



COLORADO
Division of Water Resources
Department of Natural Resources

October 25, 2019

Rachel Frei, E.I.
Bishop-Brogden Associates, Inc.
333 West Hampden Avenue, Suite 1050
Englewood, CO 80110

**RE: Substitute Water Supply Plan, E-470's Sandy Acres Pit (WDID 0202643),
DRMS File No. M-80-110
SE1/4 of Section 26, T1S, R67W, 6th P.M.
Water Division 1, Water District 2, Adams County
SWSP ID: 3102**

Approval period: October 1, 2019 through September 30, 2024
Contact information for Ms. Frei: 303-806-8952 and rfrei@bbawater.com

Dear Ms. Frei:

This letter is in response to your application of August 9, 2019 submitted on behalf of E-470 Public Highway Authority ("E-470" or "Applicant") requesting a substitute water supply plan ("SWSP") for the Sandy Acres Pit currently permitted under the Division of Reclamation Mining and Safety (DRMS File No. M-80-110). This plan was submitted pursuant to C.R.S. 37-90-137(11). The fee of \$257 for the renewal of the substitute water supply plan has been received (receipt no. 3693247).

Plan Operation

The Sandy Acres Pit (WDID 0210403) is located on E-470's property in the SE1/4 of Section 26, Township 1 South, Range 67 West of the 6th P.M. The mining operations at the Sandy Acres Pit resulted in the creation of an unlined pond, as shown on the attached Figure 1. The Sandy Acres Pit is no longer an active mining site and there are no plans for future mining. E-470 purchased the property containing the Sandy Acres Pit in 2000 in conjunction with the construction of the E-470 highway. As of July 1, 2016, E-470 has backfilled the unlined gravel pit so that no exposed groundwater remains. This SWSP seeks to replace continuing lagged depletions from evaporation associated with previously exposed groundwater at Sandy Acres Pit using water leased from the City of Aurora ("Aurora").

Note that the approval of this substitute water supply plan does not relieve the Applicant and/or landowner of the requirement to obtain future SWSPs or a Water Court decree approving a permanent plan for augmentation or mitigation to ensure the long-term lagged depletions are replaced after gravel mining operations have ceased. The Sandy



Acres Pit reclamation plan was amended on September 3, 2014 from unlined ground water pond to backfilling the site. As of July 1, 2016, backfilling operations, which consisted of filling the pit with inert material from the Brannan Sand and Gravel Company ("Brannan") Pit 29 (DRMS M1980-183), were complete and no exposed groundwater remained. The Applicant indicates that lagged depletions associated with previously exposed groundwater on the site will extend until September 2024. Continued operation under an approved SWSP or decreed plan for augmentation will be required until all lagged depletions from the Sandy Acres Pit are replaced.

Depletions

The depletions that will be covered by this SWSP are limited to ongoing lagged depletions caused by previous evaporation from the ground water exposed to the atmosphere, all of which occurred after December 31, 1980. According to the information submitted, no water surface was exposed within the reclamation permit boundary prior to January 1, 1981. A survey of the Sandy Acres Pit was conducted by Western Water Surveying on June 14, 2012 indicating that the maximum area of the pit is equal to 33.02 acres. In the previous SWSP the evaporative calculation was based on a surface area of 33.02 acres. On August 8, 2015, R. W. Bayer Associates re-surveyed the partially backfilled pond and determined an updated maximum surface area of 25.21 acres. Therefore for the purpose of this SWSP the evaporation depletions were based on an exposed surface area of 25.21 acres.

The net evaporative depletions to the South Platte River will be calculated as the difference between gross evaporation and the effective precipitation, where the effective precipitation is equal to 70% of the total precipitation. The gross evaporation will be calculated based upon evaporation atlases in NOAA Technical Report NWS 33 and the monthly distribution using the State Engineer's monthly evaporation distribution for elevation below 6,500 feet. The annual gross evaporation rate for this location is approximately 44.69 inches (3.72 feet). The annual gross precipitation rate for this location is approximately 13.80 inches, based on average annual precipitation from 1974 through 2013, taken from the Brighton 1NE weather station. The effective precipitation is 9.66 inches (13.80 inches X 70%).

Computation of evaporation under this plan was reduced during the ice covered period. You have assumed the ice covered period to occur during the months of December and January, based on the average temperatures of 29.81°F for December and 29.03°F for January; taken from the Brighton 1NE weather station. However, for the purpose of this SWSP, the Applicant shall replace the net evaporation depletions from the exposed groundwater surface area that occurred during the assumed ice covered period (the months of December and January) for any time that the pit was not completely covered by ice.

Depletions resulting from evaporation will be calculated using the Alluvial Water Accounting System ("AWAS") model developed by the IDS Group at Colorado State University. The AWAS - alluvial aquifer model uses four aquifer input parameters as follows: 1) X-distance from the well (pond) to the river, 2) W-distance from the aquifer boundary through the well (pond) to the river channel, 3) T-transmissivity of the alluvial aquifer (in gallons per foot/day) between the well (pond) and the river, and 4) S-specific yield. All distances were measured

from/through the centroid the pond exposed surface area to the South Platte River. The parameters used in the model are shown in the table below.

Glover Parameters - Sandy Acres Pit Pond

	X (ft)	W (ft)	T (gpd/ft)	S
Pond	3,173.4	12,172.6	78,729	0.2

The aquifer boundary and transmissivity were estimated from the Division of Water Resources (“DWR”) South Platte River Decision Support System (“SPDSS”) GIS shapefile. The AWAS analysis indicates that 95 percent of depletions affect the South Platte River within eight years after the SWSP period. The monthly steady state depletions resulting from the AWAS analysis are shown on the attached Table 1.

Based on the aforementioned consumptive use associated with previous years’ exposed groundwater and the lagged depletion calculation provided above, the remaining lagged depletions affecting the South Platte River are according to the following table:

Time period	Lagged depletions (AF)
October 2019 through September 2020	13.90
October 2020 through September 2021	10.08
October 2021 through September 2022	7.33
October 2022 through September 2023	5.31
October 2023 through September 2024	3.88
Total depletions during SWSP period	40.50

Replacements

The source of replacement water for this SWSP will be a lease of up to 129.25 acre-feet of fully consumable water leased from the Aurora. A copy of the current lease was provided to this office with the SWSP request and is attached to this letter. The current lease is valid through September 2024. Water leased from Aurora would be released from Robert W. Hite Treatment Facility (a/k/a Metro Wastewater Treatment Plant MWWTP) (WDID 0200700) in the SW1/4 of the SW1/4 of Section 1, Township 3 South, Range 68 West of the 6th P.M. A transit loss of 0.5 percent per mile is assessed to deliveries made to the South Platte River. The MWWTP is located 11.5 miles upstream of the point of depletions of Sandy Acres Pit, thus the total transit loss will be 5.75 percent. Replacement supplies from Aurora include transit loss, so all Sandy Acres Pit depletions are fully replaced at the point of depletions from October 2019 through September 2024 as shown in Table 2. Conveyance loss for delivery of augmentation water is subject to assessment and modification as determined by the division engineer. Currently 0.5 percent per mile conveyance loss is being assessed by the Division Engineer, subject to change depending upon current conditions. Any changes to the assessed conveyance loss will be communicated to the Division One Call List via email.

The leased water consists of fully consumable water derived from prior municipal use by Aurora. The water provided by Aurora may be supplies from any water right approved for augmentation purposes.

The Applicant shall ensure that the replacement water makes it to the calling water right. The division engineer, or his designated representative, will administer all such water transported in the South Platte River or its tributaries, including water for replacement of depletions, past intervening headgates 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 plan, 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.

Conditions of Approval

I hereby approve the SWSP in accordance with Section 37-90-137(11), C.R.S., subject to the following conditions:

1. This SWSP shall be valid for the period of October 1, 2019 through September 30, 2024, unless otherwise revoked or superseded by a decree. **This SWSP replaces all remaining lagged depletions from the previous exposure of groundwater, and prior operations, at the gravel pit, therefore no renewal of this SWSP is required.**
2. Replacements under this SWSP are limited to the lagged depletions associated with previous evaporation losses at the site. The total post evaporation depletion at the Sandy Acres Pit during this SWSP period shall not exceed 40.5 acre-feet.
3. **No ground water exposure is allowed under this SWSP.** Well permit no. 78820-F was previously issued for the Sandy Acres Pit but was abandoned upon the backfilling of the site.
4. Approval of this plan is for the ongoing lagged depletions associated with evaporation from previously exposed groundwater on the site. Any additional uses of this water must first be approved by this office.
5. 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 release of replacement water may be aggregated to maximize beneficial use if approved by the water commissioner or division engineer. The water commissioner and/or the division engineer shall determine the rate and timing of an aggregated release.

6. Conveyance loss for delivery of augmentation water to the point of depletion on the South Platte River is subject to assessment and modification as determined by the division engineer.
7. Adequate accounting of depletions and replacements must be provided to the division engineer in Greeley (Div1Accounting@state.co.us), the River Operations & Compact Coordinator (Brent Schantz at Brent.Schantz@state.co.us) and the water commissioner (Jorge Vidal at Jorge.Vidal@state.co.us) on a monthly basis. All amounts shall be in acre-feet. All submitted accounting must conform to the Administration Protocol *"Augmentation Plan Accounting - Division One, South Platte River"* (attached).

In addition, the Applicant shall verify that the City of Aurora ("Aurora") has submitted reports to the division engineer that include accounting of all replacement water controlled by Aurora showing the total volume of water under its control, and the amount committed to each of the recipients of the water, including the water committed to this plan.

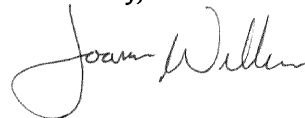
8. Water used for augmentation in this plan must be legally available for said use, augmentation. It is the Applicant's responsibility to ensure that the replacement water is decreed for said augmentation purposes in this plan.
9. The name, address, and phone number of a contact person who will be responsible for the operation and accounting of this plan must be provided on the accounting forms to the division engineer and water commissioner.
10. The approval of this substitute water supply plan does not relieve the Applicant and/or landowner of the requirement to obtain future SWSPs or a Water Court decree approving a permanent plan for augmentation or mitigation to ensure the long-term lagged depletions are replaced after gravel mining operations have ceased. The Sandy Acres Pit reclamation plan was amended on September 3, 2014 from unlined ground water pond to backfilling the site. As of July 1, 2016, backfilling operations, which consisted of filling the pit with inert material from the Brannan Sand and Gravel Company ("Brannan") Pit 29 (DRMS M1980-183), were complete and no exposed groundwater remained. The Applicant indicates that lagged depletions associated with previously exposed groundwater on the site will extend until September 2024. Continued operation under an approved SWSP or decreed plan for augmentation will be required until all lagged depletions from the Sandy Acres Pit are replaced.
11. The division engineer, or his designated representative, will administer all such water transported in the South Platte 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 installation 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.

12. 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.
13. 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 SWSP is of a quality to meet requirements of use to senior appropriations. As such, water quality data or analyses may be requested at any time to determine if the water quality is appropriate for downstream water users.
14. 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 SWSP. 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 Ioana Comaniciu in Denver at (303) 866-3581 or Dean Santistevan in Greeley at (970) 352-8712.

Sincerely,



Jeff Deatherage, P.E.
Chief of Water Supply

Attachments: Figure 1, Tables 1 and 2
Aurora Lease

Administration Protocol “*Augmentation Plan Accounting, Division One - South Platte River*”

Ec: Dean Santistevan, Assistant Division Engineer, Dean.Santistevan@state.co.us

Jorge Vidal, Water Commissioner District 2, Jorge.Vidal@state.co.us

Brent Schantz, River Operations & Compact Coordinator, Brent.Schantz@state.co.us

Division of Reclamation Mining and Safety

JD/JMW/idc: Sandy Acres approval (19-24)

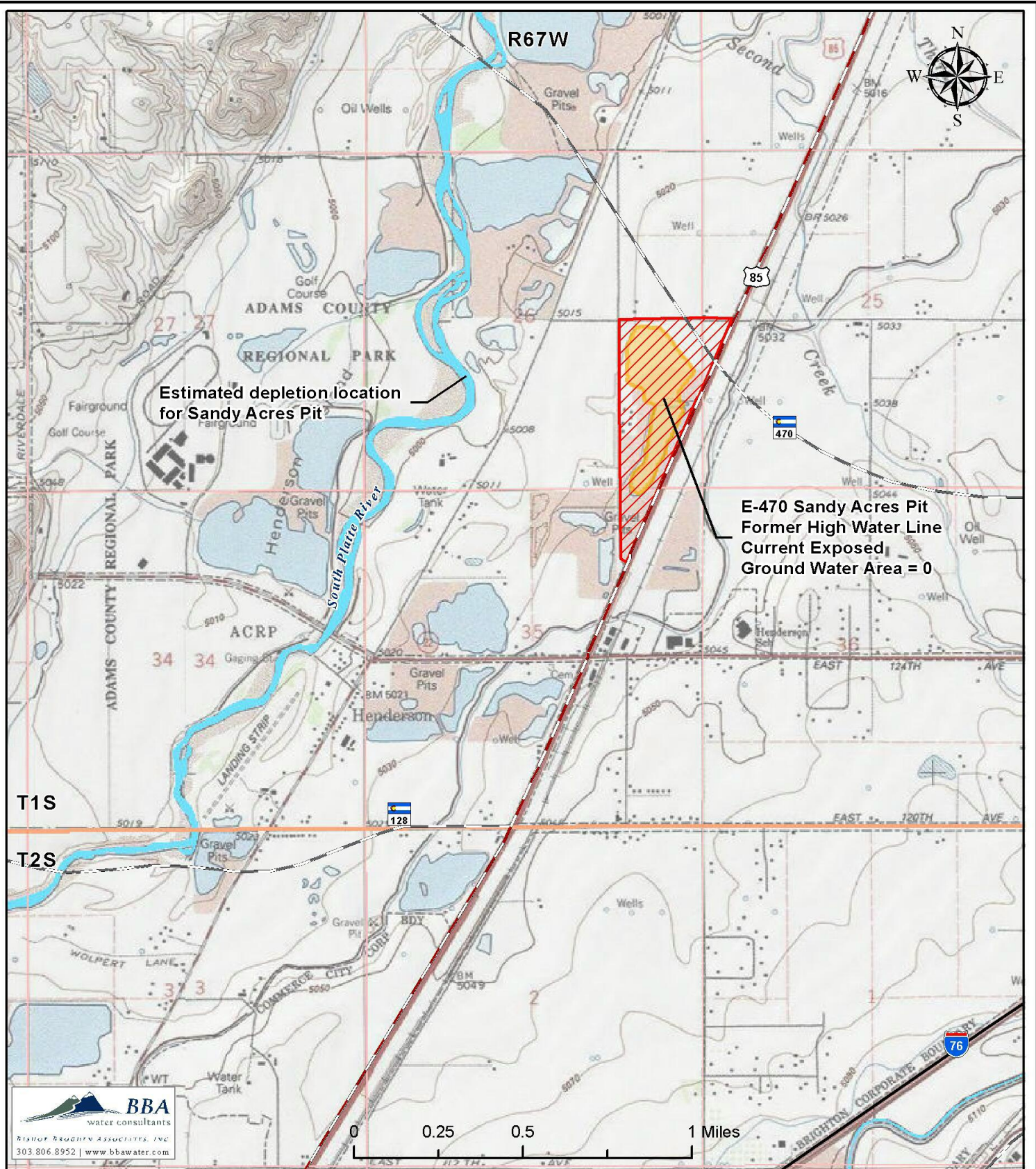


Table 1
E-470 Public Highway Authority
Sandy Acres Pit SWSP Operations
Monthly Summary

Month								Replacement Supplies (ac-ft)		Transit Loss from MWWTP (ac-ft)		Net Effect to River (ac-ft)
	Gross Evaporation (inches)	Average Annual Precipitation (inches)	Effective Precipitation (inches)	Net Evaporation (inches)	Total Exposed Pond Surface Area (ac)	Total Net Pond Evaporation (ac-ft)	Total Net Lagged Pond Evap Depletion (ac-ft)	Leased from Central	Leased from Aurora			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
Oct-14	3.13	0.88	0.62	2.51	33.02	6.91	-9.39	10.00			-0.58	0.04
Nov-14	1.79	0.75	0.53	1.26	33.02	3.47	-8.78	9.50			-0.55	0.18
Dec-14	1.34	0.48	0.33	1.01	33.02	0	-7.83	8.50			-0.49	0.19
Jan-15	1.34	0.42	0.29	1.05	33.02	0	-6.71	7.25			-0.42	0.12
Feb-15	1.56	0.38	0.27	1.30	33.02	3.56	-5.91	6.50			-0.37	0.21
Mar-15	2.46	1.11	0.78	1.68	33.02	4.62	-5.74	6.25			-0.36	0.15
Apr-15	4.02	1.69	1.18	2.84	33.02	7.82	-5.85	6.25			-0.36	0.04
May-15	5.36	2.30	1.61	3.76	33.02	10.34	-6.34	1.00	5.75		-0.39	0.02
Jun-15	6.48	1.54	1.08	5.40	33.02	14.86	-7.17		7.62		-0.44	0.01
Jul-15	6.70	1.51	1.06	5.64	33.02	15.53	-8.26		8.77		-0.50	0.01
Aug-15	6.03	1.61	1.12	4.91	33.02	13.51	-9.18		9.74		-0.56	0.00
Sep-15	4.47	1.13	0.79	3.68	25.51	7.81	-9.50		10.15		-0.58	0.07
Oct-15	3.13	0.88	0.62	2.51	25.51	5.34	-9.31		9.97		-0.57	0.09
Nov-15	1.79	0.75	0.53	1.26	25.51	2.68	-8.53		9.10		-0.52	0.05
Dec-15	1.34	0.48	0.33	1.01	25.51	0	-7.59		8.10		-0.47	0.04
Jan-16	1.34	0.42	0.29	1.05	25.51	0	-6.59		7.02		-0.40	0.03
Feb-16	1.56	0.38	0.27	1.30	25.51	2.75	-5.85		6.24		-0.36	0.03
Mar-16	2.46	1.11	0.78	1.68	25.51	3.57	-5.63		6.01		-0.35	0.03
Apr-16	4.02	1.69	1.18	2.84	25.51	6.04	-5.66		6.03		-0.35	0.02
May-16	5.36	2.30	1.61	3.76	25.51	7.99	-5.98		6.38		-0.37	0.03
Jun-16	6.48	1.54	1.08	5.40	25.51	11.48	-6.53		6.96		-0.40	0.03
Jul-16	6.70	1.51	1.06	5.64	0	0	-7.07		7.81		-0.45	0.29
Aug-16	6.03	1.61	1.12	4.91	0	0	-6.30		8.54		-0.49	1.75
Sep-16	4.47	1.13	0.79	3.68	0	0	-5.44		8.81		-0.51	2.86
Oct-16	3.13	0.88	0.62	2.51	0	0	-4.84		8.50		-0.49	3.17
Nov-16	1.79	0.75	0.53	1.26	0	0	-4.40		4.67		-0.27	0.00
Dec-16	1.34	0.48	0.33	1.01	0	0	-4.08		4.33		-0.25	0.00
Jan-17	1.34	0.42	0.29	1.05	0	0	-3.81		4.05		-0.23	0.01
Feb-17	1.56	0.38	0.27	1.30	0	0	-3.60		3.82		-0.22	0.00
Mar-17	2.46	1.11	0.78	1.68	0	0	-3.41		3.62		-0.21	0.00
Apr-17	4.02	1.69	1.18	2.84	0	0	-3.26		3.46		-0.20	0.00
May-17	5.36	2.30	1.61	3.76	0	0	-3.11		3.30		-0.19	0.00
Jun-17	6.48	1.54	1.08	5.40	0	0	-2.99		3.18		-0.18	0.01
Jul-17	6.70	1.51	1.06	5.64	0	0	-2.89		3.07		-0.18	0.00
Aug-17	6.03	1.61	1.12	4.91	0	0	-2.78		2.95		-0.17	0.00
Sep-17	4.47	1.13	0.79	3.68	0	0	-2.69		2.86		-0.16	0.01
Oct-17	3.13	0.88	0.62	2.51	0	0	-2.60		2.76		-0.16	0.00
Nov-17	1.79	0.75	0.53	1.26	0	0	-2.52		2.68		-0.15	0.01
Dec-17	1.34	0.48	0.33	1.01	0	0	-2.45		2.60		-0.15	0.00
Jan-18	1.34	0.42	0.29	1.05	0	0	-2.37		2.52		-0.14	0.01
Feb-18	1.56	0.38	0.27	1.30	0	0	-2.31		2.46		-0.14	0.01
Mar-18	2.46	1.11	0.78	1.68	0	0	-2.25		2.39		-0.14	0.00
Apr-18	4.02	1.69	1.18	2.84	0	0	-2.18		2.32		-0.13	0.01
May-18	5.36	2.30	1.61	3.76	0	0	-2.12		2.25		-0.13	0.00
Jun-18	6.48	1.54	1.08	5.40	0	0	-2.07		2.20		-0.13	0.00
Jul-18	6.70	1.51	1.06	5.64	0	0	-2.01		2.14		-0.12	0.01
Aug-18	6.03	1.61	1.12	4.91	0	0	-1.95		2.07		-0.12	0.00
Sep-18	4.47	1.13	0.79	3.68	0	0	-1.90		2.02		-0.12	0.00

Table 1
E-470 Public Highway Authority
Sandy Acres Pit SWSP Operations
Monthly Summary

Month								Replacement Supplies (ac-ft)		Transit Loss from MWWTP (ac-ft)		Net Effect to River (ac-ft)
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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)		
Oct-18	3.13	0.88	0.62	2.51	0	0	-1.85		1.97	-0.11	0.01	
Nov-18	1.79	0.75	0.53	1.26	0	0	-1.81		1.93	-0.11	0.01	
Dec-18	1.34	0.48	0.33	1.01	0	0	-1.75		1.86	-0.11	0.00	
Jan-19	1.34	0.42	0.29	1.05	0	0	-1.71		1.82	-0.10	0.01	
Feb-19	1.56	0.38	0.27	1.30	0	0	-1.66		1.77	-0.10	0.01	
Mar-19	2.46	1.11	0.78	1.68	0	0	-1.61		1.71	-0.10	0.00	
Apr-19	4.02	1.69	1.18	2.84	0	0	-1.56		1.66	-0.10	0.00	
May-19	5.36	2.30	1.61	3.76	0	0	-1.52		1.62	-0.09	0.01	
Jun-19	6.48	1.54	1.08	5.40	0	0	-1.49		1.59	-0.09	0.01	
Jul-19	6.70	1.51	1.06	5.64	0	0	-1.45		1.54	-0.09	0.00	
Aug-19	6.03	1.61	1.12	4.91	0	0	-1.40		1.49	-0.09	0.00	
Sep-19	4.47	1.13	0.79	3.68	0	0	-1.37		1.46	-0.08	0.01	
Oct-19	3.13	0.88	0.62	2.51	0	0	-1.33		1.42	-0.08	0.01	
Nov-19	1.79	0.75	0.53	1.26	0	0	-1.30		1.38	-0.08	0.00	
Dec-19	1.34	0.48	0.33	1.01	0	0	-1.27		1.35	-0.08	0.00	
Jan-20	1.34	0.42	0.29	1.05	0	0	-1.24		1.32	-0.08	0.00	
Feb-20	1.56	0.38	0.27	1.30	0	0	-1.20		1.28	-0.07	0.01	
Mar-20	2.46	1.11	0.78	1.68	0	0	-1.17		1.25	-0.07	0.01	
Apr-20	4.02	1.69	1.18	2.84	0	0	-1.14		1.21	-0.07	0.00	
May-20	5.36	2.30	1.61	3.76	0	0	-1.11		1.18	-0.07	0.00	
Jun-20	6.48	1.54	1.08	5.40	0	0	-1.08		1.15	-0.07	0.00	
Jul-20	6.70	1.51	1.06	5.64	0	0	-1.05		1.12	-0.06	0.01	
Aug-20	6.03	1.61	1.12	4.91	0	0	-1.02		1.09	-0.06	0.01	
Sep-20	4.47	1.13	0.79	3.68	0	0	-0.99		1.06	-0.06	0.01	
Oct-20	3.13	0.88	0.62	2.51	0	0	-0.97		1.03	-0.06	0.00	
Nov-20	1.79	0.75	0.53	1.26	0	0	-0.94		1.00	-0.06	0.00	
Dec-20	1.34	0.48	0.33	1.01	0	0	-0.92		0.98	-0.06	0.00	
Jan-21	1.34	0.42	0.29	1.05	0	0	-0.90		0.96	-0.06	0.00	
Feb-21	1.56	0.38	0.27	1.30	0	0	-0.88		0.94	-0.05	0.01	
Mar-21	2.46	1.11	0.78	1.68	0	0	-0.85		0.91	-0.05	0.01	
Apr-21	4.02	1.69	1.18	2.84	0	0	-0.82		0.88	-0.05	0.01	
May-21	5.36	2.30	1.61	3.76	0	0	-0.80		0.85	-0.05	0.00	
Jun-21	6.48	1.54	1.08	5.40	0	0	-0.78		0.83	-0.05	0.00	
Jul-21	6.70	1.51	1.06	5.64	0	0	-0.76		0.81	-0.05	0.00	
Aug-21	6.03	1.61	1.12	4.91	0	0	-0.74		0.79	-0.05	0.00	
Sep-21	4.47	1.13	0.79	3.68	0	0	-0.72		0.77	-0.04	0.01	
Oct-21	3.13	0.88	0.62	2.51	0	0	-0.71		0.76	-0.04	0.01	
Nov-21	1.79	0.75	0.53	1.26	0	0	-0.69		0.74	-0.04	0.01	
Dec-21	1.34	0.48	0.33	1.01	0	0	-0.67		0.72	-0.04	0.01	
Jan-22	1.34	0.42	0.29	1.05	0	0	-0.65		0.69	-0.04	0.00	
Feb-22	1.56	0.38	0.27	1.30	0	0	-0.63		0.67	-0.04	0.00	
Mar-22	2.46	1.11	0.78	1.68	0	0	-0.61		0.65	-0.04	0.00	
Apr-22	4.02	1.69	1.18	2.84	0	0	-0.60		0.64	-0.04	0.00	
May-22	5.36	2.30	1.61	3.76	0	0	-0.58		0.62	-0.04	0.00	
Jun-22	6.48	1.54	1.08	5.40	0	0	-0.57		0.61	-0.04	0.00	
Jul-22	6.70	1.51	1.06	5.64	0	0	-0.55		0.59	-0.03	0.01	
Aug-22	6.03	1.61	1.12	4.91	0	0	-0.54		0.58	-0.03	0.01	
Sep-22	4.47	1.13	0.79	3.68	0	0	-0.53		0.57	-0.03	0.01	

Table 1
E-470 Public Highway Authority
Sandy Acres Pit SWSP Operations
Monthly Summary

Month								Replacement Supplies (ac-ft)		Transit Loss from MWWTP (ac-ft)		Net Effect to River (ac-ft)	
	Gross Evaporation (inches)	Average Annual Precipitation (inches)	Effective Precipitation (inches)	Net Evaporation (inches)	Total Exposed Pond Surface Area (ac)	Total Net Pond Evaporation (ac-ft)	Total Net Lagged Pond Evap Depletion (ac-ft)	Leased from Central	Leased from Aurora				
		(1)								(2)	(3)	(4)	(5)
Oct-22	3.13	0.88	0.62	2.51	0	0	-0.51		0.55		-0.03	0.01	
Nov-22	1.79	0.75	0.53	1.26	0	0	-0.50		0.54		-0.03	0.01	
Dec-22	1.34	0.48	0.33	1.01	0	0	-0.49		0.52		-0.03	0.00	
Jan-23	1.34	0.42	0.29	1.05	0	0	-0.48		0.51		-0.03	0.00	
Feb-23	1.56	0.38	0.27	1.30	0	0	-0.46		0.49		-0.03	0.00	
Mar-23	2.46	1.11	0.78	1.68	0	0	-0.44		0.47		-0.03	0.00	
Apr-23	4.02	1.69	1.18	2.84	0	0	-0.43		0.46		-0.03	0.00	
May-23	5.36	2.30	1.61	3.76	0	0	-0.42		0.45		-0.03	0.00	
Jun-23	6.48	1.54	1.08	5.40	0	0	-0.41		0.44		-0.03	0.00	
Jul-23	6.70	1.51	1.06	5.64	0	0	-0.40		0.43		-0.02	0.01	
Aug-23	6.03	1.61	1.12	4.91	0	0	-0.39		0.42		-0.02	0.01	
Sep-23	4.47	1.13	0.79	3.68	0	0	-0.38		0.41		-0.02	0.01	
Oct-23	3.13	0.88	0.62	2.51	0	0	-0.37		0.40		-0.02	0.01	
Nov-23	1.79	0.75	0.53	1.26	0	0	-0.36		0.39		-0.02	0.01	
Dec-23	1.34	0.48	0.33	1.01	0	0	-0.35		0.38		-0.02	0.01	
Jan-24	1.34	0.42	0.29	1.05	0	0	-0.34		0.37		-0.02	0.01	
Feb-24	1.56	0.38	0.27	1.30	0	0	-0.34		0.37		-0.02	0.01	
Mar-24	2.46	1.11	0.78	1.68	0	0	-0.33		0.36		-0.02	0.01	
Apr-24	4.02	1.69	1.18	2.84	0	0	-0.32		0.34		-0.02	0.00	
May-24	5.36	2.30	1.61	3.76	0	0	-0.31		0.33		-0.02	0.00	
Jun-24	6.48	1.54	1.08	5.40	0	0	-0.30		0.32		-0.02	0.00	
Jul-24	6.70	1.51	1.06	5.64	0	0	-0.30		0.32		-0.02	0.00	
Aug-24	6.03	1.61	1.12	4.91	0	0	-0.29		0.31		-0.02	0.00	
Sep-24	4.47	1.13	0.79	3.68	0	0	-0.27		0.29		-0.02	0.00	
Total						128.27	-299.41	55.25	272.91		-18.87	9.88	

Notes:

- (1) Gross evaporation equal to annual average gross evaporation (based on NOAA Technical Report NWS 33) distributed monthly using the State Engineers monthly evaporation distribution factors for elevation below 6500 ft.
- (2) Average annual precipitation summarized from monthly data recorded at Brighton 1NE, CO (ID #USC00050950) NOAA weather station for the period 1974-2013.
- (3) Effective precipitation equal to monthly precipitation in (2) multiplied by 0.70.
- (4) Net evaporation equal to gross evaporation in (1) - effective precipitation in (3).
- (5) Exposed water surface area at the Sandy Acres Pit. Note that the projected exposed surface area is zero after June 2016 based on completion of backfilling operations before July 1, 2016.
- (6) Net pond evaporation equal to net evaporation rate in (4) multiplied by total exposed pond surface area in (5) and converted from inches to feet. Note that evaporation is assumed to equal zero in December and January because the average daily temperature at the Brighton 1NE NOAA weather station is below freezing.
- (7) Lagged depletions from pond evaporation in (6), based on IDS AWAS Glover Analysis using the following parameters: T = 78,729 gallons per day per foot; S = 0.2; W = 12,172.6 feet; X = 3,173.4 feet. All future lagged evaporation depletions are accounted for by wrapping on a per-month basis beginning in the 2016 Plan Year.
- (8) Fully-consumable sewerer return flows leased from Central Colorado Water Conservation District (released from MWWTP) per contract dated September 22, 2014.
- (9) Fully-consumable sewerer return flows leased from City of Aurora, Colorado (released from MWWTP) per IGA executed June 30, 2015. Starting in November 2015, the leased amounts are reduced from the amounts stated in the original IGA to account for reduced evaporation due to backfilling operations at Sandy Acres Pit.
- (10) Transit loss equal to 0.5% per mile. Distance from MWWTP to Sandy Acres depletion point is 11.5 miles.
- (11) Net effect to river equal to lagged depletions in (7) plus replacement supplies in (8) and/or (9) plus transit loss in (10).

Table 2
E-470 Public Highway Authority
Sandy Acres Pit SWSP Operations
Annual Summary

Plan Year	Total Net Pond Evaporation (ac-ft)	Total Net Lagged Pond Evap Depletion (ac-ft)	Replacement Supplies (ac-ft)			Transit Loss from MWWTP (ac-ft)	Net Effect to River (ac-ft)
			Leased from Central	Leased from Aurora	Total Replacement Supplies		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
2015	88.4	-90.7	55.3	42.0	97.3	-5.6	1.0
2016	39.8	-80.5	0.0	91.0	91.0	-5.2	5.3
2017	0.0	-41.9	0.0	47.8	47.8	-2.7	3.2
2018	0.0	-26.7	0.0	28.4	28.4	-1.6	0.0
2019	0.0	-19.2	0.0	20.4	20.4	-1.2	0.1
2020	0.0	-13.9	0.0	14.8	14.8	-0.9	0.1
2021	0.0	-10.1	0.0	10.8	10.8	-0.6	0.1
2022	0.0	-7.3	0.0	7.8	7.8	-0.5	0.1
2023	0.0	-5.3	0.0	5.7	5.7	-0.3	0.1
2024	0.0	-3.9	0.0	4.2	4.2	-0.2	0.1
Total	128.3	-299.4	55.3	272.9	328.2	-18.9	9.9
2020-2022 Total	0.0	-31.3	0.0	33.4	33.4	-1.9	0.2

Notes:

(1) Net pond evaporation equal to net evaporation rate from Table 1 column 4 multiplied by total exposed pond surface area from Table 1 column 5, converted to feet, and summed for each Plan Year.

(2) Lagged depletions from pond evaporation in (1) based on IDS AWAS Glover Analysis using the following parameters: T = 78,729 gallons/day/foot; S = 0.2; W = 12,172.6 feet; X = 3,173.4 feet. All future lagged evaporation depletions are accounted for by wrapping on a per-month basis beginning in the 2016 Plan Year. Calculated monthly and summed for each Plan Year.

(3) Fully-consumable sewered return flows leased from Central Colorado Water Conservation District (released from MWWTP) per contract dated September 22, 2014.

(4) Fully-consumable sewered return flows leased from City of Aurora, Colorado (released from MWWTP) per IGA executed June 30, 2015. Starting in November 2015, the leased amounts are reduced from the amounts stated in the original IGA to account for reduced evaporation due to backfilling operations at Sandy Acres Pit.

(5) Equal to (3) + (4).

(6) Transit loss equal to 0.5% per mile. Distance from MWWTP to Sandy Acres depletion point is 11.5 miles.

(7) Net effect to river equal to lagged depletions in (2) plus replacement supply in (5) plus transit loss in (6).

INTERGOVERNMENTAL AGREEMENT FOR DELIVERY OF RECLAIMED WASTEWATER

This Intergovernmental Agreement ("Agreement") is entered into as of the Effective Date defined in Paragraph 21, below, by and between the City of Aurora, Colorado, a Colorado municipal corporation of the counties of Adams, Arapahoe and Douglas acting by and through its Utility Enterprise ("Aurora"), whose address is 15151 East Alameda Parkway, Suite 3600, Aurora, Colorado 80012, and the E-470 Public Highway Authority, a political subdivision of the State of Colorado, whose address is 22470 E. 6th Parkway, Suite 100, Aurora, Colorado 80018 ("Lessee"). Aurora and Lessee collectively each referred to herein as a "Party" and collectively as the "Parties."

WITNESSETH

WHEREAS, the Parties are authorized by Colorado law to cooperate and enter into intergovernmental agreements pursuant to Section 18(2) of Article XIV of the Colorado Constitution and C.R.S § 29-1-203; and

WHEREAS, Aurora has the right to use, sell, or lease certain of its fully reusable municipal wastewater return flows to the South Platte River ("Reclaimed Wastewater"); and

WHEREAS, such Reclaimed Wastewater is derived from trans-mountain or other reusable sources; and

WHEREAS, Lessee has a use for a certain portion of this Reclaimed Wastewater; and

WHEREAS, Aurora and Lessee desire to enter into this Agreement whereby Aurora shall lease a portion of such Reclaimed Wastewater to Lessee; and

WHEREAS, this Agreement will be of mutual benefit and convenience to Aurora and Lessee; and

WHEREAS, the Aurora Utility Enterprise staff has determined as a precondition to entering this Agreement that Aurora is able to fulfill all exchange and operational obligations that require Reclaimed Wastewater, that it is able to fulfill all existing long-term agreements that require Reclaimed Wastewater (including this Agreement) that require Reclaimed Wastewater and that all other needs of Aurora that may be fulfilled by these sources are met; and

NOW, THEREFORE, for and in consideration of the mutual promises and covenants contained herein, and other good and valuable consideration, the adequacy and sufficiency of which is hereby acknowledged, Aurora and Lessee hereby agree as follows:

AGREEMENT

1. **General Terms.** The terms of this Agreement shall commence on the Effective Date and continue until the last date for delivery of water as provided for on the water delivery schedule

attached hereto as Exhibit A such date being no later than the last day of September 2024. Said Agreement shall be made expressly subject to each of the terms and conditions set forth in this Agreement.

2. **Delivery Schedule.**

(a) Delivery. Delivery of the Reclaimed Wastewater will be made in accordance with the water delivery schedule set forth and attached hereto as Exhibit A and incorporated herein by this reference as the same may be modified pursuant to the procedure described in Paragraph 2(b), ("Delivery Schedule"). In no event shall the total amount of Reclaimed Wastewater delivered exceed the maximum amounts set forth in the Delivery Schedule, unless modified pursuant to the procedure described in Paragraph 2(b), below. As long as Aurora is capable of delivering the Reclaimed Wastewater to the delivery points according to the Delivery Schedule and, except with respect to such portion of the Reclaimed Wastewater as Lessee notifies Aurora it will not require or as Aurora uses for other purposes subject to Paragraph 14 below, Aurora delivers such Reclaimed Wastewater as required in this Agreement, Lessee shall be obligated to pay the per-acre foot charge set forth in Paragraph 8 below regardless of whether or not Lessee uses the Reclaimed Wastewater.

(b) Modification of the Delivery Schedule. At Lessee's written request the Delivery Schedule set forth in Exhibit A may be modified as follows: (1) the amount of Reclaimed Wastewater available for each upcoming year may be increased up to a maximum of 100 acre feet at Aurora's sole discretion, provided Lessee submits a request in writing on or before the first day of October of the preceding year; (2) the amount of Reclaimed Wastewater available for each upcoming year may be decreased provided Lessee submits a request in writing on or before the first day of October of the preceding year; (3) the amount of Reclaimed Wastewater available for each upcoming month may be increased, but not decreased at Aurora's sole discretion, provided Lessee submits a request in writing on or before the first day of the preceding month. Any increase granted by Aurora pursuant to this Paragraph 2(b) with respect to a given month shall be reflected as a corresponding increase in the annual amount available for the applicable year.

3. **Delivery Location.**

(a) Delivery Points. Lessee agrees that Aurora shall initially make its delivery of the Reclaimed Wastewater at the outfall of the Metro Wastewater Reclamation District's Robert W. Hite treatment facility ("Hite"). Lessee further agrees that Aurora may, in its sole discretion, satisfy its delivery obligations under this Agreement by delivering the Reclaimed Wastewater at any other delivery point or delivery points on the South Platte River (each of Hite and such other delivery points, hereinafter, a "Delivery Point" and collectively, the "Delivery Points"), provided that such alternative Delivery Points are located within a reach of the South Platte River beginning at or below Hite and continuing downstream to a point at or above the location on the South Platte River that is approximately in the NE¼ SW¼ Section 26, Township 1 South, Range 67 West, 6th P.M., near Henderson, Colorado (such location, the "Point of Use"). Lessee acknowledges and agrees that the alternate Delivery Points may include, but are not limited to, the confluence of Sand Creek and the South Platte River. Aurora will bear the responsibility for delivery of the Reclaimed Wastewater to these Delivery Points, and in its sole discretion may

determine which of the Delivery Points it will use at any given time. Once Aurora has completed its delivery of the Reclaimed Wastewater hereunder, Lessee shall assume sole liability for any loss, damage, or injury that may occur to persons or property as the direct or indirect result of the control and/or use of said Reclaimed Wastewater by Lessee. The amount of Reclaimed Wastewater reflected in the Delivery Schedule was calculated by Lessee to include any transportation losses, or "shrinkage," from Hite to Lessee's Point of Use downstream. Lessee also acknowledges the travel time between the alternate Delivery Points and Lessee's Point of Use varies, but that the timing for Aurora's delivery obligations as provided for under the Delivery Schedule shall remain the same regardless of Aurora's use of alternative Delivery Points.

(b) **Credit for Avoided Transit Loss.** Aurora's obligations with respect to the volume of Reclaimed Wastewater to be delivered under this Agreement are deemed to be satisfied if Aurora makes deliveries in such amounts as if delivered at Hite. Thus, if Aurora elects, in its sole discretion, to make its delivery of any Reclaimed Wastewater under this Agreement at a Delivery Point other than Hite, and if delivery at such alternative Delivery Point(s) results in reduced transit loss, Aurora shall be entitled to retain such avoided transit loss with no credit to Lessee in water, money or otherwise. Aurora shall maintain and provide to Lessee a monthly accounting and report of daily deliveries at the Delivery Point(s). If Aurora elects to deliver some or all of the Reclaimed Wastewater at alternative Delivery Point(s), then the foregoing reports shall include the calculated amount of avoided transit loss and the amount of water physically delivered at such alternative Delivery Point(s). For purposes of calculating any such avoided transit loss, the Parties hereby agree that the volume of Reclaimed Wastewater required to be delivered by Aurora in accordance with the Delivery Schedule shall be discounted by an amount equal to one-half of one percent (0.5%) of such volume during the April through September irrigation season, or one-fourth of one percent (0.25%) of such volume during the October through March non-irrigation season, for each river mile in distance between Hite and such alternative Delivery Point(s) (such distance calculated to the nearest one-tenth of a mile), or by such other amount as determined by the Division Engineer for Water Division No. 1 (such office or its replacement the "Division Engineer") or as specified in an applicable statute or decree from a court of applicable jurisdiction. The product of this calculation shall represent the amount of avoided transit loss in acre-feet, which Aurora shall be entitled to retain.

4. **Source and Quality of Reclaimed Wastewater.** The Reclaimed Wastewater to be provided by Aurora under this Agreement shall, at Aurora's discretion, consist of Aurora's reusable municipal return flows to the South Platte River, any fully consumable portion of changed irrigation water rights owned by, or available to Aurora, fully consumable water diverted pursuant to decrees entered in 03CW414, 03CW415 and 06CW104, and any other legal source of Reclaimed Wastewater available to Aurora. Under no circumstances shall this Agreement be interpreted to mean that Aurora must supply potable water should the sources set forth in this paragraph be unavailable. Aurora does not warrant or guaranty any water quality standards with respect to the Reclaimed Wastewater to be delivered as provided for under this Agreement and Lessee hereby waives any such warranty or guaranty.

5. **Use of Reclaimed Wastewater.** Lessee shall have the right to use and reuse to extinction the Reclaimed Wastewater delivered under this Agreement for water supply purposes, including without limitation replacement and exchange purposes in connection with any

substitute water supply plan approved by the Colorado State Engineer's Office, augmentation and exchange purposes in accordance with any augmentation plan or appropriative right of exchange decreed by the Colorado Water Court, and any other lawful exchanges; provided that such use is consistent with the terms of this Agreement and all applicable laws, rules and regulations. Notwithstanding the foregoing provision, however, this entire Agreement shall be void if the Reclaimed Wastewater is used in any manner that benefits United Water and Sanitation District, East Cherry Creek Valley Water and Sanitation District or Farmers Reservoir and Irrigation Company.

6. **Water Rights Accounting.** Lessee will be solely responsible for any and all reporting and accounting required by the Colorado State Engineer, the Division Engineer for Water Division 1, the Water Commissioner for Water Commissioner District 2, or any other lawful authority after Aurora makes its delivery of the Reclaimed Wastewater as provided for under this Agreement. This responsibility includes, but is not limited to, Lessee's withdrawal of the Reclaimed Wastewater from the South Platte River (if any) and Lessee's use of the Reclaimed Wastewater. Aurora will provide any and all reporting and accounting required by the Colorado State Engineer, the Division 1 Engineer, or any other lawful authority concerning proof of the reusability of the Reclaimed Wastewater and conveyance of the Reclaimed Wastewater to the Delivery Point.

7. **Subordination Clause.** This Agreement shall be made expressly subordinate to any present or future use of effluent by Aurora for the purposes of augmentation, exchange, or any other use which is or will be of greater direct benefit to Aurora and the users of its water delivery system, as well as to the water supply obligations which Aurora has incurred or will incur through any of the following: (a) the March 2, 1981, Water Agreement with the City of Arvada, Colorado and any renewals thereof; (b) the October 25, 1993, Effluent Agreement with the State of Colorado, Division of Parks and Outdoor Recreation and any renewals thereof; (c) its obligation pursuant to the Substitute Water Supply Plan for Upper Cherry Creek Management Association approved March 19, 1998, and any renewals thereof; (d) its obligations pursuant to Water Division 1, Case Nos. 95CW226 & 227, Case No. 99CW158, Case No. 01CW284 and Case No. 02CW341; (e) the April 23, 2001, Agreement for Reclaimed Wastewater with Calpine Corporation; (f) the May 20, 2003, Water Rights Purchase and Sale Agreement with the City of Thornton, Colorado; (g) the May 19, 2006, Reusable Water Agreement with the Central Colorado Water Conservancy District, and (h) any and all obligations resulting from any firm delivery annual lease or delivery contract of Reclaimed Wastewater executed prior to the date of this Agreement. The foregoing subordination does not, in and of itself, create an excuse for Aurora's failure to deliver the Reclaimed Wastewater under this Agreement. However, Aurora and Lessee agree that the purpose and effect of the foregoing subordination is to establish a priority among and between Aurora's obligations under this Agreement and Aurora's other obligations with respect to its Reclaimed Wastewater in the event of a *force majeure* event causing delay or interruption in Aurora's delivery of the Reclaimed Wastewater.

8. **Consideration.** Lessee agrees to pay to Aurora the amount of Three Hundred dollars (\$300.00) per acre-foot ("Unit Rate") for all Reclaimed Wastewater delivered under this Agreement in 2015. Starting with the calendar year 2016 and for each calendar year through the end of the term of this Agreement, the Unit Rate applicable to each calendar year shall be 102.5% of the Unit Rate for the previous calendar year.

9. **Payment.** On the second day of January 2015, and on each succeeding January 2 thereafter, Aurora shall bill Lessee for all Reclaimed Wastewater it will deliver to Lessee during that calendar year of the Agreement as set forth in the Delivery Schedule (as may have been modified by the Parties pursuant to Paragraph 2(b) above, as well as any additional Reclaimed Wastewater that was added to the Delivery Schedule for any month during the preceding calendar year, pursuant to Paragraph 2(b) above. Payment with respect to any increases in the monthly delivery amounts made during the last year of this Agreement shall be due upon invoice by Aurora. All billing shall be done on such forms as designated by Aurora for that purpose. Payment by Lessee shall be due no later than forty-five (45) days after such bill has been issued. If Lessee does not make the required payment by the due date, Aurora may give Lessee a notice of default. If Lessee does not cure the default by making full payment within thirty (30) days of receipt of any notice of default, then Aurora, in addition to pursuing any other remedies available to it, may declare this Agreement terminated. Any delay in Aurora's invoicing for payments under this Agreement shall not constitute a breach of Aurora's obligations and shall not relieve Lessee of its obligations to pay all consideration due hereunder. If Aurora fails to deliver the entirety of the Reclaimed Wastewater it is otherwise required to deliver under this Agreement during any calendar year, Lessee shall be entitled to a credit equal to the Unit Rate multiplied by the volume of such undelivered Reclaimed Wastewater against the payment due with respect to the next calendar year except with respect to any such shortfall occurring over the last year of this Agreement in which case Aurora shall reimburse Lessee such amount promptly following notice from Lessee.

10. **Non-Assignability and No Subleases.** Neither Aurora nor Lessee may assign its rights or delegate its duties hereunder without the prior written consent of the other Party. Lessee may not sublease the Reclaimed Wastewater to which it is entitled pursuant to this Agreement without the permission of Aurora, which permission Aurora may grant or withhold at its discretion.

11. **Successors and Assigns.** This Agreement and the rights and obligations created hereby shall be binding upon and inure to the benefit of the Parties hereto and their respective successors and assigns, if any are allowed. The Parties intend that each Party shall not incur any liability other than those liabilities directly running to such Party or its assigns permitted under this Agreement if any. Each Party therefore covenants and agrees, to the extent permitted by law, to indemnify, save and hold harmless the other Party from all liability, cost or expense of any kind, including such indemnified Party's costs of defense to any other party arising in connection with or relating in any way to the execution, delivery or performance of any allowed assignment or any related document by the parties thereto or to the consummation of any transaction in connection with such documents.

12. **No Rights Conferred.** Except as otherwise provided in this Agreement, the Parties acknowledge that all Reclaimed Wastewater leased hereunder is intended for the present and future use of Aurora. It is further understood and agreed to by the Parties that this Agreement shall confer no rights in such Reclaimed Wastewater upon Lessee, nor shall any future needs of Lessee for water enable Lessee to make claim against Aurora for any of Aurora's Reclaimed Wastewater, other water or water rights. Lessee further acknowledges the statutory prohibition against vesting of a right for a continued lease expressed in CRS § 31-35-201 applies in these circumstances.

13. **No Opposition to Aurora Water Court Matters.** From the date of execution of this Agreement through the conclusion hereof, Lessee agrees that neither it nor any successors, if any are allowed, will oppose Aurora in any Colorado Water Court applications filed by Aurora.

14. **Aurora Right to Request Reuse.** The Parties hereto acknowledge that hydrologic and other conditions may exist wherein Lessee may not need all or a portion of the Reclaimed Wastewater flow available to it under this Agreement. Aurora may contact Lessee, not more frequently than once per day, to determine if any of the Reclaimed Wastewater leased hereunder will not be needed.

15. **Entire Agreement of the Parties.** This Agreement represents the entire agreement of the Parties and neither Party has relied upon any fact or representation not expressly set forth herein. All prior and contemporaneous conversations, negotiations, possible alleged agreements, representations, covenants and warranties concerning the subject matter hereof, are merged in this Agreement.

16. **Amendment.** This Agreement may be amended, modified, changed, or terminated in whole or in part only by written agreement duly authorized and executed by the Parties hereto.

17. **Enforcement.** The Parties agree that this Agreement may be enforced in law or in equity for specific performance, injunctive, or other appropriate relief, including damages, as may be available according to the laws of the State of Colorado. It is specifically understood that, by executing this Agreement, each Party commits itself to perform pursuant to the terms hereof, and that any breach hereof resulting in any recoverable damages shall not thereby cause the termination of any obligations created by this Agreement unless such termination is requested by the Party not in breach hereof.

18. **Failure to Perform Due to Force Majeure.** Subject to the terms and conditions in this Paragraph, no Party to this Agreement shall be liable for any delay or failure to perform under this Agreement due solely to conditions or events of *force majeure*, as that term is specifically defined herein; provided that: (i) the non-performing Party gives the other Party prompt written notice describing the particulars of the occurrence of the *force majeure*; (ii) the suspension of performance is of no greater scope and of no longer duration than is required by the *force majeure* event or condition; and (iii) the non-performing Party proceeds with reasonable diligence to remedy its inability to perform and provides weekly progress reports to the other Party describing the actions taken to remedy the consequences of the *force majeure* event or condition. As used herein *force majeure* shall mean any delay or failure of a Party to perform its obligations under this Agreement caused by events beyond the Party's reasonable control, and without the fault or negligence of the Party, including, without limitation A) changes in state or federal law or administrative practice concerning, water rights administration, water quality or stream flow requirements, B) changes in state water rights administrative practice concerning the reuse of reclaimed wastewater through leases to others for use at locations other than Aurora, Colorado, including, but not limited to, challenges to retained dominion and control, C) acts of God, D) sudden actions of the elements such as floods, earthquakes, hurricanes, or tornadoes, E) sabotage, F) vandalism beyond that which can be reasonably prevented by the Party, G) terrorism, H) war, I) riots, J) fire, K) explosion, L) severe cold or hot weather, M) snow, N) drought [a condition more severe than that which occurred in 2002 in the South Platte River

Basin or any basin from which the Reclaimed Wastewater originates] O) other extreme weather conditions, P) blockades, Q) insurrection, R) strike, slow down or labor disruptions (even if such difficulties could be resolved by conceding to the demands of a labor group); S) actions by federal, state, municipal, or any other government or agency (including but not limited to, the adoption or change in any rule or regulation or environmental constraint imposed by federal, state or local government bodies) but only if such requirements, actions, or failures to act prevent or delay performance, T) inability, despite due diligence, to obtain required licenses, permits or approvals, and, U) changes of law relating to financial obligations, revenues and budgetary matters concerning Colorado local governments and their enterprises. In the event a *force majeure* event or condition prevents Aurora from delivering all or part of the agreed upon amounts of Reclaimed Wastewater to Lessee, Aurora shall refund all advance payments made for that water not delivered within sixty (60) days of the conclusion of the *force majeure* event or the cancellation of the Agreement pursuant to the remaining provisions of this Paragraph. In no event will any delay or failure of performance caused by any conditions or events of *force majeure* extend this Agreement beyond its stated term. In the event any delay or failure of performance on the part of the Party claiming *force majeure* continues for an uninterrupted period of more than one hundred twenty (120) days from its occurrence or inception as noticed pursuant to this Paragraph, the Party not claiming *force majeure* may, at any time following the end of such one hundred twenty (120) day period, terminate this Agreement upon written notice to the Party claiming *force majeure*, without further obligation except as to costs and balances incurred prior to the effective date of such termination.

19. **Sole Obligation of Utility Enterprise.**

(a) This Agreement shall never constitute a general obligation or other indebtedness of the City of Aurora ("City"), or a multiple fiscal year direct or indirect debt or other financial obligation whatsoever of the City within the meaning of the Constitution and laws of the State of Colorado or of the Charter and ordinances of the City.

(b) In the event of a default by Aurora's Utility Enterprise of any of its obligations under this Agreement, Lessee shall have no recourse for any amounts owed to it against any funds or revenues of the City except for those revenues derived from rates, fees or charges for the services furnished by, or the direct or indirect use of, the Water System and deposited in the Water Enterprise Fund, as the terms "Water System" and "Water Enterprise Fund" are defined in City Ordinance No. 2003-18, and then only after the payment of all operation and maintenance expenses of the Water System and all debt service and reserve requirements of any bonds, notes, or other financial obligations of the Utility Enterprise secured by a pledge of the net revenues of the Water Enterprise Fund. Notwithstanding any language herein to the contrary, nothing in this Agreement shall be construed as creating a lien upon any revenues of the Utility Enterprise or the City.

20. **Miscellaneous.**

(a) **Intent of Agreement.** This Agreement is intended to describe the rights and responsibilities of and between the named Parties and is not intended to, and shall not be deemed to confer rights upon any persons or entities not named as Parties, nor to limit in any way the powers and responsibilities of Aurora, Lessee, or any other entity not a party hereto.

(b) **Effect of Invalidity.** If any portion of this Agreement is held invalid or unenforceable for any reason by a court of competent jurisdiction as to either Party or as to both Parties, the entire Agreement will terminate.

(c) **Waiver of Breach.** Waiver of breach of any of the provisions of this Agreement by either Party shall not constitute a continuing waiver of any subsequent breach by said Party of either the same or any other provision of this Agreement.

(d) **Multiple Originals.** This Agreement may be simultaneously executed in any number of counterparts, each one of which shall be deemed an original, but all of which constitute one and the same Agreement.

(e) **Headings for Convenience.** Headings and titles contained herein are intended for the convenience and reference of the Parties only and are not intended to confine, limit, or describe the scope of intent of any provision of this Agreement.

(f) **Recordation.** Following the execution of this Agreement, the Parties may cause this Agreement to be recorded with the Clerk and Recorder's Office of such county or counties in Colorado as they may desire.

(g) **Notice.**

(i) All notices, requests, demands, or other communications (collectively, "Notices") hereunder shall be in writing and given by (i) established express delivery service which maintains delivery records requiring a signed receipt, (ii) hand delivery, or (iii) certified or registered mail, postage prepaid, return receipt requested to the Parties at the following address, or at such other address as the Parties may designate by Notice in the above manner.

To Aurora: City of Aurora
 15151 East Alameda Parkway, Suite 3600
 Aurora, CO 80012-1555
 Attn: Director, Aurora Water

with copy to City of Aurora
 15151 East Alameda Parkway, Suite 5300
 Aurora, CO 80012-1555
 Attn: City Attorney

with copy to Brownstein Hyatt Farber Schreck, LLP
 410 17th Street, Twenty Second Floor
 Denver, CO 80202
 Attn: Andrew L. Meyers, Esq.

To Lessee: E-470 Public Highway Authority
 22470 E. 6th Parkway, Suite 100
 Aurora, CO 80018
 Attn: Neil Thompson, P.E.

with copy to Icenogle Seaver Pogue PC
4725 South Monaco Street, Suite 225
Denver, CO 80237
Attn: Ed Icenogle, Esq.

Notices shall be effective (x) the next day following the date sent by an established express delivery service which maintains delivery records requiring a signed receipt, (y) upon receipt by the addressee of a hand delivery, or (z) three (3) days following the date of mailing via certified or registered mail, postage prepaid, return receipt requested.

(ii) Notwithstanding the foregoing, the Parties may communicate with respect to adjustments of the Delivery Schedule pursuant to Paragraph 2(b) by e-mail as follows: (A) to Aurora to John Murphy at jmurphy@auroragov.org; and (B) to Lessee to Austin Malotte at amalotte@bbawater.com or such other e-mail address as other address as the Parties may designate by Notice in the manner provided for under Paragraph 20(g)(i) above.

(h) **Non-Business Days.** If any date for any action under this Agreement falls on a Saturday, Sunday or a day that is a "holiday" as such term is defined in Rule 6 of the Colorado Rules of Civil Procedure, then the relevant date shall be extended automatically until the next business day.

(i) **Commissions and Fees.** Each Party shall be solely responsible for the payment of any and all real estate commissions or other commissions or fees that it incurs with respect to this Agreement.

(j) **Governing Law and Venue.** This Agreement and its application shall be construed in accordance with the law of the State of Colorado. Should it be necessary to initiate court proceedings concerning this Agreement, the Parties agree that venue shall be in the District Court for Arapahoe County, Colorado.

(k) **No Attorneys' Fees.** In the event of any litigation, mediation, arbitration or other dispute resolution process arising out of or related to this Agreement each Party agrees to be responsible for its own attorneys' and other professional fees, costs and expenses associated with any such proceedings.

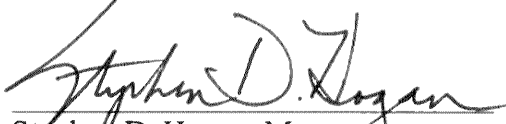
(l) **No Construction Against Drafter.** This Agreement was drafted by Aurora with review and comment from the attorney for Lessee. Accordingly, the Parties agree the legal doctrine of construction against the drafter will not be applied should any dispute arise concerning this Agreement.

21. **Effective Date.** The "Effective Date" of this Agreement shall be the date it is signed by the Mayor of Aurora.

IN WITNESS WHEREOF, the Parties hereto have duly executed this Agreement as of the Effective Date.


[signatures on following pages]

**CITY OF AURORA, COLORADO,
ACTING BY AND THROUGH ITS
UTILITY ENTERPRISE**


Stephen D. Hogan, Mayor

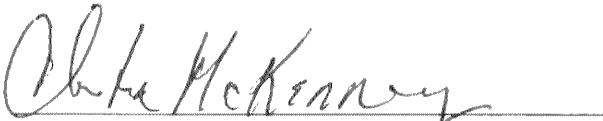
6-30-15
Date

ATTEST:


Janice Napper, City Clerk


6/30/15
Date

APPROVED AS TO FORM FOR AURORA:


Christine McKenney, Assistant City Attorney

4.22.15
Date

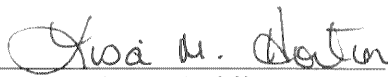
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ACS #


Steven O. Sims, Special Water Counsel

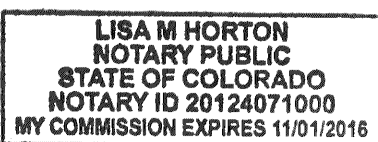
4-22-15
Date

STATE OF COLORADO)
) ss
COUNTY OF ARAPAHOE)

The foregoing instrument was acknowledged before me this 30th day of June, 2015,
by Stephen D. Hogan, Mayor, acting on behalf of the Utility Enterprise of the City of Aurora,
Colorado.

Witness my hand and official seal. 
Notary Public

My commission expires: 11/01/2016

(SEAL) 
LISA M HORTON
NOTARY PUBLIC
STATE OF COLORADO
NOTARY ID 20124071000
MY COMMISSION EXPIRES 11/01/2016

**LESSEE:
E-470 PUBLIC HIGHWAY AUTHORITY**

John D. McCuskey
By: John D. McCuskey
Its: Executive Director

ATTEST:

NG Thomson

STATE OF Colorado)
)
COUNTY OF Arapahoe) ss.

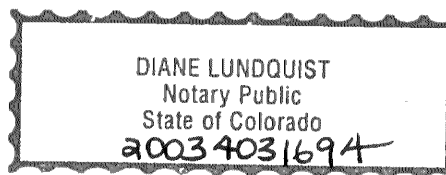
The foregoing instrument was acknowledged before me this 13th day of April, 2015 by - and John D. McCuskey, as - and Executive Director of the E-470 Public Highway Authority.

WITNESS my hand and official seal.

My commission expires: September 25, 2015

Diane Lundquist
Notary Public

APPROVED AS TO FORM:
ICENOGLE | SEAVER | POGUE
A Professional Corporation



[Signature]
General Counsel

Stan Koniz
Director of Finance · Stan Koniz

DATE APPROVED BY THE BOARD OF DIRECTORS: Feb. 12, 2015

EXHIBIT A

INITIAL DELIVERY SCHEDULE

(ACRE-FEET)

Year	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Total
2015	0.00	0.00	0.00	0.00	0.00	0.00	5.75	7.62	8.77	9.74	10.15	9.97	52.00
2016	9.32	8.31	7.13	6.28	6.10	6.21	6.73	7.62	8.77	9.74	10.15	10.14	96.50
2017	8.64	7.33	6.41	5.76	5.26	4.85	4.54	4.27	4.05	3.85	3.69	3.53	62.18
2018	3.40	3.27	3.17	3.06	2.97	2.87	2.77	2.70	2.62	2.55	2.49	2.41	34.28
2019	2.35	2.28	2.22	2.17	2.11	2.05	1.99	1.95	1.89	1.84	1.80	1.76	24.41
2020	1.70	1.66	1.62	1.58	1.53	1.49	1.46	1.41	1.37	1.34	1.31	1.28	17.75
2021	1.24	1.20	1.18	1.15	1.11	1.09	1.06	1.03	1.01	0.98	0.94	0.92	12.91
2022	0.90	0.88	0.85	0.83	0.80	0.78	0.76	0.75	0.73	0.71	0.69	0.66	9.34
2023	0.65	0.63	0.62	0.60	0.59	0.57	0.56	0.55	0.54	0.50	0.49	0.48	6.78
2024	0.47	0.46	0.45	0.44	0.43	0.42	0.41	0.40	0.39	0.37	0.36	-	4.60

Notes:

1. Values in acre-feet delivered at or downstream of the Robert W. Hite Treatment Facility to the South Platte River.
2. Delivery amounts include projected transit losses attributable to carriage of replacement water to depletion location.
3. Values based on depletions assuming zero additional evaporation at Sandy Acres Pit after September 2016.

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. All wells must be decreed by the water court, permitted by the state engineer or included in a decreed plan for augmentation. 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)