

District Court, Water Division No. 1 State of Colorado 901 9 <sup>th</sup> Ave. Greeley, CO 80631 970-475-2400	DATE FILED: November 1, 2018 CASE NUMBER: 2016CW3093 <b>Court Use Only</b>
CONCERNING THE APPLICATION FOR WATER STORAGE RIGHT, CHANGE OF WATER RIGHTS, AND AUGMENTATION OF WILLIAM O. AND PAULETTE M. SEAWORTH  IN LARIMER COUNTY	Case No. 2016CW3093  Water Division No. 1
<b>FINDINGS OF FACT, CONCLUSIONS OF LAW, JUDGMENT AND DECREE OF THE  WATER COURT</b>	

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This matter has come before the Court upon the application of William Seaworth and Paulette Seaworth ("Applicants") for a decree confirming and approving an underground

water right, a storage water right, a surface water right, a change of water right, and a plan for augmentation. The Water Judge enters the following findings of fact, conclusions of law and judgment and decree:

### **FINDINGS OF FACT**

1. **Name, Address, and Telephone Number of Applicants.** The Applicants are William O. Seaworth and Paulette M. Seaworth, 2305 North Taft Hill Road, Fort Collins, CO 80524, 970-215-2884.

2. **Application.** The original application was filed with the Water Clerk for Water Division No. 1 on June 30, 2016. An amended application was filed on October 31, 2016. Collectively, the original application and amended application are referred to herein as the “Application.”

3. **Notices and Jurisdiction.** Timely and adequate notice of the original application and amended application was given in the manner required by law. None of the land or water rights involved in the Application are located in a designated groundwater basin. The Court has jurisdiction over the subject matter of this proceeding and over all persons who have standing to appear as parties, whether or not they have appeared.

4. **Statements of Opposition.** Timely statements of opposition to the original application were filed by Martin Marietta Materials, Inc. (“Martin Marietta”), City of Fort Collins, City of Greeley, Northern Colorado Water Conservancy District, Cache La Poudre Water Users Association, and the Taylor and Gill Ditch Company. The North Poudre Irrigation Company intervened and then withdrew its statement of opposition. No statements of opposition were filed to the amended application. The time for filing statements of opposition to the Application has expired.

5. **Stipulations.** The Opposers have entered into stipulations with Applicants, and the stipulations have been approved by orders of the Court.

6. **Evidence Considered.** All matters contained in the Application have been reviewed and testimony taken where such testimony was required. The Court has considered the summary of consultation report dated September 30, 2016 and Applicants’ response dated November 21, 2016.

7. **Structures Subject of this Decree.** The following is a list of all structures that are the subject of this decree. All structures are in Larimer County, Colorado. A map of the structures and other relevant infrastructure is attached as **EXHIBIT A**.

7.1 **Seaworth Augmentation Pond.** A lined former gravel pit located in the NW  $\frac{1}{4}$  of the SE  $\frac{1}{4}$ , Section 33, Township 8 North, Range 69 West of the 6th P.M. being 2,585’ North of the South line and 1,708’ West of the East line of Section 33.

7.2 **North Taft Hill Pond.** An unlined former gravel pit located in the SE  $\frac{1}{4}$  of the NE  $\frac{1}{4}$ , Section 33, Township 8 North, Range 69 West of the 6th P.M. being 2,037’ South of the North Line and 690’ West of the East Line of Section 33.

**7.3 Taylor and Gill Ditch.** A ditch which diverts from the Cache la Poudre River in the SW  $\frac{1}{4}$  of the SW  $\frac{1}{4}$  of Section 29, Township 8 North, Range 69 West of the 6th P.M.

**8. Description of the Application.** Applicants seek approval of an augmentation plan for replacement of out-of-priority depletions to the Cache la Poudre River resulting from evaporation caused by exposure of ground water at a former gravel pit, the North Taft Hill Pond. In connection with the plan for augmentation, Applicants seek to adjudicate an underground water right for the North Taft Hill Pond and a surface water right for the North Taft Hill Pond Direct Flow Water Right at the Taylor and Gill Ditch. As replacement sources, Applicants seek to: change water rights represented by 4.0 shares of the Taylor and Gill Ditch ("Subject Shares"); and to adjudicate a water storage right for the Seaworth Augmentation Pond.

### **STORAGE WATER RIGHT**

**9. Seaworth Augmentation Pond.**

**9.1 Legal Description.** See ¶7.1.

**9.2 Source.** Cache la Poudre River.

**9.3 Filling Structure.** Taylor and Gill Ditch. See ¶7.3.

**9.4 Filling Rate.** 7.5 c.f.s.

**9.5 Date of Appropriation.** June 30, 2016.

**9.6 How Appropriation was Initiated.** By constructing and lining the Seaworth Augmentation Pond and by filing the Application.

**9.7 Date Applied to Beneficial Use.** Not applicable.

**9.8 Amount Claimed.** 56 acre-feet, conditional, with the right to one refill annually. The capacity includes *in situ* storage between the open water surface and slurry wall liner.

**9.9 Uses.** Augmentation, replacement, commercial (fishing and hunting business), in-reservoir recreation, fish propagation, and wildlife watering.

**9.10 Surface Area at High Water Line.** 4.31 acres, including the saturated area between the open water surface and the slurry wall liner. The open water surface area is 3.1 acres.

**9.11 Active Storage.** 56 acre-feet.

**9.12 Dead Storage.** 0 acre-feet.

**9.13 Evaporation.** Evaporation from the Seaworth Augmentation Pond shall be calculated on a daily basis by multiplying the total water surface area in acres by the daily gross reservoir evaporation in feet. Daily gross reservoir evaporation in feet shall be determined on a daily basis using the following method:

**9.13.1** Daily gross pan evaporation in feet shall be computed by multiplying 1.2 by the daily standard alfalfa reference crop evapotranspiration (ET<sub>r</sub>) in inches published by Northern Colorado Conservancy District for the Fort Collins Central (228) Weather Station, which product will be by divided by 12. Daily gross pan evaporation in feet shall then be multiplied by a pan coefficient of 0.7 to obtain daily gross reservoir evaporation in feet.

**9.13.2** In the event that such data are not available from the weather station identified in ¶9.13.1., then Applicants shall compute gross pan evaporation using the following table, the values in which are expressed in feet per day per acre.

Jan	Feb	Mar	Apr	May	Jun
0.00309	0.00395	0.00566	0.00957	0.01235	0.01542
Jul	Aug	Sep	Oct	Nov	Dec
0.01544	0.01389	0.01063	0.00720	0.00425	0.00309

**9.14 Remarks.** Applicants shall only divert this junior storage water right when there is no call affecting the Cache la Poudre River at the headgate of the Taylor and Gill Ditch from either a downstream water right or an intervening decreed exchange (including exchanges subsequently decreed in accordance with §37-92-305(10), C.R.S.), with a priority date senior to the appropriation awarded herein.

### **UNDERGROUND WATER RIGHT**

#### **10. North Taft Hill Pond.**

**10.1 Name of Structure.** North Taft Hill Pond.

**10.2 Legal Description.** See ¶7.2.

**10.3 Source of Water.** Ground water tributary to the Cache la Poudre River.

**10.4 Date of Appropriation.** June 30, 2016.

**10.5 How Appropriation was Initiated.** By obtaining a permit from the Colorado Division of Mining and Safety for the pond, constructing the pond, obtaining well permit for the pond and filing the Application.

**10.6 Date Applied to Beneficial Use.** Not applicable.

**10.7 Amount Claimed.** 72.0 acre-feet, conditional.

**10.8 Surface Area at High Water Line.** 33 acres.

**10.9 Uses.** All uses of water shall be within North Taft Hill Pond, being commercial (fishing and hunting business), evaporation, recreation, fish propagation and wildlife watering.

### **SURFACE WATER RIGHT**

**11. North Taft Hill Pond Direct Flow Water Right.**

**11.1 Name of Structure.** North Taft Hill Pond Direct Flow Water Right.

**11.2 Legal Description.** Taylor and Gill Ditch. See ¶7.3.

**11.3 Source.** Cache la Poudre River.

**11.4 Date of Appropriation.** June 30, 2016.

**11.5 How Appropriation was Initiated.** By filing the Application.

**11.6 Date Applied to Beneficial Use.** Not applicable.

**11.7 Amount Claimed.** 6.31 c.f.s., conditional, limited to 72.0 acre-feet annually.

**11.8 Uses.** Commercial (fishing and hunting business), evaporation, in-reservoir fish propagation and in-reservoir wildlife watering all associated with the North Taft Hill Pond.

**11.9 Remarks.** Applicants shall only divert this junior surface water right when there is no call affecting the Cache la Poudre River at the headgate of the Taylor and Gill Ditch from either a downstream water right or an intervening decreed exchange (including exchanges subsequently decreed in accordance with §37-92-305(10), C.R.S.), with a priority date senior to the appropriation awarded herein. When in-priority, Applicants may continuously divert this water right into the North Taft Hill Pond for the uses listed in ¶ 11.8, but such water must be run through the Seaworth Augmentation Pond and released to the Cache la Poudre River through the Taylor and Gill Return Ditch Outfall, as depicted on EXHIBIT A, within 24 hours. All beneficial uses will occur when the water right is delivered into and out of the North Taft Hill Pond.

### **CHANGE OF WATER RIGHT**

**12. Water Right Sought to Be Changed.** Taylor and Gill Ditch.

**12.1 Original Decree.** Civil Action 320, District Court, Larimer County dated April 11, 1882.

**12.2 Decreed Legal Description from CA 320.** North side of the Cache la Poudre River, one-half mile above the Town of La Porte with a general southeasterly course.

**12.3 Actual Legal Description.** See ¶7.3.

**12.4 Decreed Source.** Cache la Poudre River.

**12.5 Date of Appropriation.** April 15, 1866.

**12.6 Decreed Use.** Irrigation.

**12.7 Total Amount Decreed.** 18.48 c.f.s. was originally decreed to the Taylor and Gill Ditch in Civil Action 320. Subsequently, 6.31 c.f.s. was transferred from the Taylor and Gill Ditch pursuant to the decrees entered by the Larimer County District Court in Civil Actions 2850 and 3311, by which 4.75 c.f.s. is available for diversion at the North Fork Ditch (also known as the North Poudre Canal) and Halligan Reservoir, and 1.56 c.f.s. was abandoned. This leaves 12.17 c.f.s. attributable to the water right decreed to the Taylor and Gill Ditch to be changed herein.

**12.8 Shares Being Changed.** Applicants seek to change the water rights represented by 4.0 shares ("Subject Shares") of the 64.375 total shares in the Taylor and Gill Ditch Company. Of the 64.375 total shares, 42.5 shares are delivered in the Taylor and Gill Ditch ("Ditch"). The remaining 21.875 shares were the subject of Civil Actions 2850 and 3311 and are used for the diversion of water at the North Fork Ditch and Halligan Reservoir as indicated in ¶12.7. Thus, Applicants seek to change 4/42.5ths, approximately 9.4 percent, of the water rights that continue to be delivered in the Ditch.

**12.9 Amount Changed in this Application.** 1.145 c.f.s. of the 12.17 c.f.s. diverted in the Ditch.

**12.10 Changes of Type of Use.** From direct use for irrigation to direct use and storage in the Seaworth Augmentation Pond for augmentation, replacement, commercial (a hunting and fishing business), in-reservoir fish propagation, and in-reservoir wildlife watering in the Seaworth Pond, subject to ¶ 14.3.

**12.11 No Other Changes.** Applicants do not seek to change the point of diversion, place of use or the season of use of the water right.

**13. Historical Use of the Water Right.**

**13.1. Historically Irrigated Acreage.** Based on a study period of 1915 to 1990, an average of 20.35 shares of the Ditch, including the Subject Shares, were historically used to irrigate approximately 347 acres in Sections 29, 33 and 34, Township 8 North, Range 69 West of the 6th P.M. as depicted on **EXHIBIT B** ("Historically Irrigated Acreage"). Of the 20.35 shares, 19.3 shares are owned by Applicants and Martin Marietta. The historical use attributable to the remaining average 1.05 shares not owned by those Applicants and Martin Marietta has been excluded from Applicants'

analysis. Of the 19.3 shares, Applicants own 5.125 shares, and Martin Marietta owns 14.175 shares. The 19.3 shares were used to irrigate a crop mix of alfalfa, corn, pasture grass, small grains, cereals, and orchards. Of Applicants' 5.125 shares, 1.125 shares will be used for continued irrigation of up to 19.19 acres on the parcel depicted in **EXHIBIT C**. Therefore, the 18.175 shares are attributable to historical irrigation of 309.91 acres of the 347 historically irrigated acres. Since Applicants are only changing 4.0 of the 18.175 shares, Applicants are claiming 22.01 percent (4.0 shares/18.175 shares) of the 309.91 historically irrigated acres.

**13.2. Farm Headgate Deliveries and Consumptive Use.** During the study period, the average annual available irrigation supply to the farm headgate for the 19.3 shares was 1018.1 acre-feet, and the average annual available irrigation supply to the farm headgate for the Subject Shares was 211.0 acre-feet. The farm headgate delivery was derived by taking the pro-rata portion of the average historical Ditch diversions and assuming 20 percent ditch loss. Based on the historical crop demand, irrigation practices, and site-specific soil properties, the average annual consumptive use resulting from historical use of the 19.3 shares was 456.9 acre-feet or 1.39 acre-feet per acre. The average annual consumptive use resulting from historical use of the Subject Shares was 94.7 acre-feet.

**13.3. Historical Return Flows.** During the study period, an average of 561.2 acre-feet per year of return flows were attributable to the 19.3 shares, and the return flows attributable to Subject Shares averaged 116.3 acre-feet per year, with approximately 73 percent being surface and 27 percent being deep percolation return flows. The timing and amount of ground water returns to Cache La Poudre River were determined using the Glover Analytical Stream Depletion Method. The approximate location where historical return flows accrued to the Cache la Poudre River is in the NE  $\frac{1}{4}$  of the SW  $\frac{1}{4}$  of Section 33, Township 8 North, Range 69 West of the 6th P.M. at a point 2,055' from the south line and 2,025' west from the west line.

**14. Description of Change of Water Rights.** When the Taylor and Gill Ditch water right is in priority, Applicants will take delivery of water associated with the Subject Shares at the Taylor and Gill Ditch (which water contains the consumptive use and return flow component), subject to the following terms and conditions.

**14.1 Consumptive Use Component.** The consumptive use component of the water right will be delivered to the farm headgate for delivery to the Seaworth Augmentation Pond for storage for later use as described in ¶12.9.

**14.2 Return Flow Component.** The return flow component of the water right will be delivered to the farm headgate for: delivery to the Seaworth Augmentation Pond for immediate release to the Cache la Poudre River; and/or delivery to the Seaworth Augmentation Pond for storage for later release to the Cache la Poudre River.

**14.3** Both the consumptive use and the return flow components may be delivered from the farm headgate to the North Taft Hill Pond, immediately run through the North Taft Hill Pond, and immediately delivered to the Seaworth Augmentation Pond as described in ¶¶ 14.1, 14.2, 15.6.1.1 and 17.1.



15. **Terms and Conditions on Change of Water Right.** The change of the Subject Shares is approved, subject to the following terms and conditions:

15.1 **Diversion Season.** The diversion season for deliveries of the Subject Shares shall be limited to April 20 through October 31.

15.2 **Farm Headgate Deliveries.** Future farm headgate deliveries of the Subject Shares shall be subject to the following monthly, annual and rolling 20 year volumetric limitations.

	Apr	May	June	July	Aug	Sept	Oct	Total
<b>Monthly Limit (AF)</b>	27	56	56	60	58	56	41	NA
<b>Annual Limit (AF)</b>	NA	NA	NA	NA	NA	NA	NA	263
<b>20-Year Limit (AF)</b>	62	704	895	932	809	641	177	<b>4,220</b>

15.2.1. For determining Applicants' annual compliance with the rolling 20 year volumetric limits, within the first 20 years of operation, Applicants shall use the historical average annual farm headgate deliveries over the study period for any year when actual data is not available. For example, in the first year of operation, Applicants shall use the historical average annual farm headgate deliveries for all 20 years. In the second year of operation, Applicants shall use the historical average annual farm headgate deliveries for 19 years and actual farm headgate deliveries from the first year of operation. This method shall repeat for 21 years until Applicants have data of actual farm headgate deliveries under this change of water right for 20 years.

15.2.2. At times when Applicants either are not diverting water attributable to the Subject Shares or have reached the volumetric limits for the Subject Shares, the Applicants shall not take delivery of water attributable to the Taylor and Gill water rights described in ¶ 12 at their farm headgate, and any water diverted at the river headgate associated with the Taylor and Gill water rights shall remain in the Taylor and Gill Ditch or Taylor and Gill Return Ditch unused and be immediately returned to the Cache la Poudre River at the Taylor and Gill Return Outfall depicted in Exhibit A.

15.3 **Surface Water Return Flow Factors.** The following irrigation season surface water return flow percentages shall be applied to Applicants' daily farm headgate deliveries for the Subject Shares to determine the corresponding daily surface water return flow obligations.

Apr	May	Jun	Jul	Aug	Sep	Oct
38%	39%	40%	40%	40%	42%	39%

**15.4 Groundwater Return Flow Factors.** The following monthly groundwater return flow factors shall be multiplied by Applicants' average total diversions from the two previous irrigation season's April through October total to determine the monthly groundwater return flow obligation. The monthly replacement obligation shall be divided by the number of days in each month to determine the daily return flow obligation.

Jan	Feb	Mar	Apr	May	Jun
0.88%	0.68%	0.67%	0.60%	0.81%	1.30%
Jul	Aug	Sep	Oct	Nov	Dec
1.79%	2.03%	2.00%	1.88%	1.38%	1.08%

The factors in ¶ 15.4 are based on lagging of the historical return flows to the Cache la Poudre River using the following factors with the Glover Analytical Stream Depletion Method:

X value (distance from the centroid to Cache la Poudre River) of 1,791 feet;  
W value (total distance from Cache la Poudre River to the boundary of the area) of 9,240 feet;  
S value (specific yield) of 0.2; and  
T value (transmissivity) of 50,000 gallons per day per foot.

**15.5 Return Flow Replacement Sources.** Applicants shall use the following sources to satisfy the return flow obligations: the Subject Shares; the Seaworth Augmentation Pond storage water right; and Additional Sources, described in ¶19.1.

**15.6 Replacement of Return Flows.** Applicants shall only be required to meet the return flow obligations associated with the Subject Shares to the Cache la Poudre River or South Platte River on days when the historical return flows would have accrued to the stream and there is any call downstream of the location identified in ¶13.1. where historical return flows accrued to the Cache la Poudre River. Applicants shall replace historical return flows in time, place and amount pursuant to the terms and conditions of this decree to prevent injury to other water rights.

**15.6.1. Irrigation Season Return Flows.** During the irrigation season, Applicants will meet the daily return flow obligations by:

15.6.1.1. Delivering the return flow component of the Subject Shares to the Seaworth Augmentation Pond for immediate release to the Cache la Poudre River, subject to ¶ 14.3;

15.6.1.2. Releasing water stored in the Seaworth Augmentation Pond pursuant to the Seaworth Augmentation Pond water storage right to the Cache la Poudre River; and

15.6.1.3. Delivering additional sources described in ¶19.1 to a location at or above the calling water right.

15.6.2. **Non-Irrigation Season Return Flows.** During the non-irrigation season, Applicants shall replace the daily lagged return flows by:

15.6.2.1. Releasing water stored in the Seaworth Augmentation Pond under the Seaworth Augmentation Pond water storage right to the Cache la Poudre River; and

15.6.2.2. Delivering additional sources described in ¶19.1 to a location at or above the calling water right.

**15.7 Dry-Up.** Applicants have demonstrated dry-up of the total Historically Irrigated Acreage (approximately 309.91 acres), depicted in **EXHIBIT C**, by development for residential and commercial purposes and by exaction of sand and gravel operations, Applicants have monumented the dry-up using GIS coordinates. As a result, Applicants shall have the right to use 100 percent of the Subject Shares for changed uses immediately upon the entry of this decree. For each acre of dry-up, Applicants shall obtain 22.01 percent (4.0 shares/18.175 shares) of the dry up credit and may use a corresponding proportion of the farm headgate deliveries associated with such acre, with resulting consumptive use and return flow factors described in ¶¶15.2 to 15.4. For each acre of dry-up, Martin Marietta shall obtain 77.99 percent (14.175 shares/18.175 shares) of the dry up credit associated with the Historically Irrigated Acreage.

**15.8 Continued Irrigation.** Of the 19.3 shares owned by Martin Marietta and Applicants, 1.125 of Applicants' shares will remain unchanged to allow for continued irrigation of no more than 19.19 acres, depicted in **EXHIBIT C**.

**15.9 Sub-Irrigation.** Applicants have taken into consideration the areas that historically may have been sub-irrigated. The consumptive use and return flow factors account for sub-irrigation on the dry-up described in ¶15.7 and depicted in **EXHIBIT C**.

**15.10 Fully-Consumable.** The consumptive use component with the Subject Shares may be fully consumed and can be used for the changed uses so long as the return flow, dry-up and other obligations are satisfied pursuant to the terms and conditions of this decree. Any portion of the consumptive use component associated with the Subject Shares that is not necessary for the operation of the plan for augmentation can be sold, leased, or otherwise disposed of by Applicants. This decree, however, does not constitute approval for any use by a third party. A third party authorized by Applicants to lease and/or purchase such surplus consumptive use component under this paragraph shall be responsible for obtaining approval for such use.

### **PLAN FOR AUGMENTATION**

16. **Augmented Structure.** North Taft Hill Pond described in ¶10.

17. **Replacement Sources.** The following source shall be used to replace out-of-priority evaporation depletions from the North Taft Hill Pond:

**17.1 Subject Shares.** Direct use of consumptive use credits associated with the Subject Shares as changed pursuant ¶¶12 to 15, subject to ¶ 14.3.

**17.2 Seaworth Augmentation Pond.**

17.2.1. Water stored in the Seaworth Augmentation Pond under the Seaworth Augmentation Pond water storage right described in ¶9.

17.2.2. Consumptive use credits stored in the Seaworth Augmentation Pond pursuant to the Subject Shares changed in ¶¶12 to 15.

**17.3 Additional Sources.** See ¶19.1.

**18. Terms and Conditions of Plan for Augmentation.** The decree herein authorizes Applicants to replace out-of-priority depletions to the Cache la Poudre River resulting from evaporation caused by the exposure of ground water from the North Taft Hill Pond.

**18.1 Evaporation.** Evaporation losses from North Taft Hill Pond shall be calculated on a daily basis by multiplying the total water surface area in acres by the daily gross reservoir evaporation in feet minus the effective precipitation in feet. Daily gross reservoir evaporation in feet shall be determined on a daily basis using the following method:

18.1.1 Daily gross pan evaporation in feet shall be computed by multiplying 1.2 by the daily standard alfalfa reference crop evapotranspiration (ET<sub>r</sub>) in inches published by Northern Colorado Conservancy District for the Fort Collins Central (228) Weather Station, which product will be by divided by 12. Daily gross pan evaporation in feet shall then be multiplied by a pan coefficient of 0.7 to obtain daily gross reservoir evaporation in feet.

18.1.2 In the event that such data are not available from the weather station identified in ¶18.1.1., then Applicants shall compute gross pan evaporation using the following table, the values in which are expressed in feet per day per acre.

Jan	Feb	Mar	Apr	May	Jun
0.00309	0.00395	0.00566	0.00957	0.01235	0.01542
Jul	Aug	Sep	Oct	Nov	Dec
0.01544	0.01389	0.01063	0.00720	0.00425	0.00309

18.1.3 Effective precipitation in feet shall be calculated as 70% of the daily values of the on-site rain gauge in inches divided by 12. In the case that the on-site rain gauge malfunctions and no data are available, rainfall measurements published by the Northern Colorado Conservancy District for the Fort Collins Central (228) Weather Station shall be used.

**18.2 Measurements.** On a daily basis, Applicants will determine the area of the water surface in North Taft Hill Pond from staff gage measurements and a stage-

area-capacity curve attached hereto as **EXHIBIT D**. If no such data is available for a particular day, Applicants shall assume the maximum surface area of the North Taft Hill Pond.

**18.3 Ice Cover.** During days of complete ice cover on North Taft Hill Pond, evaporation shall be deemed to be zero. Complete ice cover will be documented daily by photograph. If there is less than complete ice cover, then evaporation shall be determined by ¶ 18.1.

**18.4 Lagged Depletions.** The daily volume of evaporation depletions from the North Taft Hill Pond shall be lagged to the Cache la Poudre River, using the Unit Response Factors specified in the table attached hereto as **EXHIBIT E**.

**18.5 Operations.** As set forth in ¶10, the North Taft Hill Pond underground water right is awarded a 2016 priority date with an appropriation date of June 30, 2016. Thus, out-of-priority lagged depletions requiring replacement pursuant to this plan for augmentation are those which cause a depletion to the Cache la Poudre River on a day when a water right with a priority senior to June 30, 2016, including an decreed exchange, is calling for water downstream of the location where the depletion from North Taft Hill Pond impacts the stream in the NW  $\frac{1}{4}$  of the SE  $\frac{1}{4}$  of Section 33, Township 8 North, Range 69 West of the 6th P.M. at a point 1,412' from the south line and 1,826' west from the east line, provided that the surface area of the North Taft Hill Pond is 33 acres or smaller.

**18.5.1 In-Priority.** When the evaporation from the underground water right for the North Taft Hill Pond described in ¶10 is causing a depletion to the Cache la Poudre River on a day when all downstream water rights with priorities senior to June 30, 2016 are satisfied, Applicants shall not be required to replace evaporation depletions caused by the exposure of ground water at the North Taft Hill Pond.

**18.5.2 Out-of-Priority During Irrigation Season.** When the evaporation from the underground water right for the North Taft Hill Pond described in ¶10 is causing a depletion to the Cache la Poudre River on a day when a downstream water right with a priority senior to June 30, 2016 is calling for water during the irrigation season (April 20 through October 31), Applicants shall replace evaporation depletions caused by the exposure of ground water at the North Taft Hill Pond by one or a combination of the following:

**18.5.2.1** Delivering the consumptive use component of the Subject Shares to the Seaworth Augmentation Pond for immediate release to the Cache la Poudre River;

**18.5.2.2** Releasing water stored in the Seaworth Augmentation Pond under the Seaworth Augmentation Pond water storage right to the Cache la Poudre River; and/or

18.5.2.3 Delivering additional sources described in ¶19.1 to a location at or above the calling senior water right.

18.5.3 Out-of-Priority During Non-Irrigation Season. When the evaporation from the underground water right for the North Taft Hill Pond described in ¶10 is causing a depletion to the Cache la Poudre River on a day when a downstream water right with a priority senior to June 30, 2016 is calling for water during the non-irrigation season (November 1 through April 19), Applicants shall replace evaporation depletions caused by the exposure of ground water from the North Taft Hill Pond by:

18.5.3.1 Releasing water stored in the Seaworth Augmentation Pond under the Seaworth Augmentation Pond water storage right to the Cache la Poudre River;

18.5.3.2 Releasing the consumptive use component attributable to the Subject Shares stored in the Seaworth Augmentation Pond to the Cache la Poudre River; and

18.5.3.3 Delivering additional sources described in ¶19.1 to a location at or above the calling senior water right.

19. **Terms and Conditions for Operation of the Decree.**

19.1 **Additional Sources.** Additional and alternative sources may be used for augmentation in this plan for augmentation or replacement of historical return flows if such sources are decreed or lawfully available for such use or are part of a substitute water supply plan approved by the State Engineer pursuant to C.R.S. §37-92-308, or an interruptible supply agreement approved under C.R.S. §37-92-309, or other applicable and/or successor statutes. This section sets forth the procedures under which these sources may be used in this change of water right and plan for augmentation. These procedures are adequate to prevent injury to other water rights that might otherwise result from the addition of these sources to this change of water right and plan for augmentation.

19.1.1. Additional Water Rights Separately Decreed or Lawfully Available for Augmentation or Replacement Use. If a water right is decreed or lawfully available for augmentation or replacement use and not already approved for such use under this decree, Applicants shall give at least 35 days advance written notice to the Court, the Division Engineer and all Objectors herein, which shall describe: (1) the water right by name and decree, if any; (2) the annual and monthly amount of water available to Applicants from the water right; (3) the location or locations at which the water will be delivered to the stream; (4) evidence that the claimed amount of water will not be used by another person; and (5) the manner in which Applicants will account for use of the augmentation or replacement credits. No water right may be used unless the Division Engineer approves of its use. Any exchange associated with such additional sources shall be pursuant to an administrative exchange



approved by the Division Engineer or a decree approved by the Water Court. The Division Engineer and all Objectors shall have 63 days to file an objection with the water court concerning the proposed additional water supplies. If the Division Engineer and/or any party files such an objection, Applicants shall not use the proposed additional water supplies for augmentation or replacement purposes hereunder until the water court resolves the objection.

**19.1.2. Additional Water Rights - Temporary Administrative Approval.** If a water right is not decreed or otherwise lawfully available for augmentation or replacement use, and Colorado statutes or other governing authority provide a mechanism for using such water right without the need of a decree or well permit, Applicants shall provide written notice to the objectors herein of its request for approval of the State Engineer pursuant to C.R.S. §37-92-308, or C.R.S. §37-92-309, or other applicable statute. Any exchange associated with such additional sources shall be pursuant to an administrative exchange approved by the Division Engineer or a decree approved by the Water Court. Such notice shall be in addition to any notice required by the applicable statute. Applicants 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.

**19.2 Measurement and Calculations.** On a daily basis, Applicants shall perform such calculations, measuring, and accounting pursuant to the terms and conditions of this decree to operate and administer this plan for augmentation. The amount of water delivered to and discharged from the North Taft Hill Pond and the amount of water delivered to the Seaworth Augmentation Pond and delivered to the Cache la Poudre River for augmentation via the Taylor and Gill Return Ditch Outfall shall be measured. Seaworth Augmentation Pond and the North Taft Hill Pond shall each have staff gages or equivalent measuring devices that register the water level in the pond and that correspond to a stage-area-capacity curve for each pond. In addition, Applicants shall install the measuring devices depicted in **EXHIBIT A**.

**19.3 Stage-Area-Capacity Curves.** The stage-area-capacity curves for the Seaworth Augmentation Pond and the North Taft Hill Pond are attached hereto as **EXHIBITS D and F**, respectively. These curves are not decreed herein and are subject to revision with prior approval from the Division Engineer.

**19.4 Accounting.** Applicant shall maintain daily accounting on accounting forms approved by the Division Engineer. Summaries of the accounting shall be provided to the Division Engineer, in a format acceptable to the Division Engineer, on or before the last day of the month following the month of operation. Upon request, the accounting form shall be provided to Objectors.

**19.4.1.** A sample accounting form is attached hereto as **EXHIBIT G**. This Decree does not establish or require any specific accounting form, but all information contained in **EXHIBIT G** attached hereto and required by this Decree must be included in all versions of the accounting form. The form,



format, and any changes thereto must be approved by the Division Engineer pursuant to the procedures of ¶¶ 19.4.2 and 19.4.3. At minimum, the accounting form must include the following:

19.4.1.1 The name, location, administration number, and priority of the calling water right;

19.4.1.2 Daily diversions under the North Taft Hill Pond Direct Flow Water Right;

19.4.1.3 Daily effective precipitation;

19.4.1.4 Daily evaporation;

19.4.1.5 Evaporation depletions, both unlagged and lagged, from North Taft Hill Pond and Seaworth Augmentation Pond;

19.4.1.6 Replacement water used to replace out-of-priority evaporation depletions;

19.4.1.7 Daily diversions at the Taylor and Gill Ditch;

19.4.1.8 Daily farm headgate deliveries under the Subject Shares specified for augmentation, replacement and/or storage;

19.4.1.9 Dry up acres claimed;

19.4.1.10 Daily surface and groundwater return flow obligations for the Subject Shares;

19.4.1.11 Replacement water used to meet return flow obligations;

19.4.1.12 Daily tracking of volumetric limits for the Subject Shares;

19.4.1.13 Daily diversions under the Seaworth Augmentation Pond water storage right and deliveries to the Seaworth Augmentation Pond;

19.4.1.14 Daily deliveries to the North Taft Hill Pond, by water right;

19.4.1.15 Daily contents in the Seaworth Augmentation Pond, by water right;

19.4.1.16 All inflows and outflows from Seaworth Augmentation Pond, including releases, by water right;

19.4.1.17 Daily water balance in the Seaworth Augmentation Pond to determine out-of-priority storage;

**19.4.1.18 Transit losses; and**

**19.4.1.19 Daily net augmentation balance of depletions verses replacements.**

**19.4.2.** Within 63 days of entry of this decree, Applicants shall provide an accounting form to the Objectors and the Division Engineer in electronic format with the necessary equations included and individual cells unlocked. Objectors shall have 63 days to provide written comments to the Applicants and the Division Engineer. The Division Engineer shall then have 63 days to notify Applicants in writing of an approval or of any comments the Engineer has regarding the proposed accounting form.

**19.4.3.** Any proposed changes to the approved accounting form shall be provided to Objectors and the Division Engineer in electronic format with the necessary equations included and individual cells unlocked. Objectors shall have 63 days to provide written comments to the Applicants and the Division Engineer. The Division Engineer shall then have 63 days to notify Applicants in writing of an approval or of any comments the Engineer has regarding the proposed accounting form.

**19.5 Aggregation of Augmentation Deliveries.** Delivery of augmentation and replacement water may be aggregated at the discretion of the Division Engineer or his designated representative, except that the Division Engineer shall not authorize Applicants to aggregate more than every 3 days during the irrigation season and every 7 days during the non-irrigation season.

**19.6 Transit Losses.** Applicants' augmentation and replacement water shall bear transit losses between points 7 and 8 of **EXHIBIT A** at a rate of 0.5% per mile or as otherwise assessed by the Division Engineer. When augmentation water is delivered above the location where depletions or return flows affect the stream, transit losses shall be assessed, as reasonably determined by the Division Engineer in the same manner as for other users transporting water in the same stream segment(s).

**19.7 Accounting Year.** The accounting year for purposes of this decree shall be November 1 through October 31 of the following year. The total amount of water in storage under the Seaworth Augmentation Pond Storage Water Right ("Storage Right") at the beginning of a new accounting year shall be considered carryover storage against the Storage Right in the new accounting year. At Applicants' option, water from other sources that remains in storage in the Seaworth Augmentation Pond when the Seaworth Augmentation Pond is filling in priority and there is insufficient capacity in the Seaworth Augmentation Pond for the Storage Right shall be: 1) released from the Seaworth Augmentation Pond; 2) booked over to the Storage Right; or 3) kept in the Seaworth Augmentation Pond and an equivalent amount of water not diverted but available to the Storage Right will be counted against the Storage Right for that accounting year.

19.8 **Out-of-Priority Inflows.** Applicants shall quantify and immediately return to the Cache la Poudre River all out-of-priority inflows to the Seaworth Augmentation Pond.

### **CONCLUSIONS OF LAW**

20. **Findings of Fact.** The foregoing Findings of Fact are incorporated herein.
21. **Jurisdiction.** The Water Court for Water Division No. 1 has jurisdiction over the subject matter of these proceedings and over all persons, owners of property and water rights that may be affected hereby, whether or not they have chosen to appear. The Application and the resume publication of the Application placed such persons on notice of the relief requested by the Application and granted by this Decree.
22. **Application Authority.** The Application was filed with the Water Clerk in accordance with the provisions of §37-9-302(1)(a), C.R.S.
23. **Statements of Opposition.** Statements of opposition were filed as described in ¶4, above. The time for filing additional statements of opposition and motions to intervene has expired according to law. §§37-92-302(1)(c) and 37-92-304(3), C.R.S.
24. **Approval of Plan for Augmentation.** Subject to the terms of this decree, the plan for augmentation described in this decree meets the requirements of C.R.S. §§37-80-120, 37-92-103(a), and 37-92-305. The plan for augmentation should be approved subject to the provisions of this decree.
25. **Approval of Plan for Change of Water Right.** Subject to the terms of this decree, the change of water right described in this decree meets the requirements of C.R.S. §37-92-305. The proposed changes should be approved, subject to the provisions of this decree.
26. **Approval Conditional Water Rights.** Adjudication of Applicants' conditional water rights described in this decree is authorized in accordance with provisions of C.R.S. §37-92-302(1). The appropriation should be approved, subject to the provisions of this decree.
27. **Burdens of Proof.** Applicants have complied with all requirements and met all standards and burdens of proof and are therefore entitled to a decree confirming and approving the claims described herein.
28. **No Injury.** If operated and administered in accordance with the provisions of this decree, the plan for augmentation and change of water right will not cause injury to any owner of or person entitled to use water under any vested water right or decreed conditional water right.

### **DECREE OF THE WATER COURT**

29. **Incorporation by Reference.** The foregoing findings of fact and conclusions of law are incorporated by this reference.

30. **Storage Water Right Granted.** The Court hereby grants a conditional storage water right for the Seaworth Augmentation Pond described in ¶9, subject to the terms and conditions of this decree.

31. **Underground Water Right Granted.** The Court hereby grants a conditional underground water right for the North Taft Hill Pond described in ¶10, subject to the terms and conditions of this decree.

32. **Surface Water Right Granted.** The Court hereby grants a conditional surface water right for the North Taft Hill Pond Direct Flow Water Right described in ¶11, subject to the terms and conditions of this decree.

33. **Change of Water Right Approved.** The Court hereby approves the change of the water right represented by Applicants' Subject Shares described in ¶¶12 to 15, subject to the terms and conditions of this decree.

34. **Plan for Augmentation Approved.** The Court hereby approves the plan for augmentation described in ¶¶16 to 19 subject to the terms and conditions of this decree.

35. **Decree Prevents Injury.** The terms and conditions of this decree are adequate to assure that no injury to any water rights will result from the claims approved in this decree.

36. **Martin Marietta's Shares and Applicants' 1.125 Shares.** As described in ¶13.1., Applicants own 5.125 shares, and Martin Marietta owns 14.175 shares of 19.3 shares used to irrigate approximately 329.1 acres. Applicants only seek to change 4.0 shares of the 19.3 shares in this case. While Martin Marietta's 14.175 shares and Applicants' remaining 1.125 shares are not being changed herein, the parties in this case agree that the determinations regarding the historical use quantification for the 329.1 historically irrigated acres in ¶13 and the terms and conditions in ¶15.1 (diversion season), ¶15.3 (irrigation season return flow factors), ¶15.4 (non-irrigation season return flow factors), ¶15.7 (dry-up) and ¶ 15.9 (sub-irrigation) apply with equal force to Martin Marietta's 14.175 shares and Applicants' remaining 1.125 shares. In addition, the parties agree that Martin Marietta and Applicants shall apply the methodology used to derive the values in ¶ 15.2 to determine headgate deliveries associated with Martin Marietta's 14.175 shares and Applicants' remaining 1.125 shares.

37. **Taylor and Gill Ditch Company.**

37.1. **Use of the Ditch.** Applicants acknowledge that the City of Greeley ("Greeley") and the Taylor and Gill Ditch Company ("Company") have entered into an agreement, dated December 19, 2014, granting Greeley a first right of refusal to purchase excess capacity in the Taylor and Gill Ditch ("Ditch") for the carriage of foreign water ("Right of First Refusal"). Applicants shall not use the Ditch for carriage of the water rights described in ¶¶9 and 11 unless they acquire the right to use the structure by purchase, agreement, condemnation or other appropriate means and in accordance with the Right of First Refusal.

**37.2. Deliveries and Assessments.** Applicants shall continue to pay their assessments to the Company on the Subject Shares. Applicants shall take delivery of the Subject Shares in such a manner to ensure that: historical water deliveries to other shareholders are not altered in time or quantity; the other shareholders' expenses are not increased; and the other shareholders' rights in the Company are not adversely affected.

**37.3. Ditch Operations.** Any use by Applicants of the Ditch shall remain subject to the general operational control of the Ditch by Company and its agents. Further, Applicants' use of said ditch shall remain subject to Company's then-current bylaws, rules, regulations, requirements and procedures including, but not limited to, any carriage fees, shrink/conveyance loss rules, procedures or requirements imposed by the Company.

**38. Measuring Devices.** To the extent not already in place, Applicants shall install and properly maintain measuring and recording devices as are required by the State and/or Division Engineers for administration of this decree.

**39. Accounting.** Applicants shall account for operations under this decree on a daily basis using accounting forms acceptable to the Division Engineer and shall provide summaries of such accounting to the Division Engineer on a monthly basis, or as requested by the Division Engineer.

**40. Administration.** Pursuant to C.R.S. §37-92-305(8), 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.

**41. Conditional Priorities.** The priorities granted herein for the Seaworth Augmentation Pond, the North Taft Hill Pond and the North Taft Hill Pond Direct Flow Water Right are based on the appropriation dates confirmed herein and the filing of the Application in the year of 2016. Said priorities shall be administered as having been filed in 2016 and shall be junior to all water rights granted pursuant to applications filed in previous years. As between all water rights applied for in the same calendar year, priorities shall be determined by historical dates of appropriation and shall not be affected by the date of entry of decree.

**42. Retained Jurisdiction.** Pursuant to C.R.S. §37-92-304(6), the Court shall retain jurisdiction over the change of water right and plan for augmentation approved herein for a period of 5 years from the date that Applicants file written notice with the Court that they have begun to operate the change of water right and augmentation plan for reconsideration of the question of whether the provisions of this decree are necessary or sufficient to prevent material injury to other vested water rights. The Court's retained jurisdiction may be invoked by any party to this case by the filing of a timely motion or petition with appropriate notice to all parties.

**43. Final Decree.** This decree shall become final and appealable upon entry, notwithstanding the retained jurisdiction of the Court herein.

44. **Conditional Water Rights.** The conditional water rights decreed herein are continued in full force and effect through November 1, 2024. If Applicant desires to maintain such conditional water rights, an application for finding of reasonable diligence and/or an application for a finding that the conditional water right(s) have been made absolute shall be filed on or before the last day of November, 2024.

45. **Transfer of Conditional Water Rights.** Upon the sale or transfer of the conditional water rights adjudicated herein, the transferee shall file with the Water Court having jurisdiction a notice of transfer which shall state: 1) the title and case number of the case in which the conditional decree was issued; 2) the description of the conditional water rights transferred; 3) the name of the transferor; 4) the name and mailing address of the transferee; and 5) a copy of the recorded deed or other transfer documents. The owner of any conditional water right shall notify the Clerk of the Water Court having jurisdiction of any change in mailing address.

IT IS ORDERED that this decree shall be filed with the Water Clerk and shall be effective upon such filing.

IT IS ORDERED that a copy of this decree shall be filed with the Division Engineer and the State Engineer.

Dated: November 1, 2018

BY THE COURT:

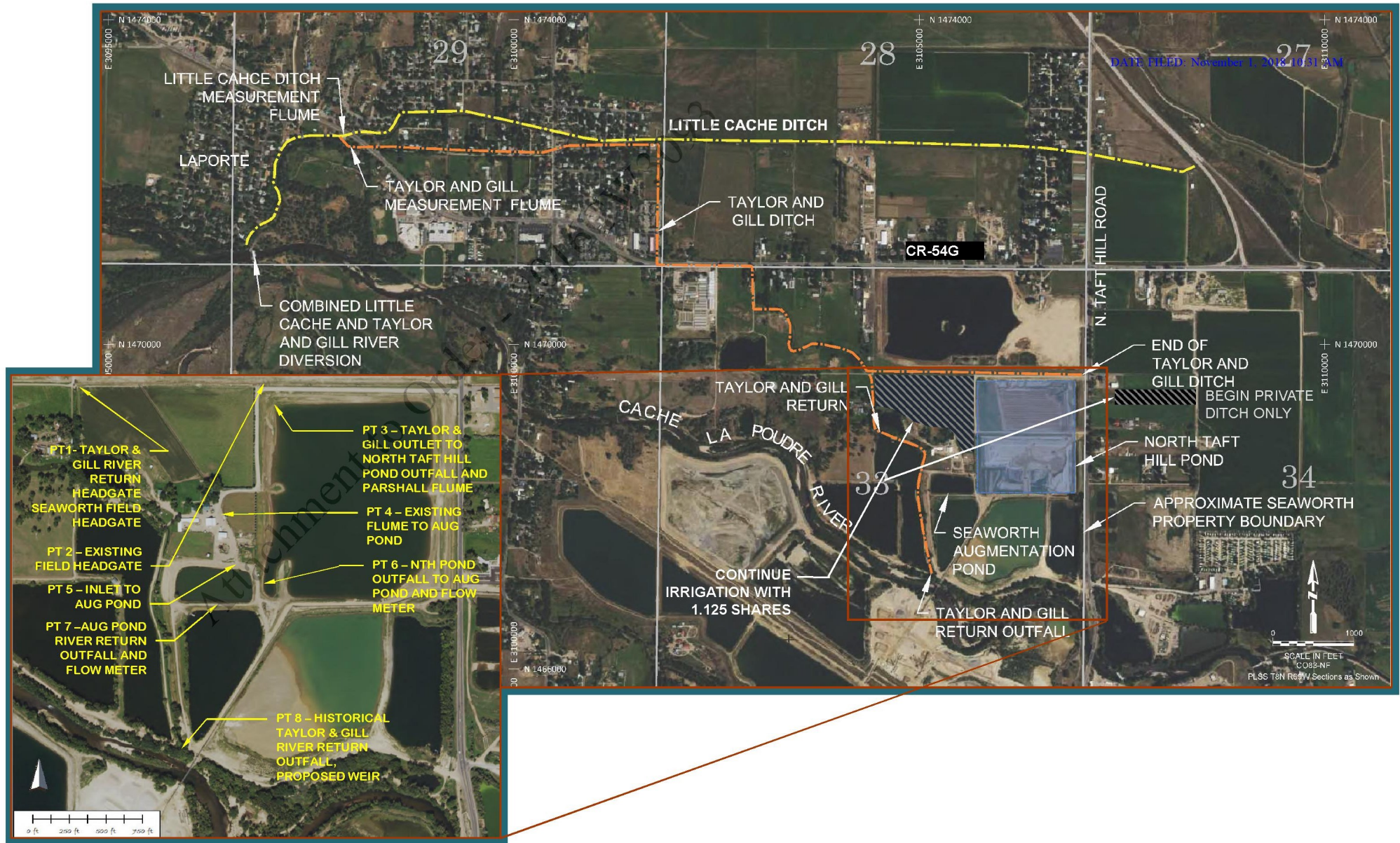
  
James F. Hartmann  
Water Judge  
Water Division 1  
State of Colorado

## **EXHIBITS**

- A. Map of Structures**
- B. Map of Historically Irrigated Acreage**
- C. Map of Dry-Up Acreage and Continued Irrigated Acreage**
- D. Staged Area Capacity Curve for North Taft Hill Pond**
- E. Lagged Depletions Table**
- F. Staged Area Capacity Curve for Seaworth Augmentation Pond**
- G. Sample Accounting Form**

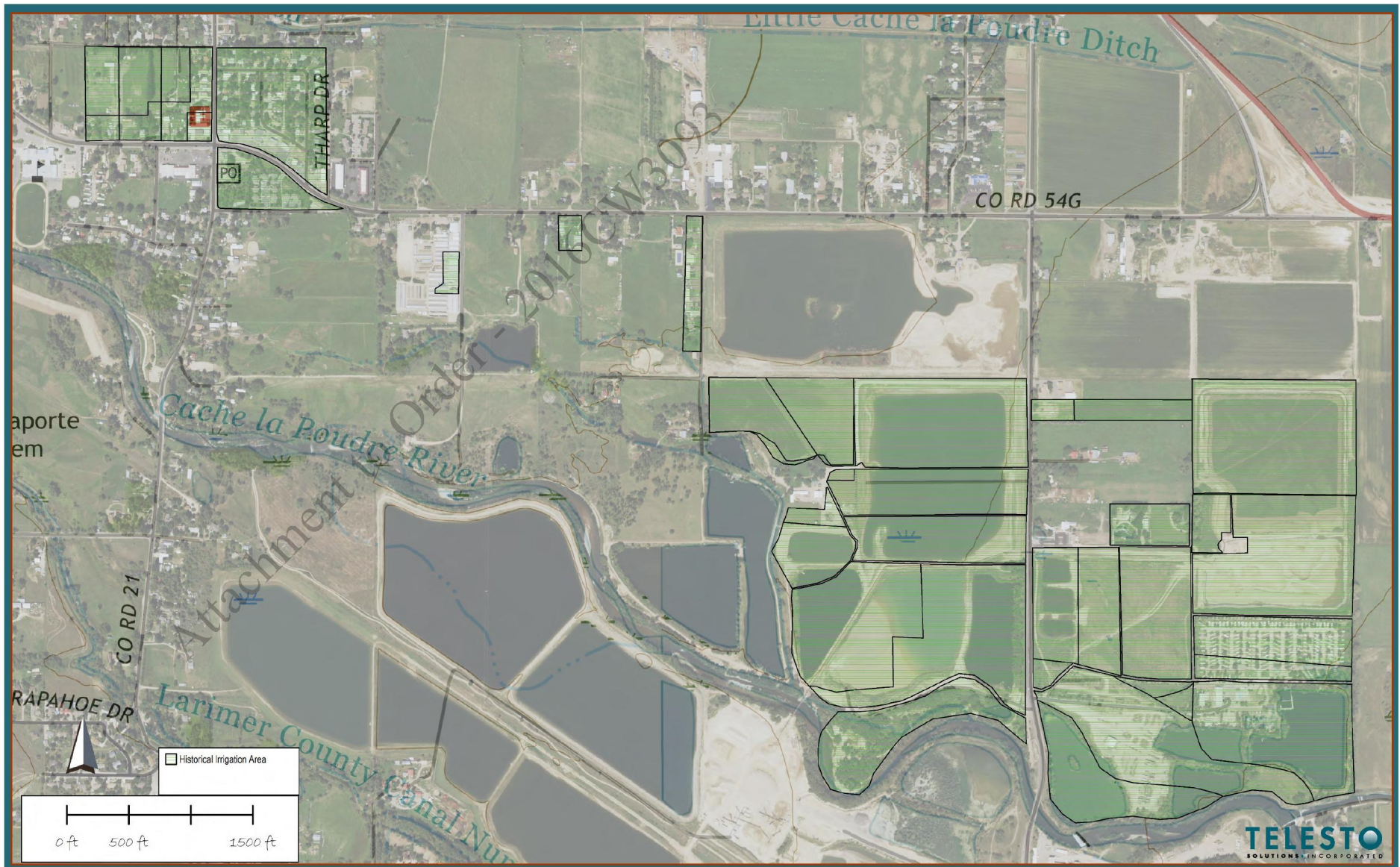


## EXHIBIT A – Relevant Infrastructure



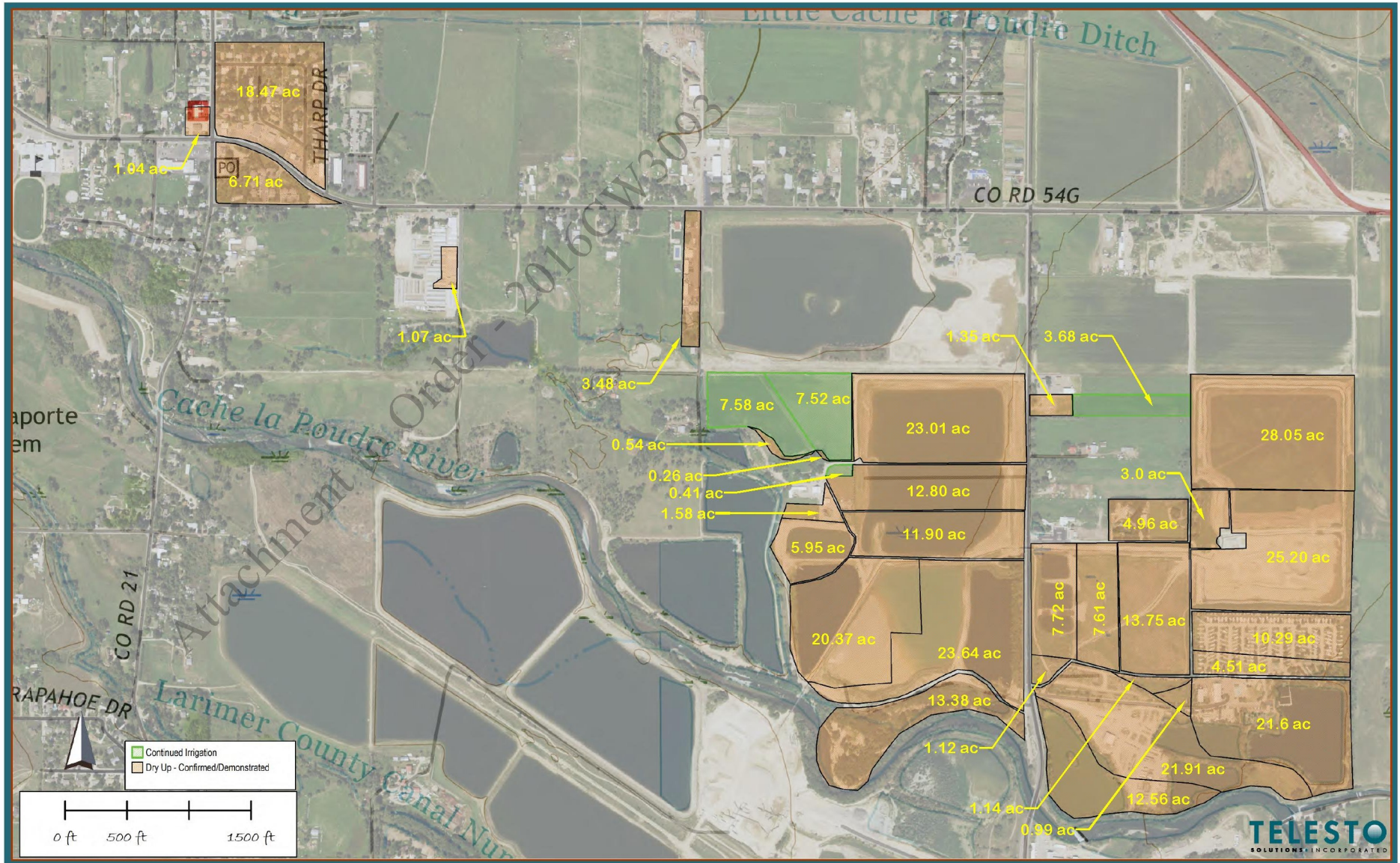


## EXHIBIT B – Historically Irrigated Acreage

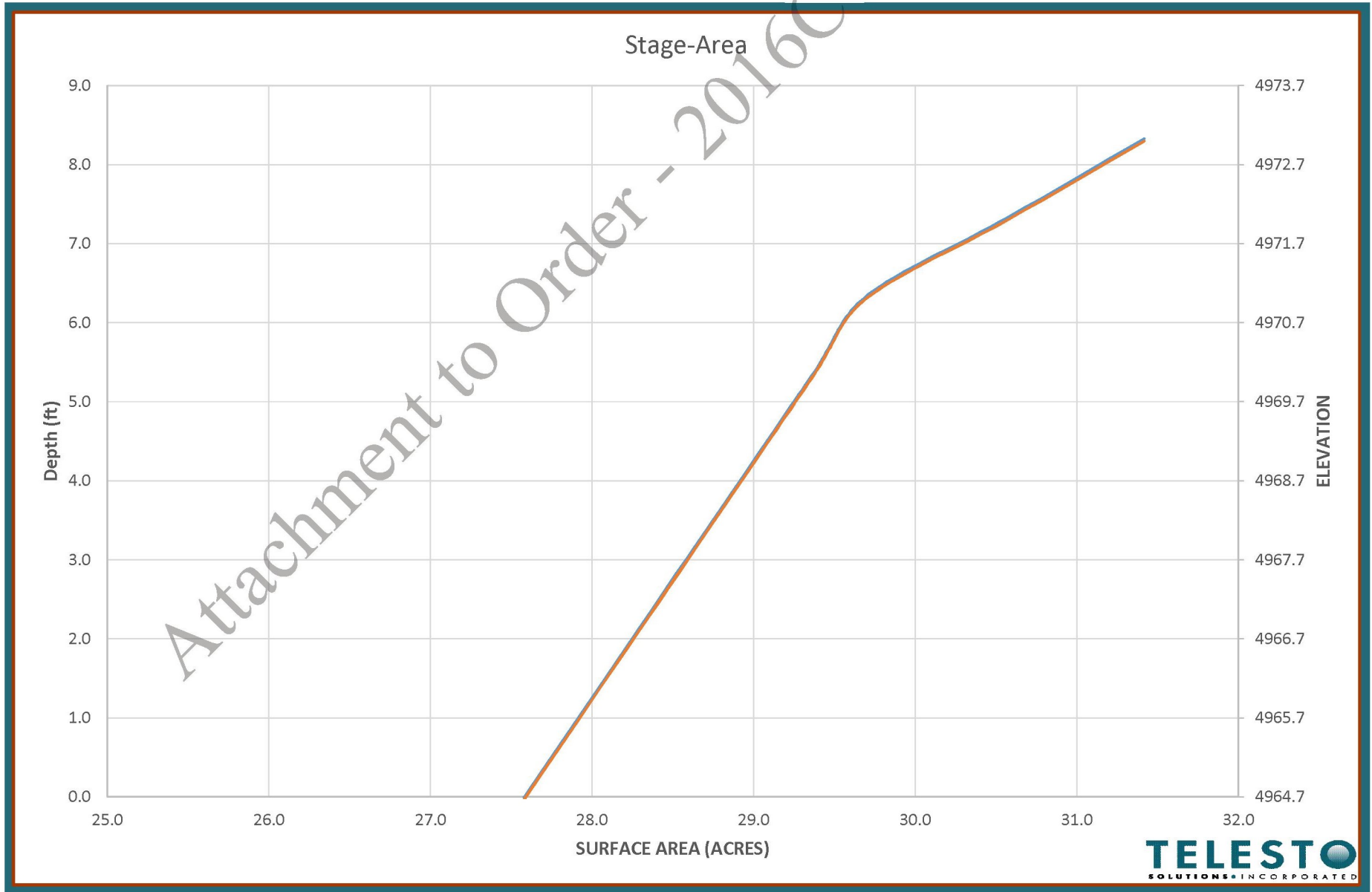




## EXHIBIT C – Areas on which Continued Irrigation will Occur and Demonstrated Dry Up



## EXHIBIT D – North Taft Hill Pond Stage-Area Curve

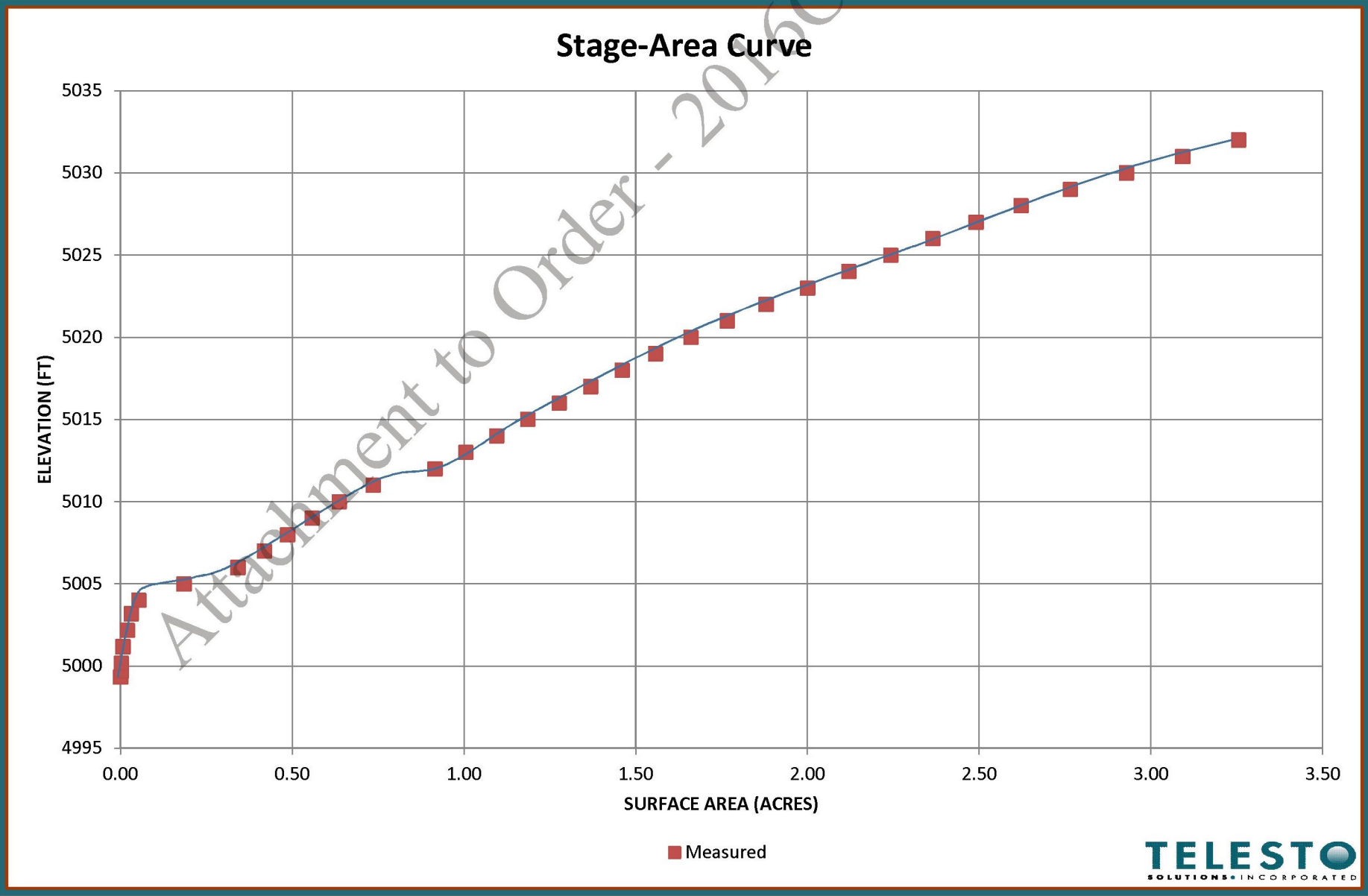




## EXHIBIT E – Lagged Depletion Table

Day	1	2	3	4	5	6	7
Factor	0.2089	0.2744	0.1070	0.0599	0.0397	0.0288	0.0222
Day	8	9	10	11	12	13	14
Factor	0.0178	0.0147	0.0124	0.0106	0.0093	0.0082	0.0073
Day	15	16	17	18	19	20	21
Factor	0.0066	0.0060	0.0055	0.0050	0.0046	0.0043	0.0040
Day	22	23	24	25	26	27	28
Factor	0.0037	0.0035	0.0033	0.0031	0.0029	0.0028	0.0027
Day	29	30	31	32	33	34	35
Factor	0.0025	0.0024	0.0023	0.0022	0.0021	0.0020	0.0020
Day	36	37	38	39	40	41	42
Factor	0.0019	0.0018	0.0018	0.0017	0.0017	0.0016	0.0016
Day	43	44	45	46	47	48	49
Factor	0.0015	0.0015	0.0014	0.0014	0.0013	0.0013	0.0013
Day	50	51	52	53	54	55	56
Factor	0.0013	0.0012	0.0012	0.0012	0.0011	0.0011	0.0011
Day	57	58	59	60	61	62	63
Factor	0.0011	0.0011	0.0010	0.0010	0.0010	0.0010	0.0010
Day	64	65	66	67	68	69	70
Factor	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009	0.0009
Day	71	72	73	74	75	76	77
Factor	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008	0.0008
Day	78	79	80	81	82	83	84
Factor	0.0008	0.0008	0.0008	0.0007	0.0007	0.0007	0.0007
Day	85	86	87	88	89	90	91
Factor	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007	0.0007
Day	92	93	94	95	96	97	98
Factor	0.0007	0.0007	0.0006	0.0006	0.0006	0.0006	0.0006
Day	99	100	101	102	103	104	105
Factor	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
Day	106	107	108	109	110	111	112
Factor	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006	0.0006
Day	113	114	115	116	117	118	119
Factor	0.0006	0.0006	0.0005	0.0005	0.0005	0.0005	0.0005
Day	120	121	122	123	124	125	126
Factor	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Day	127	128	129	130	131	132	133
Factor	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Day	134	135	136	137	138	139	140
Factor	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Day	141	142	143	144	145	146	147
Factor	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Day	148	149	150	151	152	153	154
Factor	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005	0.0005
Day	155	156	157	158	159	160	161
Factor	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
Day	162	163	164	165	166	167	168
Factor	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
Day	169	170	171	172	173	174	175
Factor	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
Day	176	177	178	179	180	181	182
Factor	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004	0.0004
Day	183	184					
Factor	0.0004	0.0004					

EXHIBIT F – Seaworth Augmentation Pond Stage-Area Curve





### Exhibit G – EXAMPLE ACCOUNTING FORM

Lake Evaporation - Table from Decree Section 9.13.2 (acre-ft/day/acre)

Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
0.00957	0.01235	0.01542	0.01544	0.01389	0.01083	0.0072	0.00425	0.00309	0.00309	0.00395	0.00566

Diversion Limits - Table from Decree Section 15.2 (af)

	Apr	May	June	July	Aug	Sept	Oct	Total
Monthly Limit (AF)	27	56	56	60	58	56	41	
Yearly Limit (AF)								263
20-Year Limit (AF)	62	704	895	932	809	641	177	4,220

Surface Water Return Flow Factors - Table from Decree Section 15.3

Apr	May	Jun	Jul	Aug	Sep	Oct
38%	39%	40%	40%	40%	42%	39%

Groundwater Return Flow Factors - Table from Decree Section 15.4 - monthly

Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
0.84%	0.81%	1.30%	1.72%	2.03%	1.90%	1.58%	1.36%	1.08%	0.98%	0.68%	0.67%

[illegible][illegible]