

July 5, 2023

Abdullah Javed Applegate Group, Inc. 1490 W 121st Ave, Suite 100 Denver, CO 80234

Becca Ingwers Flatiron Constructors, Inc. 7001 Tower Rd, Suite D Denver, CO 80249

Re: Camenish Borrow Pit (WDID 0502542)

DRMS Permit No. M-2006-078 (WDID 0503009)

NW 1/4 of the NE 1/4 of Section 15, Township 2 North, Range 68 West, 6th P.M., Weld County

Water Division 1, Water District 5

SWSP ID: 4944

Approval Period: July 5, 2023 through December 31, 2023

Contact information for Abdullah Javed: (303) 452-6611 and ajaved@applegategroup.com

Dear Abdullah Javed:

We have reviewed your request dated May 26, 2023 regarding the above-referenced substitute water supply plan (SWSP) to cover depletions caused by the Camenish Borrow Pit in accordance with section 37-90-137(11), C.R.S. The original plan was approved February 1, 2007 through January 31, 2009. The required fee of \$1,593 for this SWSP has been submitted (receipt number 10029437).

SWSP Operation

The Camenish Borrow Pit is generally located in the NW ¼ of the NE ¼ of Section 15, Township 2 North, Range 68 West, 6th P.M., Weld County. This pit was mined for sand and gravel until December 2007, after which mining ceased and the clay-liner was installed and approved August 16, 2011. Previously, depletions due to evaporative losses and operational losses were replaced by leasing water from the St. Vrain & Left Hand Water Conservancy District through January 31, 2009. This SWSP seeks to replace all lagged depletions impacting the stream starting in February 1, 2009 with excess accretions decreed in Division 1 Water Court case no. 12CW179 leased from the Denver Julesburg Water Resource Partners (DJWRP). A map of this operation is shown on attached Figure 1.

In accordance with the letter dated April 30, 2010 (copy attached) from the Colorado Division of Reclamation, Mining, and Safety ("DRMS"), all sand and gravel mining operators must comply with the requirements of the Colorado Reclamation Act and the Mineral Rules and Regulations for the protection of water resources. The April 30, 2010 letter from DRMS requires that the Applicant provide information to DRMS to demonstrate that the Applicant can replace long term injurious stream depletions that result from mining related exposure of groundwater. The DRMS letter identifies four approaches to satisfy this requirement. In accordance with approach nos. 1 and 3, the Applicant has indicated that a bond has been obtained for \$23,575.00 through the DRMS for lining of this site to assure that depletions from groundwater evaporation do not occur in the unforeseen event or events that would lead to the abandonment of the Pit. In order to be released from such bond, the Applicant must replace all lagged depletions from the mining operation until there are no lagged depletions affecting the stream.



Depletions

Lagged depletions result from past evaporative losses, water that was used for dust control, and water that was lost from mined product. Evaporative losses occurred from the dewatering trench around the excavated area which was approximately 4,000 feet in length and 5 feet wide with a total exposed area of 0.5 acre. The Integrated Decision Support Group Alluvial Water Accounting System ("IDS-AWAS") model was used to lag depletions to the South Platte River. The following parameters were used in the model: a distance from the well to the stream of 11,400 feet, a transmissivity of 50,000 gpd/ft, a specific yield of 0.2, and a noflow boundary of 13,500 feet. Total lagged depletions since the beginning of the operation through the end of the effect on the stream (February 2007 through January 2037) are 34.66 acre-feet, of which 2.434 acrefeet were replaced under the previous SWSP approval (2007-2009). A summary of the total lagged depletions is shown on attached Table 2.

In addition the lagged depletions through December 2022 were compared against the river call to determine the net depletions. That analysis shows that 7.92 acre-feet of the lagged depletions did not require replacement during periods of free river from February 2009 through December 2022. Therefore, this SWSP seeks to replace the un-replaced out-of-priority lagged depletions from the period of February 2009 through January 2037 (the end of the model period). The remaining lagged depletions since the expiration of the previous SWSP are 20.91 acre-feet. These lagged depletions include actual net depletions through December of 2022 plus any remaining future depletions wrapped back into the calendar year 2023.

After December 2023, only 2.549 acre-feet of the total 20.91 acre-feet of depletions remain. Since this is only 7.4% of the total depletions which will have occurred to the stream from the operation of this pit, the Applicant proposes to aggregate the 2.549 acre-feet of replacement water and distribute its delivery throughout 2023. A summary of the total lagged depletions and out-of-priority depletions is shown on attached Table 1.

Replacement

The replacement source for this plan period is excess accretion credits from the 12CW179 augmentation plan leased from Denver Julesburg Water Resource Partners (DJWRP) (WDID 0202634). A copy of the lease is attached. The accretion credits accrue upstream of the Lower Latham Ditch headgate at the South Platte River generally located in the S $\frac{1}{2}$ of Section 35, Township 5 North, Range 66 West of the 6th P.M., which is above any calling rights which could be injured, and were made available starting July 1, 2016.

Since such credits were not made available until 2016, excess credits were provided to make up this shortfall. From February 2009 through December 2022, there were 2,594.25 acre-feet of excess DJWRP accretions, of which 61.38 acre-feet were leased to Burnco, therefore leaving 1,926.33 acre-feet of net excess accretions available for use in this SWSP. The Applicant has leased from DJWRP 20.91 acre-feet of replacement water from the period of July 2016 through December 2023 to replace all un-replaced out-of-priority depletions starting in February 2009. A summary of the replacement schedule is shown on attached Table 1.

Conditions of Approval

This substitute water supply plan is hereby approved in accordance with section 37-90-137(11), C.R.S. and subject to the following conditions:

1. This SWSP is approved with the effective date of July 5, 2023 through December 31, 2023 unless otherwise revoked or superseded by a decree. This SWSP replaces out-of-priority lagged depletions that accrued to the river prior to the effective date of this plan that were not previously replaced

(depletions starting in February 2009) and those out-of-priority lagged depletions that will accrue to the stream during this plan period.

- 2. Well permit no. 65445-F was issued in accordance with section 37-90-137(2) and (11), C.R.S. The Applicant shall request that permit no. 65445-F be canceled since the site has been lined.
- 3. Approval of this SWSP is for the purpose stated herein, specifically to provide replacements for lagged depletions due to mining. This SWSP does not permit any future groundwater exposure, water use for dust control, aggregate production, or any other purpose. Any additional uses of this water must first be approved by this office.
- 4. All releases of replacement water must be sufficient to cover all out-of-priority depletions in time, place, and amount. The release of monthly replacement water may be aggregated in a single release to maximize beneficial use at the direction and approval of the Water Commissioner.
- 5. Conveyance loss for delivery of augmentation water to the South Platte River is subject to assessment and modification as determined by the Division Engineer.
- 6. The Applicant shall provide daily accounting from this date forward and monthly accounting for months past (including, but not limited to total water used, depletions including evaporative losses, replacement sources, the quantity of replacement water provided starting July 1, 2016, and river calls), submitted on a monthly basis. The accounting must be uploaded to the CDSS Online Reporting Tool within 30 days of the end of the month for which the accounting applies (https://dwr.state.co.us/Tools/reporting). Instructions for using the tool are available on the Division of Water Resources website on the "Services" → "Data & Information" page under the heading of Online Data Submittal. Accounting and reporting procedures are subject to approval and modification by the Division Engineer. Accounting forms need to identify the WDID number for each structure operating under this SWSP. Additional information regarding accounting requirements can be found in the attached Augmentation Plan Accounting Protocol. NOTE: Monthly accounting, even during the winter non-irrigation season, is required.

In addition, the Applicant shall verify that the entity making replacements has identified the Applicant's use specifically on the entity's accounting submitted to this office, and shall claim credit only for actual amounts released as shown in the entity's accounting. For the period of this plan, that entity is the Denver Julesburg Water Resource.

- 7. The name, address, and phone number of a contact person who will be responsible for the operation and accounting of this plan must be provided on the accounting forms to the Division Engineer and Water Commissioner.
- 8. Applicant must follow the *Augmentation Plan Accounting* as referenced in the attached document, for the operation of this SWSP.
- 9. In order to prevent injury to other water rights, the Division Engineer and Water Commissioner must be able to administer Applicants' replacement water past headgates on the river at times when those headgates would otherwise be legally entitled to divert all available flow in or "sweep" the South Platte or its tributaries. Applicant shall not receive credit for replacement of depletions to the South Platte below such diversion structures unless bypass and measurement structures are in place to allow the Division Engineer and Water Commissioner to confirm 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 a carriage or use agreement with a third party is required, Applicant shall be responsible for securing such agreement. Until such time as the Applicant

provides a copy of the carriage or use agreement to the division engineer and water commissioner, no credit will be allowed for replacement of depletions to the South Platte below such diversion structure.

- 10. The Division of Water Resources will not be responsible for any enforcement or administration of third party agreements that are not included in a decree of the water court.
- 11. The approval of this substitute water supply plan does not relieve the Applicant and/or the landowner of the requirement to obtain a Water Court decree approving a permanent plan for augmentation or mitigation to ensure the permanent replacement of all depletions, including long-term evaporation losses and lagged depletions after gravel mining operations have ceased if reclamation of the mine site will produce a permanent water surface exposing groundwater to evaporation, or lagged depletions only if a lined pond results after reclamation, until there is no longer an effect on stream flow.
- 12. The Applicant is required to maintain their DRMS permit and an adequate bond to cover their reclamation plan until (1) there are no longer lagged depletions hitting the river, (2) a suitable augmentation plan is obtained, or (3) another party assumes full augmentation responsibilities. The Applicant has a current bond of \$23,575.00 to account for backfilling the pit. With all future SWSP renewal requests, the Applicant will be required to demonstrate continuing compliance, or diligent pursuit of compliance, with their DRMS permit reclamation plan and the April 30, 2010 DRMS letter, specifically in regard to the required financial warranty for the site.
- 13. The State Engineer may revoke this SWSP or add additional restrictions to its operation if at any time the State Engineer determines that injury to other vested water rights has occurred or will occur as a result of the operation of this SWSP. Should this SWSP expire without renewal or be revoked prior to adjudication of a permanent plan for augmentation, all excavation of the product from below the water table, and all other use of water at the pit, must cease immediately. In addition, lack of timely accounting may prevent proper administration, which may lead to revocation or modification of this plan.
- 14. In accordance with amendments to section 25-8-202(7), C.R.S., and Senate Bill 89-181 Rules and Regulations adopted on February 4, 1992, the State Engineer shall determine whether the substitute supply is of a quality to meet requirements of use to senior appropriators. As such, water quality data or analysis may be requested at any time to determine if the water quality is appropriate for downstream water users.
- 15. The decision of the State Engineer shall have no precedential or evidentiary force, shall not create any presumptions, shift the burden of proof, or serve as a defense in any water court case or any other legal action that may be initiated concerning the substitute water supply plan. This decision shall not bind the State Engineer to act in a similar manner in any other applications involving other plans or in any proposed renewal of this plan, and shall not imply concurrence with any findings of fact or conclusions of law contained herein, or with the engineering methodologies used by the Applicant.

Should you have any questions, please contact Wenli Dickinson of this office at 303-866-3581 or Michael Hein of the Division office in Greeley at (970) 352-8712.

Sincerely,

Joanna Williams, P.E. Chief of Water Supply

Attachments: Figure 1

DRMS April 30, 2010 Letter

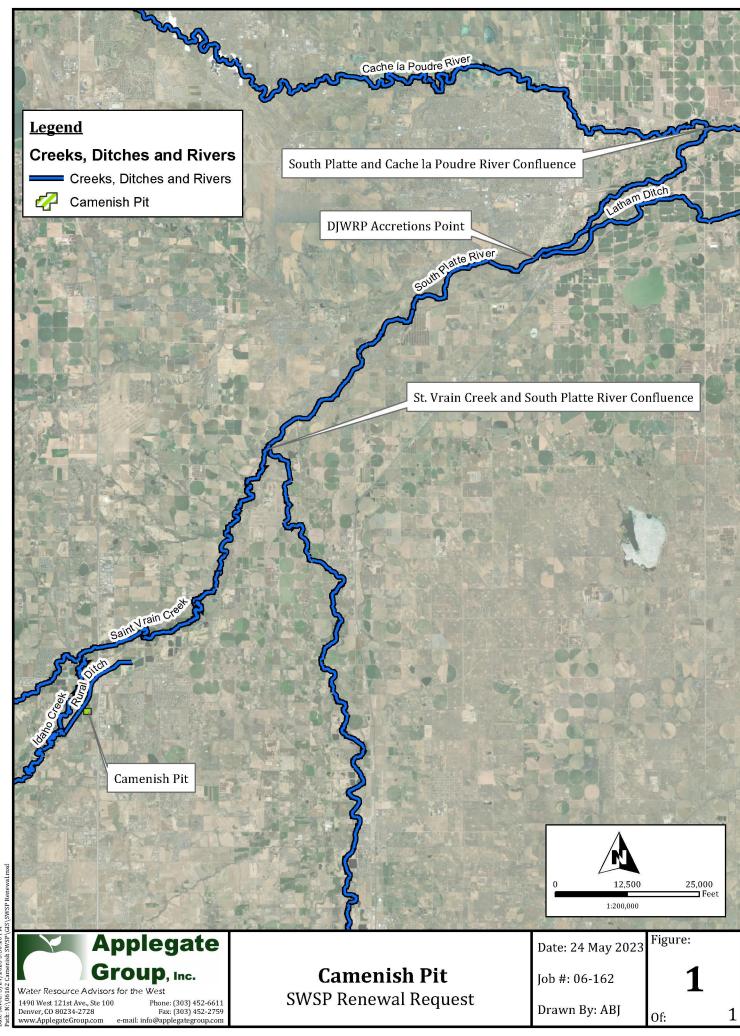
DJWRP Lease Tables 1 & 2

Augmentation Plan Accounting Protocol

Ec: Michael Hein, Lead Assistant Division Engineer, Michael. Hein@state.co.us

Dawn Ewing, Accounting Coordinator, dnr_div1accounting@state.co.us
Shera Sumerford, Water Commissioner District 5, Shera.Sumerford@state.co.us
Louis Flink, Tabulation / Diversion Records Coordinator, Louis.Flink@state.co.us
Division of Reclamation, Mining and Safety, dnr_drmsminadmin@state.co.us

JMW/idc/wad: 2009-2023 Camenish Borrow Pit SWSP - Approval.docx



Date Saved: 5/24/2023 3:30:20]

April 30, 2010

Permittee Address

RE: Mining Operations with Exposed Ground water

To Whom It May Concern:

The Division of Reclamation Mining and Safety is responsible for ensuring that Sand and Gravel mining operators comply with the requirements of the Colorado Land Reclamation Act for the Extraction of Construction Materials (Act) and the Mineral Rules and Regulations of the Colorado Mined Land Reclamation Board for the Extraction of Construction Materials (Rules). Among these requirements are provisions for the protection of water resources. The Act requires that reclamation plans must ensure minimization of disturbances to the prevailing hydrologic balance, including disturbances to the quantity of water in the area affected by mining and in the surrounding areas. § 34-32.5-116(4)(h). Rule 3.1.6(1)(a) requires compliance with Colorado water laws and regulations governing injury to existing water rights both during and after mining. Permits must specify how the permittee will comply with applicable Colorado water laws and regulations governing injury to existing water rights. Rule 6.3.3(j); Rule 6.4.5(2)(c). After an extensive review, the Division determined that several operators may not have appropriate permit conditions to address certain reclamation liabilities arising from impacts to water resources.

In September 2009 the Division of Water Resources (DWR) updated its Guidelines for Sand and Gravel Pits. These guidelines provide guidance on achieving compliance with state law regarding replacement of depletions from sand and gravel mining, thus the guidelines provide a benchmark for the protection of hydrologic balance required under the Act and Rules. As noted in the Guidelines, sand and gravel operations which expose groundwater without complying with state law create a reclamation liability by impacting available groundwater.

State law requires that any person exposing ground water must obtain a well permit from the SEO pursuant to § 37-90-137(11). Because exposed groundwater results in out-of-priority water depletions, operations which expose ground water must also eventually obtain a water-court approved augmentation plan. Currently, several operators do not have either an augmentation plan or bonding to provide an alternative method to mitigate injurious stream depletions that result from mining-related exposure of ground water. The Division has a statutory duty to ensure that lands affected by mining are reclaimed in a manner that complies with state law and to ensure that operators have sufficient bonding to achieve reclamation. In order to assist operators in achieving compliance with these requirements, the Division proposes that, by April 30, 2011, operators should contact the Division and agree upon a plan for achieving compliance.

The Division has identified four approaches for operators:

- 1. File a financial warranty that will ensure backfilling of the pit to cover the exposed ground water to a depth of two feet above the static ground water level or,
- 2. Obtain a court approved augmentation plan prior to exposing ground water or,
- 3. File a financial warranty to cover the cost of installing a clay liner or slurry wall that meets the Division of Water Resources requirements for preventing ground water exposure or,
- 4. Obtain approval from the Division of Water Resources that acknowledges compliance with the SEO's requirements pursuant to § 37-90-137(11).

The Division will work with operators on an individual basis as they move to implement one of these plans. It is likely that options 1 and 3 will require the submittal of a technical revision or an amendment to the existing permit depending on the nature of the current mining and reclamation plan and the proposed changes. Increased financial warranties, as a result of these modifications, may be posted in a phased manner not to exceed three years. Amendments or revisions currently under review will be required to be approved by April 30, 2011 and may use the phased financial warranty approach described above. New applications going forward or presently under review by the Division will be required to meet the requirements of one of the options 1-4 at the time of application approval. Failure of affected operators to initiate contact with the Division and gain compliance as described above could result in an enforcement action being issued by the Division.

If you have any questions, please contact Tony Waldron at 303-866-3567, extension 8150.

cc: Permit Id Site Name

WATER LEASE AGREEMENT

THIS AGREEMENT is made and entered into this 20 day of April, 2023, by and between Denver Julesburg Water Resource Partners, LLC ("DJWRP"), a Colorado limited liability company ("Lessor") and Flatiron Constructors, Inc., a Colorado limited liability company ("Flatiron" or "Lessee).

RECITALS

WHEREAS, Lessor has certain fully consumable water credits available for lease in the South Platte River basin.

WHEREAS, Lessee has a need for fully consumable water credits in order to pay prior depletions arising in the South Platte River Basin. Lessee understands the credits at issue in this agreement will satisfy the relevant government agencies, based on input from the Colorado Division of Water Resources. Lessor makes no warranties regarding the final approval by relevant government agencies for Lessee's use of the credits.

WHEREAS, Lessor is willing to lease and Lessee is interested in leasing DJWRP's fully consumable water credits as described below.

NOW THEREFORE in consideration of the mutual covenants and promises of the parties hereto, it is agreed as follows:

- 1. Lessor shall lease 20.91 acre-feet of raw water credit to Lessee without warranty for Lessee's use in its Substitute Water Supply Plan "SWSP" to cover depletions that arose due to operations of the Camenish Borrow Pit.
- 2. The Parties agree that the volume of water to be leased under this agreement totals 20.91 acre-feet. Upon execution of this Lease and upon satisfaction of the lease payment terms, 20.91 acre-feet of Lessor's excess fully consumable water credits previously arising in the South Platte River basin shall be utilized by Lessee in satisfaction of its depletion obligation under its forthcoming SWSP.
- 3. Lessee shall pay lessor for this water at a rate of \$400 per acre-foot, resulting in a total of \$8,363.41 due upon execution of this lease.
- 4. At the execution of this Lease Agreement, Lessor has provided Lessee with accounting demonstrating the availability of the leased raw water credits in the amounts set forth in Table 1 (attached).
- 5. The leased water is provided to lessor "as is" and "where is". The Parties expressly acknowledge and agree that the Lessor has made no representation or warranty as to the quality of or fitness for any use of the water delivered hereunder. Lessee hereby waives any actual or potential rights it might have concerning any warranties from Lessor as to the fitness for a particular use, product liability claims, and all other extant or later created or conceived of

strict liability or strict liability claims and rights concerning the fitness or appropriateness of the Leased water delivered hereunder for any particular use or uses. Lessor makes no warranty as to the use or uses of said Lease Water.

- 6. The Parties agree that this Water Lease Agreement represents the complete agreement of the parties and no oral modification shall be recognized. Any amendments or additions to this Agreement shall be made in writing and shall be signed by the parties hereto.
- 7. This agreement is binding upon the parties and the individuals signing below represent that they have the authority to bind their respective entity to this Lease Agreement.
- 8. Lessee may not assign or transfer this agreement to any other party, individual or entity.
- 9. This Lease shall expire on December 31, 2023, or upon the State water authorities' acceptance of 20.91 acre-feet of Lessor's excess raw water credits, leased herein, as satisfaction of Lessee's depletion replacement, whichever occurs first. Lessor shall have no ongoing obligation to release or otherwise deliver water beyond the 20.91 acre-feet of water previously delivered and accounted for herein in satisfaction of Lessee's depletion obligations.

Flatiron Constructors, Inc.	Denver Julesburg Water Resource Partners, LLC
Signature: Man Mus	Signature: M.S.
Date: <u>04/20/2023</u>	Date: 4-20-2023
By: Grant Johns	By: MARK S. GOLDSTEIN Title: MANAGER
Title: District Vice President	Title
385 Interlocken Cresent, #900	
Broomfield, CO 80021	

Table No. 1 Camenish Borrow Pit Substitute Water Supply Plan, M-06-078 Final Accounting Form

X	Applegate
	Group, Inc.

nai Accour	nting Form								I Group, Inc.			
Year	Month	% of Month Under Call	Camenish Depletions [ac-ft]	Net Camenish Depletions [ac-ft]	Total Excess DJWRP Accretions Available [ac-ft]	Excess DJWRP Accretions Leased to Burnco [ac-ft]	DJWRP Excess Accretions Available after Burnco Lease [ac-ft]	Net Excess DJWRP Accretions [ac-ft]	Lease Amount [ac-ft]	Running Total Net Depletions [ac-ft]	Running To Lease [ac-ft]	
2009	Feb-09	100%	0.29	0.29	-	-	-	-	-	0.29	-	
2009	Mar-09	100%	0.30	0.30	-	-	-	-	-	0.60	-	
2009	Apr-09	80%	0.31	0.25	-	-	-	-	-	0.85	-	
2009	May-09	90%	0.32	0.29	-	-	-	-	-	1.14	-	
2009	Jun-09	9%	0.33	0.03	-	-	-	-	-	1.17	-	
2009	Jul-09	76%	0.33	0.25	-	-	-	-	-	1.42	-	
2009	Aug-09	73%	0.34	0.25	-	-	-	-	-	1.67	-	
2009	Sep-09	82%	0.34	0.28	-	-	_	-	_	1.95	-	
2009	Oct-09	0%	0.35	0.00	_	_	_	_	_	1.95	_	
2009	Nov-09	0%	0.35	0.00					_	1.95		
2009	Dec-09	0%	0.35	0.00	-	-	=	-	-	1.95	-	
					-	-	-	-			-	
2010	Jan-10	0%	0.35	0.00	-	-	-	-	-	1.95	-	
2010	Feb-10	63%	0.35	0.22	-	-	-	-	-	2.17	-	
2010	Mar-10	15%	0.35	0.05	-	-	-	-	-	2.22	-	
2010	Apr-10	15%	0.35	0.05	-	-	-	-	-	2.28	-	
2010	May-10	0%	0.35	0.00	-	-	-	-	-	2.28	-	
2010	Jun-10	13%	0.34	0.04	-	-	-	-	-	2.32	-	
2010	Jul-10	100%	0.34	0.34	-	-	-	-	-	2.66	-	
2010	Aug-10	88%	0.34	0.30	-	-	-	-	-	2.96	-	
2010	Sep-10	100%	0.34	0.34	_	_	-	_	_	3.30	_	
2010	Oct-10	78%	0.33	0.26	_	_	_	_	-	3.56	_	
					=	=		-	-		-	
2010	Nov-10	97%	0.33	0.32	-	-	-	-	-	3.88	-	
2010	Dec-10	100%	0.33	0.33	-	-	-	-	-	4.21	-	
2011	Jan-11	6%	0.33	0.02	-	-	-	-	-	4.23	-	
2011	Feb-11	0%	0.32	0.00	-	-	-	-	-	4.23	-	
2011	Mar-11	56%	0.32	0.18	-	-	-	-	-	4.41	-	
2011	Apr-11	100%	0.32	0.32	-	-	-	-	-	4.72	-	
2011	May-11	60%	0.31	0.19	-	-	-	-	-	4.91	-	
2011	Jun-11	0%	0.31	0.00	-	-	_	-	-	4.91	-	
2011	Jul-11	0%	0.30	0.00	_	_	_	_	_	4.91	_	
2011									_			
	Aug-11	69%	0.30	0.21	-	-	-	-	-	5.12	-	
2011	Sep-11	56%	0.30	0.17	-	-	-	-	-	5.28	-	
2011	Oct-11	0%	0.29	0.00	-	-	-	-	-	5.28	-	
2011	Nov-11	0%	0.29	0.00	-	-	-	-	-	5.28	-	
2011	Dec-11	0%	0.29	0.00	-	-	-	-	-	5.28	-	
2012	Jan-12	0%	0.28	0.00	-	-	-	-	-	5.28	-	
2012	Feb-12	0%	0.28	0.00	-	-	-	-	-	5.28	-	
2012	Mar-12	21%	0.28	0.06	-	-	-	-	-	5.34	-	
2012	Apr-12	100%	0.27	0.27	-	-	_	-	-	5.61	-	
2012	May-12	100%	0.27	0.27	_	_	_	_	_	5.88	_	
2012	Jun-12	100%	0.26	0.26						6.14		
					-	-	-	-	-		-	
2012	Jul-12	100%	0.26	0.26	-	-	-	-		6.41	-	
2012	Aug-12	100%	0.26	0.26	-	-	-	-	-	6.66	-	
2012	Sep-12	100%	0.25	0.25	-	-	-	-	-	6.92	-	
2012	Oct-12	100%	0.25	0.25	-	-	-	-	-	7.17	-	
2012	Nov-12	100%	0.25	0.25	-	-	-	-	-	7.42	-	
2012	Dec-12	100%	0.24	0.24	-	-	-	-	-	7.66	-	
2013	Jan-13	100%	0.24	0.24	-	-	-	-	-	7.90	-	
2013	Feb-13	100%	0.24	0.24	-	-	-	-	-	8.14	-	
2013	Mar-13	100%	0.23	0.23	_	-	_	_	-	8.37		
2013	Apr-13	100%	0.23	0.23	_	_	_	_	_	8.61	_	
2013	May-13	100%	0.23	0.23	=	=		-	-	8.83	-	
2013		100%	0.23	0.23	-	-	-	-	-		-	
	Jun-13				-	-	-	-	-	9.06	-	
2013	Jul-13	100%	0.22	0.22	-	-	-	-	-	9.28	-	
2013	Aug-13	100%	0.22	0.22	-	-	-	-	-	9.50	-	
2013	Sep-13	53%	0.22	0.11	-	-	-	-	-	9.61	-	
2013	Oct-13	0%	0.21	0.00	-	-	-	-	-	9.61	-	
2013	Nov-13	81%	0.21	0.17	-	-	-	-	-	9.78	-	
2013	Dec-13	6%	0.21	0.01	-	-	-	-	-	9.80	-	
2014	Jan-14	0%	0.20	0.00	-	-	-	-	-	9.80	-	
2014	Feb-14	0%	0.20	0.00	_	-	_	_	-	9.80		
2014	Mar-14	0%	0.20	0.00	-	-	6	_	-	9.80	-	
2014	Apr-14	37%	0.20	0.07	-	-		-	-	9.87	-	
					-	-	-	-	-		-	
2014	May-14	50%	0.19	0.10	-	-	-	-	-	9.97	-	
2014	Jun-14	0%	0.19	0.00	-	-	-	-	-	9.97	-	
2014	Jul-14	86%	0.19	0.16	-	-	-	-	-	10.13	-	
2014	Aug-14	48%	0.19	0.09	-	-	-	-	-	10.22	-	
2014	Sep-14	0%	0.18	0.00	-	-	-	-	-	10.22	-	
2014	Oct-14	0%	0.18	0.00	-	-	-	-	-	10.22	-	
2014	Nov-14	0%	0.18	0.00	-	-	-	-	-	10.22	-	
2014	Dec-14	0%	0.18	0.00	_	_	_	_	_	10.22	_	
2014		0%		0.00	-	-		-	-	10.22	-	
	Jan-15		0.17		-	-	-	-			-	
2015	Feb-15	0%	0.17	0.00	-	-	-	-	-	10.22	-	
2015	Mar-15	0%	0.17	0.00	-	-	-	-	-	10.22	-	
2015	Apr-15	34%	0.17	0.06	-	-	-	-	-	10.27	-	
2015	May-15	0%	0.16	0.00	-	-	-	-	-	10.27	-	
2013												

Table No. 1 Camenish Borrow Pit Substitute Water Supply Plan, M-06-078 Final Accounting Form

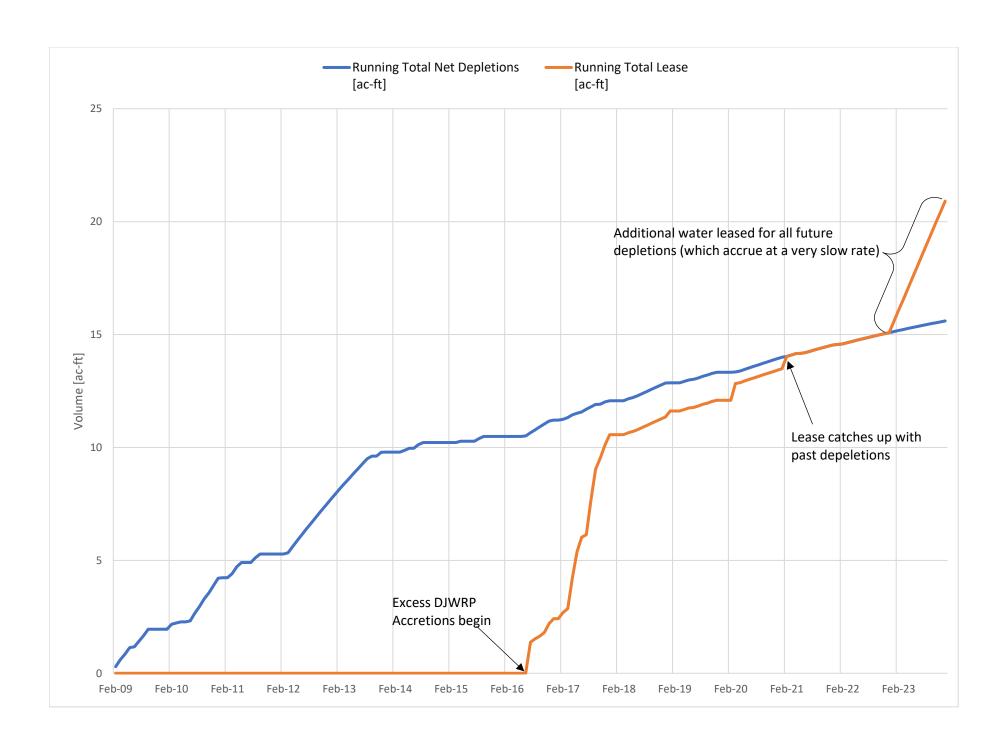
X	Applegate
	Group, Inc.

ai Accou	nting Form										-,
Year	Month	% of Month Under Call	Camenish Depletions [ac-ft]	Net Camenish Depletions [ac-ft]	Total Excess DJWRP Accretions Available	Excess DJWRP Accretions Leased to Burnco	DJWRP Excess Accretions Available after Burnco Lease	Net Excess DJWRP Accretions	Lease Amount [ac-ft]	Running Total Net Depletions [ac-ft]	Running To Lease [ac-ft]
			(22.0)	[22.10]	[ac-ft]	[ac-ft]	[ac-ft]	[ac-ft]	[]	(44.14)	()
2015	Jul-15	0%	0.16	0.00	-	-	-	-	-	10.27	-
2015	Aug-15	76%	0.16	0.12	-	-	-	-	-	10.39	-
2015	Sep-15	61%	0.16	0.09	-	-	-	-	-	10.49	-
2015	Oct-15	0%	0.15	0.00	-	-	-	-	-	10.49	-
2015	Nov-15	0%	0.15	0.00	-	-	-	-	-	10.49	-
2015	Dec-15	0%	0.15	0.00	-	-	-	-	-	10.49	-
2016	Jan-16	0%	0.15	0.00	-	-	-	-	-	10.49	-
2016	Feb-16	0%	0.15	0.00	-	-	-	-	-	10.49	-
2016	Mar-16	0%	0.14	0.00	-	-	-	-	-	10.49	-
2016	Apr-16	0%	0.14	0.00	-	-	-	-	-	10.49	-
2016	May-16	0%	0.14	0.00	-	-	-	-	-	10.49	-
2016	Jun-16	18%	0.14	0.02	-	-	-	-	-	10.51	-
2016	Jul-16	100%	0.14	0.14	4.37	0.00	4.37	4.37	1.38	10.65	1.38
2016	Aug-16	100%	0.13	0.13	0.15	0.00	0.15	0.15	0.15	10.78	1.53
2016	Sep-16	100%	0.13	0.13	0.12	0.00	0.12	0.12	0.12	10.91	1.65
2016	Oct-16	100%	0.13	0.13	0.16	0.00	0.16	0.16	0.16	11.04	1.81
2016	Nov-16	100%	0.13	0.13	0.39	0.00	0.39	0.39	0.39	11.17	2.20
2016	Dec-16	31%	0.13	0.04	0.70	0.00	0.70	0.22	0.22	11.21	2.41
2017	Jan-17	0%	0.12	0.00	9.35	0.00	9.35	0.00	0.00	11.21	2.41
2017	Feb-17	27%	0.12	0.03	1.03	0.00	1.03	0.27	0.27	11.24	2.69
2017	Mar-17	64%	0.12	0.08	0.27	0.00	0.27	0.17	0.17	11.32	2.86
2017	Apr-17	100%	0.12	0.12	7.10	0.00	7.10	7.10	1.37	11.44	4.23
2017	May-17	64%	0.12	0.08	55.47	0.00	55.47	35.66	1.14	11.52	5.38
2017	Jun-17	49%	0.12	0.06	21.47	0.00	21.47	10.46	0.65	11.57	6.02
2017	Jul-17	100%	0.11	0.11	52.01	0.00	52.01	52.01	0.11	11.69	6.14
2017	Aug-17	100%	0.11	0.11	109.84	0.00	109.84	109.84	1.54	11.80	7.67
2017	Sep-17	90%	0.11	0.10	80.99	0.00	80.99	73.09	1.36	11.90	9.03
2017	Oct-17	9%	0.11	0.01	85.07	0.00	85.07	7.98	0.49	11.91	9.53
2017	Nov-17	97%	0.11	0.11	54.90	0.00	54.90	53.29	0.58	12.02	10.11
2017	Dec-17	48%	0.11	0.05	44.30	0.00	44.30	21.48	0.46	12.07	10.11
2017	Jan-18	0%	0.11	0.00	32.22	0.00	32.22	0.00	0.00	12.07	10.57
2018	Feb-18	0%	0.10	0.00	21.47	0.00	21.47	0.00	0.00	12.07	10.57
2018	Mar-18	0%	0.10	0.00	16.44	0.00	16.44	0.00	0.00	12.07	10.57
2018	Apr-18	79%	0.10	0.08	4.34	0.00	4.34	3.43	0.00	12.07	10.57
2018	May-18	60%	0.10	0.08	1.24	0.00	1.24	0.74	0.08	12.15	10.65
2018	Jun-18	78%	0.10	0.08	11.22	0.00	1.24	8.70	0.08	12.21	10.71
2018	Jul-18 Jul-18	100%	0.10	0.10	56.55	0.00	56.55	56.55	0.08	12.29	10.78
2018		100%	0.10	0.10	28.45	0.00	28.45	28.45	0.10	12.39 12.48	10.88
2018	Aug-18	100%	0.10	0.10		0.00			0.10	12.48 12.58	10.98
2018	Sep-18 Oct-18	100% 100%	0.09	0.09	52.93 107.70	0.00	52.93 107.70	52.93 107.70	0.09	12.58 12.67	11.07 11.17
					70.90	0.00	70.90		0.09		
2018 2018	Nov-18 Dec-18	100% 100%	0.09 0.09	0.09 0.09	70.90 55.41	0.00	70.90 55.41	70.90 55.41	0.09	12.76 12.85	11.26 11.35
					55.41 41.46	0.00			0.09		
2019	Jan-19	6%	0.09	0.01			41.46	2.59		12.86	11.62
2019	Feb-19	0%	0.09	0.00	27.91	0.00	27.91	0.00	0.00	12.86	11.62
2019	Mar-19	0%	0.09	0.00	21.72	0.00	21.72	0.00	0.00	12.86	11.62
2019 2019	Apr-19 May-19	76% 78%	0.09 0.08	0.07 0.07	8.69 4.68	0.00	8.69 4.68	6.57 3.66	0.07 0.07	12.92 12.99	11.68 11.75
2019	Jun-19	29%	0.08	0.02	11.21	0.00	11.21	3.30	0.02	13.01	11.77
2019	Jul-19	70%	0.08	0.06	0.28	0.00	0.28	0.20	0.06	13.07	11.83
2019	Aug-19	96%	0.08	0.08	20.04	0.00	20.04	19.17	0.08	13.15	11.91
2019	Sep-19	70%	0.08	0.06	58.58	0.00	58.58	41.01	0.06	13.21	11.97
2019	Oct-19	91%	0.08	0.07	93.99	0.00	93.99	85.93	0.07	13.28	12.04
2019	Nov-19	65%	0.08	0.05	70.05	0.00	70.05	45.33	0.05	13.33	12.09
2019	Dec-19	0%	0.08	0.00	59.02	0.00	59.02	0.00	0.00	13.33	12.09
2020	Jan-20	0%	0.08	0.00	43.53	0.00	43.53	0.00	0.00	13.33	12.09
2020	Feb-20	0%	0.07	0.00	29.09	0.00	29.09	0.00	0.00	13.33	12.09
2020	Mar-20	20%	0.07	0.01	21.15	0.00	21.15	4.23	0.75	13.34	12.83
2020	Apr-20	53%	0.07	0.04	17.46	0.00	17.46	9.19	0.04	13.38	12.87
2020	May-20	100%	0.07	0.07	7.94	0.00	7.94	7.94	0.07	13.46	12.94
2020	Jun-20	100%	0.07	0.07	15.67	0.00	15.67	15.67	0.07	13.53	13.01
2020	Jul-20	100%	0.07	0.07	21.63	0.00	21.63	21.63	0.07	13.60	13.08
2020	Aug-20	100%	0.07	0.07	4.21	0.00	4.21	4.21	0.07	13.67	13.15
2020	Sep-20	97%	0.07	0.07	9.22	0.00	9.22	8.98	0.07	13.73	13.22
2020	Oct-20	100%	0.07	0.07	54.24	0.00	54.24	54.24	0.07	13.80	13.29
2020	Nov-20	100%	0.07	0.07	9.82	0.00	9.82	9.82	0.07	13.87	13.35
2020	Dec-20	100%	0.07	0.07	8.36	0.00	8.36	8.36	0.07	13.93	13.42
2021	Jan-21	100%	0.06	0.06	11.97	0.00	11.97	11.97	0.06	13.99	13.48
2021	Feb-21	58%	0.06	0.04	12.14	0.00	12.14	7.05	0.55	14.03	14.03
2021	Mar-21	100%	0.06	0.06	12.59	0.00	12.59	12.59	0.06	14.09	14.09
2021	Apr-21	100%	0.06	0.06	12.00	0.00	12.00	12.00	0.06	14.16	14.16
2021	May-21	15%	0.06	0.01	14.05	0.00	14.05	2.07	0.01	14.17	14.17
2021	Jun-21	59%	0.06	0.04	34.96	0.00	34.96	20.47	0.04	14.20	14.20
2021	Jul-21	100%	0.06	0.06	35.40	0.00	35.40	35.40	0.06	14.26	14.26
2021	Aug-21	100%	0.06	0.06	27.01	0.00	27.01	27.01	0.06	14.32	14.32
2021	Sep-21	100%	0.06	0.06	53.59	0.00	53.59	53.59	0.06	14.38	14.38
2021	Oct-21	100%	0.06	0.06	23.60	0.00	23.60	23.60	0.06	14.43	14.43
2021	Nov-21	100%	0.06	0.06	23.19	0.00	23.19	23.19	0.06	14.49	14.49
2021	Dec-21	97%	0.06	0.05	32.24	0.00	32.24	31.32	0.05	14.54	14.54
2022	Jan-22	38%	0.05	0.02	41.04	0.00	41.04	15.39	0.02	14.56	14.56
2022	Feb-22	42%	0.05	0.02	26.54	0.00	26.54	11.06	0.02	14.59	14.59
-	Mar-22	100%	0.05	0.05	18.22	0.00	18.22	18.22	0.05	14.64	14.64
2022				0.05	9.22	0.00	9.22	9.22	0.05	14.69	14.69
2022 2022	Apr-27	100%	0.05								
2022 2022 2022	Apr-22 May-22	100% 100%	0.05 0.05	0.05	16.88	0.00	16.88	16.88	0.05	14.74	14.74

Table No. 1 Camenish Borrow Pit Substitute Water Supply Plan, M-06-078 Final Accounting Form



. mai Accou											
Year	Month	% of Month Under Call	Camenish Depletions [ac-ft]	Net Camenish Depletions [ac-ft]	Total Excess DJWRP Accretions Available [ac-ft]	Excess DJWRP Accretions Leased to Burnco [ac-ft]	DJWRP Excess Accretions Available after Burnco Lease [ac-ft]	Net Excess DJWRP Accretions [ac-ft]	Lease Amount [ac-ft]	Running Total Net Depletions [ac-ft]	Running Total Lease [ac-ft]
2022	Jul-22	100%	0.05	0.05	31.40	9.70	21.70	21.70	0.05	14.84	14.84
2022	Aug-22	100%	0.05	0.05	22.13	0.00	22.13	22.13	0.05	14.89	14.89
2022	Sep-22	100%	0.05	0.05	50.54	0.00	50.54	50.54	0.05	14.94	14.94
2022	Oct-22	100%	0.05	0.05	30.07	7.30	22.77	22.77	0.05	14.99	14.99
2022	Nov-22	100%	0.05	0.05	48.06	21.80	26.26	26.26	0.05	15.04	15.04
2022	Dec-22	100%	0.05	0.05	37.37	22.58	14.79	14.79	0.05	15.09	15.09
2023	Jan-23	100%	0.05	0.05	32.05	0.00	32.05	32.05	0.49	15.13	15.57
2023	Feb-23	100%	0.05	0.05	18.63	0.00	18.63	18.63	0.49	15.18	16.06
2023	Mar-23	100%	0.05	0.05	10.97	0.00	10.97	10.97	0.49	15.22	16.55
2023	Apr-23	100%	0.04	0.04	18.99	0.00	18.99	18.99	0.49	15.27	17.04
2023	May-23	100%	0.04	0.04	18.94	0.00	18.94	18.94	0.49	15.31	17.52
2023	Jun-23	100%	0.04	0.04	16.57	0.00	16.57	16.57	0.49	15.35	18.01
2023	Jul-23	100%	0.04	0.04	14.22	0.00	14.22	14.22	0.48	15.40	18.49
2023	Aug-23	100%	0.04	0.04	11.88	0.00	11.88	11.88	0.48	15.44	18.98
2023	Sep-23	100%	0.04	0.04	19.70	0.00	19.70	19.70	0.48	15.48	19.46
2023	Oct-23	100%	0.04	0.04	55.46	0.00	55.46	55.46	0.48	15.52	19.94
2023	Nov-23	100%	0.04	0.04	47.64	0.00	47.64	47.64	0.48	15.56	20.43
2023	Dec-23	100%	0.04	0.04	31.78	0.00	31.78	31.78	0.48	15.60	20.91



Stream Depletion Analysis Using Stream Depletion Factors

Flatiron Constructors - Camenish Borrow Pit Mining Stream Depletions

11/1/12 Gravel Lake

Distance from stream = Transmissivity = Specific Yield = No-flow Boundary =

11,400	ft
50000	gpd/ft
0.2	
13,500	ft



		Consumed	Cumulative	Cumulative	Volume of	Volume of
Cumulative		Volume	Volume	Volume of	Depletion	Stream
Time	Month	Pumped	Pumped	Depletion	This Step	Depletions
(months)		(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)	(ac-ft)
1	Feb-07	2.70	2.704	0.000	0.0000	
2	Mar-07	2.74	5.446	0.000	0.0000	
3	Apr-07	2.99	8.431	0.000	0.0000	
4	May-07	3.19	11.624	0.000	0.0001	
5	Jun-07	3.31	14.932	0.001	0.0005	Year 1
6	Jul-07	3.34	18.270	0.002	0.0019	
7	Aug-07	3.29	21.564	0.007	0.0048	0.16
8	Sep-07	3.13	24.691	0.017	0.0100	
9	Oct-07	2.99	27.686	0.035	0.0178	
10	Nov-07	2.85	30.532	0.063	0.0284	
11	Dec-07	0.12	30.651	0.105	0.0418	
12	Jan-08	0.05	30.706	0.163	0.0579	
13 14	Feb-08 Mar-08	0.03	30.734	0.240	0.0765	
14 15	Mar-08 Apr-08	0.07 0.31	30.801 31.111	0.337 0.457	0.0973 0.1196	
16	May-08	0.51	31.628	0.437	0.1425	
17	Jun-08	0.63	32.261	0.764	0.1423	Year 2
18	Jul-08	0.66	32.923	0.951	0.1866	Teal 2
19	Aug-08	0.62	33.541	1.157	0.2066	2.27
20	Sep-08	0.45	33.993	1.382	0.2249	
21	Oct-08	0.32	34.312	1.624	0.2415	
22	Nov-08	0.32	34.482	1.880	0.2566	
23	Dec-08	0.17	34.602	2.151	0.2704	
23 24	Jan-09	0.12	34.602 34.657	2.131	0.2829	
25	Feb-09	0.00	34.657	2.728	0.2829	
25 26		0.00		3.032	0.3044	
	Mar-09		34.657			
27	Apr-09	0.00	34.657	3.346	0.3135	
28	May-09	0.00	34.657	3.667	0.3215	** 0
29	Jun-09	0.00	34.657	3.996	0.3284	Year 3
30	Jul-09	0.00	34.657	4.330	0.3342	
31	Aug-09	0.00	34.657	4.669	0.3390	3.97
32	Sep-09	0.00	34.657	5.012	0.3428	
33	Oct-09	0.00	34.657	5.357	0.3456	
34	Nov-09	0.00	34.657	5.705	0.3477	
35	Dec-09	0.00	34.657	6.054	0.3489	
36	Jan-10	0.00	34.657	6.403	0.3495	
37	Feb-10	0.00	34.657	6.753	0.3495	
38	Mar-10	0.00	34.657	7.102	0.3489	
39	Apr-10	0.00	34.657	7.450	0.3479	
40	May-10	0.00	34.657	7.796	0.3465	
41	Jun-10	0.00	34.657	8.141	0.3447	Year 4
42	Jul-10	0.00	34.657	8.484	0.3426	
43	Aug-10	0.00	34.657	8.824	0.3402	4.08
44	Sep-10	0.00	34.657	9.161	0.3376	
45	Oct-10	0.00	34.657	9.496	0.3348	
46	Nov-10	0.00	34.657	9.828	0.3318	
47	Dec-10	0.00	34.657	10.157	0.3287	
48	Jan-11	0.00	34.657	10.482	0.3254	

Cumulative Time (months)	Month	Consumed Volume Pumped (ac-ft)	Cumulative Volume Pumped (ac-ft)	Cumulative Volume of Depletion (ac-ft)	Volume of Depletion This Step (ac-ft)	Volume of Stream Depletions (ac-ft)
49	Feb-11	0.00	34.657	10.804	0.3221	
50	Mar-11	0.00	34.657	11.123	0.3187	
51	Apr-11	0.00	34.657	11.438	0.3152	
52	May-11	0.00	34.657	11.750	0.3116	
53	Jun-11	0.00	34.657	12.058	0.3080	Year 5
54	Jul-11	0.00	34.657	12.362	0.3044	
55	Aug-11	0.00	34.657	12.663	0.3008	3.63
56	Sep-11	0.00	34.657	12.960	0.2971	
57	Oct-11	0.00	34.657	13.253	0.2935	
58	Nov-11	0.00	34.657	13.543	0.2898	
59	Dec-11	0.00	34.657	13.829	0.2862	
60	Jan-12	0.00	34.657	14.112	0.2825	
61	Feb-12	0.00	34.657	14.391	0.2789	
62	Mar-12	0.00	34.657	14.666	0.2753	
63	Apr-12	0.00	34.657	14.938	0.2718	
64	May-12	0.00	34.657	15.206	0.2682	
65	Jun-12	0.00	34.657	15.471	0.2647	Year 6
66	Jul-12	0.00	34.657	15.732	0.2612	
67	Aug-12	0.00	34.657	15.990	0.2578	3.12
68	Sep-12	0.00	34.657	16.244	0.2543	
69	Oct-12	0.00	34.657	16.495	0.2510	
70	Nov-12	0.00	34.657	16.743	0.2476	
71	Dec-12	0.00	34.657	16.987	0.2443	
72	Jan-13	0.00	34.657	17.228	0.2411	
73	Feb-13	0.00	34.657	17.466	0.2378	
74	Mar-13	0.00	34.657	17.701	0.2347	
75	Apr-13	0.00	34.657	17.932	0.2314	
76	May-13	0.00	34.657	18.160	0.2283	
77	Jun-13	0.00	34.657	18.386	0.2252	Year 7
78	Jul-13	0.00	34.657	18.608	0.2222	
79	Aug-13	0.00	34.657	18.827	0.2192	2.65
80	Sep-13	0.00	34.657	19.043	0.2162	
81	Oct-13	0.00	34.657	19.256	0.2133	
82	Nov-13	0.00	34.657	19.467	0.2103	
83	Dec-13	0.00	34.657	19.674	0.2075	
84	Jan-14	0.00	34.657	19.879	0.2047	
85	Feb-14	0.00	34.657	20.081	0.2019	
86	Mar-14	0.00	34.657	20.280	0.1992	
87	Apr-14	0.00	34.657	20.477	0.1964	
88	May-14	0.00	34.657	20.670	0.1938	
89	Jun-14	0.00	34.657	20.861	0.1911	Year 8
90	Jul-14	0.00	34.657	21.050	0.1885	
91	Aug-14	0.00	34.657	21.236	0.1859	2.25
92	Sep-14	0.00	34.657	21.419	0.1834	
93	Oct-14	0.00	34.657	21.600	0.1809	
94	Nov-14	0.00	34.657	21.779	0.1784	
95	Dec-14	0.00	34.657	21.955	0.1760	
96	Jan-15	0.00	34.657	22.128	0.1736	
97	Feb-15	0.00	34.657	22.300	0.1713	
98	Mar-15	0.00	34.657	22.468	0.1689	
99	Apr-15	0.00	34.657	22.635	0.1666	
100	May-15	0.00	34.657	22.799	0.1643	
101	Jun-15	0.00	34.657	22.961	0.1620	Year 9
102	Jul-15	0.00	34.657	23.121	0.1599	
103	Aug-15	0.00	34.657	23.279	0.1577	1.91
104	Sep-15	0.00	34.657	23.434	0.1555	1.01
105	Oct-15	0.00	34.657	23.588	0.1534	
106	Nov-15	0.00	34.657	23.739	0.1513	
107	Dec-15	0.00	34.657	23.888	0.1313	
107	Jan-16	0.00	34.657	24.036	0.1472	1

Cumulative Time (months)	Month	Consumed Volume Pumped (ac-ft)	Cumulative Volume Pumped (ac-ft)	Cumulative Volume of Depletion (ac-ft)	Volume of Depletion This Step (ac-ft)	Volume of Stream Depletions (ac-ft)
109	Feb-16	0.00	34.657	24.181	0.1452	(=== ==)
110	Mar-16	0.00	34.657	24.324	0.1432	
111	Apr-16	0.00	34.657	24.465	0.1412	
112	May-16	0.00	34.657	24.604	0.1393	
113	Jun-16	0.00	34.657	24.742	0.1374	Year 10
114	Jul-16	0.00	34.657	24.877	0.1355	
115	Aug-16	0.00	34.657	25.011	0.1337	1.62
116	Sep-16	0.00	34.657	25.143	0.1318	
117	Oct-16	0.00	34.657	25.273	0.1300	
118	Nov-16	0.00	34.657	25.401	0.1283	
119	Dec-16	0.00	34.657	25.528	0.1265	
120	Jan-17	0.00	34.657	25.652	0.1246	
121	Feb-17	0.00	34.657	25.775	0.1231	
122	Mar-17	0.00	34.657	25.897	0.1214	
123	Apr-17	0.00	34.657	26.017	0.1197	
124	May-17	0.00	34.657	26.135	0.1181	
125	Jun-17	0.00	34.657	26.251	0.1165	Year 11
126	Jul-17	0.00	34.657	26.366	0.1149	
127	Aug-17	0.00	34.657	26.479	0.1133	1.37
128	Sep-17	0.00	34.657	26.591	0.1118	
129	Oct-17	0.00	34.657	26.701	0.1102	
130	Nov-17	0.00	34.657	26.810	0.1089	
131	Dec-17	0.00	34.657	26.918	0.1073	
132	Jan-18	0.00	34.657	27.023	0.1058	
133	Feb-18	0.00	34.657	27.128	0.1043	
134	Mar-18	0.00	34.657	27.231	0.1029	
135	Apr-18	0.00	34.657	27.332	0.1015	
136	May-18	0.00	34.657	27.432	0.1001	
137	Jun-18	0.00	34.657	27.531	0.0988	Year 12
138	Jul-18	0.00	34.657	27.628	0.0974	
139	Aug-18	0.00	34.657	27.724	0.0961	1.16
140	Sep-18	0.00	34.657	27.819	0.0948	
141	Oct-18	0.00	34.657	27.913	0.0935	
142	Nov-18	0.00	34.657	28.005	0.0922	
143	Dec-18	0.00	34.657	28.096	0.0909	
144	Jan-19	0.00	34.657	28.185	0.0897	
145	Feb-19	0.00	34.657	28.274	0.0885	
146	Mar-19	0.00	34.657	28.361	0.0872	
147	Apr-19	0.00	34.657	28.447	0.0861	
148 149	May-19 Jun-19	0.00	34.657 34.657	28.532	0.0849	Year 13
150	Jun-19 Jul-19	0.00 0.00	34.657 34.657	28.616 28.698	0.0837 0.0826	100113
150		0.00	34.657 34.657	28.698	0.0826	0.99
151	Aug-19 Sep-19	0.00	34.657	28.860	0.0814	0.99
153	Oct-19	0.00	34.657	28.939	0.0803	
154	Nov-19	0.00	34.657	29.018	0.0792	
155	Dec-19	0.00	34.657	29.018	0.0782	
156	Jan-20	0.00	34.657	29.093	0.0760	
157	Feb-20	0.00	34.657	29.246	0.0750	
158	Mar-20	0.00	34.657	29.320	0.0740	
159	Apr-20	0.00	34.657	29.393	0.0730	
160	May-20	0.00	34.657	29.465	0.0720	
161	Jun-20	0.00	34.657	29.536	0.0710	Year 14
162	Jul-20 Jul-20	0.00	34.657	29.606	0.0700	100111
163	Aug-20	0.00	34.657	29.675	0.0690	0.84
164	Sep-20	0.00	34.657	29.743	0.0681	0.51
165	Oct-20	0.00	34.657	29.810	0.0672	
166	Nov-20	0.00	34.657	29.876	0.0663	
167	Dec-20	0.00	34.657	29.941	0.0653	
	200 20	0.00	2		0.0000	1

Cumulative Time (months)	Month	Consumed Volume Pumped (ac-ft)	Cumulative Volume Pumped (ac-ft)	Cumulative Volume of Depletion (ac-ft)	Volume of Depletion This Step (ac-ft)	Volume of Stream Depletions (ac-ft)
169	Feb-21	0.00	34.657	30.069	0.0636	
170	Mar-21	0.00	34.657	30.132	0.0627	
171	Apr-21	0.00	34.657	30.194	0.0618	
172	May-21	0.00	34.657	30.255	0.0610	
173	Jun-21	0.00	34.657	30.315	0.0602	Year 15
174	Jul-21	0.00	34.657	30.375	0.0593	1000 10
175	Aug-21	0.00	34.657	30.433	0.0585	0.71
176	Sep-21	0.00	34.657	30.491	0.0577	0.71
177	Oct-21	0.00	34.657	30.548	0.0569	
178	Nov-21	0.00	34.657	30.604	0.0562	
179	Dec-21	0.00	34.657	30.659	0.0554	
180	Jan-22	0.00	34.657	30.714	0.0546	
181	Feb-22	0.00	34.657	30.768	0.0539	
182	Mar-22	0.00	34.657	30.821	0.0532	
183		0.00	34.657	30.821	0.0532	
	Apr-22					
184	May-22	0.00	34.657	30.925	0.0517	Van 16
185	Jun-22	0.00	34.657	30.976	0.0510	Year 16
186	Jul-22	0.00	34.657	31.026	0.0503	0.00
187	Aug-22	0.00	34.657	31.076	0.0496	0.60
188	Sep-22	0.00	34.657	31.125	0.0489	
189	Oct-22	0.00	34.657	31.173	0.0483	
190	Nov-22	0.00	34.657	31.221	0.0476	
191	Dec-22	0.00	34.657	31.268	0.0470	
192	Jan-23	0.00	34.657	31.314	0.0463	
193	Feb-23	0.00	34.657	31.360	0.0457	
194	Mar-23	0.00	34.657	31.405	0.0451	
195	Apr-23	0.00	34.657	31.449	0.0445	
196	May-23	0.00	34.657	31.493	0.0438	
197	Jun-23	0.00	34.657	31.537	0.0432	Year 17
198	Jul-23	0.00	34.657	31.579	0.0427	
199	Aug-23	0.00	34.657	31.621	0.0421	0.51
200	Sep-23	0.00	34.657	31.663	0.0415	
201	Oct-23	0.00	34.657	31.704	0.0409	
202	Nov-23	0.00	34.657	31.744	0.0404	
203	Dec-23	0.00	34.657	31.784	0.0398	
204	Jan-24	0.00	34.657	31.823	0.0393	
205	Feb-24	0.00	34.657	31.862	0.0387	
206	Mar-24	0.00	34.657	31.900	0.0382	
207	Apr-24	0.00	34.657	31.938	0.0377	
208	May-24	0.00	34.657	31.975	0.0372	
209	Jun-24	0.00	34.657	32.012	0.0367	Year 18
210	Jul-24	0.00	34.657	32.048	0.0362	
211	Aug-24	0.00	34.657	32.083	0.0357	0.43
212	Sep-24	0.00	34.657	32.119	0.0352	
213	Oct-24	0.00	34.657	32.153	0.0347	
214	Nov-24	0.00	34.657	32.187	0.0342	
215	Dec-24	0.00	34.657	32.221	0.0338	
216	Jan-25	0.00	34.657	32.255	0.0333	
217	Feb-25	0.00	34.657	32.287	0.0328	
217	Mar-25	0.00	34.657	32.320	0.0324	
219	Apr-25	0.00	34.657	32.352	0.0324	
220	May-25	0.00	34.657	32.383	0.0315	
220	Jun-25	0.00	34.657	32.363	0.0313	Year 19
222	Jun-25 Jul-25	0.00	34.657 34.657	32.445	0.0311	1 5 41 17
						0.37
223	Aug-25	0.00	34.657	32.475	0.0302	0.37
224	Sep-25	0.00	34.657	32.505	0.0298	
225	Oct-25	0.00	34.657	32.534	0.0294	1
226	Nov-25	0.00	34.657	32.563	0.0290	
227	Dec-25	0.00	34.657	32.592	0.0286	
228	Jan-26	0.00	34.657	32.620	0.0282	

Cumulative Time (months)	Month	Consumed Volume Pumped (ac-ft)	Cumulative Volume Pumped (ac-ft)	Cumulative Volume of Depletion (ac-ft)	Volume of Depletion This Step (ac-ft)	Volume of Stream Depletions (ac-ft)
229	Feb-26	0.00	34.657	32.648	0.0278	()
230	Mar-26	0.00	34.657	32.676	0.0274	
231	Apr-26	0.00	34.657	32.703	0.0271	
232	May-26	0.00	34.657	32.729	0.0267	
233	Jun-26	0.00	34.657	32.756	0.0263	Year 20
234	Jul-26	0.00	34.657	32.782	0.0260	20
235	Aug-26	0.00	34.657	32.807	0.0256	0.31
236	Sep-26	0.00	34.657	32.833	0.0253	
237	Oct-26	0.00	34.657	32.858	0.0249	
238	Nov-26	0.00	34.657	32.882	0.0246	
239	Dec-26	0.00	34.657	32.906	0.0243	
240	Jan-27	0.00	34.657	32.930	0.0239	
241	Feb-27	0.00	34.657	32.954	0.0236	
242	Mar-27	0.00	34.657	32.977	0.0233	
243	Apr-27	0.00	34.657	33.000	0.0230	
244	May-27	0.00	34.657	33.023	0.0226	
245	Jun-27	0.00	34.657	33.045	0.0223	Year 21
246	Jul-27	0.00	34.657	33.067	0.0221	
247	Aug-27	0.00	34.657	33.089	0.0217	0.26
248	Sep-27	0.00	34.657	33.110	0.0214	
249	Oct-27	0.00	34.657	33.131	0.0211	
250	Nov-27	0.00	34.657	33.152	0.0209	
251	Dec-27	0.00	34.657	33.173	0.0206	
252	Jan-28	0.00	34.657	33.193	0.0203	
253	Feb-28	0.00	34.657	33.213	0.0200	
254	Mar-28	0.00	34.657	33.233	0.0197	
255	Apr-28	0.00	34.657	33.252	0.0195	
256	May-28	0.00	34.657	33.272	0.0192	
257	Jun-28	0.00	34.657	33.290	0.0189	Year 22
258	Jul-28	0.00	34.657	33.309	0.0187	
259	Aug-28	0.00	34.657	33.328	0.0184	0.22
260	Sep-28	0.00	34.657	33.346	0.0182	
261	Oct-28	0.00	34.657	33.364	0.0179	
262	Nov-28	0.00	34.657	33.381	0.0177	
263	Dec-28	0.00	34.657	33.399	0.0174	
264	Jan-29	0.00	34.657	33.416	0.0172	
265	Feb-29	0.00	34.657	33.433	0.0170	
266	Mar-29	0.00	34.657	33.450	0.0167	
267	Apr-29	0.00	34.657	33.466	0.0165	
268	May-29	0.00	34.657	33.482	0.0163	V22
269	Jun-29	0.00	34.657	33.498	0.0161	Year 23
270	Jul-29	0.00	34.657	33.514	0.0158	0.10
271	Aug-29	0.00	34.657	33.530	0.0156	0.19
272 273	Sep-29 Oct-29	0.00 0.00	34.657 34.657	33.545 33.561	0.0154 0.0152	
274			34.657 34.657			
274	Nov-29 Dec-29	0.00 0.00	34.657 34.657	33.576 33.590	0.0150 0.0148	
276	Jan-30	0.00	34.657	33.605	0.0148	
277	Feb-30	0.00	34.657	33.619	0.0146	
278	Mar-30	0.00	34.657	33.634	0.0144	
279	Apr-30	0.00	34.657	33.648	0.0142	
280	May-30	0.00	34.657	33.661	0.0140	
281	Jun-30	0.00	34.657	33.675	0.0136	Year 24
282	Jul-30 Jul-30	0.00	34.657	33.688	0.0130	1001 27
283	Aug-30	0.00	34.657	33.702	0.0134	0.16
284	Sep-30	0.00	34.657	33.702	0.0132	0.10
285	Oct-30	0.00	34.657	33.727	0.0131	
286	Nov-30	0.00	34.657	33.740	0.0129	
287	Dec-30	0.00	34.657	33.753	0.0127	

Cumulative Time (months)	Month	Consumed Volume Pumped (ac-ft)	Cumulative Volume Pumped (ac-ft)	Cumulative Volume of Depletion (ac-ft)	Volume of Depletion This Step (ac-ft)	Volume of Stream Depletions (ac-ft)
289	Feb-31	0.00	34.657	33.777	0.0122	· · ·
290	Mar-31	0.00	34.657	33.789	0.0120	
291	Apr-31	0.00	34.657	33.801	0.0119	
292	May-31	0.00	34.657	33.813	0.0117	
293	Jun-31	0.00	34.657	33.824	0.0115	Year 25
294	Jul-31	0.00	34.657	33.836	0.0114	
295	Aug-31	0.00	34.657	33.847	0.0112	0.14
296	Sep-31	0.00	34.657	33.858	0.0111	
297	Oct-31	0.00	34.657	33.869	0.0109	
298	Nov-31	0.00	34.657	33.880	0.0108	
299	Dec-31	0.00	34.657	33.890	0.0107	
300	Jan-32	0.00	34.657	33.901	0.0105	
301	Feb-32	0.00	34.657	33.911	0.0103	
302	Mar-32	0.00	34.657	33.921	0.0102	
303	Apr-32	0.00	34.657	33.931	0.0101	
304	May-32	0.00	34.657	33.941	0.0099	
305	Jun-32	0.00	34.657	33.951	0.0098	Year 26
306	Jul-32	0.00	34.657	33.961	0.0096	
307	Aug-32	0.00	34.657	33.970	0.0095	0.12
308	Sep-32	0.00	34.657	33.980	0.0094	
309	Oct-32	0.00	34.657	33.989	0.0092	
310	Nov-32	0.00	34.657	33.998	0.0091	
311	Dec-32	0.00	34.657	34.007	0.0090	
312	Jan-33	0.00	34.657	34.016	0.0088	
313	Feb-33	0.00	34.657	34.025	0.0088	
314	Mar-33	0.00	34.657	34.033	0.0086	
315	Apr-33	0.00	34.657	34.042	0.0085	
316	May-33	0.00	34.657	34.050	0.0084	V 27
317 318	Jun-33 Jul-33	0.00	34.657	34.059	0.0083	Year 27
		0.00	34.657	34.067	0.0082	0.10
319 320	Aug-33	0.00 0.00	34.657 34.657	34.075 34.083	0.0081 0.0080	0.10
320	Sep-33 Oct-33	0.00	34.657	34.083	0.0080	
321	Nov-33	0.00	34.657	34.091	0.0078	
323	Dec-33	0.00	34.657	34.106	0.0077	
323	Jan-34	0.00	34.657	34.113	0.0076	
325	Feb-34	0.00	34.657	34.121	0.0074	
326	Mar-34	0.00	34.657	34.121	0.0074	
327	Apr-34	0.00	34.657	34.135	0.0074	
328	May-34	0.00	34.657	34.143	0.0072	
329	Jun-34	0.00	34.657	34.150	0.0071	Year 28
330	Jul-34	0.00	34.657	34.157	0.0069	
331	Aug-34	0.00	34.657	34.163	0.0068	0.08
332	Sep-34	0.00	34.657	34.170	0.0067	
333	Oct-34	0.00	34.657	34.177	0.0066	
334	Nov-34	0.00	34.657	34.183	0.0066	
335	Dec-34	0.00	34.657	34.190	0.0065	
336	Jan-35	0.00	34.657	34.196	0.0063	
337	Feb-35	0.00	34.657	34.203	0.0063	
338	Mar-35	0.00	34.657	34.209	0.0062	
339	Apr-35	0.00	34.657	34.215	0.0061	
340	May-35	0.00	34.657	34.221	0.0060	
341	Jun-35	0.00	34.657	34.227	0.0060	Year 29
342	Jul-35	0.00	34.657	34.233	0.0059	
343	Aug-35	0.00	34.657	34.239	0.0058	0.07
344	Sep-35	0.00	34.657	34.244	0.0057	
345	Oct-35	0.00	34.657	34.250	0.0056	
346	Nov-35	0.00	34.657	34.255	0.0056	
347	Dec-35	0.00	34.657	34.261	0.0055	
348	Jan-36	0.00	34.657	34.266	0.0054	1

Cumulative Time (months)	Month	Consumed Volume Pumped (ac-ft)	Cumulative Volume Pumped (ac-ft)	Cumulative Volume of Depletion (ac-ft)	Volume of Depletion This Step (ac-ft)	Volume of Stream Depletions (ac-ft)
349	Feb-36	0.00	34.657	34.272	0.0053	
350	Mar-36	0.00	34.657	34.277	0.0053	
351	Apr-36	0.00	34.657	34.282	0.0052	
352	May-36	0.00	34.657	34.287	0.0051	
353	Jun-36	0.00	34.657	34.292	0.0051	Year 30
354	Jul-36	0.00	34.657	34.297	0.0050	
355	Aug-36	0.00	34.657	34.302	0.0049	0.06
356	Sep-36	0.00	34.657	34.307	0.0049	
357	Oct-36	0.00	34.657	34.312	0.0048	
358	Nov-36	0.00	34.657	34.317	0.0047	
359	Dec-36	0.00	34.657	34.321	0.0046	
360	Jan-37	0.00	34.657	34.326	0.0046	



Augmentation Plan Accounting Protocol June 2022

Accounting is an administrative tool to confirm water use is in accordance with a decree or other approval including that any required replacement is made to the stream system at the correct time, location, and amount. This guideline is subordinate to any decree language or Division Engineer specific accounting requirements. It describes basic augmentation plan accounting scenarios. Accounting for more complex scenarios can build on the fundamentals described herein.

Contents

1. Background and definitions	2
2. Methods to submit accounting Accounting and Reporting Uploader (preferred) Email	2 2 2
3. Timing of accounting submittal	3
4. Overall organization of accounting spreadsheet and required information per tab	4
Overall organization	4
Contact/Plan Information Tab	4
Input Tab(s)	4
Depletion & Obligation tab	7
Replacement tab	7
Summary Tab	8
DWR tab for Diversion Record Data Import	8
DWR Meters tab for Meter Reading Data Import	8
Version/Notes tab	8
5. Requirements and recommendations for all tabs	8
6 Example Screenshots and Spreadsheet Templates	9

1. Background and definitions

A thorough description of augmentation plans for well pumping is available in the <u>Beginners Guide to</u> Augmentation Plans for Wells. The following terms are used in this document:

- **Diversions** are withdrawals from a well, stream, or pond/reservoir.
- **Depletions** are the volume of reduced streamflow caused by a diversion. Lagged depletions are those that occur at a later time than when water is diverted by well pumping or groundwater pond evaporation due to the timing of water movement through the subsurface between the well/groundwater pond and the stream.
- **Hydrobase** is DWR's database of water information.
- Colorado's Decision Support Systems ("CDSS") is a State of Colorado website (https://cdss.colorado.gov/) providing access to water data and tools.
- Replacement water is a volume of water provided to the stream system to replace depletions and satisfy the unmet needs of senior water rights. Replacement water is typically provided from a reservoir release or another source that has been contracted for the purpose of replacing depletions. Replacement water may also be provided in the form of historic consumptive use ("HCU") credits derived from a change of water right where the use of a water right was changed to augmentation.
- Transit loss is the diminishment of the amount of water in a stream as water travels from upstream to the downstream location.
- **Priority Admin Number** indicates the seniority of a water right; equal to the number of days between a water right's priority date and the earliest decreed priority, December 31, 1849. For example, the Priority Admin Number for a water right with a priority date of May 5, 1950 is 36650.00000. The lower the Priority Admin Number, the more senior the water right. The five digits to the right of the period are used when the postponement doctrine applies to a water right due to a delay in decreeing the water right in the court (read more about this in the <u>Administrative Call Standard</u>, Appendix A).
- Administrative Call is a term that indicates there are unfulfilled downstream water rights "calling" for curtailment of upstream junior water rights to fulfill their need. In accounting, when the downstream Administrative Call is from a senior water right (with a lower Priority Admin Number), diversions/depletions are out-of-priority and replacement water must be provided.
- **Balance** is the amount of replacement water minus the depletions and obligations, not considering the Administrative Call. The balance may be negative when the diversions resulting in the depletions are in priority.
- **Net Effect** is the amount of replacement water minus the depletions and obligations, considering the Administrative Call. When the net effect is zero or positive, it shows that the Augmentation Plan prevented injury by replacing all out-of-priority diversions/depletions.

2. Methods to submit accounting

a. Accounting and Reporting Uploader (preferred)

The preferred method to submit accounting is through the use of the <u>CDSS Accounting and Reporting Uploader tool</u>. To set up an online account, call or email the Division contacts for the appropriate Water Division as shown in Table 1. Additional information is available on DWR's website under Data and Information/Online Data Submittal.

b. Email

Submit via email to the Water Commissioner and the Division Accounting email shown in Table 1. File names for accounting sheets should include the 7 digit Augmentation Plan WDID assigned by the Division Engineer's office.

3. Timing of accounting submittal

Accounting must be submitted as specified by your decree, DWR administrative approval (SWSP, Replacement Plan, etc.), or as requested by the Division Engineer or designated representative(s). If timing is not specified, submit accounting with the timing shown in Table 1.¹

Table 1. Accounting Submittal Emails and Phone Number by Division

Division	Accounting Question & Submittal Email	Contact Phone Number	Standard Submittal Timing
1 - South Platte	Div1Accounting@state.co.us	970-352-8712	30 days after the end of the reporting month
2 - Arkansas	water.reporting@state.co.us	719-542-3368	10 days after the end of the reporting month*
3 - Rio Grande	kevin.boyle@state.co.us	719-589-6683	10 days after the end of the reporting month
4 - Gunnison	greg.powers@state.co.us	970-249-6622	10 days after the end of the reporting month
5 - Colorado	dnr div5acct@state.co.us	970-945-5665	10 days after the end of the reporting month
6 - Yampa/White	brian.romig@state.co.us	970-846-0036	Annually by November 15 or as needed upon request
7 - San Juan/ Dolores	dnr div7acct@state.co.us	970-247-1845	10 days after the end of the reporting month**
Designated Ground Water Basins	chris.grimes@state.co.us	303-866-3851 ext. 8253	Annually by February 15 for the prior year

^{*}for approvals deemed critical for administration; all others (including simple subdivisions) bi-annual readings before and after the irrigation season

^{**}for approvals deemed critical for administration; annual submittals for others

¹ For proper administration, Water Commissioners may request regular and direct submission of water data in addition to accounting submittals described herein.

4. Overall organization of accounting spreadsheet and required information per tab

a. Overall organization

The following are typical spreadsheet tab names in accounting. See the <u>example and screenshots</u> <u>section</u> for an overview of what this might look like:

- i. Contact/Plan Information tab
- ii. Input tab(s)
- iii. Depletions & Obligations tab
- iv. Replacement tab
- v. Summary tab
- vi. DWR tab
- vii. DWR Meters tab
- viii. Version/Notes tab

Fewer or additional tabs as necessary for more simple or complex accounting, subject to approval by the Division Engineer

b. Contact/Plan Information Tab

The accounting must provide the contact information including name and email address for:

- i. The party(s) responsible for submitting the accounting
- ii. The plan administrator and/or the plan attorney
- iii. Water court case number (format of YYCWXXXX), SWSP name and 4-digit Plan ID, or Ground Water Commission Order represented in the accounting.
- iv. The 7-digit overall WDID(s) associated with the augmentation plan (not the individual structure WDIDs).²

c. Input Tab(s)

When possible, all cells showing diversion of water (well pumping and stream diversions) should be located on one or multiple input tabs as shown below. Cells with regular input, such as meter readings and reservoir releases, should be shaded a specifically identified color to distinguish them from cells that use formulas to convert or summarize the input.

Depending on the specific operation, the following may be included on Input tabs:

i. Estimated water use or evaporation:

When meters or measurement structures are not required, water consumption is estimated based on counts (number of homes, number of domestic animals, acreage of pond surface area, etc.) multiplied by a factor. Include a column or row for each of the following that are relevant to the augmentation plan:

- 1. Type of use: single family dwellings, domestic animals, area of lawn and garden (include units square feet or acres), area of pond evaporation (include units square feet or acres), etc.
- 2. Count or area input value for each type: the number of homes or domestic animals or the area (square footage or acres of home lawn and garden irrigation or pond surface evaporation). [this is the "Input" that could change regularly]

² Colorado Decision Support System Tools (https://dwr.state.co.us/Tools) can be used to find WDIDs (see Structures), court case numbers (see Water Rights), and other supporting information.

- 3. Factor to convert input to consumption in acre-feet.
- 4. Acre-feet of consumption.

ii. Well diversion data using flow meters:

Enter raw readings or measurements (e.g., from totalizing flow meters) and how those raw readings or measurements are converted to volumes of water. There should be one row or column for each well with a meter as described below. Once the spreadsheet formulas have been established, generally only the meter reading is entered with every submittal. The well and meter information may be located in a separate well & meter information tab (see example and screenshots section).

- 1. Well WDID
- 2. Well Permit Number
- 3. Priority Admin Number
- 4. Flow Meter Serial Number
- 5. Reading Date
- 6. Reading³ [this is the "Input" that will change regularly]

 Enter reading exactly as shown on the face of the meter as a non-negative integer.

7. Comment

a. When a meter rolls over (such as from 999 to 000), is replaced or reset⁴, add a comment stating the old meter serial number, the maximum number before the rollover or replacement and then enter the number on the face of the meter at the end of the reporting period. Update the meter information section with the new meter's serial number.

8. Meter information:

- a. Make
- b. Model
- c. The units represented by the digits on the meter (such as gallons or acre-feet)
- d. Multiplier for meter reading (if applicable)
 - i. Residential well meters typically have a multiplier of 1.0 with units of gallons. Readings should generally report all numbers on the face of the meter (including non-rotating digits) with a multiplier of 1.0.
 - ii. Larger agricultural or commercial wells typically read in acre-feet and typically have a decimal multiplier. For instance, with a multiplier of 0.001, a meter reading of 123456 represents 123.456 acre-feet.

e. Correction factor

. This is a multiplier used when a meter test shows a need to correct the installed meter to an accurate reading. This will be 1.0 when there is not a test showing a need for correction.

9. Acre-feet pumped

Use a formula to convert from the meter reading to acre-feet using the multiplier and correction factor. To convert meter readings in gallons to acre-feet, divide by 325,851.

iii. Well diversion data using Electricity Consumption

For wells approved to use power records and a Power Conversion Coefficient (PCC) to estimate water pumped, the accounting information is similar to well diversion data using flow meters (section 4.c.ii) above with the following replacements (instead of 6. "Reading" and 8. "Meter information):

³ A comment on the Meter Reading cell is used to note "Actual, Estimated, Corrected, or Calculated" for all wells subject to measurement rules when the entry is not based on a reading taken on the actual date specified.

⁴ Resetting a meter may be prohibited by local well measurement rules.

- 6. Power meter reading [this is the "Input" that will change regularly]
- 8. Power Meter Information
 - a. PCC

iv. Surface diversion data

Include a column or row for each surface diversion with the following information:

- 1. Diversion structure name or a.k.a.
- 2. Structure WDID
- 3. Measured flow through the measurement structure and units
 - a. If more than one water right is diverted through the structure, there should be adjacent columns for each. Each source should have a designated column or row and labeling should include the measuring structure WDID and the source of the water (e.g. case number).
 - b. If there is a multiplier that adjusts the standard measurement-flow relationship to reflect the actual measurement-flow relationship of the specific structure ("shift"), the adjusted value should be reflected in a separate column.
- 4. Priority Admin Number
- 5. Storage and release

If the diversion is to storage, which will be followed by a release of water, follow the instructions in the Reservoir Accounting Guideline.

v. Administrative Call (are diversions in-priority?)

In portions of Colorado, there may be times when depletions are in-priority, and do not require replacement. Depletions are in-priority when water rights on the stream system that are senior to the diversion have enough water and are not "calling" for more water.

1. Simplified (percent of month administrative call)

For certain basic accounting, such as subdivision well depletions, the Division Engineer may allow or apply an estimate of the days of expected administrative call each month. Typically, replacement water is provided based on projected call days, which is later compared to actual administrative call data to ensure that adequate replacement was provided. In this case, the accounting should have an input field either for the number of call days or the percentage of days in the month with a call.

2. Daily record of administrative call

Provide a column that shows whether depletions are either "IN" or "OUT" of priority each day.

- Locations with minimal call variation: In areas with minimal variation in the call, the Division Office may not require a formula comparing Priority Admin Numbers, but will accept manual entries of "IN" or "OUT" of priority each day.
- All other locations: "IN" or "OUT" of priority is determined daily using formulas
 comparing the Priority Admin Number of depletions to the Priority Admin Number of
 the calling water right in each depleted stream reach. Include a column for each of
 the following:
 - The Priority Admin Number of the calling water right. Calling structure information can be obtained programmatically from:
 - CDSS <u>REST</u> services insert a link that pulls the required information directly from DWR's database.
 - CDSS Administrative Calls tool.

DWR accounting staff can provide guidance on incorporating this information within an accounting spreadsheet.

- The Name of the calling water right
- "In" or "Out"-of-priority either for all structures covered by the accounting or for each structure in its own column. Use a formula to compare the Priority Admin Number of the calling structure to the Priority Admin Number of the structure(s) in the accounting.

d. Depletion & Obligation tab

Used to (1) convert well pumping (and groundwater pond evaporation) to lagged depletions impacting the stream and (2) show lagged depletions that are out-of-priority, and (3) include any additional water obligations of the plan for augmentation.

- i. Calculate lagged depletions Although well pumping and modeling may use a monthly step function to determine the depletions from pumping, the monthly result may, if requested by the Division Office or required by decree, then be divided by the number of days in the month in order to calculate a daily impact for daily water administration.
 - 1. Well Pumping (or groundwater pond evaporation) Reference back to the Input tab for the acre-feet of water pumped or evaporated.
 - 2. Consumption factor (%) If the decree or approval describes that a percentage of the water pumped is consumed and only the consumed amount is replaced.
 - 3. Acre-feet consumed Multiply the acre-feet pumped by the consumption factor.
 - 4. Delay Factors show factors that convert pumping in one month to depletions in future months. These may be percentages per month, that total 100 percent over an extended period of time.
 - 5. Depletions a formula that combines previous months and present month pumping with the delay factors to determine depletions impacting the stream this month and in future months.
- ii. Out-of-priority depletions are combined into one column for each reach considering the administrative call information included on the Input tab.
- iii. Return flow obligations (if applicable): Replacement water sources changed from a historical irrigation use usually have a return flow obligation that must also be tracked in accounting. Return flow obligations are similar to depletions because they must be replaced in time, place, and amount. Depending on decree language and preference, return flow obligations may be included under the replacement tab in section 4.e. below. For each replacement source with return flow obligations, include the following:
 - the basis and volume of the return flow obligation,
 - the location of the return flow obligation,
 - replacement of the return flow obligation.

e. Replacement tab

List each structure providing replacement water, transit loss information, and volumes released:

- i. Structure providing replacement water: name of reservoir, ditch, well, leased or other replacement water, its WDID, and the water court decree allowing its use for augmentation or replacement. For instructions on accounting for replacement using recharge accretions, refer to specific recharge guidance.
- ii. Replacement water travel distance (miles)
 the distance from the point of release to the location of the out-of-priority depletion where replacement is owed
- iii. Transit loss percent per mile (%)

- iv. Total transit loss (%)
- v. Volume released (acre-feet)
- vi. Transit loss volume (acre-feet)
- vii. Volume delivered (acre-feet) equal to volume released minus transit loss volume
- viii. Return flow obligations (acre-feet): Depending on decree language as described above, these may be included here instead of in the depletion tab. See description under section 4.d. above.

f. Summary Tab

The Summary Tab is used to calculate the Net Effect of the Plan on each impacted stream reach. The summary should reference back to information and formulas in the other spreadsheet tabs. The summary tab compares obligations, replacements and that replacements equal or exceed obligations in time, place, and amount. The Summary tab should only summarize data and calculations located in other tabs of the accounting. It should not contain manual entries, input data, or make calculations that are used in other tabs.

The Summary Tab should contain the following for each impacted stream reach (typically on a daily basis or as required by the division office):

- i. Total depletions and obligations
- ii. Total replacement
- **iii.** Balance Total replacement minus total depletions and obligations, which may be negative when the diversions resulting in the depletions are in priority.
- iv. Net Effect Total replacement minus out-of-priority depletions and obligations. If the net effect is negative, the Plan resulted in injury.

g. DWR tab for Diversion Record Data Import

A tab titled "DWR" can be used to convert data input or numbers calculated in other tabs into rows that represent diversion record water classes, which DWR staff can upload to create official diversion records. When appropriate, DWR staff will develop this tab or work with plan owners to develop this tab, and ensure it follows the format shown in the "Diversion Record Spreadsheet User Guide" and utilizes water classes according to the Diversion Records Standard. This format is necessary to allow the records to be imported directly into Hydrobase.

h. DWR Meters tab for Meter Reading Data Import

A tab titled "DWR Meters" can be included for use in bulk uploading meter readings. This calculates pumping totals in compliance with well rules or to meet other Division-specific requirements. In order for this tab to be bulk uploaded into Hydrobase, the columns in this tab must be formatted as shown in the "User Guide - How to Bulk Upload Meter Readings".

i. Version/Notes tab

A tab to document changes in accounting formulas and the date of those changes.

5. Requirements and recommendations for all tabs

- a. Accounting should show how raw input data is manipulated using formulas to determine the resulting impact on the river. Accounting must therefore include a functional spreadsheet (ie no pdfs) showing all operations, formulas, etc. to clearly show calculations.
- b. The use of a water year of November 1 through October 31 is required unless specifically decreed otherwise. When a different water year is required by decree, DWR may request additional months of data in the accounting to include the November 1 through October 31

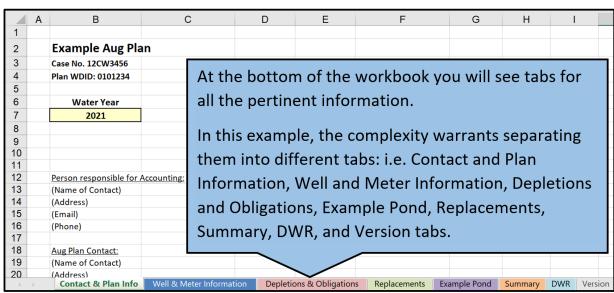
time period, resulting in more than 12 months of data being reported.

- c. For all tabs other than the Summary tab, include running accounting for the entire water year without monthly subtotals. Monthly subtotals commonly result in errors in the spreadsheet. The Summary tab can be used as a place to show monthly totals.
- d. Date fields should be complete dates (month, day, and year, recognized as a date value by the spreadsheet software) but may be formatted to display as desired.
- e. Use consistent cell color shading to clearly identify the different types of information, such as manual input cells and formula cells (provide a legend for data types, see example below)
- f. Enter "0" in cells to document no diversion or use, rather than blanks, hyphens, or another character.
- g. When a formula is overwritten with a manual entry, the cell should be highlighted and a comment added for the reasoning.
- h. When there are multiple stream reaches involved, organize accounting from upstream to downstream.
- i. Footnotes should be utilized, as necessary, to describe the basis for formulas, calculations imposed on the raw input data, and column descriptions.

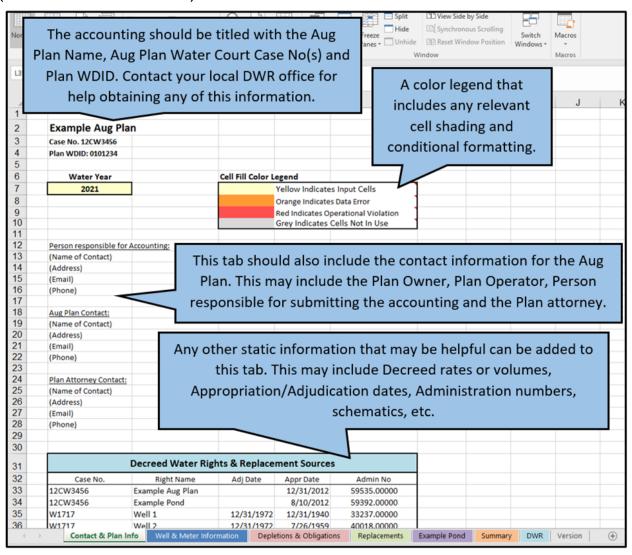
<u>6. Example, Screenshots, and Spreadsheet Templates</u>

Water users may request spreadsheet templates from their local division office for use as examples of how accounting may be assembled, but are responsible for developing their own functional accounting customized for their own Plan requirements. Note that example and actual accounting may have slightly different organization than what is described above.

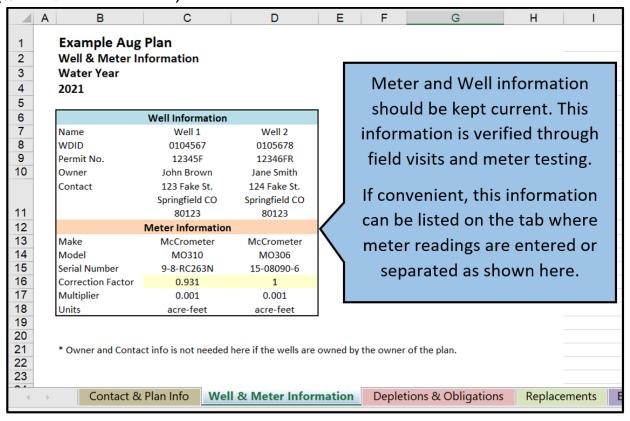
a. (List of relevant tabs)



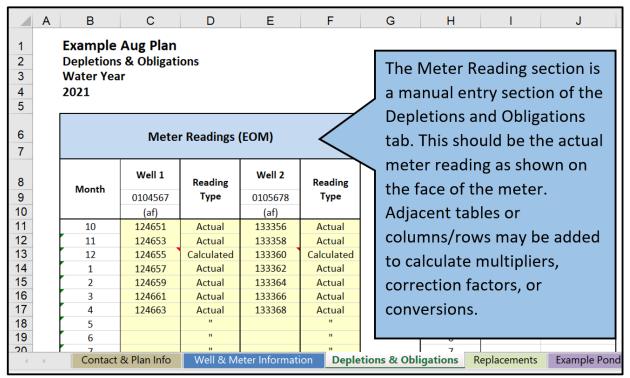
b. (Contact & Plan Information)



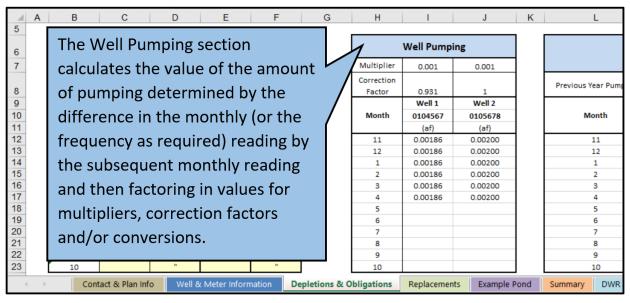
c. (Well & Meter Information)



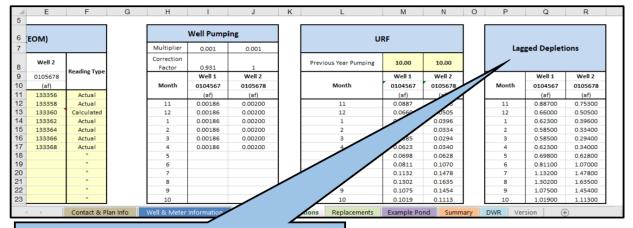
d. (Depletions & Obligations) - in this example, the Depletions & Obligations tab includes cells for entering meter readings, calculating well pumping over the period, and converting that to lagged depetions.



e. (Depletions & Obligations)

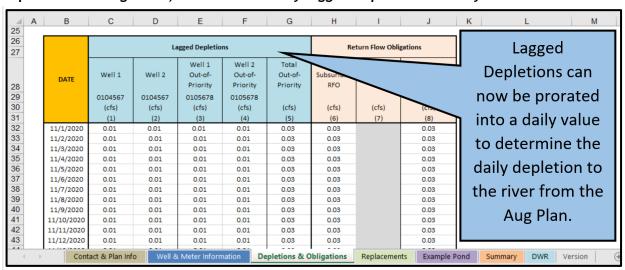


f. (Depletions & Obligations) - calculate lagged depletions for the month

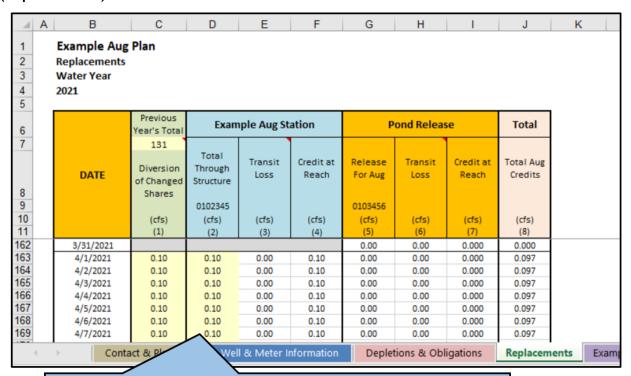


Lagged Depletions should be calculated utilizing the Well Pumping data and the lagging method established by the relevant decree or SWSP (Stream depletion Factors or Glover Parameters).

g. (Depletions & Obligations) - convert monthly lagged depletions to daily

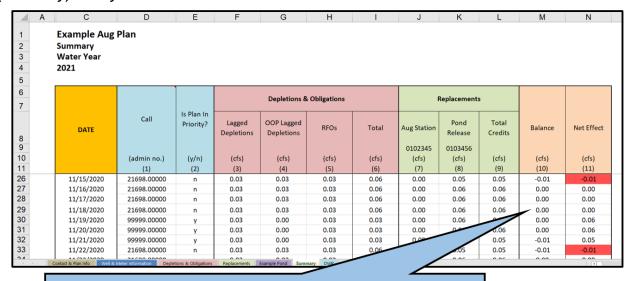


h. (Replacements)



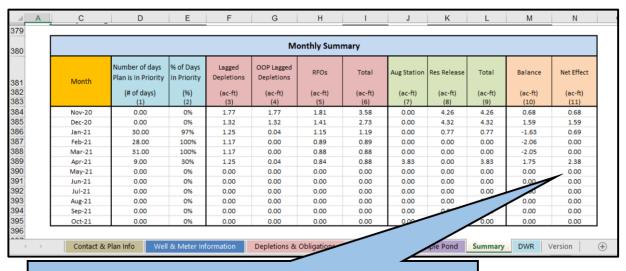
Input information should be shaded differently than the calculated (cells with formulas) cells. Please provide a legend with the color/shading scheme.

i. (Summary) - daily



The Balance column is the balance of Replacements and actual Depletions/Obligations regardless of whether the plan is in or out of priority. It is calculated by subtracting Depletions and Obligations from Replacements.

j. (Summary) - a monthly summary table may be added at the bottom of the Summary tab below the daily summary



Net Effect is the Balance or Net Impact value with the priority of the plan included. Plans considered in priority may not be required to replace depletions. This column represents whether the Aug plan shows injury to the river or has sufficiently replaced its uses.