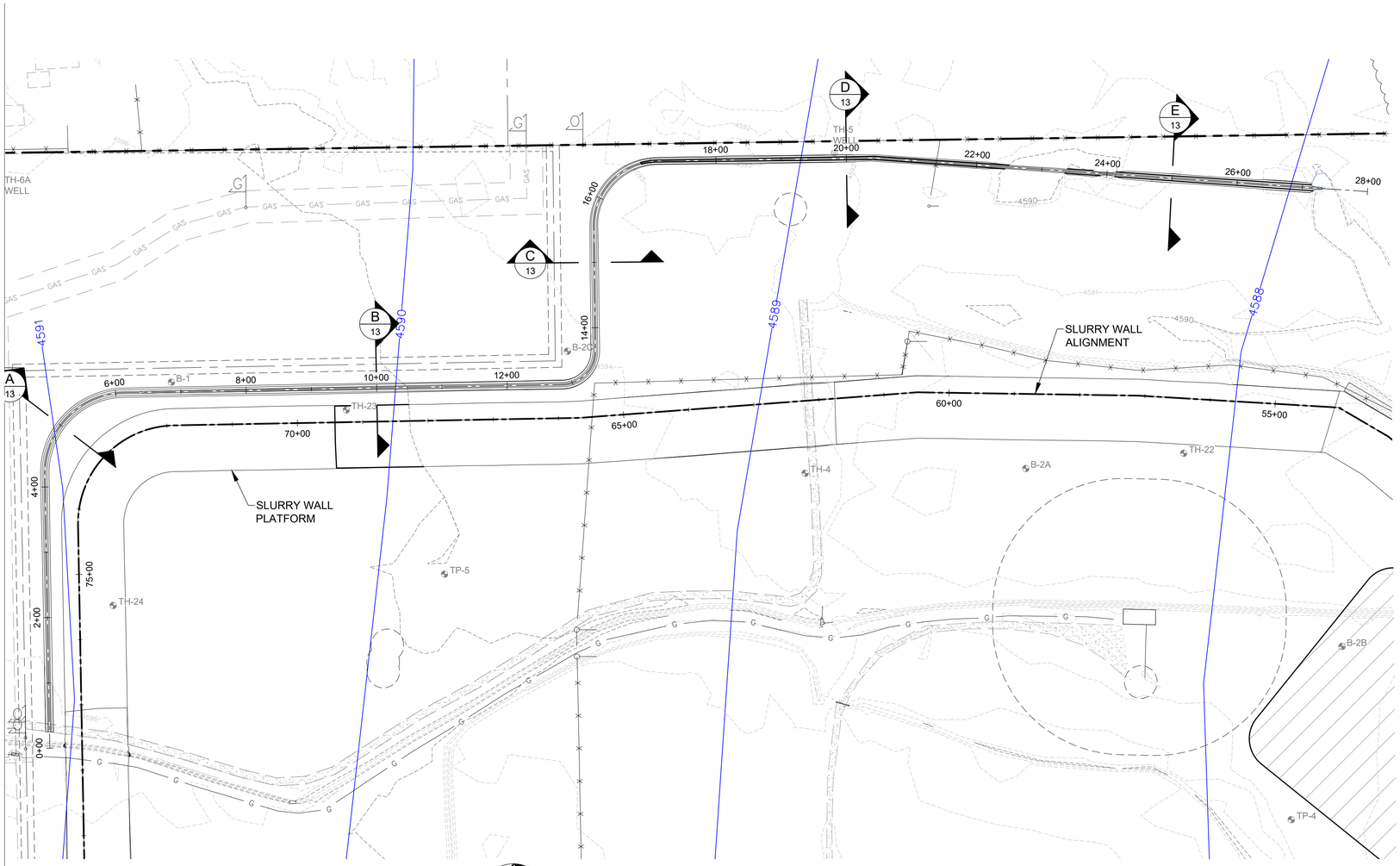
SUSAN A. RAINEY
STATE PROFESSIONAL ENGINEER NO. XXXXX
DATE:

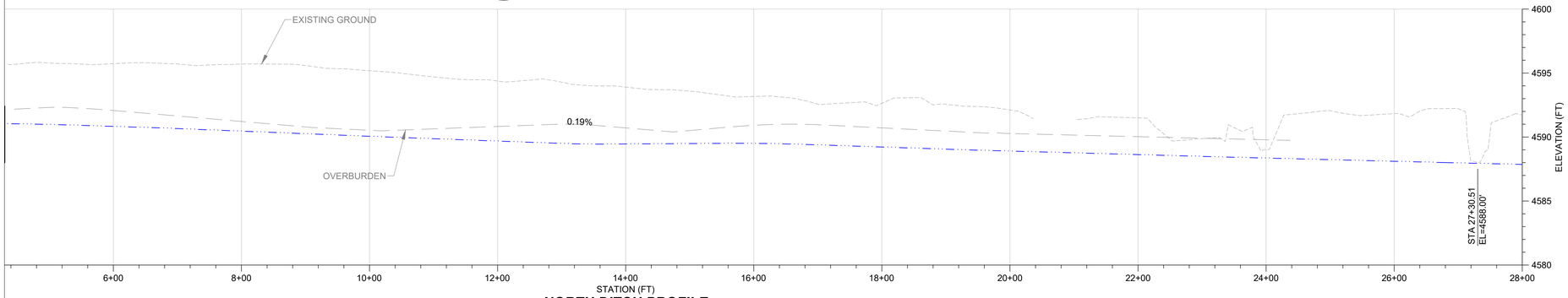
Schnabel ENGINEERING
600 SOUTH AIRPORT ROAD, BUILDING A, SUITE 205
LONGMONT, COLORADO 80503
PHONE: 303.651.1414
schnabel-eng.com

PROJECT NAME
JURGENS FARM SLURRY WALL

SLURRY WALL DETAILS

PROJECT: DA126038.00
DATE: AUGUST 2024
SHEET
11 OF 15




## *NORTH DITCH PROFILE*

Vertical Scale (FT) 0 5 10

Horizontal Scale (FT) 0 100 200

***NOTE:***

1. DITCH TO BE CONSTRUCTED BEFORE SLURRY WALL PLATFORM.

| REV | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 1 | CLIENT REVIEW SET | SAR | 6/2/21 |
| 2 | CLIENT REVIEW SET | SAR | 4/27/22 |

DESIGNED BY: SAR
DRAWN BY: ITR
CHECKED BY: SAR

SUSAN A. RAINEY
STATE PROFESSIONAL ENGINEER NO. 26356
DATE:

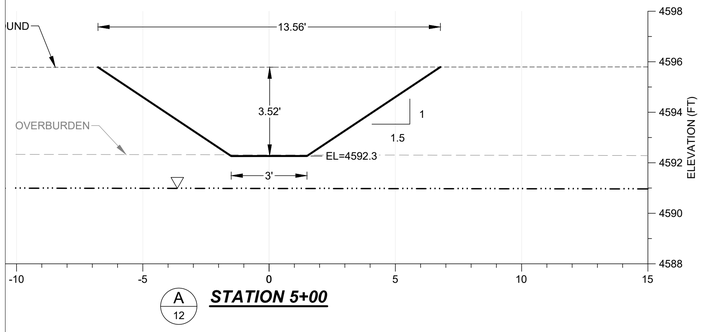
BHOGNESS 10/7/2024 8:10:28 AM

Schnabel ENGINEERING
600 SOUTH AIRPORT ROAD, BUILDING A, SUITE 205
LONGMONT, COLORADO 80503
PHONE: (303) 444-1951
schnabel-eng.com

PROJECT NAME
JURGENS FARM SLURRY WALL

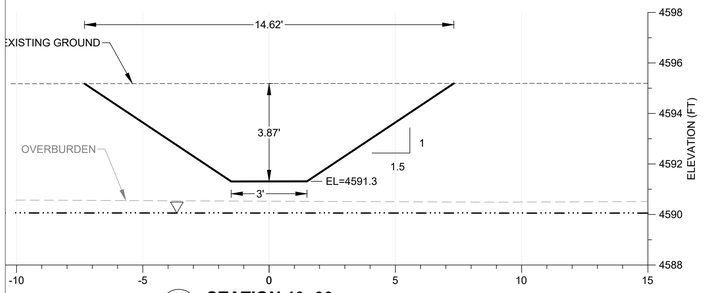
NORTH DITCH PLAN & PROFILE

PROJECT: DA126038.00
DATE: AUGUST 2024
SHEET
12 OF 15



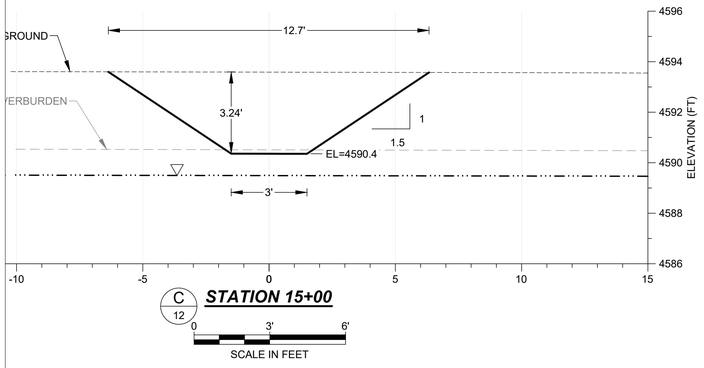

A
12

**STATION 5+00**



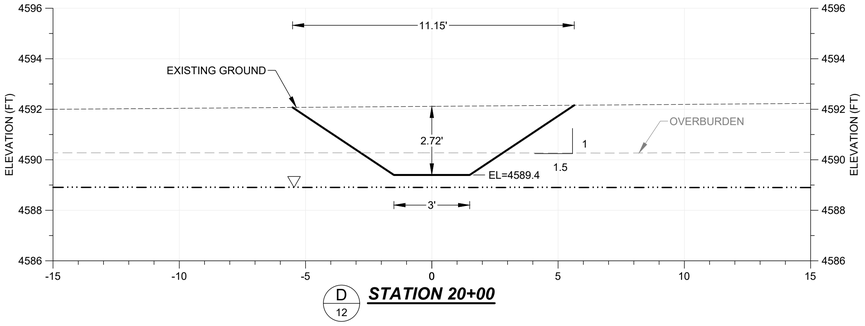

B
12

**STATION 10+00**



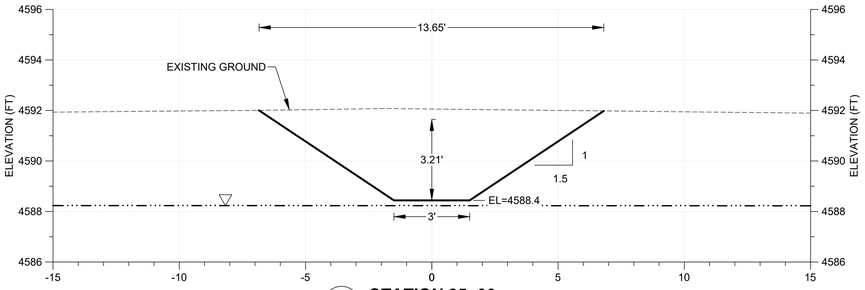

C
12

**STATION 15+00**




D
12

**STATION 20+00**




E
12

**STATION 25+00**

0 3' 6'

SCALE IN FEET

| REV | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 1 | CLIENT REVIEW SET | SAR | 6/2/21 |
| 2 | CLIENT REVIEW SET | SAR | 4/27/22 |

BHOGNESS 10/7/2024 8:10:28 AM

DESIGNED BY: SAR

DRAWN BY: ITR

CHECKED BY: SAR

SUSAN A. RAINEY

DATE:

STATE PROFESSIONAL ENGINEER NO. 26356

Schnabel ENGINEERING
600 SOUTH AIRPORT ROAD, BUILDING A, SUITE 205
LONGMONT, COLORADO 80503
PHONE: 303.651.1456
schnabel-eng.com

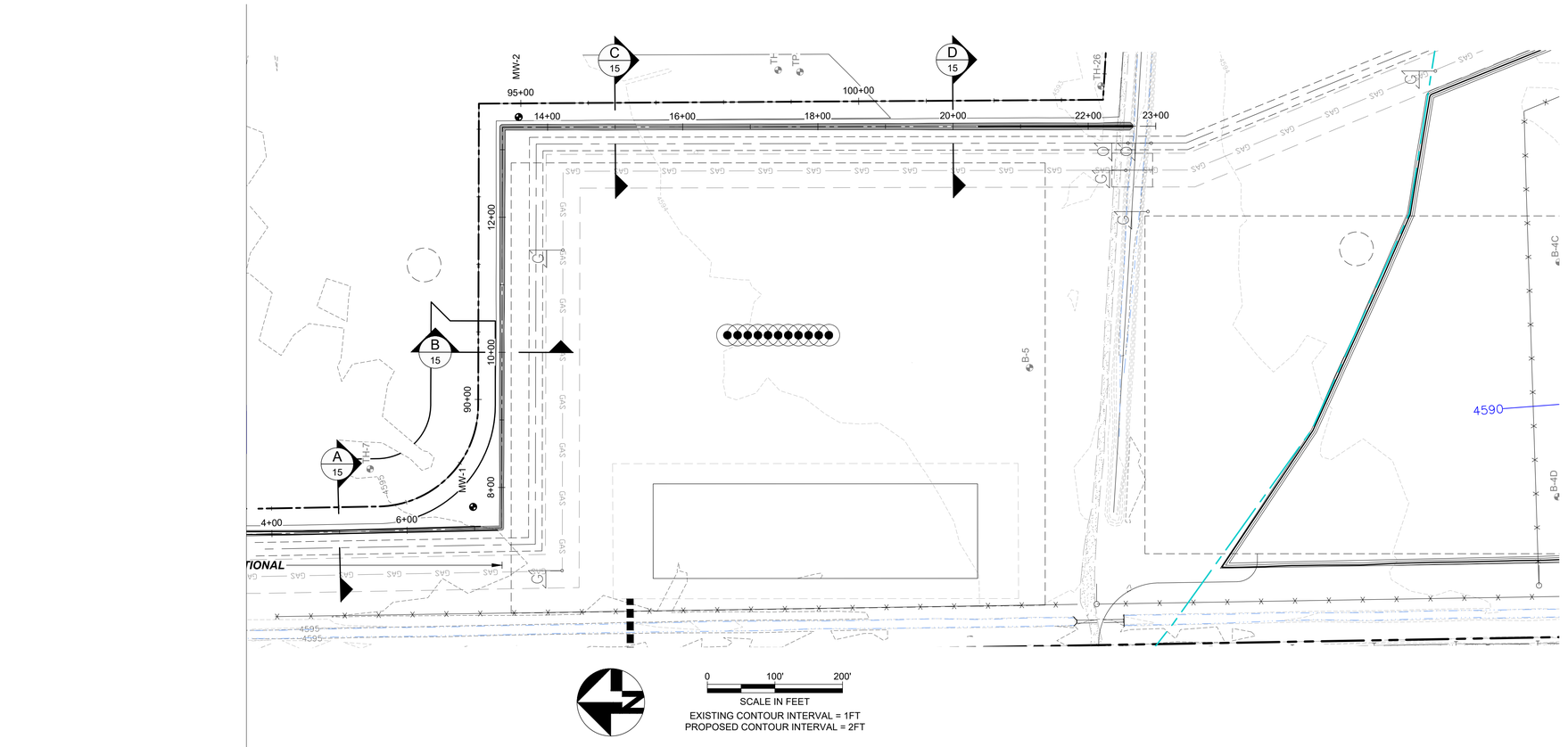
PROJECT NAME
JURGENS FARM SLURRY WALL

# NORTH DITCH SECTIONS

PROJECT: DA126038.00

DATE: AUGUST 2024

SHEET
13 OF 15




0 100' 200'

SCALE IN FEET
EXISTING CONTOUR INTERVAL = 1FT
PROPOSED CONTOUR INTERVAL = 2FT




## SOUTH GROUNDWATER INTERCEPT DITCH

Vertical Scale (FT) 0 5 10
Horizontal Scale (FT) 0 100 200

**NOTE:**

1. OPTIONAL SECTION MAY BE CONSTRUCTED AT ONWERS DESCRETION AFTER OBSERVING FUNCTIONALITY OF THE CONSTRUCTED SECTION

| REV | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 1 | CLIENT REVIEW SET | SAR | 6/2/21 |
| 2 | CLIENT REVIEW SET | SAR | 4/27/22 |

BHOGNESS 10/7/2024 8:10:28 AM

DESIGNED BY: SAR
DRAWN BY: ITR
CHECKED BY: SAR

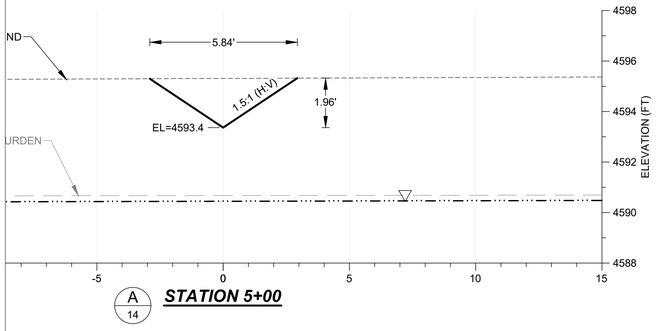
SUSAN A. RAINEY
DATE:
STATE PROFESSIONAL ENGINEER NO. 26356

Schnabel ENGINEERING
600 SOUTH AIRPORT ROAD, BUILDING A, SUITE 205
LONGMONT, COLORADO 80503
PHONE: (303) 651-8456
schnabel-eng.com

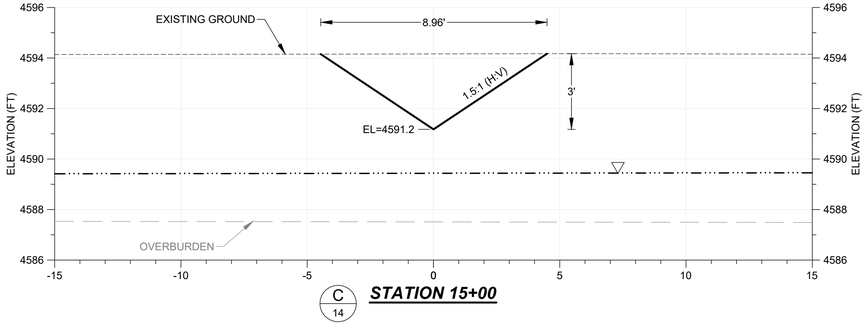
PROJECT NAME
JURGENS FARM SLURRY WALL

# SOUTH DITCH PLAN & PROFILE

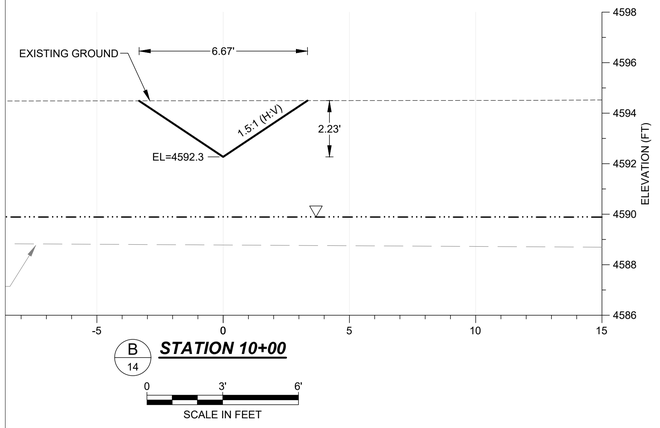
PROJECT: DA126038.00
DATE: AUGUST 2024
SHEET
14 OF 15



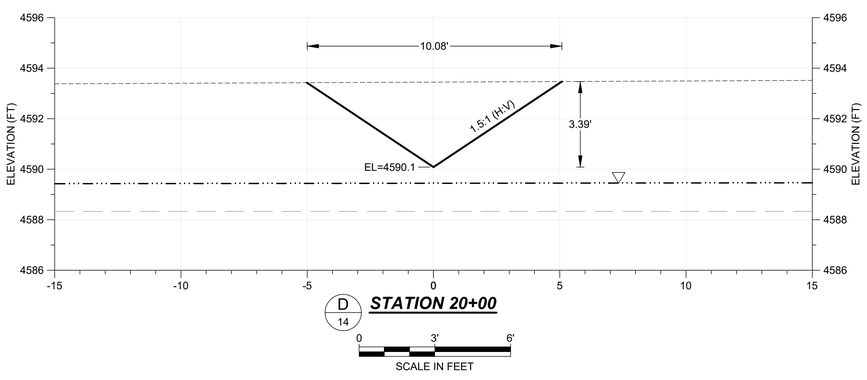

A/14 **STATION 5+00**




C/14 **STATION 15+00**




B/14 **STATION 10+00**




D/14 **STATION 20+00**

0 3' 6'
SCALE IN FEET

| REV | DESCRIPTION | BY | DATE |
|---|---|---|---|
| 1 | CLIENT REVIEW SET | SAR | 6/2/21 |
| 2 | CLIENT REVIEW SET | SAR | 4/27/22 |

BHOGNESS 10/7/2024 8:10:28 AM

DESIGNED BY: SAR
DRAWN BY: ITR
CHECKED BY: SAR

SUSAN A. RAINEY
DATE:
STATE PROFESSIONAL ENGINEER NO. 26356

Schnabel ENGINEERING
600 SOUTH AIRPORT ROAD, BUILDING A, SUITE 205
LONGMONT, COLORADO 80503
PHONE: (303) 444-1951
schnabel-eng.com

PROJECT NAME
JURGENS FARM SLURRY WALL

# SOUTH DITCH SECTIONS

PROJECT: DA126038.00
DATE: AUGUST 2024
SHEET
15 OF 15

# APPENDIX F

## JURGENS RESERVOIR
## SLURRY WALL BID TABULATION
## AND
## OPINION OF COSTS FOR ANCILLARY FACILITIES

**NOTICE OF AWARD**
**JURGENS FARM SLURRY WALL**

Date of Notice of Award: March 28, 2025

To: Odin Environmental Solutions, LLC

Lower Latham Reservoir Company (LLRC) has considered Bids for the above Project in response to its Invitation to Bidders. LLRC accepts your Bid for the Work in the amount of: $12,732,123.00

You must sign the Construction Contract with LLRC and furnish complying insurance evidence and applicable Performance and Labor and Material Payment Bonds within thirty days from the date of delivery of this NOTICE to you.

If you fail to sign the Construction Contract or furnish the bonds and insurance within thirty days from the date of delivery of this NOTICE, then LLRC may consider all your rights under LLRC's acceptance of your Proposal as abandoned.

Lower Latham Reservoir Company (LLRC)

Theodore Buderus

Theodore Buderus, President

**ACCEPTANCE OF NOTICE**

Receipt of the above NOTICE OF AWARD is hereby acknowledged this 28th day of March, 2025.

**CONTRACTOR**

Signature

Mary E. Coombe, General Counsel & Secretary

Printed Name, Title

## JURGENS FARM SLURRY WALL

BID SCHEDULE - **REVISED TO INCLUDE ITEM #10**

| # | | Construction Item | Quantity | Unit | Cost | Extension |
|---|---|---|---|---|---|---|
| **1** | | **Mobilization/Demobilization (5% of construction)** | 1 | LS | $ 1,775,500.00 | $ 1,775,500.00 |
| **2** | | **Platform Construction** | | | | |
| | a | Platform Construction | 21,000 | CY | $ 6.50 | $ 136,500.00 |
| | b | Supplemental Fines | 38,500 | CY | $ 5.00 | $ 192,500.00 |
| | c | Laydown Area | 54,000 | CY | $ 6.00 | $ 324,000.00 |
| | d | Remove and Dispose of Existing Fence | 1 | LS | $ 20,000.00 | $ 20,000.00 |
| | e | Access Road Grading | 3,460 | LF | $ 6.40 | $ 22,144.00 |
| **3** | | Primary Slurry Wall | | | | |
| | a | Slurry Excavation (Alluvial above 80') | 807,791.000 | SF | $ 8.00 | $ 6,462,328.00 |
| | b | Slurry Excavation (Bedrock above 80') | 28,385.000 | SF | $ 8.00 | $ 227,080.00 |
| | c | Slurry Excavation (Alluvial below 80') | 53,818.000 | SF | $ 42.00 | $ 2,260,356.00 |
| | d | Slurry Excavation (Bedrock below 80') | 16,507.000 | SF | $ 45.00 | $ 742,815.00 |
| **4** | | **Structural Crossings** | | | | |
| | a | Permanent Road Corssing | 2 | EA | $ 40,000.00 | $ 80,000.00 |
| | b | 24" DIA Culvert Crossing | 4 | EA | $ 5,000.00 | $ 20,000.00 |
| | c | Backfilling of Exiting Ditches | 2 | EA | $ 10,000.00 | $ 20,000.00 |
| **5** | | **Ditch Restoration** | | | | |
| | a | Ditch Restoration at 24" DIA Culverts | 2 | EA | $ 4,000.00 | $ 8,000.00 |
| | b | Ditch Restoration (within Slurry Wall) | 1 | LS | $ 3,000.00 | $ 3,000.00 |
| **6** | | **Post Construction Site Restoration** | | | | |
| | a | Platform Removal | 21,000 | CY | $ 4.00 | $ 84,000.00 |
| | b | Cast Out Material Removal | 42,350 | CY | $ 4.00 | $ 169,400.00 |
| | c | Slurry Wall Cap Removal | 3,000 | CY | $ 15.00 | $ 45,000.00 |
| | d | Slurry Pond Backfilling | 1 | LS | $ 10,000.00 | $ 10,000.00 |
| | e | Site Grading | 1 | LS | $ 45,000.00 | $ 45,000.00 |
| | f | Installation of Permanent Fencing | 1 | LS | $ 50,000.00 | $ 50,000.00 |
| **7** | | **Survey** | | | | |
| | a | Pre-Construction Drone Survey | 1 | LS | $ 13,000.00 | $ 13,000.00 |
| | b | As-Constructed Slurry Wall Centerline Alignment Survey | 1 | LS | $ 8,500.00 | $ 8,500.00 |
| | c | As-Constructed Survey | 1 | LS | $ 13,000.00 | $ 13,000.00 |
| | | **Optional Items** | | | | |
| **1** | | Secondary Slurry Wall Platform Construction | 3,300 | CY | $ 11.00 | $ 36,300.00 |
| **2** | | Secondary Slurry Wall Supplimental Fines | 5,700 | CY | $ 4.00 | $ 22,800.00 |
| **3** | | Secondary Slurry Excavation (Alluvial) | 109,600 | SF | $ 8.00 | $ 876,800.00 |
| **4** | | Secondary Slurry Excavation (Bedrock) | 7,400 | SF | $ 8.00 | $ 59,200.00 |
| **5** | | Secondary Slurry Wall Culvert Crossing | 1 | EA | $ 5,000.00 | $ 5,000.00 |
| **6** | | Secondary Slurry Wall Backfill of Existing Ditch | 1 | EA | $ 18,000.00 | $ 18,000.00 |
| **7** | | Excavation and Grading of North Ditch | 2,500 | CY | $ 9.00 | $ 22,500.00 |
| **8** | | Excavation and Grading of South Groundwater Ditch | 830 | CY | $ 20.00 | $ 16,600.00 |
| **9** | | Platform, Cast Out Material, and Cap Removal | 10,000 | CY | $ 5.00 | $ 50,000.00 |
| **10** | | Dewatering for Leak Test | 4 | Month | $ 45,800.00 | $ 183,200.00 |
| **11** | | Seeding & Reclamation | 42 | AC | $ 3,400.00 | $ 142,800.00 |
| | | | | | **TOTAL BID** | **$ 14,165,323.00** |

**Total Bid (in words): Fourteen million one hundred sixty five thousand three hundred twenty three and 00/100 dollars**.

**JURGENS RESERVOIR**
**RECOVERY WELLS, PIPELINE AND MONITORING CONSTRUCTION**
**ENGINEER'S OPINION OF PROBABLE CONSTRUCTION COST**
**March 28, 2025**

| | Construction Item | Quantity | Unit | Cost | Extension |
|---|---|---|---|---|---|
| 1 | **Mobilization, Bonding and Insurance (10%)** | 1 | LS | $ 285,000 | **$ 285,000** |
| 2 | **Installation of 24-Inch Well Casings (Approximately 100-feet deep)** | 3 | EA | $ 115,500 | **$ 346,500** |
| 3 | **Pumpstation at Each Well Location** | 3 | EA | $ 100,000 | **$ 300,000** |
| 4 | **Well Distribution Pipelines** | 2500 | LF | $ 250 | **$ 625,000** |
| 5 | **Well Pipeline Fittings, Valves, Air/VAC Manholes, Testing** | 1 | LS | $ 300,000 | **$ 300,000** |
| 6 | **Flow Meter Vaults for Each Pumpstation** | 3 | EA | $ 80,000 | **$ 240,000** |
| 7 | **Plumb Ditch Concrete Diversion Structure** | 80 | CY | $ 3,000 | **$ 240,000** |
| 8 | **Plumb Ditch Diversion Rubicon Gates** | 2 | EA | $ 45,000 | **$ 90,000** |
| 9 | **Plumb Ditch Diversion Slide Gate** | 1 | LS | $ 50,000 | **$ 50,000** |
| 10 | **Measurement Flume Structures** | 4 | EA | $ 20,000 | **$ 80,000** |
| 11 | **Slurry Wall Patch** | 3 | EA | $ 8,000 | **$ 24,000** |
| 12 | **Electrical and Communication Equpiment** | 1 | LS | $ 500,000 | **$ 500,000** |
| 13 | **Erosion Control and BMP's** | 1 | LS | $ 50,000 | **$ 50,000** |
| | | | | **Total Construction Items (Items 1 through 13)** | **$ 3,131,000** |
| | | | | Construction Contingency @ 20% | **$ 626,000** |
| | | | | **Construction Subtotal** | **$ 3,757,000** |
| | | | | Engineering (15%) | $ 564,000 |
| | | | | **Estimated Total (rounded to nearest $1,000)** | **$ 4,321,000** |
| | | | | Slurry Wall Construction Cost (Bid Total) | $ 14,165,323 |
| | | | | Engineering Services during Slurry Wall Construction (rounded to nearest $1,000) | $ 722,000 |
| | | | | **Estimated Grand Total (rounded to nearest $1,000)** | **$ 19,208,000** |

**Notes:**

1. No costs are included for Federal, State or Local Permitting.

# APPENDIX G

## LOWER LATHAM RESERVOIR COMPANY
## FINANCIAL STATEMENTS FOR
## 2022, 2023 AND 2024