



STATE OF
COLORADO

Ebert - DNR, Jared <jared.ebert@state.co.us>

Coulson Temporary SWSP's

Comaniciu - DNR, Ioana <ioana.comaniciu@state.co.us>

Wed, Jun 5, 2019 at 4:20 PM

To: Peter Wayland <pwayland@weilandinc.com>

Cc: "Ebert - DNR, Jared" <jared.ebert@state.co.us>

Hello Peter,

Please see attached SWSP approval letter along with the attachments for Gardels Pit (M2005-033). Please note the requirements under the Condition No. 13 of the SWSP approval letter.

Also, please note that I am still waiting for you to respond to my questions on Coulson's other sites before I recommend those plans for approval.

Sincerely,

Ioana Comaniciu, P.E.
Water Resources Engineer



COLORADO
Division of Water Resources
Department of Natural Resources

P 303-866-3581 x 8246

1313 Sherman St., Suite 818, Denver, CO 80203

ioana.comaniciu@state.co.us | www.water.state.co.us

On Fri, Apr 5, 2019 at 2:05 PM Peter Wayland <pwayland@weilandinc.com> wrote:

[Quoted text hidden]

4 attachments



Gardelstbl.pdf

34K



Figure.pdf

264K



Loveland Lease.pdf

7147K



Gardels SWSP 19-20_Final.pdf

330K



COLORADO
Division of Water Resources
Department of Natural Resources

June 4, 2019

Mr. Peter Wayland
Weiland, Inc.
P.O. Box 18087
Boulder, CO 80308

**Re: Gardels Substitute Water Supply Plan (WDID 0402547)
Gardels Pit, DRMS Permit No. M-2005-033 (WDID 0403019)
N ½ of Section 19, T5N, R68W, 6th P.M.
Water Division 1, Water District 4, Weld County
SWSP ID: 4709**

**Approval Period: June 4, 2019 through December 31, 2019 (or December 31, 2020
subject to condition no. 1)**

Contact Information for Mr. Peter Wayland: 303-443-9521; pwayland@weilandinc.com

Dear Mr. Wayland:

Your letter submitted on March 5, 2019 requesting renewal of the above referenced substitute water supply plan ("SWSP") to cover depletions caused by an existing gravel mining operation has been reviewed. This sand and gravel pit is owned and operated by Coulson Excavating Company, Inc. ("Coulson" or "Applicant"). The Applicant shall be responsible for compliance with this plan. The required fee of \$257 for the substitute water supply plan has been submitted (receipt no. 3690915A). The Gardels Pit SWSP was most recently approved on November 17, 2016 and was valid through October 31, 2017.

Plan Operation

This plan seeks to replace depletions resulting from mining at the Gardels Gravel Pit ("Gardels Pit"). The Gardels Pit is located in the N ½ of Section 19, Township 5 North, Range 68 West of the 6th P.M. Mining at this site began in 2004 and was completed by 2006. The site has been reclaimed and there are now two unlined ponds remaining and one lined mining cell ("West Cell"). The West Cell was approved as a lined reservoir (WDID 0403396) by the State Engineers Office through a letter dated October 4, 2012. Approximately 8.8 acres of exposed groundwater remain within the DRMS permit boundary. There are no groundwater areas within the DRMS permit boundary that were exposed prior to January 1, 1981. This SWSP only covers the evaporative losses from the exposed groundwater associated with the Gardels Pit.

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 you provide information to DRMS to demonstrate you can replace long term injurious stream depletions that result from mining related exposure of groundwater.



In accordance with approach nos. 1 and 3, you have indicated that a bond has been obtained for \$291,800 through the DRMS for lining of the pit thus ensuring that depletions from groundwater evaporation do not occur in the unforeseen event, or events, that would lead to the abandonment of the Pit. Along with the bond for this site and in accordance with approach no. 4, the Applicant has also dedicated $\frac{1}{4}$ share of the Big Thompson Ditch & Manufacturing Co. ("BTDMC") (WDID 0400503). The $\frac{1}{4}$ share of the BTDMC is part of $\frac{5}{6}$ shares of water rights owned by the Applicant that were historically used to irrigate the Brownwood property.

Renewal of this plan beyond October 2015 was contingent of the Applicant or its successor in ownership filing an application for a plan for augmentation with the Division 1 Water Court that includes replacing long-term evaporation losses at the Gardels Pit, or commenced backfilling or lining of the site. You have stated that Coulson is planning to file for a plan for augmentation no later than the end of June 2019. In addition, you have claimed that not being able to continue operating under a substitute water supply plan until an application is filed with the water court will cause undue hardship to the applicant.

The approval of this substitute water supply plan does not relieve the Applicant and/or 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. To allow additional time for filing, the deadline for submitting an application for a plan for augmentation is hereby extended to December 31, 2019 by way of this letter. Approval of this plan does not imply approval by this office of any related litigation. By that date the Applicant or its successor in ownership must have either filed an application with the Water Court for a court-approved augmentation plan or commenced backfilling or lining of the site or explain why an extension to the above deadline is justified.

Depletions

The anticipated net depletion for this plan is 19.45 acre-feet per year for evaporation from up to 8.8 acres of exposed groundwater. The groundwater is found within Pond 1 and Pond 2 with surface areas of 6.8 acres and 2.00 acres, respectively. The Applicant proposed to replace evaporation from exposed groundwater at the site based upon evaporation atlases in NOAA Technical Report NWS 33 and the SEO monthly distribution factors for sites below 6,500 feet. Gross annual evaporation at the gravel pit location is estimated to be approximately 39.2 inches per year. Net evaporation is defined as gross evaporation less the consumptive use of water by vegetation that naturally occurred at the site prior to construction of the pit. The historical consumptive use by vegetation was assumed to be equal to the effective precipitation, which was estimated based on the data from the Loveland NOAA weather station (period of record 1989-2017).

Computation of evaporation under this SWSP was reduced during the ice-covered period. You have assumed the ice-covered period will occur during the months of December and January based on average monthly temperatures of less than 32°F taken from the Loveland NOAA weather station. However, for the purpose of this SWSP, the Applicant shall replace the net evaporation depletions from the exposed groundwater surface area that may occur during the assumed ice-covered period (the months of December and January) for any time that the pit is not completely covered by ice. Computation of the net evaporation during any time that the pit is not completely covered by ice shall be determined as the pro-rata amount of the

monthly gross evaporation rate distribution amount identified in the State Engineer's *General Guidelines for Substitute Supply Plans for Sand and Gravel Pits*, subtracting the pro-rata amount of the effective precipitation for that period.

The lagged depletions from evaporation at the Gardels Pit were estimated using the Integrated Decision Support group's Alluvial Water Accounting System (IDS AWAS) stream depletion model. The aquifer characteristics used in the model are: transmissivity (T) = 20,000 gallons per day per foot; specific yield (SY) = 0.2; the distance from the centroid of the exposed groundwater to the stream = 410.5 feet (Pond 1) and 254.7 feet (Pond 2); and the location of the parallel impermeable boundary was estimated to be 1,400 feet from the stream.

Replacements

Replacement water for this pit will be made available throughout the year from a lease of fully consumable water from the City of Loveland's Water and Power Department. A copy of the lease associated with the mining operation was provided to the State Engineer's Office with the SWSP request and is attached to this letter. The duration of the lease is for a term of twenty-five years ending on December 31, 2022.

Under the terms of the lease, replacements can be made using a variety of water owned by Loveland including, but not limited to, Windy Gap reusable effluent, Loveland Storage Reservoir water as decreed in case no. 82CW202A, and Colorado-Big Thompson ("C-BT") Project water. **In the event that Loveland plans to use C-BT water as a replacement source, Loveland shall comply with the Interim Rule issued by the Northern Colorado Water Conservancy District ("Northern District") in May 2005, regarding the use of C-BT Project water in substitute water supply plans.** Prior to the use of C-BT Project water, Loveland is required to notify this office, the division engineer and the water commissioner of the amount of C-BT Project water dedicated to this plan and provide a copy of the Northern District's approval letter as required by paragraph I(g) of the Northern District's May, 2005 Interim Rule.

The monthly depletions and replacement requirements are found on the attached Table AI.1 for Pond 1 and Table AI.1 for Pond 2.

Conditions of Approval

I hereby approve the proposed substitute water supply plan in accordance with §37-90-137(11), C.R.S. subject to the following conditions:

1. This SWSP shall be valid for the period of June 4, 2019 through December 31, 2019, unless otherwise revoked or superseded by decree. **The plan may be extended through December 31, 2020 if the Applicant can demonstrate that a water court application for a permanent plan for augmentation was filed with the Division 1 water court.** If this plan will not be made absolute by a water court action by the plan's expiration date, a renewal request must be submitted to this office with the statutory fee (currently \$257) by **November 15, 2019** (November 15, 2020, if extended).
2. Well permit no. 78896-F was obtained for the current use and exposed pond surface area of the Gardels Pit in accordance with § 37-90-137(2) and (11), C.R.S., and this permit remains valid.
3. The total surface area of the groundwater exposed at the Gardels Pit site must not exceed 8.8 acres, which results in a maximum annual evaporative loss of 19.45 acre-feet.

4. Total consumption at the Gardels Pit site must not exceed this amount unless an amendment is made to this plan.
5. Approval of this plan is for the purposes as stated herein. This office must first approve any additional uses for the water. Any future additional historic consumptive use credit given (e.g., agricultural water transfer) for this site must consider all previous credits given.
6. The replacement water that is the subject of this plan cannot be sold or leased to any other entity. As a condition of subsequent renewals of this substitute water supply plan, the replacement water must be appurtenant to this site until a plan for augmentation is obtained. All replacement water must be concurrent with depletions in quantity, timing, and locations.
7. In the event Loveland plans to use C-BT Project water as a replacement source, Loveland shall comply with the Interim Rule issued by the Northern District in May 2005 regarding the use of C-BT Project water in substitute water supply plans. Prior to the use of the C-BT Project water, Loveland shall notify this office, the division engineer and the water commissioner of the amount of C-BT Project water dedicated to this plan and provide a copy of the Northern District's approval letter as required by paragraph I(g) of the Northern District's May, 2005 Interim Rule.
8. All releases of replacement water must be sufficient to cover all out-of-priority depletions in time, place, and amount and must be made under the direction and/or the approval of the water commissioner. Notice must be provided and approval made by the water commissioner at least 48 hours prior to the release of replacement water, or as required by the water commissioner. The release of replacement water may be aggregated to maximize beneficial use. The water commissioner and/or the division engineer shall determine the rate and timing of an aggregated release.
9. Adequate accounting of depletions and replacements must be provided to the division engineer in Greeley (DNR_Div1Accounting@state.co.us) and the water commissioner (Jean Lever at Jean.Lever@state.co.us) on a monthly basis, or more frequent if required by the water commissioner. All amounts shall be in acre-feet. All submitted accounting shall conform to the Administration Protocol "*Augmentation Plan Accounting - Division One, South Platte River*" (attached).

In addition, the applicant shall verify that the City of Loveland (WDID 0402519) includes in Loveland's monthly accounting a report on the reusable water released to provide replacement for this SWSP. It is the Applicant's responsibility to ensure Loveland releases the leased water in the correct time, place, and amount.

10. The Division Engineer, or his designated representative, will administer all such water transported in the Big Thompson River or its tributaries under this SWSP, including water for replacement of depletions, past intervening headgate to ensure that such water is not intercepted or otherwise diminished in quantity by diversion, use or other interference by intervening water rights and to assure that such water remains available and suitable for Applicant's uses under this SWSP, except when any intervening headgate is diverting the entire flow of ("sweeping") the river. In the event that delivery past headgates which sweep the river requires the installation of a bypass structure or the use of an existing bypass structure by agreement with a third-party, Applicant is responsible for either installing a new bypass structure with a continuous recording measuring device(s) as approved by the Water Commissioner or

- securing an agreement with a third-party to use an existing bypass structure and providing such information and agreement to the Division Engineer.
11. 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.
 12. The name, mailing address, and phone number of the contact person who will be responsible for operation and accounting of this plan must be provided on the accounting forms to the division engineer and water commissioner.
 13. **Approval of this substitute water supply plan does not relieve the Applicant and/or 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. An application for a plan for augmentation is required to be filed with the Water Court by December 31, 2019. Approval of this plan does not imply approval by this office of any related litigation. By that date the Applicant or its successor in ownership must have either:**
 - a. filed an application with the Water Court for a court-approved augmentation plan; OR,
 - b. commenced backfilling of the site; OR,
 - c. provided the State Engineer's Office with a written explanation why an extension to the above deadline is justified.
 14. 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 you provide information to DRMS to demonstrate you can replace long term injurious stream depletions that result from mining related exposure of groundwater. In accordance with approach nos. 1 and 3, you have indicated that a bond has been obtained for \$291,800 through the Division of Reclamation, Mining, and Safety ("DRMS") for lining of the pit thus ensuring that depletions from groundwater evaporation do not occur in the unforeseen event, or events, that would lead to the abandonment of the Pit. In addition along with the bond for this site and in accordance with approach no. 4 the Applicant dedicated $\frac{1}{4}$ shares of the Big Thompson Ditch & Manufacturing Co. ("BTDMC") (WDID 0104503). The $\frac{1}{4}$ share of the BTDMC is part of $\frac{5}{6}$ shares water rights owned by the Applicant that were historically used to irrigate the Brownwood property.
 15. 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.
 16. 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 if this substitute supply is of a quality to meet requirements of use to which the senior

appropriation receiving the substitute supply has normally been put. As such, water quality data or analyses may be requested at any time to determine if the requirement of use of the senior appropriator is met.

17. 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 Ioana Comaniciu of this office or Michael Hein of our Division office in Greeley at (970) 352-0742.

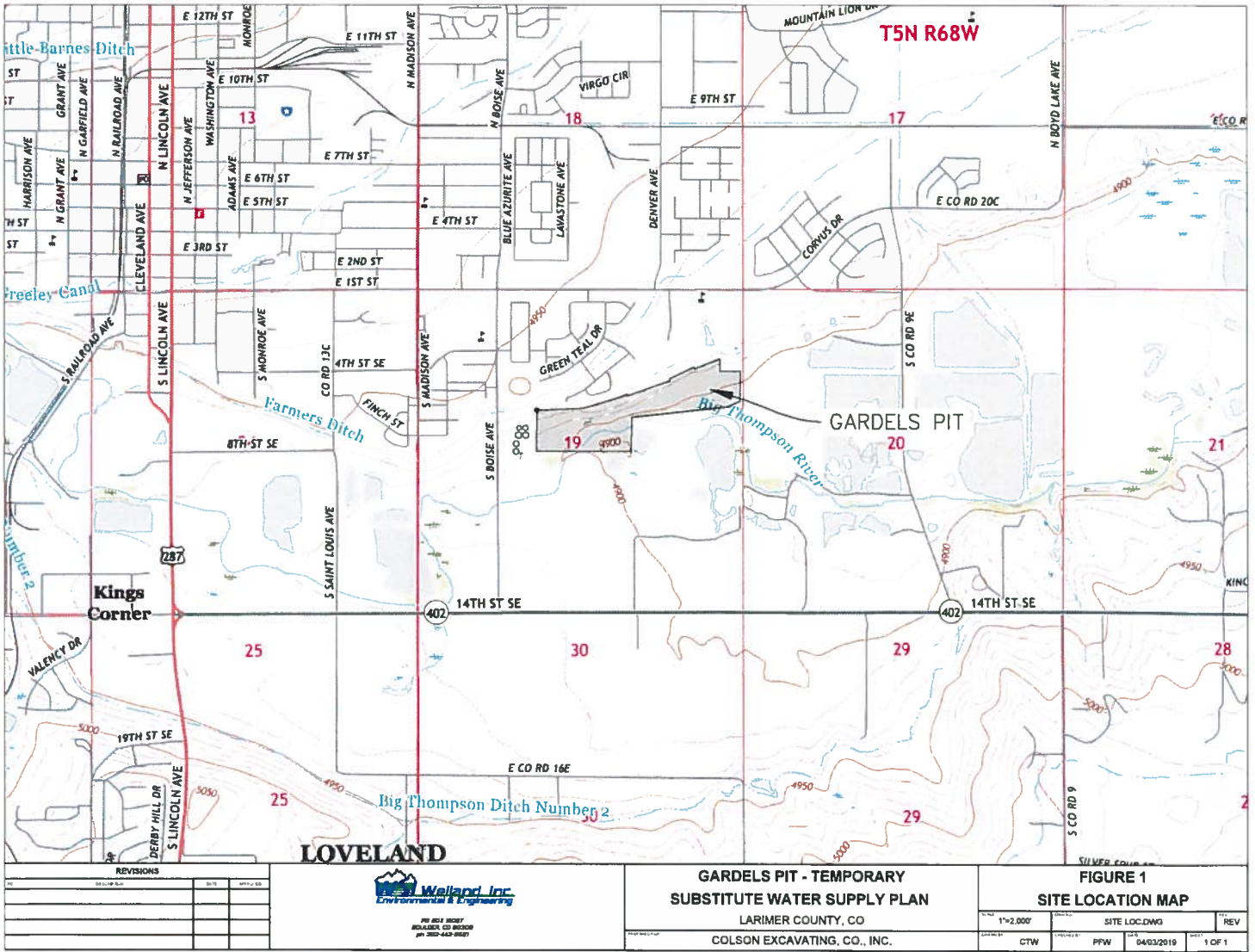
Sincerely,

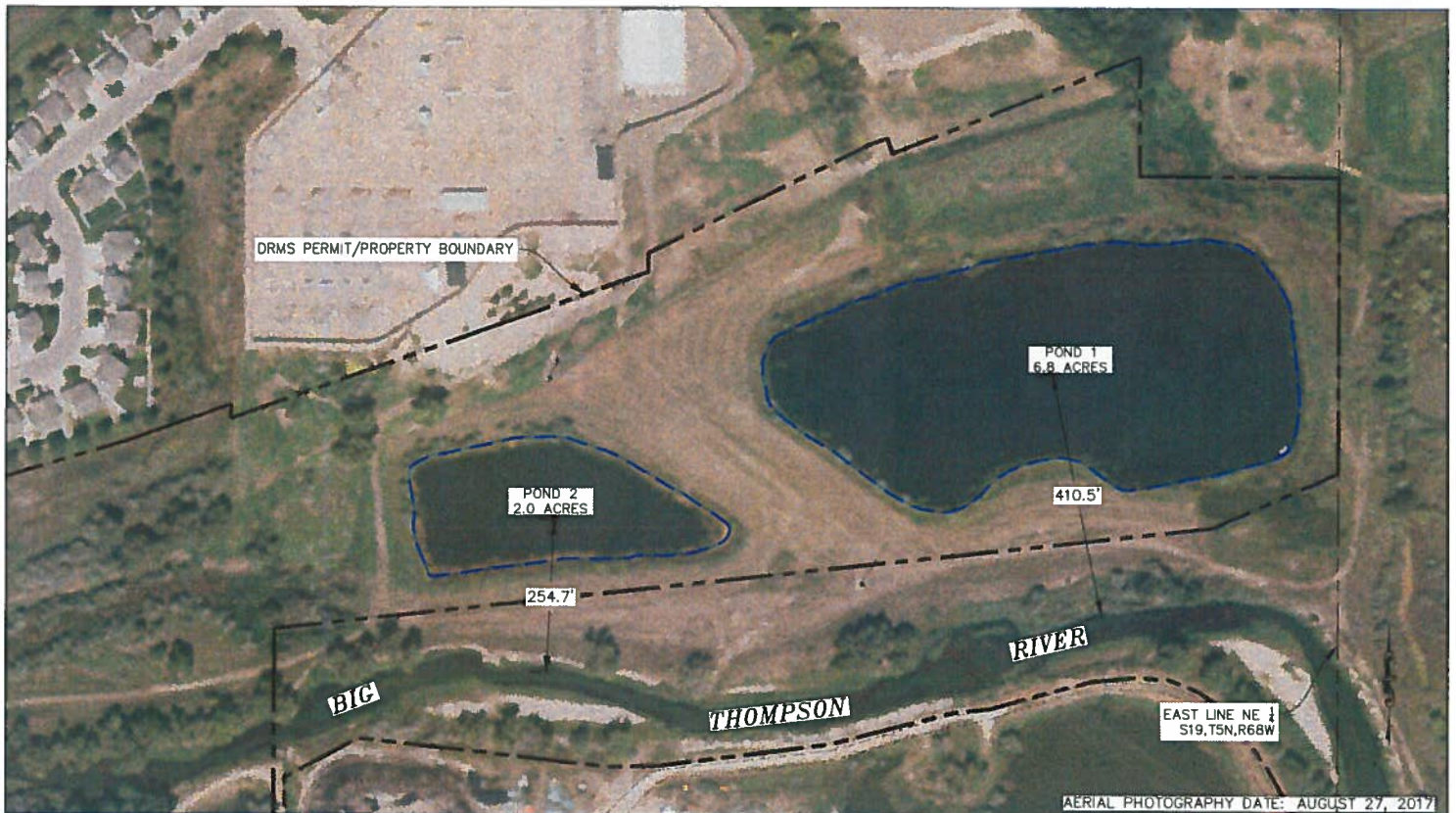


for Jeff Deatherage, P.E.
Chief of Water Supply

Attachments: Figure 1
Tables AI.1 (Pond 1 & Pond 2)
City of Loveland Lease Agreement
Augmentation Plan Accounting Protocol

Ec: Michael Hein, Water Resource Engineer, michael.hein@state.co.us
810 9th Street, Ste. 200, Greeley, CO 80631 (970) 352-8712
Jean Lever, District 4 Water Commissioner, jean.lever@state.co.us
Division of Reclamation Mining and Safety





REVISIONS			
NO.	DESCRIPTION	DATE	BY

West Wapiti, Inc.
 Environmental & Engineering
 PO BOX 80007
 BOULDER, CO 80508
 PH 303-443-0001

**COULSON GRAVEL PONDS
 AUGMENTATION PLAN**
 LARIMER COUNTY
 COULSON EXCAVATING CO., INC.

FIGURE 2 - GARDELS PIT POND AREAS			
Scale	1"=150'	FIGURE 4 DWG	REV
Author	CTW	Checker	PFW
Date	01/16/2019	Sheet	1 OF 1

AI.1 Evaporative Loss Worksheet - Gardels Pit

1 of 2

Pond 1 Surface Area: 6.80 acres

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Month	Monthly Distribution	Free Water Surface Evaporation	Gross Evaporation Rate	Surface Area	Gross Evaporation	Average Monthly Precip.	Effective Precip. Credit	Net Evaporative Loss (unlagged)	Net Evaporative Loss (lagged)
		[ft./yr.]	[ft./mo.]	[acres]	[acre-ft./mo.]	[ft./mo.]	[acre-ft./mo.]	[acre-ft./mo.]	[acre-ft./mo.]
Jan	0.030	3.270	0.098	6.80	0.00	0.04	0.00	0.00	0.32
Feb	0.035	3.270	0.114	6.80	0.78	0.05	0.24	0.54	0.44
Mar	0.055	3.270	0.180	6.80	1.22	0.12	0.57	0.65	0.56
Apr	0.090	3.270	0.294	6.80	2.00	0.17	0.81	1.19	0.85
May	0.120	3.270	0.392	6.80	2.67	0.22	1.05	1.62	1.22
June	0.145	3.270	0.474	6.80	3.22	0.14	0.67	2.55	1.83
Jul	0.150	3.270	0.491	6.80	3.34	0.13	0.62	2.72	2.25
Aug	0.135	3.270	0.441	6.80	3.00	0.11	0.52	2.48	2.34
Sep	0.100	3.270	0.327	6.80	2.22	0.13	0.62	1.60	1.98
Oct	0.070	3.270	0.229	6.80	1.56	0.10	0.48	1.08	1.54
Nov	0.040	3.270	0.131	6.80	0.89	0.06	0.29	0.60	1.10
Dec	0.030	3.270	0.098	6.80	0.00	0.05	0.00	0.00	0.60
totals			3.270		20.90	1.32	5.87	15.03	15.03

Notes:

- (1) = SEO Monthly fraction of evaporation for elevations below 6500 ft from Guidelines for Substitute Water Supply Plans.
- (2) = Free Water Surface Evaporation from NOAA Technical Report NWS 33 = Class A Pan Evaporation * Kp, where Kp = 1.0.
- (3) = Column (1) * Column (2).
- (4) = Total Free Water Surface Area (see Figure 2 - Gardels Pit Pond Areas).
- (5) = Column (3) * Column (4). For months where Mean Ave. Temp. <32, ice cover = 0.0 Evap.
- (6) = From All.1 Precipitation Data.
- (7) = (Column (6) * 70%) * Column (4)
- (8) = Column (5) -Column (7).
- (9) = Column (8) Lagged utilizing AWAS program (See All.2).

AI.1 Evaporative Loss Worksheet - Gardels Pit

2 of 2

Pond 2 Surface Area: 2.00 acres

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Month	Monthly Distribution	Free Water Surface Evaporation	Gross Evaporation Rate	Surface Area	Gross Evaporation	Average Monthly Precip.	Effective Precip. Credit	Net Evaporative Loss (unlagged)	Net Evaporative Loss (lagged)	Net Evaporative Loss (lagged) Pond 1 + 2
		[ft./yr.]	[ft./mo.]	[acres]	[acre-ft./mo.]	[ft./mo.]	[acre-ft./mo.]	[acre-ft./mo.]	[acre-ft./mo.]	[acre-ft./mo.]
Jan	0.030	3.270	0.098	2.00	0.00	0.04	0.00	0.00	0.06	0.38
Feb	0.035	3.270	0.114	2.00	0.23	0.05	0.07	0.18	0.14	0.58
Mar	0.055	3.270	0.180	2.00	0.36	0.12	0.17	0.19	0.17	0.73
Apr	0.090	3.270	0.294	2.00	0.59	0.17	0.24	0.35	0.28	1.13
May	0.120	3.270	0.392	2.00	0.78	0.22	0.31	0.47	0.39	1.61
June	0.145	3.270	0.474	2.00	0.95	0.14	0.20	0.75	0.61	2.44
Jul	0.150	3.270	0.491	2.00	0.98	0.13	0.18	0.80	0.71	2.96
Aug	0.135	3.270	0.441	2.00	0.88	0.11	0.15	0.73	0.70	3.04
Sep	0.100	3.270	0.327	2.00	0.65	0.13	0.18	0.47	0.55	2.53
Oct	0.070	3.270	0.229	2.00	0.46	0.10	0.14	0.32	0.41	1.95
Nov	0.040	3.270	0.131	2.00	0.26	0.06	0.08	0.18	0.28	1.38
Dec	0.030	3.270	0.098	2.00	0.00	0.05	0.00	0.00	0.12	0.72
totals			3.270		6.14	1.32	1.72	4.42	4.42	19.45

Notes:

- (1) = SEO Monthly fraction of evaporation for elevations below 6500 ft from Guidelines for Substitute Water Supply Plans.
- (2) = Free Water Surface Evaporation from NOAA Technical Report NWS 33 = Class A Pan Evaporation * Kp, where Kp = 1.0.
- (3) = Column (1) * Column (2).
- (4) = Total Free Water Surface Area (see Figure 2 - Gardels Pit Pond Areas).
- (5) = Column (3) * Column (4). For months where Mean Ave. Temp. <32, ice cover = 0.0 Evap.
- (6) = From All.1 Precipitation Data.
- (7) = (Column (6) * 70%) * Column (4)
- (8) = Column (5) -Column (7).
- (9) = Column (8) Lagged utilizing AWAS program (See All.2).
- (10) = Pond 1, Column (9) + Pond 2, Column (9).

LEASE OF FULLY CONSUMABLE WATER

THIS LEASE is made and entered into this 13th day of Jan, 1998, by and between the City of Loveland, Colorado, a Colorado home rule municipality ("City"), whose address is 500 East Third Street, Loveland, Colorado 80537, and Coulson Excavating Company, a Colorado corporation ("Lessee"), whose address is 3609 North County Road 13, Loveland, Colorado 80538.

WHEREAS, the City owns certain water which, pursuant to the water laws of the state of Colorado, may be used, re-used and successively used to extinction (the "Fully Consumable Water"); and

WHEREAS, the Lessee wishes to lease from the City the right to use a portion of the City's Fully Consumable Water; and

WHEREAS, the City is willing to lease to Lessee a portion of its Fully Consumable Water pursuant to certain terms and conditions as set forth in this Lease,

NOW, THEREFORE, in consideration of the mutual promises and covenants contained herein and other good and valuable consideration, the receipt of which is hereby acknowledged, the parties agree as follows:

1. The City hereby leases to the Lessee the right to receive one hundred acre feet of the City's Fully Consumable Water, as defined in paragraph 4 of this Lease, on an annual basis. This Lease shall be for a term of twenty-five (25) years, ending on December 31, 2022. However, Lessee shall have the option to renew this Lease for successive terms of twenty-five years, which option shall terminate only if Lessee is in default of its payment obligations under paragraphs 6 or 7 of this Lease or if Lessee elects not to exercise its option to renew by giving notice to the City pursuant to paragraph 12 of this Lease not later than three (3) months prior to the end of any twenty-five (25) year term. In the event Lessee is not in default of its payment obligations and elects to renew the Lease for any successive twenty-five year period, Lessee shall not be required to pay any additional amounts under this Lease for the right to receive its allotted amount of the City's Fully Consumable Water as set forth above.

2. The one hundred acre feet of Fully Consumable Water which the Lessee shall be entitled to receive annually is hereinafter referred to as the "Leased Water." The parties

recognize that, simultaneously with the execution of this Lease, the City has leased the right to receive two hundred acre feet of its Fully Consumable Water to Loveland Ready Mix and that the City may, in the future, lease additional portions of its Fully Consumable Water to persons other than Lessee. The Lessee's right to receive one hundred acre feet of the City's Fully Consumable Water pursuant to this Lease shall be equal to the right of Loveland Ready Mix to receive its two hundred acre feet of Fully Consumable Water such that in the event less than three hundred acre feet of Fully Consumable Water is available in any year, Lessee and Loveland Ready Mix shall each be entitled to receive a proportionate share of the available Fully Consumable Water. The right of Lessee to receive one hundred acre feet of the City's Fully Consumable Water under this Lease shall be deemed to be a first right relative to all others, such that in the event the available Fully Consumable Water in any year is in excess of three hundred acre feet but is not sufficient to meet the needs of all persons holding leases of Fully Consumable Water, Lessee shall receive up to its entire one hundred acre feet allotment from the first three hundred acre feet of Fully Consumable Water available.

3. In consideration of the right to receive the Leased Water, Lessee shall, upon execution of this Lease, pay City the sum of Two Hundred Twenty Thousand and 00/100 (\$ 220,000.00) Dollars in certified funds. By entering into this Lease with the Lessee, the City is and shall be under no obligation to file an application for a change of water rights or for a plan of augmentation concerning the use of the Leased Water by the Lessee.

The City shall not be responsible for the implementation of any temporary substitute supply plan or augmentation plan concerning the use of the Leased Water. The cost and expense of any such proceeding shall be that of the Lessee. The City agrees to furnish sufficient Leased Water so that, subject to the provisions of this Agreement, the net usable first use or subsequent use water obtained by the Lessee shall be 100 acre feet. The City shall not be obligated to deliver Leased Water to Lessee unless Lessee shall have first provided written notice to the City that Leased Water will be required in a given year by April 1 of the preceding year.

The City shall deliver the Leased Water under this Lease in a total annual quantity as specified by the Lessee and at specific monthly delivery times and in specific monthly quantities according to the evaporation table, attached hereto as

Exhibit A, or as otherwise agreed by the City and the Lessee in writing. In no event shall the monthly deliveries exceed the monthly amounts shown on Exhibit A unless hereafter agreed in writing by the City and the Lessee.

The Lessee shall not have the right to carryover from month to month or from year to year any Leased Water which was deliverable, but not requested for delivery, in a prior time period. If the maximum allowable delivery under this Lease is not requested by Lessee in any month, the right of Lessee to call for the delivery of such water shall lapse and all such water shall remain the sole property of the City.

4. In supplying the Leased Water pursuant to this Lease, the City may use any water, including, but not limited to the following sources of water which may be used to extinction (the "Fully Consumable Water"):

- a. Native water from the Big Thompson River basin which, when stored within the City's reservoir system, may be totally consumed pursuant to the terms and conditions of the Decree for Change of Water Rights for the City of Loveland, dated June 18, 1985, Case No. 82-CW-202A, Water Court Division One, State of Colorado or subsequent actions; and
- b. Water under an Allotment Contract with the Municipal Sub-District of the Northern Colorado Water Conservancy District (the "Northern District"), commonly known as Windy Gap Water; and
- c. Any water subsequently acquired by the City and determined by Water Court Decree to be totally consumable.

5. The City shall have the right to deliver the Leased Water to Lessee from any of the sources of Fully Consumable Water, at the City's sole discretion, and shall have the right to determine if any or all of the Leased Water shall be first use water or subsequent use water. The City shall never be required to deliver first use water, even if it is the only Fully Consumable Water available to meet the terms of this Lease. In the event the only water available to the City to meet the terms of this Lease is first use Windy Gap Water and the City is willing to deliver such first use water, the City shall notify the Lessee prior to delivering such water and the Lessee shall

have the option to accept the first use Windy Gap Water and pay the costs of delivering such water pursuant to the terms of paragraph 6 of this Lease. In the event the Lessee refuses to accept the delivery of the first use Windy Gap Water, the City shall be deemed to have met its obligations under this Lease, until such time as a source of Fully Consumable Water, other than first use Windy Gap Water, becomes available. In the event the City is reasonably able to but fails to exercise its rights under Case No. 82CW202A sufficient to meet the demands under this Agreement, (unless the exercise of such rights would impair the City's ability to meet the normal domestic needs of the City), and the only water available to the City to meet the terms of this Lease is first use Windy Gap Water, the Lessee shall not be required to pay the delivery charges provided in paragraphs 5 or 6 for the delivery of such first use Windy Gap Water.

6. In the event the Lessee agrees to accept the delivery of first use water from the City's allotment of Windy Gap Water, Lessee shall pay to the City, the total costs of all pumping and conveyance charges, plus any assessments and fees for administrative, operating, maintenance and any other fees or costs charged by the Sub-District for delivery of the water to the City. The Lessee shall pay the City the total estimated costs in advance, and the City shall not be obligated to deliver any such water until it has received the full estimated payment. In the event the estimated costs paid by the Lessee are less than the actual costs incurred by the City in delivery of Windy Gap Water to the Lessee, Lessee shall pay the City any additional amounts owed within thirty days of receipt of an invoice from the City setting forth the amount owed. In the event the Lessee shall fail to pay such additional amounts upon receipt of an invoice from the City, the City shall have the right, in addition to any other legal or equitable remedies it may have, to refuse to deliver any Leased Water until such time as all additional amounts owed pursuant to this paragraph have been paid in full. In the event the estimated costs paid by the Lessee are greater than the actual costs incurred by the City in delivery of Windy Gap Water to the Lessee, the City shall refund any excess within thirty days of the City's receipt of an invoice from the Northern District.

7. Lessee shall pay the City's reasonable costs incurred in administering the terms of this Lease. For the first five years of this Lease, the administrative costs shall be One Thousand and 00/100 Dollars (\$1,000.00) per year, payable in advance. The City shall recalculate the reasonable administrative costs every five years and inform the Lessee in writing of the

change at least thirty days prior to the start of the new five year period. In the event the Lessee does not require the delivery of any of the Leased Water in a given year, there shall be no administrative costs charged. The City shall invoice the Lessee for the annual administrative costs in January of each year and Lessee shall pay said costs within thirty days of the invoice date. In the event the Lessee shall fail to pay its accrued administrative costs in any year, the City shall have the right, in addition to any other legal or equitable remedies it may have, to refuse to deliver the Leased Water until such time as all accrued administrative fees have been paid in full.

8. At the option of the City, delivery of the Leased Water shall be made at the City's Waste Water Treatment Plant, 700 South Boise Avenue, Loveland, CO, or at such other downstream location or locations above the Lessee's original point of need as agreed by and between the Lessee and City in writing. Lessee shall not unreasonably withhold its approval of any request by the City to move the point of delivery.

9. Subject to the provisions of paragraph 5, the City shall only be obligated to deliver the Leased Water to the Lessee if water meeting the requirements of this Lease is reasonably available to the City. In the event of a drought or other conditions, restrictions or emergency situations beyond the control of the City which limit the City's ability to receive or deliver all or a portion of the Leased Water to the Lessee, the City shall be relieved of its obligations to deliver such water under the terms of this Lease until such time as conditions permit the City's receipt and delivery of the Leased Water.

10. The Lessee shall take the Leased Water AS IS and the City makes no express or implied warranties of any kind or nature, including the warranties of merchantability or fitness for a particular purpose, concerning the water quality of the Leased Water.

11. In the event the Lessee wishes to assign, encumber or exchange its rights to receive all or any portion of the Leased Water not already used to satisfy a temporary substitute supply plan or permanent augmentation decree to a third party, the City shall have the first right of refusal to reacquire said rights. In such event, Lessee shall notify the City in writing and shall provide the City with a copy of the signed agreement between the Lessee and the third party. The City shall have the right to reacquire the water rights within ninety days from receipt of the notice, by informing Lessee of its intent to exercise its first

right of refusal and by paying Lessee the contract price as set forth in the agreement between the Lessee and the third party. If the City does not exercise its right of first refusal, the Lessee may assign or transfer its rights to a third party, and the third party shall be bound by all terms and conditions of this Lease, including the obligation to allow the City the first right of refusal on any transfer or assignment of the Leased Water, it being the intent of this Lease that the City's right of first refusal shall apply to each and every transfer of the Leased Water which may arise at any time during the existence of this or any subsequent Lease. The right of first refusal set forth in this paragraph shall not apply in the event the Lessee wishes to assign, encumber or exchange its rights to receive all or any portion of the Leased Water to a third party pursuant to an exchange which is a transfer, sale or assignment of all or substantially all of Lessee's assets to said third party.

12. After the City has increased the storage capacity of Green Ridge Glade Reservoir to at least five thousand (5,000) acre feet, and upon sufficient advance written notice so as to permit the City to place appropriate orders for replacement water, the Lessee may temporarily sub-lease the Leased Water or portions thereof to third parties without activating the City's right of first refusal as set forth in paragraph 11, so long as the length of the sub-lease term and the amounts and times of discharge required by the Sub-lessee are acceptable to the City. Any such lease arrangement shall first be provided to the City for its review and approval, which approval shall not be unreasonably withheld.

13. All notices shall be in writing and shall be deemed given if personally delivered or mailed, certified mail, return receipt requested, to the following addresses:

If to City, to:

City of Loveland Water & Power Department
Attn: Ralph Mullinix, Director
200 North Wilson Avenue
Loveland, Colorado 80537

with a copy to:

City of Loveland
Attn: City Attorney
500 East Third Street
Loveland, Colorado 80537

If to Lessee, to:

Coulson Excavating Company
3609 North County Road 13
Loveland, Colorado 80538

14. No alteration or other modification of this Lease shall be effective unless such modification shall be in writing and signed by the parties.

15. In the event any portion of this Lease should become invalid, the remainder of the Lease shall remain in full force and effect.

16. This Lease shall be governed by and construed in accordance with the laws of the State of Colorado. This Lease shall inure to the benefit of, and be binding upon, the successors in interest of the respective parties.

IN WITNESS WHEREOF, the parties have executed this Lease on the day and year first above written.

CITY OF LOVELAND

Kathleen C. Gilliland
Mayor



[Signature]
City Clerk

APPROVED AS TO FORM:

Jane S. Broutigami
City Attorney

LESSEE
COULSON EXCAVATING COMPANY

Coulson Excavating Company, Inc.
By: Richard Cole
Its: President

ATTEST:

[Signature]
Secy. Secretary


EXHIBIT A TO LEASE OF FULLY CONSUMABLE WATER
BETWEEN
THE CITY OF LOVELAND AND COULSON EXCAVATING COMPANY

EVAPORATION BY MONTHS

MONTH	PERCENT EVAPORATION
January	3.0%
February	3.5
March	5.5
April	9.0
May	12.0
June	14.5
July	15.0
August	13.5
September	10.0
October	7.0
November	4.0
December	3.0

DEDICATION OF WATER RIGHTS

I Richard Coulson, do hereby dedicate 0.24 shares out of $5/6^{\text{th}}$ (0.833) shares of ownership of Big Thompson Ditch and Manufacturing Co. water rights to operation of the Temporary Substitute Water Supply Plan for the Brownwood Pit (M-1979-059). I also dedicate as much of my ownership of $5/6$ (0.833) of a share in the Big Thompson Ditch and Manufacturing Co. water right as may be required for the long term replacement of depletions to the Big Thompson River for the Brownwood Pit (M-1979-059) and the Gardels Pit (M-2005-033). The Gardels Pit (M-2005-033) obligation is estimated at 0.25 shares. Furthermore, the required portion of my $5/6$ (0.833) of a share can be used in the court augmentation plans, unless a sufficient alternative replacement source is identified and dedicated.

Signature  Date 2-27-15

ADMINISTRATION PROTOCOL

Augmentation Plan Accounting

Division One – South Platte River

This protocol establishes the accounting and reporting process required to enable the division engineer's office to confirm that depletions from all out-of-priority diversions are being replaced so as to prevent injury to vested water rights. The accounting must comport with established "cradle to grave" accounting standards, which allow an audit of the information to track exactly how the data is manipulated as it is translated from raw input data to the resultant impact on the river. While this protocol is subordinate to any decreed language addressing specific accounting requirements, it generally addresses the minimum requirements of such accounting.

The accounting must use the standard convention where a depletion is "negative" and an accretion or other replacement source is "positive". The sum of the impacts will then result in either a "negative" or "positive" impact on the stream.

Wells in plans that have a negative stream impact must provide additional replacement water, curtail pumping or both until the impact is no longer negative. Plans with a negative stream impact that fail to curtail pumping will be ordered to stop pumping until such time as the projected impact of the wells is no longer negative.

1. Accounting must be submitted electronically to the water commissioner (call 970-352-8712 to obtain email address) and division engineer at Div1Accounting@state.co.us within 30 days of the end of the month for which the accounting is being submitted.
2. The accounting must provide the **contact information** including name and address for:
 - a. the owner(s) of each well
 - b. the person responsible for submitting the accounting
 - c. the plan administrator and/or the plan attorney.
3. All **input data** must be in one location, such as an "Input" worksheet, etc. The accounting must show all pumping. Input data includes the information listed below.
 - a. The required input data for each **well** is:
 - i. the monthly meter reading for wells that use a **presumptive depletion factor** (PDF) to determine the associated consumptive use (CU); or
 - ii. the monthly CU in acre-feet (AF) for wells that have a decree or approved SWSP that allows the wells to use a **water balance methodology** to determine the CU of the well. The analysis used to determine the CU must be included with the accounting.
 - iii. Wells that are decreed as an **alternate point of diversion** (APOD) to a surface water right must report pumping on a daily basis if any of the diversion during the month is claimed as being "in priority". (See *Administration Protocol – APOD Wells* for more details.)

- iv. The well meter serial readings for each meter shall be included if there is more than one meter on a well.
- b. Each **recharge site** must comply with the *Administration Protocol - Recharge* and must report the:
 - i. daily volume in AF diverted into the site;
 - ii. monthly volume in AF released from the site;
 - iii. monthly net evaporative loss in AF;
 - iv. volume of water in AF remaining at the end of the month.
- c. The accounting must identify each source of **fully consumable replacement water** actually delivered to the location impacted by the depletions. To demonstrate the water was actually delivered to the required location will require the following information:
 - i. the originating source of the water, date released and volume of water released;
 - ii. transportation losses to point of diversion or use, if any, using stream loss factors approved by the water commissioner;
 - iii. the volume of water actually delivered on a daily basis past any surface water diversion that was sweeping the river as corroborated by the water commissioner.

(See *Administration Protocol – Delivery of Water* for more details on delivering water.)
- d. For each source of **replacement water that has been “changed”** for use as a source of augmentation, such as changed reservoir shares, ditch bypass credits or credits from dry-up, etc., the following input information must be reported:
 - i. the basis and volume of the return flow obligation;
 - ii. the location the changed water was historically used; this will be the location used to determine the timing of the return flow impact on the river.
- 4. The accounting must include a monthly **projection** of the plan's operation at least through March 31 of the next calendar year.
- 5. The accounting must include all input and output files associated with **modeling the delayed impact** of diversions. The output from the modeling must report to a summary table that shows, by month, the ongoing depletions associated with pumping, return flow obligations, etc. and accretions from recharge operations.
- 6. A **net impact** summary must show the out-of-priority depletions, accretions from each recharge site, volume of replacement water actually delivered to the location of the depletions and the resultant net impact on a daily basis. If necessary, the net impact must be done by river reach.

While **modeling** may use a **monthly step function** to determine the depletions from pumping and accretions from recharge, the monthly result must then be **divided by the number of days in the month** in order to **simulate a daily impact**, as water rights are administered on a daily and not monthly basis.

Replacement water must be provided such that the **daily net impact** (using the simulated daily numbers from the modeling) **is not negative**. If a well is out-of-priority for 15 days during a month, replacement must be made only for the 15 days the well is out-of-priority. The replacement must be made, however, on a daily basis as opposed to, for instance, making an aggregated release equal to the volume of the out-of-priority depletions. Likewise, the simulated daily accretion will only count toward replacing the depletion on the days the well is out-of-priority. The accretions that report to the river when the well is in priority cannot be used to replace the out-of-priority depletions.

The **accretions that impact the river when the well is in priority** are not considered "excess" unless the cumulative net impact of the well is not negative for the entire irrigation year to date. (The irrigation year for this purpose is April 1 thru the following March 31.) Until such time as the cumulative net impact is not negative, the accretions must simply be released to the river and cannot be leased to other plans or recaptured. Plans that show a positive cumulative net impact are still required to make replacements on a daily basis; the cumulative analysis only effects whether or not accretions reporting to the river when the well is in priority are considered "excess" and are, therefore, able to be recaptured.

7. The basis for determining that the depletions are **out-of-priority** must be clearly established and all steps in the calculation included in the accounting. The analysis may be done, unless otherwise limited by decree, for each well or groups of wells, provided the most junior water right associated with the group of wells is used as the reference water right for the group's out-of-priority status.
8. Accounting must include **actual information** for the irrigation year through the month for which the accounting is being submitted **AND projections** of the plan operation through March 31 of the next calendar year.
9. The following **naming convention** must be used for all files submitted pursuant to item 1:

"PlanWDID_YYMMDD"

where: PlanWDID is the WDID assigned by the division engineer's office
YYMMDD corresponds to the date the accounting is submitted.

As an example, the assigned WDID for the former GASP plan was 0103333. If accounting using Excel® was submitted for that plan on May 15, 2004, the file name would be:

"0103333_040515.xls"

The name of the file must be in the subject line of the email.

10. All accounting must be reported using the **WDID** for the structure, at a minimum. Other information such as well name, permit number, etc. may also be included as desired. All wells must be decreed by the water court, permitted by the state engineer or included in a decreed plan for augmentation. Unregistered and undecead wells cannot, in the opinion of the division engineer, be effectively administered because of the need to know the location, allowable diversion rate and use of the well - information that is only available from the decree or permitting process.

11. If a well is covered in multiple SWSP's or augmentation plans, the monthly meter readings must be the same in the accounting for each plan covering the subject well. The accounting for every plan covering the well shall state the proportionate pumping amount covered by each plan to assure all out-of-priority depletions are replaced.
12. The following additional accounting is required for sources of replacement water used for more than one plan. The water right owner of the replacement water is responsible for accounting for the total replacement amount and how much each plan is using of that total amount. The accounting for portions of the replacement water by other users must match the accounting of the water right owner. The amount of replacement water used by the water right owner and other users together shall not exceed the total replacement amount available.

(See Administration Protocol – Use Of Unnamed Sources For Replacement for additional requirements concerning required notice and approval of sources of replacement not specifically described in a SWSP or augmentation plan)