



May 24, 2017

**Marshal Brown, Morgan Brown, and Marlene Brown**  
17435 Roller Coaster Road  
Monument, CO 80132

Re: *Water Supply for Jackson Ranch Filing No. 4*  
*Project No. 61073*

Dear Marshal, Morgan, & Marlene Brown:

The following describes the water supply to serve up to nineteen (19) residential lots on 31.18 acres located in the NW1/4 of Section 20, T11S, R66W of the 6<sup>th</sup> P.M., El Paso County, Colorado (Subject Property). This letter is based on a decree entered in Consolidated Case Nos. 15CW3119, Water Division 1, and 15CW3047, Water Division 2 (Decree/copy attached), which decreed the not nontributary Dawson and Denver, and the nontributary Arapahoe and Laramie-Fox Hills aquifer groundwater underlying the Subject Property, and approves a plan for augmentation for use of up to 19 individual Dawson aquifer wells to serve each lot for a 300 year water supply period.

#### AMOUNTS DECREED AND AVAILABLE

The decreed amount of Dawson aquifer groundwater is not nontributary and the decreed amount of Laramie-Fox Hills aquifer groundwater is nontributary. The following annual amounts are decreed and are based on annual withdrawals over a 300 year period (one acre-foot is 325,851 gallons):

Depletion's caused by pumping water from the Dawson aquifer shall be replaced as provided and decreed. Annual withdrawals from the Dawson aquifer shall not exceed 0.70 acre feet (228,096 gallons) per well, nor more than 14.25 acre feet total for 19 wells. The State or Division Engineer shall curtail the pumping of more than those amounts from the Dawson aquifer. Applicants shall also reserve 25.4 acre-feet per year of nontributary Arapahoe, and 17.6 acre-feet per year their nontributary Laramie-Fox Hills aquifer water rights for the replacement of post-pumping depletions. These allocations will meet the El Paso County's 300 year water requirement for approval of subdivisions utilizing non-renewable water resources for their source of water supply.

#### WATER SUPPLY

The eight (8) residential lots (up to nineteen (19) potential as assumed in the Decree) will be served by individual not nontributary Dawson aquifer wells to be permitted and to operate pursuant to an augmentation plan as approved in the Decree. The Decree allows each of the Dawson aquifer wells to withdraw 0.70 acre-foot per year for 300 years for the following uses:

*Engineers • Surveyors*  
*1903 Lelaray Street, Suite 200 • Colorado Springs, CO 80909 • Phone 719-635-5736*  
*Fax 719-635-5450 • e-mail mve@mvecivil.com*

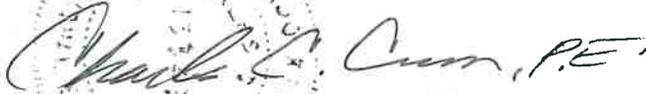
- A. In-house use: 0.35 acre-feet per year
- B. Irrigation. 0.30 acre-feet per year limited to irrigation of 5,000 square feet of home lawn or garden.
- C. Water Feature 0.05 acre-feet per year

The water supply for the residential lots using up to 19 Dawson aquifer wells pursuant to the augmentation plan approved in the Decrees is sufficient and satisfies the 300 year supply requirement of El Paso County.

Contact our office should you have any question concerning this water information.

Very truly yours,

M.V.E., Inc.



Charles C. Crum, P.E.

CCC:sh

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Enc. Water Decree

<p>DISTRICT COURT, WATER DIVISION 1 and 2, COLORADO</p> <p>Court Addresses: Water Division 1 P.O. Box 2038 Greeley, CO 80632</p> <hr/> <p>CONCERNING THE APPLICATION FOR WATER RIGHTS OF:</p> <p>MORGAN AND CHRISTINE BROWN, GWILYM BROWN, MARLENE BROWN, AND MARSHAL AND SARA BROWN, Applicants,</p> <p>IN EL PASO COUNTY.</p>	<p>DATE FILED: August 15, 2016 6:45 AM CASE NUMBER: 2015CW3119</p> <p>• COURT USE ONLY •</p> <p>Case Number: 15CW3119</p>
<p>FINDINGS OF FACT, CONCLUSIONS OF LAW, RULING OF THE REFEREE AND JUDGMENT AND DECREE OF THE WATER COURT</p>	

A claim for change of water rights and approval of plan for augmentation was filed in this case on September 23, 2015, in Case No. 15CW3119 in Water Division 1, and Case No. 15CW3047 in Water Division 2. These cases were consolidated in Water Division 1. All matters contained in the application having been reviewed, and testimony having been taken where such testimony is necessary, and such corrections made as are indicated by the evidence presented herein, the following is hereby the Judgment and Decree of the Court:

FINDINGS OF FACT

1. Name, Address and Telephone Number of Applicants:

Morgan and Christine Brown, Gwilym Brown, Marlene Brown,  
and Marshal and Sara Brown  
c/o 17435 Roller Coaster Road  
Monument, CO 80132-8312  
(970) 339-5225

2. Opposers: A statement of opposition was filed in Case No. 15CW3047 in Water Division 2 by the City of Colorado Springs, acting by and through its enterprise, Colorado Springs Utilities ("Colorado Springs"). Colorado Springs stipulated to entry of a decree which is no less restrictive on Applicants than this decree on June 15, 2016. Said stipulation was approved as an order of the court on June 16, 2016. No other statements of opposition were filed and the time for filing such statements has expired.

3. Subject matter jurisdiction: Timely and adequate notice of the application was published as required by statute, and the Court has jurisdiction over the subject matter of this proceeding and over the parties affected hereby, whether they have appeared or not. The cases were consolidated in Case No. 16MD3 to be decreed by the Water Court, Water Division 1.

4. Decreed Change:

A. Decree Information: Case Nos. 08CW206, 08CW315, 08CW316, 08CW317, 08CW318, and 08CW319, Water Division 1, decreed on October 22, 2009. The parcels associated with Case Nos. 08CW206, 08CW315, 08CW316, and 08CW319, are comprised of a total of 59.8 acres and are generally located in the NW1/4 of Section 21, T11S, R66W of the 6<sup>th</sup> P.M., as shown on Attachment A (Parcels 1, 2, 3 and 6). The parcels associated with Case Nos. 08CW317 and 08CW318, are associated with a total of 95 acres also located in the NW1/4 of Section 21, as shown on Attachment A (Parcels 4 and 5). Said parcels are contiguous and the water decreed in these cases is owned by Applicants as described on Attachment B. The groundwater which is the subject of the decrees and this change is not nontributary Dawson and Denver and nontributary Arapahoe and Laramie-Fox Hills aquifer groundwater.

B. Decreed change: The decrees in Case Nos. 08CW206, 08CW315, 08CW316, and 08CW319, require that wells to withdraw the decreed groundwater be located on the land which is the subject of that specific decree. By this change, Applicants may withdraw the combined decreed annual amounts through wells located on any of the parcels which are the subject of those decrees (Parcels 1, 2, 3, and 6). Applicants may also withdraw 12.5 acre-feet per year of not nontributary Dawson aquifer groundwater as decreed in Case Nos. 08CW317 and 08CW318, in combination with the combined annual amounts of Dawson aquifer groundwater decreed in Case Nos. 08CW206, 08CW315, 08CW316, and 08CW319 (Combined annual amount of 57 acre-feet per year total through all decrees), through wells located on any of the parcels which are the subject of any decrees (Parcels 1 through 6). No other parts of the original decrees are changed herein.

5. Plan for augmentation:

A. Groundwater to be augmented: 13.3 acre-feet per year over a 300 year period and 14.25 acre-feet per year over a 100 year period of not nontributary Dawson aquifer groundwater decreed in Case Nos. 08CW206, 08CW315, 08CW316, 08CW317, 08CW318, and 08CW319, pursuant to the change decreed above.

B. Water to be used for augmentation: Return flows from the use of not nontributary Dawson aquifer water and return flows or direct discharge of nontributary Arapahoe and Laramie-Fox Hills aquifer groundwater decreed in Case Nos. 08CW206, 08CW315, 08CW316, 08CW317, 08CW318, and 08CW319, as more specifically described in paragraph 5.F below.

C. Development and Consumptive Use: The 13.3 acre-feet per year for 300 years (3990 acre-feet total) of Dawson aquifer groundwater will be used through 19 individual wells to serve up to 19 residential lots. Each of the 19 wells will withdraw and use 0.70 acre-feet per

year for in house use (0.35 acre-feet), irrigation of 5000 square feet of home lawn and garden (0.3 acre-feet), and use in a water feature (0.05 acre-feet). Conservatively, water use in single family dwellings will equal at least 0.2 acre-feet of water annually, and that use of non-evaporative septic systems typically results in consumption of approximately 10% of such use, resulting in return flows of at least 0.18 acre-feet annually from those uses. Various components of this plan for augmentation are predicated on these estimations, and Applicants shall be required to use non-evaporative septic systems to treat and dispose of water used for in house use. The 14.25 acre-feet per year for 100 years (1425 acre-feet total) of Dawson aquifer groundwater will be used for irrigation and fire protection use for a 100 year period. Return flow from irrigation use is estimated to be 15% of the annual amount used for that purpose. Fire protection is considered to be 100% consumed.

Applicants or successors in interest will convey by deed the 0.7 acre-feet per year of Dawson aquifer groundwater to be used through each of the 19 wells by the lot owner, so that this plan for augmentation can be administered, and well permits issued by the Colorado Division of Water Resources.

D. Replacement of depletions during pumping: Based on annual pumping of 13.3 acre-feet per year over a 300 year pumping period, it is estimated that the total actual depletion to all stream systems is approximately 23.5% or a total of 3.1 acre-feet (0.16 acre-feet per well). Return flows from use of the Upper Dawson aquifer groundwater from in house use in one residence on each of the 19 lots (0.18 acre-feet per year) is sufficient to replace actual depletions from pumping of the entire 0.7 acre-feet per year from each of the 19 wells for 300 years. As long as the Upper Dawson aquifer groundwater is being used in one residence on each lot, the groundwater may be used for all uses on the lot as described in paragraph 10.C above. For annual pumping of 14.25 acre-feet per year for 100 years for irrigation and fire protection use, the total actual depletion at 100 years is approximately 8% of the annual amount withdrawn or 1.14 acre-feet. Irrigation return flows are estimated to be 15% of the annual amount withdrawn for that purpose which at maximum pumping of 14.25 acre-feet would be 2.14 acre-feet. Applicants will use irrigation return flows to replace the amount of actual depletion for each year of pumping which will be calculated using the percentage of depletion for each year of pumping as shown on the depletion curve attached as Attachment B-1. Water used for fire protection purposes will be separately metered so that no return flow will be claimed from use of the groundwater used for that purpose. If sufficient irrigation return flow is not available for replacement of actual depletions as calculated for that year of pumping, Applicants will pump the additional required amount of replacement water from the Dawson aquifer directly into the stream. Such replacement will be prior to the irrigation season for the following year.

Of the total actual depletion from pumping of 13.3 acre-feet per year after 300 years of pumping, it is estimated that approximately 13% occurs to the South Platte River stream systems and approximately 10.4% occurs to the Arkansas River stream systems, and of the total actual depletion from pumping 14.25 acre-feet per year at 100 years, it is estimated that approximately 4.4% occurs to the South Platte River stream systems and approximately 3.6% occurs to the Arkansas River stream systems. (The remaining percentages of actual depletions occur to streams in designated basins). Applicants do not have the physical ability to replace depletions to the Arkansas River and Monument Creek stream systems, but shall instead replace all such depletions

to the South Platte River via the Cherry Creek stream systems. During pumping of the Dawson aquifer groundwater for use through 19 wells for 300 years, annual in house return flows are estimated to be 3.42 acre-feet annually (based on 0.18 acre-feet per year for each of the 19 wells), which is in excess of the total actual depletion of 3.1 acre-feet after 300 years of pumping. During pumping of the Dawson aquifer groundwater for irrigation and fire protection use for 100 years, annual irrigation return flows based on maximum pumping would be 2.14 acre-feet annually which is in excess of the total actual depletion of 1.14 acre-feet after 100 years of pumping.

E. Replacement of Post-pumping Depletions: Applicants agree to replace depletions for the shortest of the following periods: the period provided by the Colorado Legislature, should it eventually specify one and if the Applicants obtain water court approval for such modification; the period determined by the State Engineer, should the State Engineer lawfully establish such a period; the period established through rulings of the Colorado Supreme Court on relevant cases; or until Applicants petition the water court and after notice to parties in the case and prove that they have complied with all statutory requirements. The court finds that the provisions of this paragraph are adequate to comply with existing law and to prevent injury to others. It is estimated that maximum total actual depletion to all stream systems from pumping of 13.3 acre-feet per year for 300 years will be approximately 23.87% of average annual pumping in the 312th year, and the maximum total actual depletion to all stream systems from pumping of 14.25 acre-feet per year for 100 years will be approximately 8.72% of average annual pumping in the 126th year and will decline thereafter. Applicants' replacement obligation will be the total stream depletion factor for all stream systems as shown on Attachment B-1 for 100 years of pumping and B-2 for 300 years of pumping. That required amount of water will be pumped from the nontributary Arapahoe or Laramie-Fox Hills aquifers which is reserved for this purpose herein for diversion into the Cherry Creek stream systems. However, Applicants reserve the right to substitute the use of other nontributary groundwater, including return flows, decreed in Case Nos. 08CW206, 08CW315, 08CW316, 08CW317, 08CW318, and 08CW319, Water Division 1, or from another location which is legally available for such purpose, for replacement of post-pumping depletions at such time that post-pumping depletions may begin. The Court retains continuing jurisdiction in this matter to determine if the supply is adequate.

F. Applicants shall reserve and dedicate to this plan for augmentation 25.4 acre-feet per year and 2540 acre-feet total of nontributary Arapahoe and 17.6 acre-feet per year and 1760 acre-feet total of nontributary Laramie-Fox Hills aquifer groundwater decreed in Case Nos. 08CW206 (2.1 acre-feet per year of Arapahoe and 1.5 acre-feet per year of Laramie-Fox Hills), 08CW315 (2.1 acre-feet per year of Arapahoe and 1.5 acre-feet per year of Laramie-Fox Hills), 08CW316 (2.1 acre-feet per year of Arapahoe and 1.5 acre-feet per year of Laramie-Fox Hills), and 08CW319 (19.1 acre-feet per year of Arapahoe and 13.1 acre-feet per year of Laramie-Fox Hills), and 5.8 acre-feet per year and 580 acre-feet total of the Arapahoe aquifer groundwater decreed in Case No. 08CW317 and 5.35 acre-feet per year and 535 acre-feet total of the Arapahoe aquifer groundwater decreed in Case No. 08CW318, for the purpose of replacing to the Cherry Creek stream systems all post-pumping depletions. If at some time replacement of post-pumping depletions is no longer required pursuant to paragraph 5.E above, said reservation will become null and void at such time as the obligation to replace post-pumping depletions

terminates. Applicants will be required to construct a well into the Arapahoe and/or Laramie-Fox Hills aquifer to provide for post-pumping depletions herein.

6. Applicants or successors and assigns shall be responsible for the operation of this augmentation plan. Applicants shall reserve the nontributary Arapahoe and Laramie-Fox Hills aquifer groundwater described in paragraph 5. F above, for use in this plan. Failure of either the Applicants or successors and assigns to comply with the terms of the decree may result in an order of the Division Engineer's office to curtail or eliminate pumping of the well or wells. This decree shall be recorded in the real property records of El Paso County so that a title examination of the property, or any part thereof, shall reveal to all future purchasers the existence of this decree.

7. Administration of plan for augmentation:

A. Applicants shall report to the Division **Engineer** for Water Division I upon request, a summary of the annual metered withdrawals of the subject wells from November 1 through October 31, on an accounting form acceptable to the Division Engineer.

B. All withdrawals which are the subject of this decree will be metered.

C. Pursuant to Section 37-92-305(8), C.R.S., 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.

D. The Applicants or successor and assigns at the direction of the Division Engineer, shall make post-pumping replacements to the Cherry Creek stream systems from wells operating for 100 years and 300 years pursuant to the percentage of depletion referenced on the depletion curve attached hereto on Attachment B-1 and B-2, respectively.

8. Retained jurisdiction for plan for augmentation:

A. Pursuant to Section 37-92-304(6), C.R.S., the Court retains continuing jurisdiction over the plan for augmentation decreed herein for reconsideration of the question whether the provisions of this decree are necessary and/or sufficient to prevent injury to vested water rights of others. The Court also has jurisdiction for the purposes of determining compliance with the terms of the augmentation plan. Objector City of Colorado Springs owns senior water rights on Monument Creek that may be negatively impacted by the operation of this decree wherein depletions to Monument Creek will not be replaced to Monument Creek, but rather will be replaced to the Cherry Creek stream systems. In addition, Colorado Springs reserves the right to claim that the cumulative negative impacts of this and other similar decrees constitutes injury to its senior Monument Creek rights. In the interest of settlement only, Colorado Springs consents to the entry of this decree. However, by doing so, Colorado Springs does not waive its right to claim injury and to seek relief in the future according to this paragraph.

B. Any person seeking to invoke the retained jurisdiction of the Court shall file a verified petition with the Court. The petition to invoke retained jurisdiction or to modify the Decree shall set forth with particularity the factual basis and the requested decretal language to effect the petition. The party lodging the petition shall have the burden of going forward to establish prima facie facts alleged in the petition. If the Court finds those facts to be established, Applicants shall thereupon have the burden of proof to show: (1) that any modification sought by Applicants will avoid injury to other appropriators, or (2) that any modification sought by Objector is not required to avoid injury to other appropriators, or (3) that any term or condition proposed by Applicants in response to the Objector's petition does avoid injury to other appropriators.

C. The Court retains jurisdiction for the purpose of determining whether the continued reservation of the nontributary water for use on the property is required. After notice to the State Engineer's Office, if Applicants can demonstrate to the Court that post-pumping depletions need no longer be replaced, the Court may remove the requirement that the nontributary water must be reserved.

#### CONCLUSIONS OF LAW

9. The Water Court has jurisdiction over this proceeding pursuant to Section 37-90-137(6), C.R.S. This Court concludes as a matter of law that the application herein is one contemplated by law. Sections 37-90-137(4) and (9)(c). The withdrawal of up to 13.3 acre-feet per year for 300 years and no more than 3990 acre-feet total and the withdrawal of up to 14.25 acre-feet per year for 100 years and no more than 1425 acre-feet total of the Dawson aquifer in accordance with the terms of this decree will not result in material injury to vested water rights of others subject to the provisions of this decree.

10. This plan for augmentation satisfies the requirements of Section 37-90-137(9)(c), C.R.S., for replacement of actual depletions to the affected stream systems for withdrawals of the Dawson aquifer water.

#### JUDGMENT AND DECREE

The Findings of Fact and Conclusions of Law set forth above are hereby incorporated into the terms of this Judgment and Decree as if the same were fully set forth herein.

11. Full and adequate notice of the application was given, and the Court has jurisdiction over the subject matter and over the parties whether they have appeared or not.

12. Applicants may withdraw up to 13.3 acre-feet per year for 300 years and no more than 3990 acre-feet total and up to 14.25 acre-feet per year for 100 years and no more than 1425 acre-feet total of not nontributary ground water from the Dawson aquifer under the plan for augmentation decreed herein pursuant to Section 37-90-137(9)(c), C.R.S.

13. Applicants have complied with all requirements and met all standards and burdens of proof, including but not limited to Sections 37-90-137(9)(c), 37-92-103(9), 37-92-302, 37-92-

304(6), 37-92-305(1), (2), (3), (4), (6), (8), (9), C.R.S., to adjudicate this plan for augmentation and is therefore entitled to a decree confirming and approving this plan for augmentation as described in the findings of fact.

14. Pursuant to Section 37-92-305(5), C.R.S., the replacement water herein shall be of a quality so as to meet the requirements for which the water of the senior appropriator has normally used.

15. The change of water rights and plan for augmentation as described in the findings of fact is hereby approved, confirmed, and adjudicated, including and subject to the terms and conditions specified herein.

16. No owners of or person entitled to use water under a vested water right or decreed conditional water right will be injured or injuriously affected by change of water rights and the operation of the plan for augmentation as decreed herein.

17. In considering applications for permits for wells to withdraw the groundwater which is the subject of this decree, the State Engineer shall be bound by this decree and shall issue said permits in accordance with terms of this decree.

18. Continuing Jurisdiction:

Pursuant to Section 37-92-304(6), C.R.S., the Court retains continuing jurisdiction over the plan for augmentation decreed herein for reconsideration of the question of whether the provisions of this decree are necessary and/or sufficient to prevent injury to vested water rights of others. The Court also retains continuing jurisdiction for the purpose of determining compliance with the terms of the augmentation plan.

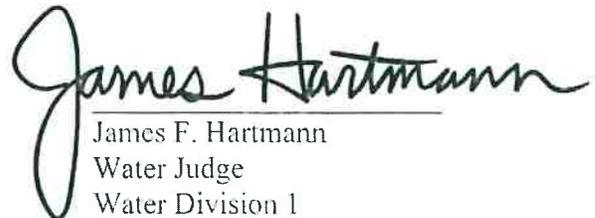
Date: July 22, 2016



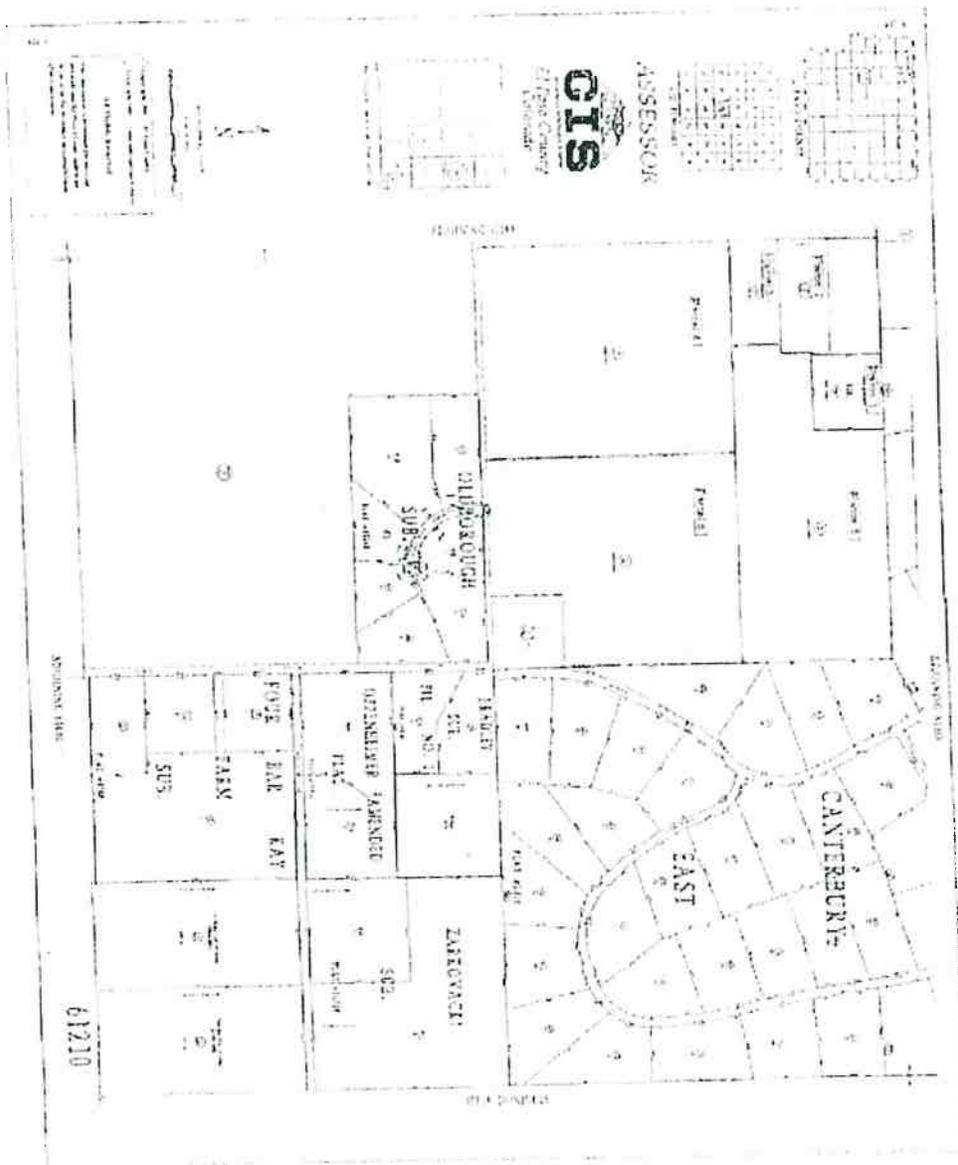
John S. Cowan, Water Referee  
Water Division I

The court finds that no protest was filed in this matter. The foregoing ruling is confirmed and approved, and is made the judgment and decree of this Court.

Date: August 15, 2016



James F. Hartmann  
Water Judge  
Water Division I

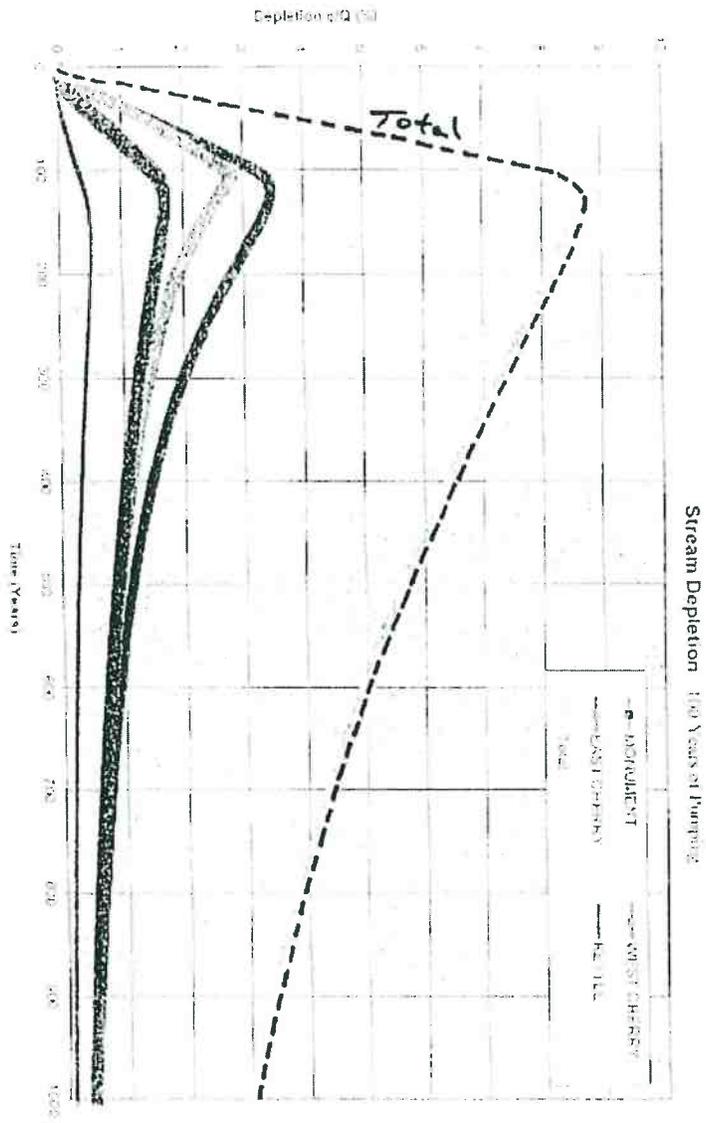


ATTACHMENT A-1  
 Case Nos. 15CW3119 and 15CW3047

Brown  
 15CW3119

ATTACHMENT A-1

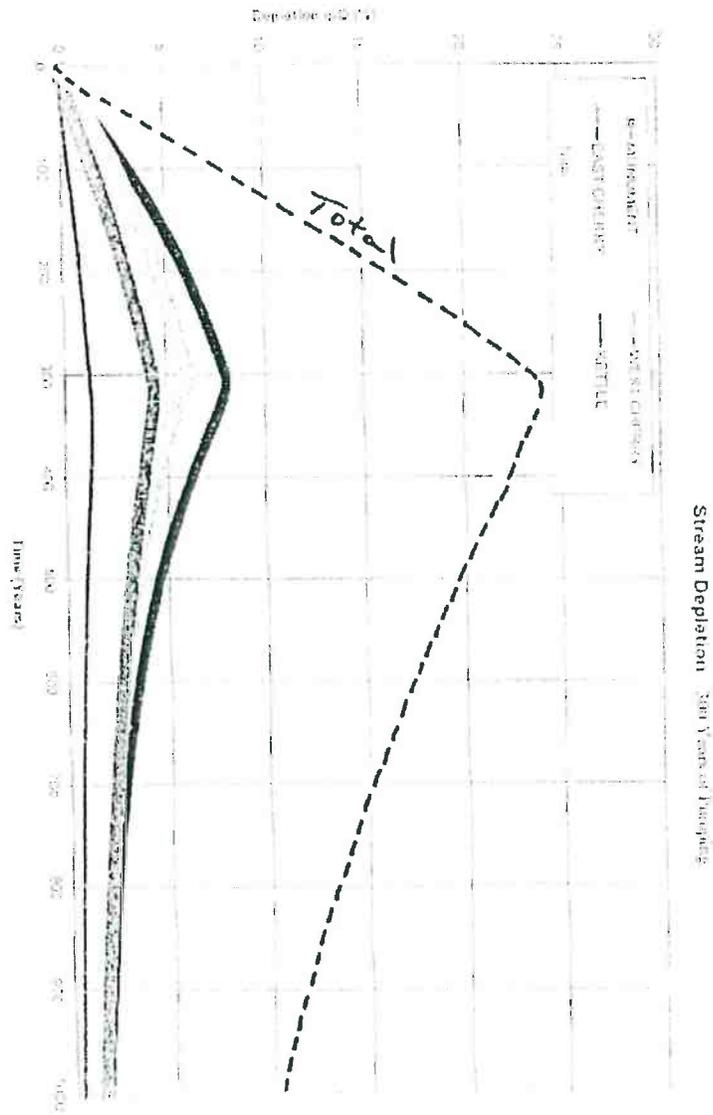




ATTACHMENT B-1  
Case Nos. 15CW3119 and 15CW3047

Brown  
15CW3119

ATTACHMENT B-1



ATTACHMENT B-2  
Case Nos. 15CW3119 and 15CW3047