December 22, 2020

Mr. Andy Rodriguez, P.E.
Civil Resources, LLC
323 Fifth Street
P.O. Box 680
Frederick, CO 80530

Re: Poudre Pits Aggregate Mine Substitute Water Supply Plan (WDID 0302519)
La Poudre Aggregate Mine, DRMS Permit M-1983-090 (WDID 0303010, Plan ID 3218)
Section 19, T6N, R67W, 6th P.M.
North La Poudre Aggregate Mine, DRMS Permit M-2000-144 (WDID 0303011, Plan ID 4585)
Section 19, T6N, R67W, 6th P.M.
Water Division 1, Water District 3, Weld County

Approval Period: January 1, 2021 through December 31, 2021
Contact Phone Number for Mr. Rodriguez: 303-833-1416 ext. 202; andy@civilresources.com

Dear Mr. Rodriguez:

We have reviewed your letter dated October 22, 2020 requesting renewal of the above referenced substitute water supply plan ("SWSP") in accordance with section 37-90-137(11), C.R.S. This SWSP is requested to cover depletions caused by sand and gravel mining operations at two sites along the Cache la Poudre River operated by Bestway Concrete & Aggregates ("Bestway" or "Applicant"). The required fee of $514 (2 × $257) has been submitted (receipt nos. 10007168 and 10007169).

Plan Operation

The following table lists the sites that are included in this combined replacement plan:

Table A – Combined Replacement Plan Sites

Site Name	DRMS Permit No.	WDID	Well Permit No.	Location	Exposed Surface Area (post-12/31/80) (acres)
La Poudre Aggregate Mine	M-83-090	0303010	61571-F	19-T6N-R67W	21.44
North La Poudre Aggregate Mine	M-00-144	0303011	62037-F	19-T6N-R67W	7.43

The La Poudre site consists of three separate cells designated as the West Lake, Middle Lake, and East Lake. An additional parcel in the northwest corner of Section 19, known as the Lee Parcel, was amended into the mining permit boundary in December 2017. The Lee Parcel has been mined out, but continuous dewatering and backfill operations will continue in 2021, which are included in

the La Poudre site depletions for the West Site. Dewatering water will be delivered to recharge in the West Lake/Wildlife Lake located in the western portion of the La Poudre site. It is assumed that 33% of the water pumped into the lake will recharge into the West Lake and 67% will be discharged from the lake directly to the river. No mining of aggregate is proposed to occur at either the La Poudre or North La Poudre sites during this plan period.

Depletions

Evaporation and Operational Losses

During this SWSP period, depletions at the La Poudre and North La Poudre Pits will consist of evaporation losses and water used for dust control. The depletions for each site are shown in the following table:

Table B – 2021 Site Depletions (acre-feet)[a]

Site Name		Evaporation Losses	Groundwater Lost in Mined Product	Groundwater Consumed in Concrete Batching	Dust Control	Total Depletions	Total Lagged Depletions
La Poudre	West	13.37	0	0	2.20	15.57	15.5
	Middle	3.66	0	0	0	3.66	3.66
	East	34.29	0	0	0	34.29	34.29
North La Poudre		17.79	0	0	0	17.79	18.42
Total		72.78	0	0[b]	2.20	71.31	71.84

[a] Depletions shown do not include those from past or projected dewatering operations at the sites.
[b] Water for concrete batching is supplied from municipal taps.

For the purposes of this SWSP, depletions are assumed to impact the Cache la Poudre River perpendicular to the point of depletions, which is considered to be the centroid of the exposed surface area at each site. Evaporative depletions for each site were calculated using a gross annual evaporation of 38.5 inches, with a credit of 9.78 inches for effective precipitation (based on an average annual precipitation of 13.97 inches for the Windsor weather station). The West Site includes a 4-acre Wildlife Pond and 1.58 acres of dewatering trenches associated with the West Lake/Wildlife Pond and the Lee Parcel; the Middle Lake contains a 1.53-acre pond; and the East Lake contains a 14.33-acre pond. The North La Poudre site contains a 1.23-acre pond and a 6.2-acre pond. The attached Figure 1 shows the location of each of these exposed groundwater features.

Operational losses at the La Poudre and North La Poudre sites will consist of 2.20 acre-feet of groundwater used for dust control purposes. The Applicant anticipates that there will be no mining of aggregate during this plan period. Water for dust control purposes will be pumped from the West Lake within the La Poudre site. Operational activities at the site will include concrete batching, but no groundwater is anticipated to be used for this purpose as two domestic water taps are currently enough to supply the estimated water requirements for the projected 105,000 cubic yards of concrete. Depletions from the La Poudre and North La Poudre pits will impact the Cache la Poudre River upstream of the Whitney Irrigation Ditch (WDID 0300930).

The Alluvial Water Accounting System (AWAS), which uses the Glover method, was used to determine the lagged depletions to the Cache la Poudre River from past (since 1990) and projected evaporation and operational losses at each site. The following parameters were used in the model with the alluvial aquifer boundary condition: the distance (X) from the centroid of the exposed groundwater surface to the river; the width (W) of the aquifer on the side of the river where the pit is located; the transmissivity (T); and the specific yield (S). The Glover parameters used for each pit site are shown in the table below.

Table C – Glover Parameters (Evaporative/Operational Losses)

Site Name		X (ft)	W (ft)	T (gpd/ft)	S
La Poudre	West	512	4,800	50,000	0.20
	Middle	399	4,800	50,000	0.20
	East	626	4,800	50,000	0.20
North La Poudre		2,500	4,800	50,000	0.20

The lagged evaporative and operational depletions for 2021 will total 71.84 acre-feet for the La Poudre and North La Poudre sites.

Dewatering

Dewatering has occurred at each pit over varying intervals from 1995 through 2020. The Lee Parcel is the only portion of either site that is proposed to be actively dewatered during this SWSP period. In the past, it was assumed that the pits were dewatered at a rate of 500 gpm with all water released directly to the river. These assumptions have been revised to reflect the historic average dewatering rate of 100 gpm where the majority (75%) of the water was recharged in the adjacent pits with only 25% discharged directly to the river. This is based on a reevaluation of historic operations by the operator's consultant and a December 20, 2012 letter from Mark Johnson, Compliance Manager with Bestway Concrete & Aggregates as well as submitted pump specifications and data showing the 100 gpm is a more accurate estimate than the previously accepted 500 gpm. Mark Johnson described the recharge operation as occurring simultaneously with dewatering in that the operator would discharge the water into an adjacent, previously mined, cell. Once the cell being recharged exceeded its hydraulic capacity the water would then be diverted directly to the river.

Dewatering operations at the La Poudre Pit occurred from January 1995 through December 2002, and during October and November of 2014. As stated above, 75% of the water was recharged in the adjacent pits with 25% discharged directly to the river. The Lee Parcel has been dewatered since April 2018 at an average rate of 212 gallons per minute with one-third (33%) of the dewatering water delivered to recharge in the West Lake and two-thirds (66%) delivered directly to the river.

At the North La Poudre site, dewatering operations occurred from September 2002 through March 2003 and recommenced from April 2012 through July 2014. The 2012 dewatering was not metered therefore no recharge credit was given. Instead, all 2012 dewatering was assumed to be discharged directly to the river creating no lagged accretions. The operator installed meters at this site by January 2013 and starting January 2013 the actual meter readings are used in the dewatering analysis. Dewatering that occurred from January 2013 through November 2013 and March 2014

through July 2014 was returned directly to the river through an unnamed slough located above the Whitney Ditch.

In the past, lagged depletions resulting from dewatering at the sites were calculated using AWAS with the infinite aquifer boundary condition. The following parameters were used in the model: the distance (X) from the centroid of the exposed groundwater surface to the river; the transmissivity (T); and the specific yield (S). The Glover parameters used for each pit are shown in Table D below.

Table D – Glover Parameters (Dewatering)

Site Name	X (ft)	T (gpd/ft)	S
La Poudre	1,500	50,000	0.20
North La Poudre	2,500	50,000	0.20

Beginning with the 2019 plan year, you began to lag dewatering depletions using the alluvial aquifer boundary condition, consistent with the methodology and aquifer width (W) parameter for lagging operational depletions, which is believed to be more appropriate given the close proximity of the pits to the Cache la Poudre River. In order to ensure that this change in methodology does not result in unreplaced depletions to the river, you have proposed to continue lagging dewatering depletions resulting from dewatering that occurred in 2018 and earlier using the infinite aquifer boundary condition, and to lag depletions resulting from dewatering that occurred in 2019 and later using the alluvial aquifer boundary condition. Because the remaining depletions resulting from dewatering prior to 2019 as calculated using the infinite aquifer method lag out for a long time period in relatively small quantities, you have proposed to "wrap" the lagged depletions remaining after 2028, which represent less than 10% of the total volume pumped for dewatering purposes, and redistribute and replace these depletions during the time period of 2019 through 2028. Depletions resulting from post-2019 dewatering are not proposed to be wrapped at this time.

Based on discussions with the mine operator, dewatering during 2021 is projected to occur at the Lee Parcel portion of the La Poudre site at a rate of 185 gpm, with 123 gpm delivered directly to the river and 61 gpm delivered to recharge in the Wildlife Pond. Actual monthly meter readings must be used to determine the true dewatering rate, and to determine how much water was delivered to recharge versus being directly returned to the river.

Table E below summarizes the impacts past and projected dewatering operations at each pit will have on the stream system during this SWSP period of January 1, 2021 through December 31, 2021, as calculated using the methodologies and assumptions described above.

Table E – Summary of Dewatering Impacts (acre-feet)

	Pre-2019 Pumping (infinite aquifer method)			Post-2019 Pumping (alluvial aquifer method)			
Site Name	**Lagged Accretions**	**Lagged Depletions**	**Wrapped Depletions**	**Direct Returns**	**Lagged Accretions**	**Lagged Depletions**	**Net Balance**
North La Poudre	1.81[a]	-4.94	-3.97	N/A	N/A	N/A	-7.1
La Poudre	3.59	-9.80	-3.83	200.17	109.07	-330.1	-30.91
Total	5.4	-14.74	-7.80	200.17	109.07	-330.1	**-38.02**

[a] Excludes accretions from any dewatering recharge that may have occurred in 2012

The combined lagged dewatering depletions, accretions from the stated recharge, and direct delivery to the river from dewatering operations create a net deficit to the river in the amount of 38.02 acre-feet. With the stated combined lagged evaporative and operational depletions of 71.84 acre-feet, the total net depletion owed to the river for this SWSP approval period is 109.86 acre-feet. See attached Table 4 for the monthly distribution of depletions and accretions.

Replacements

The proposed source of replacement water under this SWSP is water leased from the Central Colorado Water Conservancy District.

The Applicant has obtained a lease with the Ground Water Management Subdistrict of the Central Colorado Water Conservancy District ("Central") for 109.86 acre-feet of Central's fully consumable storage and direct flow water rights in the Cache la Poudre basin. The term of the lease is January 1, 2021 through December 31, 2021. A copy of the signed lease, dated November 2020, is attached. Central has water in storage in Siebring Reservoir (WDID 0303803), 83rd Avenue Reservoir (WDID 0303408), and La Poudre Reservoir (WDID 0303377). Siebring Reservoir and 83rd Avenue Reservoir are located in Section 31, Township 6 North, Range 66 West of the 6th P.M. La Poudre Reservoir is located within the boundaries of the La Poudre Aggregate Mine (M-1983-090) in Section 19, Township 6 North, Range 67 West of the 6th P.M. If the Whitney Ditch or B.H. Eaton Ditch are sweeping the river, Central lease water from La Poudre Reservoir can be used to cover the depletions from the La Poudre and North La Poudre Pits, but the Central lease water from Siebring Reservoir and 83rd Avenue Reservoir cannot.

Conveyance loss for delivery of the augmentation water referenced above is subject to assessment and modification as determined by the division engineer.

Long-Term Augmentation

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.

For any gravel pit whose reclamation includes unlined ponds, a plan of augmentation approved by the water court must be obtained to cover the long term evaporative depletions. Until an augmentation plan is obtained the operator may post a sufficient bond to backfill or line the site thereby eliminating any long term augmentation requirements, or permanently dedicate shares that will be used in an augmentation plan to the pit. For any gravel pit whose reclamation includes lining or backfilling of the pit, bonds must be posted that can be used to complete the reclamation plan should the operator walk away from the site. The North La Poudre and La Poudre pits have been bonded through DRMS and are in compliance with the April 2010 DRMS letter (approach #1 and #3). A summary of each pit's status regarding their long term augmentation and bonding held through DRMS is shown on the following table:

Table F – Final Reclamation Summary

Site Name	DRMS Permit #	Proposed Final Reclamation	Bond Amount	Comments
North La Poudre	M-2000-144	Unlined Ponds	$1,158,930	Operator increased reclamation liability bond on 4/22/2013 to comply with DRMS requirements for exposed groundwater on site. Operator increased reclamation liability bond on 7/26/2017 in response to the increased acreage approved in amendment AM01.
La Poudre	M-1983-090	Lined and Unlined Ponds	$1,506,500	Operator increased reclamation liability bond on 5/3/2013 to comply with DRMS requirements for exposed groundwater on site. Operator increased reclamation liability bond on 12/17/2017 in response to the increased acreage approved in amendment AM02.

Conditions of Approval

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

1. This plan shall be valid for the period of January 1, 2021 through December 31, 2021 unless otherwise revoked or superseded by decree. 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 of $257 for each DRMS site, and with all necessary leases and other supporting documentation, no later than November 1, 2021. If a renewal request is received after the expiration date of this plan, it may be considered a request for a new SWSP, in which case a $1,593 filing fee will apply.
2. Well permit no. 61571-F was obtained for the La Poudre Pit in accordance with sections 37-90-137(2) and (11), C.R.S. This permit allows for up to 33.3 acres of exposed groundwater and allows for operational losses from the mining of aggregate, production of concrete, and dust control. The water use projected in this SWSP remains within the permit's limits.
3. Well permit no. 78235-F was obtained for the North La Poudre Pit in accordance with sections 37-90-137(2) and (11), C.R.S. This permit allows for evaporation, dewatering, and operational losses from the mining of aggregate, production of concrete, and dust control. The water use projected in this SWSP is within the permit's limits.

4. The total surface area of the groundwater exposed at each of the pits shall not exceed those values listed in Table A of this approval. Should the total surface area exposed exceed those amounts, the Applicant is required to immediately file an amendment with this office.

5. The total amount of groundwater to be appropriated from each of the pits shall not exceed the values listed in Table B of this approval.

6. Total consumption at the La Poudre and North La Poudre Pits must not exceed these aforementioned amounts unless an amendment is made to this plan.

7. Approval of this plan is for the purposes stated herein. Any additional uses of this water must first be approved by this office.

8. All pumping for dust control shall be measured in a manner acceptable to the division engineer.

9. The Applicant shall follow the attached Administration Protocol *"Recharge, Division One - South Platte River"* for the operation of this SWSP. The Division of Water Resources will not acknowledge any recharge activity conducted without the knowledge of the water commissioner. The flow into the recharge site(s) must be metered with a continuous flow recorder. Water may be delivered to recharge only if the net impact of this plan is not negative. Water must be first delivered or exchanged to offset negative impacts of this plan before it may be diverted for recharge.

10. 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. The attached Table 4 provides a proposed schedule of replacement. 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.

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 replacement water which 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. A copy of this approval letter should be recorded with the county clerk and recorder. All replacement water must be concurrent with depletions in quantity, timing, and location.

13. The name, address, and phone number of the contact person who will be responsible for the operation and accounting of this plan must be provided on the accounting forms submitted to the division engineer and the water commissioner.

14. Conveyance loss for delivery of augmentation water is subject to assessment and modification as determined by the division engineer.

15. Adequate accounting of depletions and replacement must be provided to the division engineer in Greeley (DNR_Div1Accounting@state.co.us) and the water commissioner (Mark Simpson, Mark.Simpson@state.co.us) on a monthly basis. Submitted accounting shall conform to the Administration Protocol *"Augmentation Plan Accounting, Division One - South Platte River"* (attached).

16. If reclamation of the mine site produces a permanent water surface exposing groundwater to evaporation, an application for a plan for augmentation must be filed with the Division 1 Water Court at least three years prior to the completion of mining to include, but not be limited to, long-term evaporation losses. If a lined pond results after reclamation, replacement of lagged depletions shall continue until there is no longer an effect on stream flow. Granting of this plan does not imply approval by this office of any such court application(s).
17. Dewatering operations produce delayed depletions to the stream system. This SWSP includes these lagged depletions associated with the North La Poudre Pit. These lagged depletions are partially offset with dewatering accretions from active dewatering at the La Poudre Pit (Lee Parcel). Once dewatering at the La Poudre Pit ceases, the delayed dewatering depletions must continue to be replaced until there is no longer an effect on stream flow. A totalizing flow meter is required on all dewatering discharge in order for the operator to claim any accretion credits.
18. If dewatering at the site is discontinued, the pit would fill, creating additional depletions to the stream system due to increased evaporation. To assure that additional depletions to the river does not occur, a bond for $1,506,500 for La Poudre Pit and a bond for $1,158,930 for North La Poudre Pit through the DRMS for lining or backfilling of the lakes has been obtained. Therefore, if the dewatering is discontinued these bonds can finance the completion of the lining of these pits or the backfilling, thus preventing depletions to the stream system.
19. 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 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.
20. 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 product from below the water table, and all other use of water at the pit, must cease immediately.
21. 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 pending water court case or any other legal action that may be initiated concerning this 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.

If you have any questions concerning this approval, please contact Javier Vargas-Johnson in Denver at (303) 866-3581 or Michael Hein in Greeley at (970) 352-8712.

Sincerely,

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

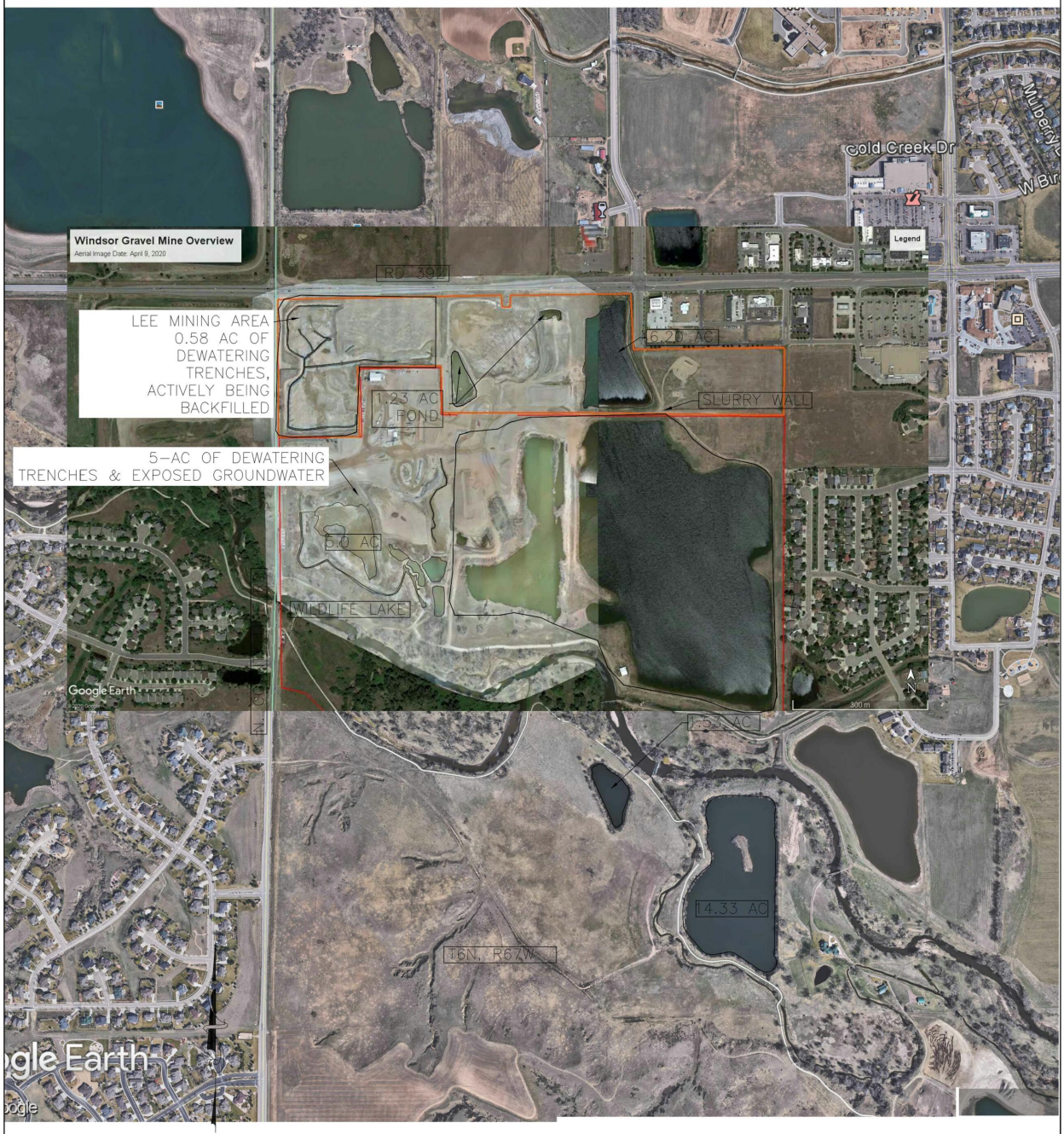
Attachments: Figure 1
Table 4
2021 Central Lease
April 2010 DRMS Letter
Administration Protocol *"Recharge, Division One – South Platte River"*
Administration Protocol *"Augmentation Plan Accounting, Division One – South Platte River"*

Cc: Michael Hein, Lead Assistant Division Engineer, Michael.Hein@state.co.us
810 9th Street, Suite 200, Greeley CO 80631, (970) 352-8712

Mark Simpson, Water Commissioner, Water District 3, Mark.Simpson@state.co.us

Louis Flink, Tabulation/Diversion Records Coordinator, Louis.Flink@state.co.us

Eric C. Scott, Division of Reclamation, Mining and Safety, eric.scott@state.co.us



NORTH

0 500 1000

(IN FEET)

CIVIL RESOURCES, LLC	BESTWAY CONCRETE & AGGREGATE LA POUDRE PITS 2021 SWSP RENEWAL
DATE: 10/2020 / FIGURE: 1	GENERAL LOCATION MAP-2020 AERIAL PHOTO

Table 1a

2021 SWSP Operational Losses and Supplies - La Poudre Pits

La Poudre and North La Poudre Resource (M-83-090) (M-00-144)
Evaporative and Operational Losses

Month	Percent of Annual Evaporation	Gross Evaporation (inches)	Average Precipitation (inches)	Effective Precipitation (inches)	Net Evaporation (inches)	Net Water Surface Evaporation for Wildlife/West Lake 5.58 (acre-feet)	Net Water Surface Evaporation for Middle Lake 1.53 (acre-feet)	Net Water Surface Evaporation for East Lake 14.33 (acre-feet)	Net Water Surface Evaporation for La Poudre North 7.43 (acre-feet)	Net Water Surface Evaporation for Silt Ponds 0 (acre-feet)
	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
January	3.0%	1.16	0.43	0.30	0.85	0.40	0.11	1.02	0.53	0.00
February	3.5%	1.35	0.33	0.23	1.12	0.52	0.14	1.33	0.69	0.00
March	5.5%	2.12	1.09	0.76	1.35	0.63	0.17	1.62	0.84	0.00
April	9.0%	3.47	1.54	1.08	2.39	1.11	0.30	2.85	1.48	0.00
May	12.0%	4.62	2.56	1.79	2.83	1.32	0.36	3.38	1.75	0.00
June	14.5%	5.58	2.03	1.42	4.16	1.94	0.53	4.97	2.58	0.00
July	15.0%	5.78	1.47	1.03	4.75	2.21	0.61	5.67	2.94	0.00
August	13.5%	5.20	1.18	0.83	4.37	2.03	0.56	5.22	2.71	0.00
September	10.0%	3.85	1.32	0.92	2.93	1.36	0.37	3.49	1.81	0.00
October	7.0%	2.70	0.87	0.61	2.09	0.97	0.27	2.49	1.29	0.00
November	4.0%	1.54	0.70	0.49	1.05	0.49	0.13	1.25	0.65	0.00
December	3.0%	1.16	0.45	0.32	0.84	0.39	0.11	1.00	0.52	0.00
Total	100.0%	38.50	13.97	9.78	28.72	13.37	3.66	34.29	17.79	0.00

Month	Percent of Annual Aggregate & Concrete Production	Amount of Aggregate Production West Site (tons)	Water Lost With Mined Aggregate West Site (acre-feet)	Percent of Annual Aggregate & Concrete Production	Amount of Concrete Production (cubic yards)	Water Used in Concrete Batching (acre-feet)	Water Used for Dust Control (acre-feet)	Total Evaporative & Operational Losses (acre-feet)	Lagged Depletions West Lake Dust Supp & Batching (%)	Lagged Depletions Middle Lake (%)	Lagged Depletions East Lake (%)	Lagged Depletions La Poudre North (%)	Lagged Depletions Silt Ponds (%)	Lagged Total Evaporative and Operational Losses (acre-feet)
	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]	[19]	[20]	[21]	[22]	[23]	[24]
January	5.0%	0	0.00	2.7%	2,824	0.00	0.18	2.24	-0.73	-0.14	-1.52	-1.48	0.00	-3.87
February	3.9%	0	0.00	3.5%	3,629	0.00	0.18	2.86	-0.77	-0.16	-1.58	-1.37	0.00	-3.88
March	8.6%	0	0.00	6.5%	6,776	0.00	0.18	3.44	-0.84	-0.18	-1.74	-1.3	0.00	-4.06
April	10.8%	0	0.00	8.6%	9,041	0.00	0.18	5.92	-1.12	-0.26	-2.37	-1.27	0.00	-5.02
May	10.0%	0	0.00	10.2%	10,733	0.00	0.18	6.99	-1.34	-0.33	-2.92	-1.32	0.00	-5.91
June	10.6%	0	0.00	11.7%	12,271	0.00	0.18	10.20	-1.75	-0.45	-3.86	-1.42	0.00	-7.48
July	7.6%	0	0.00	10.6%	11,087	0.00	0.18	11.61	-2.05	-0.53	-4.64	-1.58	0.00	-8.80
August	11.5%	0	0.00	8.9%	9,317	0.00	0.18	10.70	-2.06	-0.53	-4.74	-1.76	0.00	-9.09
September	11.0%	0	0.00	11.5%	12,092	0.00	0.18	7.21	-1.69	-0.41	-3.94	-1.85	0.00	-7.89
October	11.6%	0	0.00	11.3%	11,831	0.00	0.18	5.20	-1.35	-0.31	-3.09	-1.81	0.00	-6.56
November	5.0%	0	0.00	8.6%	9,041	0.00	0.18	2.70	-0.98	-0.2	-2.2	-1.71	0.00	-5.09
December	4.4%	0	0.00	6.1%	6,359	0.00	0.18	2.20	-0.79	-0.16	-1.69	-1.55	0.00	-4.19
Total	100.0%	0	0.00	100.0%	105,000	0.00	2.20	71.31	-15.5	-3.66	-34.29	-18.42	0	-71.84

Notes:

[1] From SB 120, the evaporation percentages are for gravel pits with elevations below 6,500 feet.

[2] Equals Percent of Annual Evaporation times 38.5 inches.

[3] From Colorado State University's Colorado Climate Center web page, http://ccc.atmos.colostate.edu for Windsor Weather Station.

[4] Equals Column (3) times 70 percent. 70 percent value was taken from SB 120.

[5] Equals Column (2) minus Column (4). If the resultant value is less than zero then a zero is substituted.

[6] Equals Column (5) divided by 12 times 15.4 acres.

[7] Equals Column (5) divided by 12 times 1.94 acres.

[8] Equals Column (5) divided by 12 times 15.29 acres.

[9] Equals Column (5) divided by 12 times 10 acres.

[10] Equals Column (5) divided by 12 times 0 acres.

[11] Based on information from Bestway .

[12] Equals Column (11) times 0 tons per year. Production based on information from Bestway .

[13] Equals Column (12) times 2000 times 4% divided by 62.4 divided by 43,560.

[14] Based on information from Bestway .

[15] Equals Column (14) times 76,500 CY per year. Production based on information from Bestway .

[16] Equals Column (15) times 40 gallons divided by 325851. Assume a use of 40 gallons per cubic yard of concrete production.

[17] Equals 3000 gallons per day times number of operating days (20 days) in the month divided by 325851, during production months (March thru November).

[18] Equals Column (6) plus Column (7) plus Column (8) plus Column (9) plus Column (10) plus Column (13) plus Column (16) plus Column (17).

[19] West Lake, Dust Suppression and Concrete Batching - From AWAS Unit Stream Depletion Model - 30 year simulation . (W=4800 feet, x=512 feet, T=50,000 gpd/foot, S = 0.20)

[20] Middle Lake - From AWAS Unit Stream Depletion Model - 30 year simulation . (W=4800 feet, x=399 feet, T=50,000 gpd/foot, S = 0.20)

[21] East Lake - From AWAS Unit Stream Depletion Model - 30 year simulation . (W=4800 feet, x=626 feet, T=50,000 gpd/foot, S = 0.20)

[22] La Poudre North Pits - From AWAS Unit Stream Depletion Model - 30 year simulation . (W=4800 feet, x=2500 feet, T=50,000 gpd/foot, S = 0.20)

[23] Silt Ponds - From AWAS Unit Stream Depletion Model - 30 year simulation . (W=4800 feet, x=1457 feet, T=50,000 gpd/foot, S = 0.20)

[24] Equals (total of Column (6) + total of Column (16) + total of Column (17) x Column (19)) + (total of Column (7) x Column (20)) + (total of Column (8) x Column (21)) + (total of Column (9) x Column (22)) + (total of Column (10) * Column (23))

WATER LEASE AGREEMENT
Windsor Aggregate Mines

THIS AGREEMENT made and entered into this _____ day of November, 2020, by and between the Groundwater Management Subdistrict (GMS) of the Central Colorado Water Conservancy District, hereinafter referred to as "Lessor", and Bestway Concrete & Aggregates, hereinafter referred to as "Lessee"

WITNESSETH:

WHEREAS, Lessor has storage and direct flow water rights in the Cache la Poudre basin. Lessee has a Substitute Water Supply Plan (SWSP) filed with the State Engineer pursuant to 37-92-308(4) C.R.S.

WHEREAS, Lessor desires to lease to Lessee **109.86** acre feet and Lessee desires to lease the same.

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

1. Lessor shall lease **109.86** acre feet to Lessee for use in Lessee's SWSP.
2. The parties agree that the volume of water to be leased under this agreement totals **109.86** acre feet for delivery January 2021 through December 2021. Parties agree to the monthly delivery schedule as follows:

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
9.86	8.37	7.81	8.4	9.04	10.4	11.53	11.66	10.33	8.87	7.30	6.29	109.86

3. Lessee shall pay lessor a total of **$71,409.00 ($650/AF· 109.86 AF)** due upon signing.
4. Parties agree that this Agreement is for the water delivery of **109.86** acre feet from January 2021 through December 2021 and shall immediately terminate December 31st, 2021.
5. This Agreement represents the complete agreement of the parties and no oral modification shall be recognized. Any amendments or additions to the Agreement shall be made in writing and shall be signed by the parties hereto.
6. This agreement is binding upon the parties.
7. Bestway may not assign or transfer this agreement to another party.

WITNESS WHEREOF, Lessor and Lessee have caused this Water Lease Agreement to be executed.

Dated the day and year first executed above.

Randy W. Ray, CCWCD Executive Director

Bestway Concrete & Aggregate

STATE OF COLORADO

DIVISION OF RECLAMATION, MINING AND SAFETY
Department of Natural Resources

1313 Sherman St., Room 215
Denver, Colorado 80203
Phone: (303) 866-3567
FAX: (303) 832-8106

COLORADO DIVISION OF RECLAMATION MINING & SAFETY

April 30, 2010

Lafarge West, Inc.
10170 Church Ranch Way, Ste. 200
Westminister, CO 800210000

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 right 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:

M2006064	Shields at Fossil Creek Mine			M1983031	Stromquist Pit
M1994002	Andrews S & G #5 (Burlington Pit)			M1974072	Chantala Pit
M2006018	North Bank Resources			M1985218	Rich Pit
M2006073	Sundance Sand and Gravel Resource			M1985206	Boone-Martin Pit
M2009082	Parsons Mine			M1995022	Andrews #2
M1977081	Greeley West Pit			M1990144	Boone-Fillmore Pit
M2003091	Duckworth Pit			M1997087	Hartman Pit
M2000113	Mamm Creek Sand & Gravel			M2001094	Shaw Pit
M2001090	River Valley Resource			M2002009	Beeman Pit #1
M2000016	Riverbend Operation			M1981307	Fountain Pit
M1979134	Powers Pit			M1977439	Home Office Mine
M1977036	Greeley 35th Ave Pit			M1979191	Three Bells Pit
M2000034	Reichert Pit			M1982182	Port of Entry Pit
M2001051	North Taft Hill Expansion Site			M2002081	Overland Ponds
M1974015	Lyons Pit			M1981088	McCoy Pit
M1974004	Specification Aggregates Quarry			M1982034	Miller Pit
M1987176	Hamm Pit			M1996082	Blair Mesa Pit
M1988042	Cottonwood Pit			M1980136	Chambers Pit
M1990112	State Pit			M1977098	Sievers Pit
M1979002	North Delta Pit	M1983013	Latham - Burkett Pit	M1974070	Nelson Pit
M1979159	Brose Pit	M1979097	East Rigden Pit	M2000002	Tanabe Pit
M1998014	Gypsum Ranch Pit	M1991035	Bluestone Pit	M1994045	Bluestone Pit
M1999088	Kyger Pit	M1986159	Courtner Pit	M1986079	M & G Pit
M1998075	Andrews #3 (Mock Pit)				

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:

   "Plan**WDID**_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. <u>All wells must be decreed by the water court, permitted by the state engineer or included in a decreed plan for augmentation</u>. Unregistered and undecreed 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*)*

ADMINISTRATION PROTOCOL
Recharge
Division One – South Platte River

The purpose of a "recharge structure" as referenced in this document is to introduce water to the river alluvium that will result in accretions to a live stream. For the purposes of this document, a recharge structure does not include a well that is used to artificially recharge a Denver Basin bedrock aquifer. With that qualification, a recharge structure is defined as:

- A section of ditch, the losses from which can be reasonably modeled as a single source of water.
- A pond or group of ponds that receive water from the same delivery location and can be reasonably modeled as a single source of water.

1. A written notification for each recharge structure must be provided to the water commissioner and division engineer. **The Division of Water Resources will not acknowledge any recharge activity conducted without the knowledge of the water commissioner.** The notification must include:
    a. a map showing the location of the structure and the court case number of the plan for augmentation authorized to use the structure;
    b. a map showing the location of the diversion point and the court case number for the decree authorizing the diversion, if any;
    c. a map showing the location of and all information for the metering location;
    d. the maximum water surface area of the structure;
    e. for ditch structures, if the ditch is divided into more than one recharge reach, an explanation of how the volume diverted will be allocated to the various sections.
2. Upon receiving written notification or decree by the water court, the division engineer will assign the structure a WDID number. The WDID number is the identification number that will be used for the administration of the structure and must be included in all correspondence and accounting reports. **(For structures that were included in a decreed plan for augmentation but were not physically constructed at the time of the decree, a written notification of the intent to construct the structure must be provided.)**
3. Any structure that intercepts groundwater must be permitted as a well and included in a plan for augmentation or substitute water supply plan approved by the state engineer. The division engineer strongly recommends avoiding recharge structures that intercept groundwater, in order to simplify the accounting process.
4. The flow into **EVERY** recharge structure **MUST** be metered and equipped with a continuous flow recorder unless the water commissioner in conjunction with the division engineer determines adequate records may be kept without such equipment. If the recharge structure is designed to discharge water via a surface outlet, such discharge must also be metered and equipped with a continuous flow recorder. The water commissioner **MUST** approve the use of the recharge structure **BEFORE** any credit will be given for water placed into recharge.

5. All recharge ponds must have a staff gauge installed such that the gauge registers the lowest water level in the pond. The staff gauge must be readable from a readily accessible location adjacent to the pond.
6. All recharge areas must be maintained in such a way as to minimize consumptive use of the water by vegetation. **No recharge area may be used for the planting of crops during the same irrigation year that it is used as a recharge site without prior approval from the water commissioner or division engineer.**
7. The amount of water recharged to the alluvial aquifer is determined by measuring the amount of water delivered to the recharge structure and subtracting:
    a. the amount of water discharged from the recharge structure,
    b. the amount of water lost to evaporation (see item 8, below),
    c. the amount of water lost to consumptive use due to vegetation located within the recharge structure, and
    d. the amount of water retained in the recharge structure that has not yet percolated into the ground.
8. Net evaporative losses from the recharge structure must be subtracted from the volume of water delivered to the pond. Evaporative losses must be taken every day the pond has a visible water level. If the pond does not have a stage-surface area curve approved by the water commissioner, the maximum surface area of the pond must be used to determine the evaporative losses. Monthly loss factors prorated for the number of days the pond had a visible water level may be used as may real time evaporation data from NOAA or a local weather station. If the pond is not inspected on a routine basis through the month, no prorating of monthly factors will be allowed.
9. The amount of accretions from the recharge structure will be credited only in accordance with a decreed plan of augmentation or substitute water supply plan approved by the State Engineer.
10. All water delivered for recharge must be fully consumable:
    a. changed reservoir rights or the CU portion of changed senior ditch rights;
    b. transbasin water that has been imported into the South Platte River basin;
    c. nontributary water;
    d. excess (unused) accretions from the previous recharge of fully consumable water;
    e. water diverted in priority after "notice" of intent to fully consume the water;
    f. water diverted under free river.
11. Water may be delivered to recharge only if the net impact of the associated plan for augmentation is not negative. Water must first be delivered or exchanged to offset negative impacts of the plan for augmentation before it may be diverted for recharge.
12. Accounting must be performed on a daily basis with reports submitted at least monthly and within 30 days of the end of the month for which the accounting is being made. The volume of water diverted into recharge must be provided to the water commissioner weekly when requested by the water commissioner.