CERTIFICATE OF NOTICE

The undersigned herby certifies that on October 11, 2015, a true and correct copy of the foregoing documents:

1. Substitute Water Supply Plan ("SWSP") Application for GCC Energy, LLC
2. SWSP Engineering Report
3. SWSP notification letter

were served by email on the following:

All parties on the SWSP notification list for Water Division 7

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GCC ENERGY MINE
SUBSTITUTE WATER SUPPLY PLAN

October 8, 2015

PLAN SUMMARY

GCC Energy, LLC (GCC) has been operating the King Coal II Mine (Mine) in Hay Gulch since 2009 and based on that operation it was found that the water demand estimated in 2009 is not adequate for current operations and additional supply is necessary. To provide the additional water, GCC has made arrangements with Huntington Ranches, LLC's (Huntington) using Class A shares in the Hay Gulch Ditch (HGD) to supply the additional water through temporary (until the Mine is no longer in operation) dry up of an additional 44 acres.

While a permanent water court application is prepared and processed, this substitute Water Supply Plan (SWSP) is requested to be in effect to provide water to the Mine beginning in May of 2016. This SWSP involves a change of irrigation water to use at the Mine that will be nearly identical to the conversion of the previous 9 acres in Water Court Case No. 07CW100. There will be a couple exceptions, as described herein, that the land has been historically sprinkler irrigated, water has been provided through the Huntington lateral of the HGD, and the land is further from Hay Gulch requiring analysis of lagged return flow.

As with the 07CW100 change of water right, the consumptive use that would have occurred on the dry up land each day will be either conveyed to the Mine for use directly by the Mine or stored in an impoundment structure (pond) on the Huntington property for use at a later time. The consumptive use from the dry up land will be based on either the calculated full supply amount from the modified Blaney-Criddle formula or the available water supply, whichever is less. The change does not involve use of the historic consumptive use but the actual consumptive use that would occur on the dry up land.

GCC ENERGY MINE – UPDATED WATER SUPPLY PLAN
ENGINEERING REPORT FOR
SUBSTITUTE WATER SUPPLY PLAN
October 8, 2015

PROJECT DESCRIPTION

GCC in 2009 estimated the Mine water demand to be approximately 13 acre-feet of water per year, based on 20,000 gallons per day with four day work weeks. The 20,000 gallons per day was estimated based on experience at the King I Mine because the King II Mine was not yet fully developed. The portion of water used in the mining facility for the primary industrial purpose (i.e. dust suppression), will be fully consumed and the portion used for domestic water will be treated by underground infiltration gallery and will be 10% consumed.

The most recent records of water use during current operation of the Mine show an increase in water demand. The water demand for the Mine in 2014 is shown below in Table 1 when approximately 1 million tons of coal was produced. The water demand increased from an estimated 13 AF per year to the current demand of approximately 30 AF per year. As explained below the additional dry up of 44 acres will provide a significant amount of water estimated to be well above the current demand, in order to satisfy existing demand and serve increased demand.

TABLE 1. GCC ENERGY MINE WATER USAGE FOR 2014

Month	Hauled Mine Water (AF)	Huntington Dry Up Land (AF)	Hauled Potable Water (AF)	Total Water Use (AF)	Total Tons Mined (AF)
January	2.67		*	2.67	80,298
February	2.23		*	2.23	84,633
March	2.35		*	2.35	68,341
April	2.31		*	2.31	69,595
May		2.29	0.18	2.47	95,147
June		2.04	0.14	2.18	69,034
July		2.12	0.2	2.32	85,842
August		2.27	0.12	2.39	78,778
September		2.13	0.16	2.29	76,585
October	2.49		*	2.49	88,654
November	3.14		*	3.14	95,470
December	3.33		0.1	3.43	78,413
Total	18.52	10.85	0.9	30.27	970,790

*total potable gallons included in hauled mine water total

The water demand at the Mine is dependent upon a number of factors, including: numbers of days in operation per week, amount of employees on site each day, tons of coal mined daily, and the air moisture content inside the Mine. The Mine is permitted to mine and produce 1.3 million tons of coal per year. Based on 2014 records of usage and production, about 43 percent of the water use is constant; it is unchanged as relates to coal mined. Whereas 57 percent of the water use has a linear relationship with tons of coal mined. Using these known relationships, the estimated amount of water needed to produce 1.3 million tons of coal per year is 40.52 AF, including water use in the mine, and domestic water use described below.

DEPLETION

A. Historically Irrigated Land

The 44 irrigated acres that will be utilized for this SWSP are shown on Figure A. As can be seen these lands are located approximately 1,000 feet southeast (to centroid) and 350 feet above Hay Gulch (7,500+- feet elevation). This land has been historically irrigated through Huntington Lateral of the HGD. The Huntington Lateral changes from an open ditch to a pipeline which delivers pressurized water to the 44 acres to sprinkler irrigate the land. The 44 acres are separated from other Huntington irrigated land. The total land irrigated by Huntington is estimated to be 237 acres which is shown on Figure 1, see Appendix A.

B. Crop Consumptive Use

The crop consumptive use is estimated using the same method as in Case 07CW100. The State of Colorado Crop Consumptive Use model (StateCU) within the CDSS was used to determine the crop consumptive use (CCU) for the dry up land. The modified Blaney-Criddle method was utilized. The Fort Lewis climate station was selected for temperature and precipitation data because of its similar characteristics to the land in question. The growing season was initially estimated to be May 1 through October 31; however, the model results showed there was no CCU in October which was subsequently removed. The mean temperature for the pasture grass was kept at the standard rate of 45 degrees Fahrenheit. The high elevation crop coefficients determined by the Colorado Water Conservation Board (CWCB) and described in a July 10, 2006 memo to the CWCB Board of Directors were used. Temperature data from 1950 to 2004 was evaluated. Effective precipitation is included in the model results.

The model creates tables (Refer to Appendix B) detailing each year's CCU and all values needed to run the Blaney-Criddle method and the output for each month. Monthly CCU was determined for each month and year from 1950 to 2004 and the total annual CCU, for one acre of grass is 18.76 inches per year and are shown in Table 2.

TABLE 2. CROP CONSUMPTIVE USE

May	3.16	inches
June	5.04	inches
July	4.62	inches
August	3.45	inches
September	2.49	inches
Average	18.76	inches/year
Average	1.56	feet/year

The water supply plan for the Mine is not to transfer the historic consumptive use but to estimate the actual CCU each month based on water availability and that water amount is then conveyed to the Mine or stored. Rather than attempt to calculate the CCU each year, the proposal herein is to utilize the average monthly CCU for the past 54 years for easier administration.

C. Dry Up Land as a Portion of Huntington Shares

The HGD has a decreed water right for 10.5 cubic feet per second (cfs), which is the No. 3 priority in the La Plata River. Of the 10.5 cfs, 2.625 cfs is used by the Fort Lewis Research Center. The remaining 7.875 cfs is owned by the HGD Corp. (The Research Center water is not part of the HGD Corporation). The HGD Corporation has allocated 1 cfs per 16 shares; there are 126 shares.

Huntington owns 63 shares of Class A stock (half of the 7.875 cfs of Priority No. 3 in the HGD Corporation), which are used to irrigate a total of 237 acres. Therefore, Huntington's share ownership entitles it to 37.5% (3.94 cfs of the 10.5 cfs) of the No. 3 priority.

The 44 acres to be dried up in this SWSP is 18.6% of the total acreage of Huntington's irrigated lands.

D. Huntington Share of the HGD

The following summarizes the Huntington share of the HGD.

Hay Gulch Ditch Senior Priority	10.5 cfs
Fort Lewis Research Center	2.625 cfs
Hay Gulch Ditch Corp. (126 shares)	7.875 cfs
Huntington Share of HGD (63 shares)	3.94 cfs
% Huntington Share of HGD Diversions	37.5%
Huntington Irrigation Land	237 acres
Gross Acres No Longer Irrigated	44 acres
Net Dry Up Land for CCU	44 acres
Conveyance Loss HGD to Huntington Lateral	7%
Conveyance Loss in Huntington Lateral	3%
Net Dry Up Land Irrigation Efficiency	70%
% of Huntington Share Allocated for Dry Up	18.6%
% of Huntington's Share of HGD for Dry Up	7.0% (18.6% times 37.5%)

E. On-Field Irrigation Efficiency and Return Flow

The water applied to the field has been by sprinkler with an estimated efficiency of 70% which will be used by the crop and 30% will flow from the field; 15% is assumed to be surface runoff while the remaining 15% is assumed to be by subsurface given the distance to Hay Gulch and other surrounding drainages. The surface return flow volumes will be released to Hay Gulch. The historic subsurface return flow volumes will be replaced through construction of an underground infiltration gallery at the north edge of the 44 acre field to mimic historic return flows. The drainage field is sized to store the maximum daily amount of return flows based on the historic consumptive use.

F. Conveyance Loss to Dry Up Land

Water is conveyed to the Huntington lands, including the 44 acres, through diversions into the Hay Gulch Ditch from the La Plata River near Hesperus. The conveyance to the dry up land has 2 segments: (1) the main segment from the diversion from the La Plata River to the Huntington Lateral, 2.18 miles; and (2) the Huntington Lateral, 3.81 miles. The conveyance loss through the Huntington Lateral is 3%, and the loss through the main segment to the Huntington Lateral was calculated to be 3% but the application is using 7% per the stipulation with other parties in Case No. 07CW100. The conveyance losses in the main Hay Gulch Ditch and Huntington lateral were field measured for Case 07CW100 and the report describing the measurement is documented in Appendix C. The Ditch losses from the HGD Valley segment are not included in this report because the water delivered to the dry up land is taken through the Huntington Lateral which bypasses the HGD Valley segment. Water is being conveyed to the Mine through an extension of the pipeline that presently serves all of the Huntington land, including the 44 acres.

G. Net La Plata River Diversion to Serve Dry Up Land

The following table summarizes the amount of water needed from the La Plata River diversion to provide a full water supply to the dry up land and allow for on-field and conveyance losses. The amounts shown are the maximum and may be reduced if the La Plata River diversions do not provide a full supply.

The columns in Table 3 are described below for acre-feet per month and per day:

- Column (1) – The May through September irrigation months.
- Column (2) – The monthly CCU for a full supply to irrigate the dry up land using the values in Table 2.
- Column (3) – The amount of water that will not be used by the crop and is returned to Hay Gulch, with half assumed to be through surface and half through subsurface return to Hay Gulch.
- Column (4) – The 3% ditch loss through the Huntington Lateral will return to Hay Gulch as it has historically.
- Column (5) – The 7% ditch loss through the main segment of the HGD from the La Plata River diversion to the Huntington Lateral will return to the La Plata River as it has historically
- Column (6) – The diversion amount from the La Plata River that is needed to provide a full supply to the dry up 44 acres.

TABLE 3. MAXIMUM DRY UP LAND CONSUMPTIVE USE AND LOSSES

	Bl-Cr Crop CU Dry Up 44 Acres (AF/Month)	Sprinkler On-Field Loss 30% (AF/Month)	Huntington Lateral Loss 3% (AF/Month)	La Plata HGD Loss 7% (AF/Month)	Full Supply La Plata Div. for Dry Up (AF/Month)
(1)	(2)	(3)	(4)	(5)	(6)
May	11.59	4.97	0.51	1.29	18.36
June	18.48	7.93	0.82	2.05	29.29
July	16.94	7.27	0.75	1.88	26.85
August	12.65	5.43	0.56	1.40	20.05
September	9.13	3.92	0.40	1.01	14.47
Totals	68.79	29.50	3.04	7.63	109.01
	Bl-Cr Crop CU Dry Up 44 Acres (AF/Day)	Sprinkler On-Field Loss 30% (AF/Day)	Huntington Lateral Loss 3% (AF/Day)	La Plata HGD Loss 7% (AF/Day)	Full Supply La Plata Div. for Dry Up (AF/Day)
(1)	(2)	(3)	(4)	(5)	(6)
May	0.374	0.160	0.017	0.041	0.592
June	0.616	0.264	0.027	0.068	0.976
July	0.546	0.234	0.024	0.061	0.866
August	0.408	0.175	0.018	0.045	0.646
September	0.304	0.131	0.013	0.034	0.482

In order to meet the Mine's water demand, Huntington is willing to provide an additional 18.6% of its share of the HGD for irrigation of the dry up land. If the HGD is not receiving its full water right the 18.6% will not provide a full supply to the dry up land which will result in the CCU being reduced from the amounts shown in Table 2. However, GCC's agreement with Huntington requires Huntington to prioritize water deliveries to the dry up lands if needed by GCC, so a full supply may be delivered to the dry up lands even when a full supply to the HGD is not available. An impoundment structure is necessary to store water in months and years there is excess water from the dry up land CCU because of the good water supply; for times when there is a reduced water supply and resulting CCU. Additionally, the reservoir will be utilized to enhance the reliability of GCC's water supply during the non-irrigation season.

H. Evaporation

The Huntington Pond is proposed to have an estimated surface area of 4 acres and a total volume of up to 50 acre feet. The Huntington Pond will experience year around evaporation based on NOAA estimate of 43 inches (NOAA Technical Report NWS 33). See Table 4 below for the monthly distribution. The yearly evaporation losses are expected to be upwards of 12 acre-feet with more evaporation occurring in the summer months than any other time of year. See Appendix F for a general location of the pond in Figure 2 and copy of the "Notice of Intent" to construct the water impoundment structure.

TABLE 4. MONTHLY EVAPORATION LOSSES

Month	inches	feet
January	0.45	0.04
February	1.30	0.11
March	2.60	0.22
April	3.89	0.32
May	5.40	0.45
June	6.65	0.55
July	6.85	0.57
August	5.60	0.47
September	4.75	0.40
October	3.23	0.27
November	1.70	0.14
December	0.65	0.05
Yearly	43.07	3.59

I. Drinking & Sanitary

In May of 2015, GCC received approval to construct a drinking water treatment plant from the Colorado Department of Public Health. The existing pump building will house the treatment train, testing equipment, etc… The treatment train consists of membrane filtration, chlorination equipment and all valves, taps, and meters associated with its operation. Treated water will be conveyed to a 37,000 gallon storage tank. A pump will then deliver the treated water to the distribution system.

The domestic water demand is based on existing number of employees and an estimated usage of 1,700 gallons per day (about 141 employees). The number of employees may increase up to 165 in the coming years; therefore, the estimated demand would be 2,000 gallons per day. The membrane filtration technology is expected to treat on average 2,100 gallons per day (based on current use and a factor of 1.24). The water is treated by two leach fields designed and constructed per San Juan Basin Health Department On-Site Wastewater Treatment System Regulations. The fields were sized to maximize space and provide adequate treatment.

REPLACEMENT SOURCES

Not applicable. This SWSP is a proposed change of use and location not a proposed change of timing to use out-of-priority depletions.

OPERATION OF PLAN

The Mine has three sources of water: Priority No. 3 HGD water associated with Huntington dry up lands (existing and an additional amount addressed in this SWSP), a new water right decreed in 07CW100 to divert from the La Plata River through the HGD and Huntington Lateral; and the GCC well field. Operation and administration of the sources is described below.

A. Facilities to Convey the Water Supplies to the Mine

GCC has extended the Huntington Lateral pipeline to the Mine. The pipeline is gravity pressurized. A turnout has been installed in the pipeline to: (1) release water to Hay Gulch for irrigation return flows. The pipeline is 6 inch diameter. Surface return flows associated with the dry up land will be released to Hay Gulch in the same manner and location as decreed in Case No. 07CW100. Subsurface return flows will be delivered to the infiltration gallery on the edge of the dry up lands.

The pipeline delivers water into a 100,000 gallon steel covered tank (Tank) where the water volumes are also measured. Water immediately needed for the Mine's operations is pumped from the Tank. If the available water supply is greater than the Mine's immediate demand, the water will be stored in the Huntington Pond for future use. If the water supply through the pipeline is not adequate, water previously stored in the Huntington Pond will be conveyed into the Tank via the pipeline delivery system.

The Huntington Pond constructed at the inlet to the pipeline to Huntington irrigated land and the Mine is an important component of the water supply plan in order to store the CCU from the dry up land during the irrigation season that is not immediately needed. The Tank is the central facility at the Mine with all water going through the Tank for dust control and/or treatment for domestic use. The Tank is an enclosed structure where no evaporation occurs.

Measurement devices are located throughout the water distribution system for current operations and administration. In addition to those, another meter will be installed on the pipeline that delivers the subsurface return flows to the infiltration gallery.

B. Administration of Dry Up Land CCU Supply

The volume delivered to the Tank or stored each month from the dry up land will be limited by the CCU shown in Table 2 or the actual diversions from the La Plata River into the HGD and delivered to the dry up lands, whichever is less. The release to compensate for return flows and conveyance losses will be administered in a similar manner. Determination of the amount of water that can be delivered to the Mine and the amount to be released to Hay Gulch is described below. The administration is not based on diverting the historic CCU every month, but is based on the actual monthly CCU for the dry up land based on water availability. If the water delivered to the dry up lands does not provide a full water supply, the CCU delivered to the Mine or to storage will be reduced.

Column 10 (a through c) in the Appendix E tables, displays the available CCU to the dry up lands. This following narrative describes how this amount is arrived upon. Column 9 (*Full Supply Divr. To Dry Up Lands*) shows the amount of water needed to be diverted from the La Plata River each day to provide a full irrigation supply to the dry up land. If 7.0% of the total HGD diversion each day as shown in Column 8 (*Available Supply to Dry Up Lands*) (or a higher percentage allocated to the dry-up lands) is equal to, or more than Column 9 (*Full Supply Divr. To Dry Up Lands*) then:

(1) the amount in Column 4 (*Full Supply Dry Up Land CCU*) can be delivered to the Mine, and

(2) the surface runoff amount in Column 12 (*Releases to the Creek*) will be released to Hay Gulch from the pipeline,
(3) and the subsurface amount in Column 13 (*Releases to the Infiltration Gallery*) will be released into the underground infiltration gallery.

If 7.0% the HGD diversion each day/month as shown in Column 9 (*Available Supply to Dry Up Lands*) (or a higher percentage allocated to the dry-up lands) is less than the amount shown in Column 9 (*Full Supply Divr. To Dry Up Lands*) then:

(1) The amount delivered to the Mine or to storage will be reduced proportionally based on the following formula: the actual 7.0% of the HGD diversion for each month as shown in Column 8 (*Available Supply to Dry Up Lands*), divided by the amount in Column 9 (*Full Supply Divr. To Dry Up Lands*) for the appropriate month, multiplied by the amount for each month shown in Column 4 (*Full Supply Dry Up Land CCU*), and
(2) the surface and subsurface return flow amounts released to Hay Gulch or to the infiltration gallery will be reduced by the same proportion as the water to the Mine is reduced.

The administration will be the same administration as in Case 07CW100; it will be on a daily basis with monthly adjustments if needed.

C. Accounting Form

The accounting forms will be the same as used for Case 07CW100 with different percentages and irrigation return flow release pattern. The accounting form is included in Appendix E to show how the Mine water supply will be accounted for and administered. Forms are provide for each of the dry up acreage amounts as well as a combined total dry up acreage accounting form.

D. Water Storage Right

GCC received a junior storage right in Case 07CW100 to divert water from the La Plata River to an underground reservoir in the mine. However, the reservoir in the Mine is no longer viable and the storage right in Case 07CW100 will be change to the Huntington Pond. Additional storage amount will be sought in a new application to allow up to 50 acre-feet of storage in the Huntington Pond, with the right to fill and refill in priority. Storage in the Pond will be CCU from the dry up lands and water diverted from the La Plata River under the diversion right in 07CW100. The water under 07CW100 water right is conveyed through an agreement with the HGD Corporation. Physically the water will be conveyed through the HGD and Huntington Lateral to the Huntington Pond for storage.

E. Dominion and Control

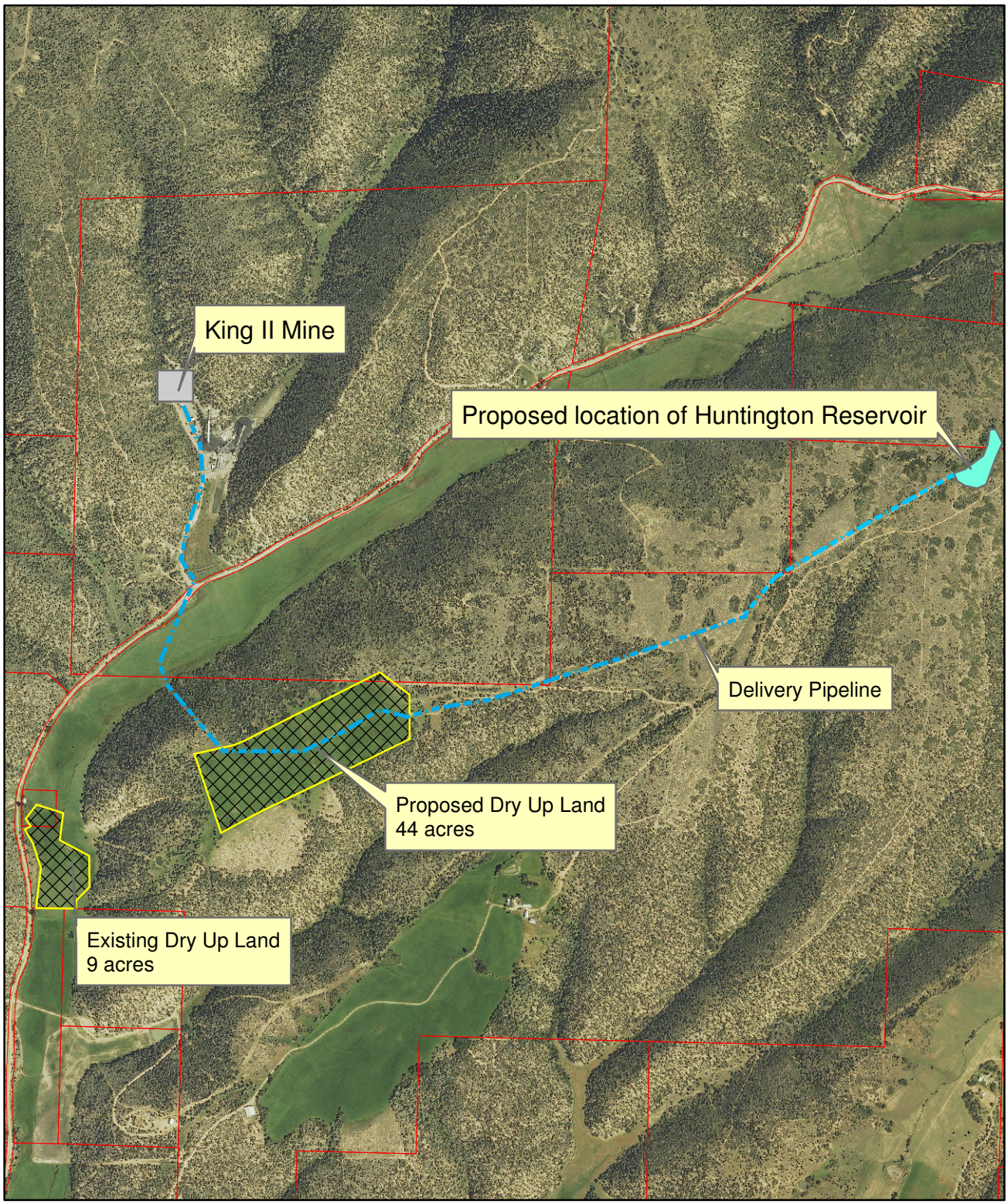
All of the water diverted pursuant to the change of water right set forth above will be fully consumable. GCC intends to retain dominion and control over all return flows from its use of said fully consumable water. It is assumed that the primary industrial use (i.e. dust suppression) is fully consumptive. However, the domestic use is not fully consumptive and here may be other permitted uses that are not 100% consumptive. To the extent that GCC's fully consumable changed HGD shares or water hauled to the Mine are used for purpose that are not fully consumptive, GCC may calculate and take credit for the fully consumable water that it returns to

the stream. Said fully consumable return flows may be applied as part of GCC's return flow obligations under the change of water right, or may be exchanged to GCC's mining facility or used for augmentation.

Appendix A

Figure 1. Huntington Irrigated Land

Figure 1



Harris Water Engineering, Inc. 954 E. 2nd Ave, Suite #202 Durango, Colorado 81301 (970) 259-5322	GCC Energy, LLC Location Map September 2015	Aerial Imagery 0 0.175 0.35 0.7 Miles

Appendix B

CDSS Modified Blaney-Criddle Crop Consumptive Use Model Output

StateCU Version 12.17 9/16/2008
Scenario Name: Modified Fort Lewis
Model execution time: 9/16/2008
Modified FLC
September 16, 2008
Simulation of COclim2006.rcu

Detailed Results of the Consumptive Use Calculation
Blaney-Criddle Model

3016 FORT LEWIS

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1950

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
9-May	74.2	47.39	7.32	3.47	0.51	1.21	0.61	2.61	0.17	2.44
Jun	100	56.58	9.91	5.6	0.66	1.1	0.73	5.03	1.14	3.89
Jul	100	61.47	10.06	6.19	0.75	0.96	0.72	5.48	1.64	3.84
Aug	100	60.16	9.45	5.68	0.73	0.91	0.66	4.62	0.56	4.06
Sep	100	52.33	8.37	4.38	0.59	0.99	0.58	3.15	2.24	0.91
27-Oct	87.1	51.13	6.84	3.5	0.57	0	0	0	0	0
Season Total								20.88	5.75	15.13

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1951

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
4-May	90.3	48.6	8.91	4.33	0.53	1.23	0.65	3.44	0.45	2.99
Jun	100	53.28	9.91	5.28	0.61	1.1	0.67	4.33	0	4.33
Jul	100	63.36	10.06	6.38	0.78	0.96	0.75	5.89	1.79	4.1
Aug	100	59.97	9.45	5.67	0.72	0.91	0.66	4.58	1.72	2.87
Sep	100	53.13	8.37	4.44	0.61	0.99	0.6	3.27	0.76	2.52
10-Oct	32.3	46.65	2.58	1.21	0.49	0	0	0	0	0
Season Total								21.52	4.72	16.8

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1952

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	50.05	9.86	4.94	0.55	1.24	0.69	4.17	0.09	4.08
Jun	100	57.87	9.91	5.73	0.69	1.1	0.75	5.31	1.56	3.76
Jul	100	63.48	10.06	6.39	0.78	0.96	0.75	5.92	1.74	4.17
Aug	100	62.27	9.45	5.88	0.76	0.91	0.69	5.02	0.96	4.06
Sep	100	55.95	8.37	4.68	0.65	0.99	0.65	3.72	0.93	2.8
19-Oct	61.3	48.95	4.86	2.38	0.53	0	0	0	0	0
Season Total								24.15	5.28	18.87

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1953

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
17-May	48.4	47.64	4.78	2.28	0.51	1.17	0.6	1.67	0.07	1.6
Jun	100	57.72	9.91	5.72	0.68	1.1	0.75	5.28	0	5.28
Jul	100	63.9	10.06	6.43	0.79	0.96	0.76	6.01	1.77	4.24
Aug	100	59.74	9.45	5.64	0.72	0.91	0.65	4.54	1.13	3.41
Sep	100	54.97	8.37	4.6	0.64	0.99	0.63	3.56	0	3.56
13-Oct	41.9	47.23	3.35	1.58	0.5	0	0	0	0	0
Season Total								21.07	2.97	18.1

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1954

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	49.29	9.86	4.86	0.54	1.24	0.67	4.01	1.03	2.98
Jun	100	55.1	9.91	5.46	0.64	1.1	0.7	4.71	0.77	3.93
Jul	100	62.85	10.06	6.33	0.77	0.96	0.74	5.78	2.64	3.14
Aug	100	59.27	9.45	5.6	0.71	0.91	0.65	4.45	0.91	3.55
Sep	100	56.68	8.37	4.74	0.67	0.99	0.66	3.85	1.88	1.96
25-Oct	80.6	49.25	6.35	3.13	0.54	0	0	0	0	0
Season Total								22.8	7.23	15.56

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1955

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
8-May	77.4	47.84	7.64	3.65	0.51	1.21	0.62	2.79	0.87	1.92
Jun	100	54.26	9.91	5.38	0.62	1.1	0.68	4.53	0.08	4.45
Jul	100	61.32	10.06	6.17	0.75	0.96	0.72	5.44	1.39	4.05
Aug	100	62.67	9.45	5.92	0.77	0.91	0.7	5.1	2.99	2.11
Sep	100	55.45	8.37	4.64	0.65	0.99	0.64	3.64	0.5	3.14
20-Oct	64.5	48.92	5.11	2.5	0.53	0	0	0	0	0
Season Total								21.5	5.83	15.68

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1956

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	50.17	9.86	4.95	0.55	1.24	0.69	4.2	0.44	3.76
Jun	100	60.7	9.91	6.01	0.74	1.1	0.81	5.97	0	5.97
Jul	100	62.58	10.06	6.3	0.77	0.96	0.74	5.72	0.81	4.91
Aug	100	59.52	9.45	5.62	0.72	0.91	0.65	4.5	0.86	3.64
Sep	100	58.15	8.37	4.86	0.69	0.99	0.68	4.1	0.1	4
17-Oct	54.8	48.96	4.36	2.13	0.53	0	0	0	0	0
Season Total								24.48	2.21	22.27

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1957

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
12-May	64.5	48.2	6.37	3.07	0.52	1.19	0.62	2.33	1.3	1.04
Jun	100	57.54	9.91	5.7	0.68	1.1	0.75	5.24	0.54	4.7
Jul	100	61.97	10.06	6.24	0.76	0.96	0.73	5.58	2.85	2.73
Aug	100	60.38	9.45	5.7	0.73	0.91	0.66	4.66	2.85	1.81
Sep	100	52.75	8.37	4.41	0.6	0.99	0.59	3.21	0	3.21
11-Oct	35.5	46.48	2.84	1.32	0.49	0	0	0	0	0
Season Total								21.03	7.54	13.49

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1958

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	51.74	9.86	5.1	0.58	1.24	0.72	4.54	0.1	4.44
Jun	100	59.19	9.91	5.86	0.71	1.1	0.78	5.61	0.69	4.92
Jul	100	61.74	10.06	6.21	0.75	0.96	0.72	5.53	0.39	5.15
Aug	100	64.1	9.45	6.06	0.79	0.91	0.72	5.38	1.09	4.3
Sep	100	56	8.37	4.69	0.65	0.99	0.65	3.73	1.07	2.66
18-Oct	58.1	48.44	4.61	2.23	0.52	0	0	0	0	0
Season Total								24.81	3.34	21.47

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1959

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
3-May	93.5	48.37	9.23	4.46	0.52	1.23	0.65	3.55	0.27	3.28
Jun	100	60.3	9.91	5.97	0.73	1.1	0.8	5.87	0.78	5.1
Jul	100	64.1	10.06	6.45	0.79	0.96	0.76	6.06	1.02	5.04
Aug	100	61.73	9.45	5.83	0.75	0.91	0.68	4.92	2.5	2.42
Sep	100	53.73	8.37	4.5	0.62	0.99	0.61	3.37	0.84	2.53
13-Oct	41.9	47.07	3.35	1.57	0.5	0	0	0	0	0
Season Total								23.76	5.4	18.37

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1960

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
2-May	96.8	48.2	9.54	4.6	0.52	1.23	0.64	3.64	0.4	3.24
Jun	100	59.82	9.91	5.93	0.72	1.1	0.79	5.76	0.25	5.51
Jul	100	65.89	10.06	6.63	0.83	0.96	0.79	6.47	0.41	6.06
Aug	100	64.95	9.45	6.14	0.81	0.91	0.74	5.56	0.82	4.74
Sep	100	59.5	8.37	4.98	0.72	0.99	0.71	4.33	0.93	3.4
14-Oct	45.2	48.84	3.6	1.76	0.53	0	0	0	0	0
Season Total								25.76	2.81	22.95

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1961

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	50.66	9.86	5	0.56	1.24	0.7	4.3	0.1	4.2
Jun	100	62.3	9.91	6.17	0.76	1.1	0.84	6.36	0	6.36
Jul	100	64.76	10.06	6.52	0.81	0.96	0.77	6.21	1.18	5.02
Aug	100	63.39	9.45	5.99	0.78	0.91	0.71	5.24	2.47	2.77
Sep	100	51.2	8.37	4.28	0.57	0.99	0.56	2.98	1.59	1.39
10-Oct	32.3	46.25	2.58	1.2	0.49	0	0	0	0	0
Season Total								25.09	5.35	19.74

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1962

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	48.58	9.86	4.79	0.53	1.24	0.65	3.86	0.6	3.26
Jun	100	58.75	9.91	5.82	0.7	1.1	0.77	5.51	0.49	5.02
Jul	100	64	10.06	6.44	0.79	0.96	0.76	6.03	0.61	5.43
Aug	100	63.66	9.45	6.01	0.79	0.91	0.71	5.3	0.11	5.19
Sep	100	57.42	8.37	4.8	0.68	0.99	0.67	3.97	1.35	2.63
24-Oct	77.4	49.08	6.11	3	0.54	0	0	0	0	0
Season Total								24.68	3.16	21.52

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1963

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	53.42	9.86	5.27	0.61	1.24	0.76	4.92	0	4.92
Jun	100	57.18	9.91	5.66	0.68	1.1	0.74	5.16	0.34	4.81
Jul	100	67.26	10.06	6.77	0.85	0.96	0.81	6.79	1.41	5.38
Aug	100	63.44	9.45	5.99	0.78	0.91	0.71	5.25	2.54	2.72
Sep	100	59.7	8.37	4.99	0.72	0.99	0.71	4.37	0.75	3.62
28-Oct	90.3	51.96	7.09	3.69	0.58	0	0	0	0	0
Season Total								26.5	5.05	21.45

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1964

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
4-May	90.3	49.99	8.91	4.45	0.55	1.23	0.67	3.7	0.28	3.42
Jun	100	57.28	9.91	5.67	0.68	1.1	0.74	5.18	0.03	5.15
Jul	100	66.45	10.06	6.69	0.84	0.96	0.8	6.6	2.37	4.23
Aug	100	61.66	9.45	5.82	0.75	0.91	0.68	4.9	1.89	3.02
Sep	100	54.97	8.37	4.6	0.64	0.99	0.63	3.56	1.08	2.49
22-Oct	71	49.77	5.61	2.79	0.55	0	0	0	0	0
Season Total								23.95	5.64	18.31

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1965

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
8-May	77.4	47.8	7.64	3.65	0.51	1.21	0.62	2.78	1.25	1.53
Jun	100	54.56	9.91	5.4	0.63	1.1	0.69	4.59	1.12	3.47
Jul	100	64.6	10.06	6.5	0.8	0.96	0.77	6.17	2.89	3.28
Aug	100	61.14	9.45	5.78	0.74	0.91	0.68	4.8	1.69	3.11
Sep	100	52.33	8.37	4.38	0.59	0.99	0.58	3.15	1.26	1.89
25-Oct	80.6	48.92	6.35	3.11	0.53	0	0	0	0	0
Season T	otal							21.5	8.21	13.29

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1966

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	51.6	9.86	5.09	0.58	1.24	0.72	4.51	0.9	3.61
Jun	100	58.22	9.91	5.77	0.69	1.1	0.76	5.39	0.55	4.84
Jul	100	67.72	10.06	6.82	0.86	0.96	0.82	6.9	1.65	5.26
Aug	100	63.71	9.45	6.02	0.79	0.91	0.72	5.31	0.91	4.4
Sep	100	56.74	8.37	4.75	0.67	0.99	0.66	3.86	1.07	2.78
20-Oct	64.5	48.47	5.11	2.48	0.52	0	0	0	0	0
Season Total								25.97	5.08	20.89

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1967

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
5-May	87.1	48.93	8.59	4.2	0.53	1.23	0.65	3.38	0.53	2.85
Jun	100	55.71	9.91	5.52	0.65	1.1	0.71	4.84	0.87	3.97
Jul	100	66.59	10.06	6.7	0.84	0.96	0.8	6.63	2.03	4.61
Aug	100	61.36	9.45	5.8	0.75	0.91	0.68	4.85	2.19	2.66
Sep	100	56.39	8.37	4.72	0.66	0.99	0.65	3.8	0.39	3.41
23-Oct	74.2	48.96	5.85	2.87	0.53	0	0	0	0	0
Season Total								23.49	6	17.49

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1968

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
9-May	74.2	48.86	7.32	3.58	0.53	1.21	0.64	2.82	0.74	2.09
Jun	100	58.81	9.91	5.83	0.7	1.1	0.77	5.53	0.35	5.17
Jul	100	64.65	10.06	6.51	0.8	0.96	0.77	6.18	1.82	4.36
Aug	100	58.53	9.45	5.53	0.7	0.91	0.63	4.32	1.45	2.87
Sep	100	54.12	8.37	4.53	0.62	0.99	0.61	3.43	0.07	3.36
19-Oct	61.3	48.42	4.86	2.35	0.52	0	0	0	0	0
Season Total								22.28	4.43	17.85

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1969

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	52.65	9.86	5.19	0.6	1.24	0.74	4.75	0.86	3.89
Jun	100	54.89	9.91	5.44	0.64	1.1	0.7	4.66	1.7	2.96
Jul	100	65.93	10.06	6.64	0.83	0.96	0.79	6.48	1.54	4.94
Aug	100	64.95	9.45	6.14	0.81	0.91	0.74	5.56	1.53	4.03
Sep	100	56.62	8.37	4.74	0.67	0.99	0.66	3.84	1.97	1.87
6-Oct	19.4	46.99	1.56	0.73	0.5	0	0	0	0	0
Season Total								25.28	7.59	17.69

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1970

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
5-May	87.1	50.73	8.59	4.36	0.56	1.23	0.69	3.71	0	3.71
Jun	100	57.24	9.91	5.67	0.68	1.1	0.74	5.17	1.21	3.96
Jul	100	65.2	10.06	6.56	0.81	0.96	0.78	6.31	1.68	4.63
Aug	100	65.2	9.45	6.16	0.81	0.91	0.74	5.61	1.58	4.03
Sep	100	52.22	8.37	4.37	0.59	0.99	0.58	3.13	2.96	0.18
3-Oct	9.7	45.37	0.78	0.35	0.47	0	0	0	0	0
Season Total								23.93	7.43	16.5

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1971

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
8-May	77.4	48.23	7.64	3.68	0.52	1.21	0.63	2.85	1.32	1.53
Jun	100	59.12	9.91	5.86	0.71	1.1	0.78	5.6	0	5.6
Jul	100	65.47	10.06	6.59	0.82	0.96	0.79	6.37	1.17	5.2
Aug	100	61.76	9.45	5.83	0.75	0.91	0.69	4.92	3.49	1.43
Sep	100	53.43	8.37	4.47	0.61	0.99	0.6	3.32	1.23	2.09
17-Oct	54.8	47.79	4.36	2.08	0.51	0	0	0	0	0
Season Total								23.06	7.21	15.86

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1972

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	49.45	9.86	4.88	0.54	1.24	0.67	4.05	0	4.05
Jun	100	59.37	9.91	5.88	0.71	1.1	0.78	5.66	1.18	4.48
Jul	100	64.24	10.06	6.46	0.8	0.96	0.76	6.09	1.92	4.17
Aug	100	61.92	9.45	5.85	0.76	0.91	0.69	4.95	1.79	3.17
Sep	100	54.37	8.37	4.55	0.63	0.99	0.62	3.47	1.38	2.09
17-Oct	54.8	48.13	4.36	2.1	0.52	0	0	0	0	0
Season Total								24.21	6.26	17.95

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1973

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
7-May	80.6	49.54	7.96	3.94	0.54	1.22	0.66	3.21	0.63	2.58
Jun	100	56.63	9.91	5.61	0.67	1.1	0.73	5.04	1.15	3.88
Jul	100	63.23	10.06	6.36	0.78	0.96	0.75	5.86	0.82	5.05
Aug	100	62.58	9.45	5.91	0.77	0.91	0.7	5.08	1.08	4
Sep	100	52.1	8.37	4.36	0.59	0.99	0.58	3.12	0.89	2.22
11-Oct	35.5	46.55	2.84	1.32	0.49	0	0	0	0	0
Season Total								22.3	4.57	17.73

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1974

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	52.59	9.86	5.19	0.6	1.24	0.74	4.73	0	4.73
Jun	100	63.5	9.91	6.29	0.78	1.1	0.86	6.66	0	6.66
Jul	100	63.19	10.06	6.36	0.78	0.96	0.75	5.85	1.26	4.59
Aug	100	60.77	9.45	5.74	0.74	0.91	0.67	4.73	0.52	4.21
Sep	100	54.72	8.37	4.58	0.63	0.99	0.63	3.52	0.66	2.87
20-Oct	64.5	48.78	5.11	2.49	0.53	0	0	0	0	0
Season Total								25.5	2.44	23.06

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1975

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
10-May	71	48.25	7	3.38	0.52	1.2	0.62	2.6	0.56	2.03
Jun	100	55.17	9.91	5.47	0.64	1.1	0.7	4.72	0	4.72
Jul	100	63.68	10.06	6.41	0.79	0.96	0.76	5.96	1.36	4.6
Aug	100	61.23	9.45	5.78	0.75	0.91	0.68	4.82	0.51	4.31
Sep	100	54.76	8.37	4.58	0.63	0.99	0.63	3.53	0.91	2.62
18-Oct	58.1	48.23	4.61	2.22	0.52	0	0	0	0	0
Season Total								21.63	3.35	18.28

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1976

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	50.49	9.86	4.98	0.56	1.24	0.7	4.27	1.64	2.62
Jun	100	57.83	9.91	5.73	0.69	1.1	0.75	5.3	0	5.3
Jul	100	65.26	10.06	6.57	0.81	0.96	0.78	6.32	2.16	4.16
Aug	100	61.42	9.45	5.8	0.75	0.91	0.68	4.86	1.17	3.69
Sep	100	56.4	8.37	4.72	0.66	0.99	0.65	3.8	1.83	1.97
10-Oct	32.3	47.53	2.58	1.23	0.51	0	0	0	0	0
Season Total								24.55	6.8	17.75

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1977

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	47.98	9.86	4.73	0.52	1.24	0.64	3.74	0.85	2.89
Jun	100	62.35	9.91	6.18	0.76	1.1	0.84	6.37	0.33	6.04
Jul	100	65.68	10.06	6.61	0.82	0.96	0.79	6.42	3.06	3.36
Aug	100	64.31	9.45	6.08	0.8	0.91	0.73	5.43	2.3	3.13
Sep	100	56.7	8.37	4.74	0.67	0.99	0.66	3.85	0.84	3.01
22-Oct	71	49.43	5.61	2.77	0.54	0	0	0	0	0
Season Total								25.81	7.38	18.43

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1978

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
2-May	96.8	47.49	9.54	4.53	0.51	1.23	0.63	3.5	1.79	1.71
Jun	100	58.52	9.91	5.8	0.7	1.1	0.76	5.46	0.27	5.19
Jul	100	65.16	10.06	6.56	0.81	0.96	0.78	6.3	0.72	5.58
Aug	100	62.15	9.45	5.87	0.76	0.91	0.69	5	0.14	4.86
Sep	100	56.49	8.37	4.73	0.66	0.99	0.66	3.81	1.27	2.55
23-Oct	74.2	49.91	5.85	2.92	0.55	0	0	0	0	0
Season Total								24.07	4.18	19.89

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1979

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
3-May	93.5	48.97	9.23	4.52	0.53	1.23	0.66	3.66	0.99	2.67
Jun	100	57.88	9.91	5.73	0.69	1.1	0.75	5.32	0.06	5.26
Jul	100	64.45	10.06	6.49	0.8	0.96	0.77	6.14	1.07	5.07
Aug	100	61.32	9.45	5.79	0.75	0.91	0.68	4.84	1.77	3.06
Sep	100	58.53	8.37	4.9	0.7	0.99	0.69	4.16	0.09	4.07
19-Oct	61.3	50.01	4.86	2.43	0.55	0	0	0	0	0
Season Total								24.12	3.98	20.14

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1980

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
8-May	77.4	48.78	7.64	3.73	0.53	1.21	0.64	2.94	1.02	1.91
Jun	100	60.18	9.91	5.96	0.73	1.1	0.8	5.85	0	5.85
Jul	100	66.39	10.06	6.68	0.83	0.96	0.8	6.59	0.4	6.18
Aug	100	62.93	9.45	5.94	0.77	0.91	0.7	5.15	1.5	3.65
Sep	100	56.36	8.37	4.72	0.66	0.99	0.65	3.79	1.4	2.39
15-Oct	48.4	47.82	3.85	1.84	0.51	0	0	0	0	0
Season Total								24.31	4.33	19.98

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1981

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	49	9.86	4.83	0.53	1.24	0.66	3.95	1	2.95
Jun	100	61.65	9.91	6.11	0.75	1.1	0.82	6.2	0.39	5.8
Jul	100	65.24	10.06	6.57	0.81	0.96	0.78	6.32	3.78	2.53
Aug	100	62.79	9.45	5.93	0.77	0.91	0.7	5.12	2.12	3.01
Sep	100	56.85	8.37	4.76	0.67	0.99	0.66	3.88	0.99	2.88
13-Oct	41.9	47.55	3.35	1.59	0.51	0	0	0	0	0
Season Total								25.47	8.29	17.17

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1982

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
3-May	93.5	48.06	9.23	4.43	0.52	1.23	0.64	3.49	1.33	2.16
Jun	100	56.67	9.91	5.61	0.67	1.1	0.73	5.05	0.01	5.03
Jul	100	62.53	10.06	6.29	0.77	0.96	0.74	5.71	1.6	4.1
Aug	100	64.62	9.45	6.1	0.8	0.91	0.73	5.49	1.72	3.77
Sep	100	55.63	8.37	4.65	0.65	0.99	0.64	3.67	1.86	1.81
10-Oct	32.3	47.2	2.58	1.22	0.5	0	0	0	0	0
Season Total								23.4	6.53	16.87

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1983

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
11-May	67.7	48.06	6.69	3.21	0.52	1.2	0.62	2.45	0.1	2.35
Jun	100	55.45	9.91	5.49	0.65	1.1	0.71	4.78	1.07	3.71
Jul	100	63.81	10.06	6.42	0.79	0.96	0.76	5.99	2.58	3.41
Aug	100	64.84	9.45	6.13	0.81	0.91	0.73	5.53	1.51	4.02
Sep	100	58.32	8.37	4.88	0.69	0.99	0.69	4.13	1.27	2.85
17-Oct	54.8	48.87	4.36	2.13	0.53	0	0	0	0	0
Season Total								22.88	6.54	16.34

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1984

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	54.44	9.86	5.37	0.63	1.24	0.78	5.16	0.38	4.78
Jun	100	58.2	9.91	5.77	0.69	1.1	0.76	5.39	1.06	4.33
Jul	100	66.44	10.06	6.69	0.84	0.96	0.8	6.6	1.31	5.29
Aug	100	63.4	9.45	5.99	0.78	0.91	0.71	5.24	2.63	2.61
Sep	100	56.63	8.37	4.74	0.67	0.99	0.66	3.84	1.05	2.79
5-Oct	16.1	46.34	1.3	0.6	0.49	0	0	0	0	0
Season Total								26.23	6.44	19.79

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1985

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	49.85	9.86	4.92	0.55	1.24	0.68	4.13	0.47	3.66
Jun	100	60.75	9.91	6.02	0.74	1.1	0.81	5.98	0	5.98
Jul	100	65.77	10.06	6.62	0.82	0.96	0.79	6.44	1.8	4.64
Aug	100	63.87	9.45	6.03	0.79	0.91	0.72	5.34	1.04	4.3
Sep	100	52.4	8.37	4.38	0.59	0.99	0.59	3.16	2.08	1.09
16-Oct	51.6	47.26	4.11	1.94	0.5	0	0	0	0	0
Season Total								25.05	5.39	19.66

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1986

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	49.1	9.86	4.84	0.54	1.24	0.67	3.97	0.76	3.21
Jun	100	59.33	9.91	5.88	0.71	1.1	0.78	5.65	1.05	4.6
Jul	100	61.82	10.06	6.22	0.76	0.96	0.72	5.55	2.89	2.66
Aug	100	64.16	9.45	6.06	0.8	0.91	0.72	5.4	2.87	2.53
Sep	100	51.95	8.37	4.35	0.58	0.99	0.58	3.09	1.97	1.12
9-Oct	29	46.32	2.33	1.08	0.49	0	0	0	0	0
Season Total								23.66	9.55	14.11

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1987

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	49.95	9.86	4.93	0.55	1.24	0.68	4.15	1.06	3.09
Jun	100	60.2	9.91	5.96	0.73	1.1	0.8	5.85	0.08	5.77
Jul	100	63.29	10.06	6.37	0.78	0.96	0.75	5.88	1.19	4.69
Aug	100	62.02	9.45	5.86	0.76	0.91	0.69	4.97	2.44	2.53
Sep	100	55.07	8.37	4.61	0.64	0.99	0.63	3.58	0.47	3.11
21-Oct	67.7	49.12	5.36	2.63	0.54	0	0	0	0	0
Season Total								24.43	5.24	19.19

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1988

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	50.16	9.86	4.95	0.55	1.24	0.69	4.2	0.55	3.65
Jun	100	61.9	9.91	6.13	0.76	1.1	0.83	6.26	1.14	5.12
Jul	100	65.13	10.06	6.55	0.81	0.96	0.78	6.29	0.35	5.94
Aug	100	63.14	9.45	5.96	0.78	0.91	0.71	5.19	1.91	3.28
Sep	100	55.03	8.37	4.6	0.64	0.99	0.63	3.57	0.72	2.86
23-Oct	74.2	50.12	5.85	2.93	0.55	0	0	0	0	0
Season Total								25.51	4.66	20.85

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1989

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	51.69	9.86	5.1	0.58	1.24	0.72	4.53	0	4.53
Jun	100	58.98	9.91	5.84	0.71	1.1	0.77	5.57	0	5.57
Jul	100	65.89	10.06	6.63	0.83	0.96	0.79	6.47	1.71	4.76
Aug	100	61.9	9.45	5.85	0.76	0.91	0.69	4.95	1.48	3.47
Sep	100	57.77	8.37	4.83	0.69	0.99	0.68	4.03	0.59	3.44
14-Oct	45.2	48.4	3.6	1.74	0.52	0	0	0	0	0
Season Total								25.55	3.78	21.76

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1990

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	47.93	9.86	4.73	0.52	1.24	0.64	3.73	1.12	2.61
Jun	100	61.48	9.91	6.09	0.75	1.1	0.82	6.16	0.43	5.73
Jul	100	64.34	10.06	6.48	0.8	0.96	0.77	6.11	2.09	4.02
Aug	100	61.74	9.45	5.83	0.75	0.91	0.68	4.92	1.49	3.43
Sep	100	58.38	8.37	4.88	0.7	0.99	0.69	4.14	3.24	0.9
17-Oct	54.8	48.46	4.36	2.11	0.52	0	0	0	0	0
Season Total								25.05	8.36	16.69

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1991

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
3-May	93.5	49.04	9.23	4.52	0.53	1.23	0.66	3.68	0.07	3.61
Jun	100	56.85	9.91	5.63	0.67	1.1	0.73	5.09	0.41	4.67
Jul	100	64.05	10.06	6.45	0.79	0.96	0.76	6.05	1.73	4.32
Aug	100	64.61	9.45	6.1	0.8	0.91	0.73	5.49	1.17	4.32
Sep	100	56.38	8.37	4.72	0.66	0.99	0.65	3.8	1.88	1.92
19-Oct	61.3	48.73	4.86	2.37	0.53	0	0	0	0	0
Season Total								24.09	5.25	18.84

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1992

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	51.15	9.86	5.04	0.57	1.24	0.71	4.41	3.2	1.21
Jun	100	56.73	9.91	5.62	0.67	1.1	0.73	5.06	0.28	4.78
Jul	100	61.56	10.06	6.2	0.75	0.96	0.72	5.5	2.67	2.83
Aug	100	62.29	9.45	5.88	0.76	0.91	0.69	5.03	1.78	3.25
Sep	100	55.27	8.37	4.62	0.64	0.99	0.63	3.61	1.69	1.92
18-Oct	58.1	48.87	4.61	2.25	0.53	0	0	0	0	0
Season Total								23.6	9.62	13.99

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1993

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	51.89	9.86	5.12	0.58	1.24	0.73	4.58	0.67	3.91
Jun	100	55.87	9.91	5.53	0.65	1.1	0.71	4.87	0.24	4.63
Jul	100	63.42	10.06	6.38	0.78	0.96	0.75	5.9	0.05	5.86
Aug	100	62.76	9.45	5.93	0.77	0.91	0.7	5.12	3.23	1.88
Sep	100	54.33	8.37	4.55	0.63	0.99	0.62	3.46	1.16	2.3
13-Oct	41.9	47.17	3.35	1.58	0.5	0	0	0	0	0
Season Total								23.93	5.35	18.58

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1994

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	51.26	9.86	5.06	0.57	1.24	0.71	4.44	1.11	3.33
Jun	100	62.75	9.91	6.22	0.77	1.1	0.84	6.47	0.78	5.69
Jul	100	66.34	10.06	6.68	0.83	0.96	0.8	6.57	0.71	5.86
Aug	100	66.61	9.45	6.29	0.84	0.91	0.76	5.9	1.46	4.44
Sep	100	57.7	8.37	4.83	0.68	0.99	0.68	4.02	2.58	1.44
13-Oct	41.9	48.01	3.35	1.61	0.52	0	0	0	0	0
Season Total								27.4	6.64	20.76

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1995

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
9-May	74.2	47.91	7.32	3.51	0.51	1.21	0.62	2.68	1.01	1.67
Jun	100	56.42	9.91	5.59	0.66	1.1	0.72	4.99	0.47	4.52
Jul	100	64.45	10.06	6.49	0.8	0.96	0.77	6.14	0.8	5.33
Aug	100	67.74	9.45	6.4	0.86	0.91	0.78	6.14	1.86	4.28
Sep	100	58.23	8.37	4.87	0.69	0.99	0.69	4.11	0.73	3.39
19-Oct	61.3	48.42	4.86	2.35	0.52	0	0	0	0	0
Season Total								24.06	4.87	19.19

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1996

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	53.65	9.86	5.29	0.61	1.24	0.76	4.98	0	4.98
Jun	100	62.4	9.91	6.18	0.77	1.1	0.84	6.38	1.46	4.92
Jul	100	67.95	10.06	6.84	0.86	0.96	0.83	6.96	1.55	5.41
Aug	100	65.84	9.45	6.22	0.83	0.91	0.75	5.74	1.01	4.73
Sep	100	54.95	8.37	4.6	0.64	0.99	0.63	3.56	1.23	2.33
15-Oct	48.4	47.51	3.85	1.83	0.51	0	0	0	0	0
Season Total								27.62	5.25	22.37

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1997

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	52	9.86	5.13	0.59	1.24	0.73	4.6	1.17	3.43
Jun	100	58.65	9.91	5.81	0.7	1.1	0.77	5.49	0.99	4.5
Jul	100	65.58	10.06	6.6	0.82	0.96	0.79	6.4	2.67	3.73
Aug	100	63.81	9.45	6.03	0.79	0.91	0.72	5.33	1.35	3.98
Sep	100	59.43	8.37	4.97	0.71	0.99	0.71	4.32	3.33	0.99
15-Oct	48.4	48.45	3.85	1.87	0.52	0	0	0	0	0
Season Total								26.13	9.51	16.62

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1998

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	51.05	9.86	5.03	0.57	1.24	0.71	4.39	0.02	4.37
Jun	100	55.43	9.91	5.49	0.64	1.1	0.71	4.78	0	4.78
Jul	100	68.21	10.06	6.86	0.87	0.96	0.83	7.02	3.44	3.58
Aug	100	65.26	9.45	6.17	0.81	0.91	0.74	5.62	0.72	4.9
Sep	100	61.47	8.37	5.14	0.75	0.99	0.74	4.69	0.66	4.03
17-Oct	54.8	49.14	4.36	2.14	0.54	0	0	0	0	0
Season Total								26.5	4.85	21.65

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 1999

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
4-May	90.3	47.87	8.91	4.27	0.51	1.23	0.63	3.31	1.02	2.29
Jun	100	57.18	9.91	5.66	0.68	1.1	0.74	5.16	0.53	4.62
Jul	100	65.73	10.06	6.61	0.82	0.96	0.79	6.43	2.59	3.84
Aug	100	63.14	9.45	5.96	0.78	0.91	0.71	5.19	4.67	0.52
Sep	100	55.15	8.37	4.61	0.64	0.99	0.63	3.59	0.85	2.74
29-Oct	93.5	49.03	7.33	3.59	0.53	0	0	0	0	0
Season Total								23.69	9.67	14.02

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 2000

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	54.18	9.86	5.34	0.62	1.24	0.78	5.1	0.16	4.94
Jun	100	62.35	9.91	6.18	0.76	1.1	0.84	6.37	0.62	5.75
Jul	100	66.97	10.06	6.74	0.84	0.96	0.81	6.72	0.93	5.79
Aug	100	67.14	9.45	6.34	0.85	0.91	0.77	6.01	2.35	3.66
Sep	100	59.23	8.37	4.96	0.71	0.99	0.7	4.29	0.22	4.06
17-Oct	54.8	48.97	4.36	2.13	0.53	0	0	0	0	0
Season Total								28.49	4.28	24.21

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 2001

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	53.81	9.86	5.31	0.62	1.24	0.77	5.01	0.52	4.49
Jun	100	61.75	9.91	6.12	0.75	1.1	0.83	6.22	0.36	5.87
Jul	100	67.25	10.06	6.77	0.85	0.96	0.81	6.79	1.44	5.35
Aug	100	63.51	9.45	6	0.78	0.91	0.71	5.27	2.74	2.52
Sep	100	58.95	8.37	4.93	0.71	0.99	0.7	4.24	0.26	3.98
23-Oct	74.2	49.21	5.85	2.88	0.54	0	0	0	0	0
Season Total								27.53	5.32	22.21

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 2002

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	51.74	9.86	5.1	0.58	1.24	0.72	4.54	0	4.54
Jun	100	66.02	9.91	6.54	0.83	1.1	0.91	7.3	0	7.3
Jul	100	69.16	10.06	6.96	0.88	0.96	0.85	7.26	1.14	6.12
Aug	100	63.29	9.45	5.98	0.78	0.91	0.71	5.22	0.71	4.51
Sep	100	58.2	8.37	4.87	0.69	0.99	0.68	4.11	1.76	2.35
14-Oct	45.2	48.42	3.6	1.74	0.52	0	0	0	0	0
Season Total								28.43	3.61	24.82

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 2003

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
1-May	100	53.11	9.86	5.24	0.6	1.24	0.75	4.85	0.01	4.84
Jun	100	58.52	9.91	5.8	0.7	1.1	0.76	5.46	0	5.46
Jul	100	69.68	10.06	7.01	0.89	0.96	0.85	7.38	0.5	6.88
Aug	100	65.63	9.45	6.2	0.82	0.91	0.75	5.7	2.42	3.28
Sep	100	55.53	8.37	4.65	0.65	0.99	0.64	3.66	1.95	1.71
23-Oct	74.2	50.28	5.85	2.94	0.56	0	0	0	0	0
Season Total								27.05	4.87	22.17

Grass Pasture.TR21 Method = TR21 Modified BC w/Elevation Adjust Year 2004

Month	percent month	temp (F)	daylight (%)	f	kt	kc	k	ETp (in)	Re (in)	IWR (in)
20-May	38.7	47.34	3.82	1.81	0.5	1.15	0.58	1.3	0	1.3
Jun	100	56.07	9.91	5.55	0.66	1.1	0.72	4.91	0.3	4.62
Jul	100	62.4	10.06	6.28	0.77	0.96	0.73	5.68	1.34	4.34
Aug	100	56.92	9.45	5.38	0.67	0.91	0.61	4.03	0.52	3.52
Sep	100	54.6	8.37	4.57	0.63	0.99	0.62	3.51	2.78	0.72
14-Oct	45.2	47.5	3.6	1.71	0.51	0	0	0	0	0
Season Total								19.43	4.93	14.5

Appendix C

HGD Conveyance Loss Evaluation

GCC ENERGY MINE WATER SUPPLY PLAN
ENGINEERING REPORT
TRANSIT WATER LOSS ANALYSIS

The GCC Energy Substitute Water Supply Plan required a field study of the transit loss for the Hay Gulch Ditch (HGD) and the Huntington Lateral, to better quantify the water lost in transit and water available for use by GCC Energy. On July 30, 2008, Brian Houghton, Lead Hydrographer for Division of Water Resources, Division 7, conducted flow measurements on the Hay Gulch Ditch and the Huntington Lateral. Amy Kraft, of Harris Water Engineering (HWE) assisted Mr. Houghton in the field.

For each measurement location, revolutions and time in seconds were measured at even intervals across the width of the entire channel. The depth was also recorded for each measurement. A Pygmy current meter was used to measure the flow characteristics of revolutions and time in seconds. These measurements allowed calculation of the total channel width, channel area, and mean velocity, resulting in a calculation of the total discharge for each channel section. The flow at the Hay Gulch Ditch headgate was measured to calibrate the meter.

The HGD has three general segments: (1) the main segment from the diversion from the LaPlata River to the Huntington Lateral, 2.18 miles; (2) the valley segment of the HGD drops into the valley and follows along CR120 to the dry up field, 5.74 miles; and (3) the Huntington Lateral, 3.81 miles. Two measurement segments were selected because there were no diversions between the chosen locations and are: (a) valley segment, 4.62 miles of the 5.74 miles; and (b) 2.69 miles of the 3.81 mile Huntington Lateral.

<u>Huntington Lateral Measured Segment</u>
The Huntington Lateral flow was measured at two locations. The up-ditch location was downstream of the last turnout before Huntington. The down-ditch location was just upstream of the pond at the end of the lateral. The down-ditch location measurement was 2.95 cfs at 10:45 am. The up-ditch measurement was 3.01 cfs at 3:30 pm. This measurements indicates a loss of 0.06 cfs through the 2.69 mile measured segment.

An attempt was made to account for the diurnal fluctuations in the flow diverted from the LaPlata River. The water measured at the down-ditch location was estimated to have been diverted from the LaPlata River between 7:15 and 8:15 am on July 30, when the range was 12.4 to 12.6 cfs. The water measured at the up-ditch location was estimated to have been diverted from the LaPlata River at between about 1:30 and 2:30 pm on July 30, with a range of 12.4 to 13.1 cfs diverted. The difference in flows during the time periods is not adequate to ascertain that the diurnal affect impacted the flow readings.

The 0.022 cfs per mile loss rate is extrapolated to apply to the entire 3.81 mile Huntington Lateral to be 0.085 cfs based on the flow on the day of the measurements which was 3 cfs. The loss is 3% of the flow which is extrapolated to be 3% of any flow is lost in conveyance through the Huntington lateral.

HGD Valley Measured Segment

The flow in the Valley segment of the HGD was measured at three locations (blue diamonds on the attached map). The up-ditch location was downstream of the drop from the mesa. The mid-ditch location was near the entrance to the new GCC mine, 3.76 miles from up-ditch location. The down-ditch location was at the south end of the dry up field on the HGD, 4.64 miles downstream from the up-ditch location. The measurements were 2.1 cfs at 2:45pm, 1.7 cfs at 2:00pm, and 1.6 cfs at 1:00 pm, respectively from up to down-ditch. These measurements indicate a loss of 0.5 cfs between the up and down-ditch locations of 4.64 miles.

As with the above segment, an attempt was made to account for the diurnal fluctuations in the flow diverted from the LaPlata River. The water measured at the down-ditch location was estimated to have been diverted from the LaPlata River between 8:30 and 9:30 am on July 30, when the diversion ranged from 12.6 and 13.3 cfs. The water measured at the up-ditch location was estimated to have been diverted from the LaPlata River between 12:45 and 1:45 pm on July 30, when the diversion range was 13.5 to 13.0 cfs. Again, the difference in flows during the time periods is not adequate to ascertain that the diurnal affect impacted the flow readings.

The 0.11 cfs per mile loss rate for the measured portion of the HGD is extrapolated to apply to the 5.65 mile (from Huntington lateral to north end of dry up land) valley segment of the HGD to be 0.62 cfs. The flow at the upper end of the segment was 2.1 cfs on the day of the measurement that indicates a loss rate of 30%.

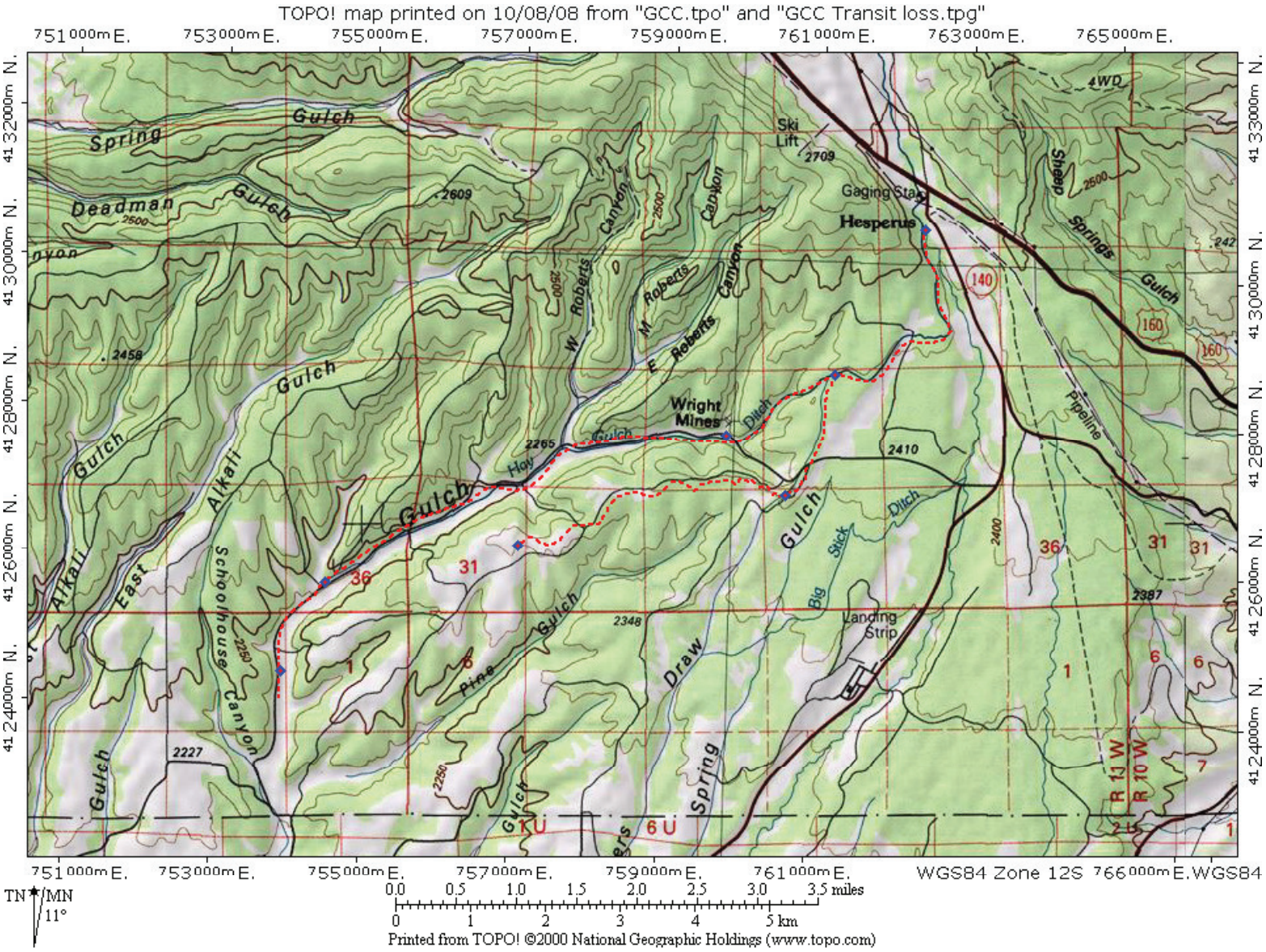
HGD Main Segment

The ditch loss for the 2.18 mile HGD main segment is also required to estimate the appropriate conveyance loss. No measurements were taken within this segment due to the inability to close the headgates in a control section, requiring the loss rate be derived from the estimates for the other two segments. This segment of the HGD most closely resembles the Huntington Lateral in terms of slope, channel shape, and soils; therefore, the 3% loss rate in the Huntington lateral is estimated and used herein.

Summary

The data collected for the ditch loss rates described above initially appeared to be too low for the Huntington Lateral and too high for the valley segment of the HGD; however, a thorough evaluation of the data and factors that may influence the recorded data could not be determined (e.g. river flow diurnal). Therefore, the resulting ditch loss rates are:

> The net loss rate for water conveyed from the LaPlata River headgate to the Huntington Lateral is 3% of the flow.
>
> The net loss rate for water conveyed through the Huntington Lateral is 3%.
>
> The net loss rate for water conveyed through the HGD from the Huntington Lateral to the dry up land is 30%.


TOPO! map printed on 10/08/08 from "GCC.tpo" and "GCC Transit loss.tpg"
751000m E.
753000m E.
755000m E.
757000m E.
759000m E.
761000m E.
763000m E.
765000m E.
41 32000m N.
41 30000m N.
41 28000m N.
41 26000m N.
41 24000m N.
Spring
Gulch
Deadman
Gulch
Ski Lift
2709
2609
Gaging Sta.
Hesperus
Sheep
Springs
Gulch
4WD
Roberts
Canyon
W. Roberts
M. Roberts
E. Roberts
Canyon
Wright Mines
Ditch
Gulch
Hay
2265
2410
Gulch
Alkali
East
Alkali
Schoolhouse
Canyon
Big Stick
Ditch
Pipeline
Landing Strip
Pine
Gulch
Draw
Spring
2348
2387
2400
2227
2250
2458
36
31
1
6
7
R 11 W
R 10 W
6 U
140
160
TN
MN
11°
0.0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 miles
0 1 2 3 4 5 km
WGS84 Zone 12S
Printed from TOPO! ©2000 National Geographic Holdings (www.topo.com)

Appendix D

Table 3 of Case No. 07CW100 for 9 Acres of Dry Up

TABLE 3

MAXIMUM DRY UP LAND CONSUMPTIVE USE AND LOSSES

ACRE-FEET PER MONTH

Months (1)	Bl-Cr Crop CU Dry Up 9 Acres (AF/Mon) (2)	Max On-Field Loss 40% (AF/Mon) (3)	Max Ditch Loss 30% (AF/Mon) (4)	LaPlata HGD Loss 7% (AF/Mon) (5)	Full Supply LaPlata Divr for Dry Up (AF/Mon) (6)
May	2.37	1.58	1.69	0.42	6.06
June	3.78	2.52	2.7	0.68	9.68
July	3.46	2.31	2.48	0.62	8.87
August	2.59	1.72	1.85	0.46	6.62
September	1.87	1.25	1.33	0.33	4.78
Totals	14.07	9.38	10.05	2.51	36.01

ACRE-FEET PER DAY

Months (1)	Full Supply CCU for Dry Up 9 Acres (AF/Day) (2)	Max On-Field Loss 40% (AF/Day) (3)	Max Ditch Loss 30% (AF/Day) (4)	LaPlata HGD Loss 7% (AF/Day) (5)	Full Supply LaPlata Divr for Dry Up (AF/Day) (6)
May	0.076	0.051	0.055	0.014	0.195
June	0.126	0.084	0.090	0.023	0.323
July	0.112	0.075	0.080	0.020	0.286
August	0.084	0.055	0.060	0.015	0.214
September	0.062	0.042	0.044	0.011	0.159

Notes: The AF/day table is the amounts in the AF/month table divided by the days in each month for use in the daily accounting.

The sum of columns 3 and 4 is to be released to the stream in Hay Gulch to replace historic return flow.

Column 5 is the conveyance loss in HGD that returns directly to the LaPlata River; therefore, does not need to be released as part of the accounting.

Appendix E

Accounting Forms

GCC MINE WATER SUPPLY ACCOUNTING FORM
44 ACRES OF DRY UP LAND

Year (1)	HGD Diversions (cfs) (2)a	Huntington Portion 37.5% (AF) (3)	Full Supply Dry UP Land CCU (AF) (4)a	Full Supply On-Field Losses (AF) (5)a	Full Supply HT Lat Losses (AF) (6)a	Full Supply HGD to Ht Lat Losses (AF) (7)a	Available Supply to Dry Up Lands (AF) (8)a	Full Supply Divr. To Dry Up Lands (AF) (9)a	CCU to Dry Up Lands (AF) (10)a	Available CCU Water to GCC (AF) (11)	Unlagged Releases to the Creek (AF) (12)a	Releases to the Infiltration Gallery (AF) (13)
=======	========	========	======	======	======	======	========	=======	======	========	======	======
1-May	10.50	7.812	0.374	0.160	0.017	0.041	0.547	0.592	0.345	0.345	0.008	0.008
2-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
3-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
4-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
5-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
6-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
7-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
8-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
9-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
10-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
11-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
12-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
13-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
14-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
15-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
16-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
17-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
18-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
19-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
20-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
21-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
22-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
23-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
24-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
25-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
26-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
27-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
28-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
29-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
30-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
31-May		0.000	0.374	0.160	0.017	0.041	0.000	0.592	0.000	0.000	0.000	0.000
Total		7.81	11.59	4.97	0.51	1.29	0.55	18.354	0.35	0.35	0.01	0.01

GCC MINE WATER SUPPLY ACCOUNTING FORM
44 ACRES OF DRY UP LAND

Year (1)	HGD Diversions (cfs) (2)a	Huntington Portion 37.5% (AF) (3)	Full Supply Dry UP Land CCU (AF) (4)a	Full Supply On-Field Losses (AF) (5)a	Full Supply HT Lat Losses (AF) (6)a	Full Supply HGD to Ht Lat Losses (AF) (7)a	Available Supply to Dry Up Lands (AF) (8)a	Full Supply Divr. To Dry Up Lands (AF) (9)a	CCU to Dry Up Lands (AF) (10)a	Available CCU Water to GCC (AF) (11)	Unlagged Releases to the Creek (AF) (12)a	Releases to the Infiltration Gallery (AF) (13)
=======	========	========	======	======	======	======	========	=======	======	========	======	======
1-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
2-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
3-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
4-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
5-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
6-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
7-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
8-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
9-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
10-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
11-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
12-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
13-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
14-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
15-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
16-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
17-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
18-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
19-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
20-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
21-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
22-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
23-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
24-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
25-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
26-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
27-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
28-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
29-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
30-Jun		0.000	0.616	0.264	0.027	0.068	0.000	0.949	0.000	0.000	0.000	0.000
Total		0.00	18.48	7.93	0.82	2.05	0.00	28.46	0.00	0.00	0.00	0.00

GCC MINE WATER SUPPLY ACCOUNTING FORM
44 ACRES OF DRY UP LAND

Year (1)	HGD Diversions (cfs) (2)a	Huntington Portion 37.5% (AF) (3)	Full Supply Dry UP Land CCU (AF) (4)a	Full Supply On-Field Losses (AF) (5)a	Full Supply HT Lat Losses (AF) (6)a	Full Supply HGD to Ht Lat Losses (AF) (7)a	Available Supply to Dry Up Lands (AF) (8)a	Full Supply Divr. To Dry Up Lands (AF) (9)a	CCU to Dry Up Lands (AF) (10)a	Available CCU Water to GCC (AF) (11)	Unlagged Releases to the Creek (AF) (12)a	Releases to the Infiltration Gallery (AF) (13)
=======	========	========	======	======	======	======	========	=======	======	========	======	======
1-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
2-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
3-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
4-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
5-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
6-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
7-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
8-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
9-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
10-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
11-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
12-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
13-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
14-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
15-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
16-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
17-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
18-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
19-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
20-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
21-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
22-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
23-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
24-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
25-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
26-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
27-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
28-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
29-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
30-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
31-Jul		0.000	0.546	0.234	0.024	0.061	0.000	0.841	0.000	0.000	0.000	0.000
Total		0.00	16.94	7.27	0.75	1.88	0.00	26.08	0.00	0.00	0.00	0.00

GCC MINE WATER SUPPLY ACCOUNTING FORM
44 ACRES OF DRY UP LAND

Year (1)	HGD Diversions (cfs) (2)a	Huntington Portion 37.5% (AF) (3)	Full Supply Dry UP Land CCU (AF) (4)a	Full Supply On-Field Losses (AF) (5)a	Full Supply HT Lat Losses (AF) (6)a	Full Supply HGD to Ht Lat Losses (AF) (7)a	Available Supply to Dry Up Lands (AF) (8)a	Full Supply Divr. To Dry Up Lands (AF) (9)a	CCU to Dry Up Lands (AF) (10)a	Available CCU Water to GCC (AF) (11)	Unlagged Releases to the Creek (AF) (12)a	Releases to the Infiltration Gallery (AF) (13)
=======	========	========	======	======	======	======	========	=======	======	========	======	======
1-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
2-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
3-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
4-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
5-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
6-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
7-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
8-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
9-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
10-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
11-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
12-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
13-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
14-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
15-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
16-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
17-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
18-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
19-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
20-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
21-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
22-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
23-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
24-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
25-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
26-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
27-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
28-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
29-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
30-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
31-Aug		0.000	0.408	0.175	0.018	0.045	0.000	0.628	0.000	0.000	0.000	0.000
Total		0.00	12.65	5.43	0.56	1.40	0.00	19.48	0.00	0.00	0.00	0.00

GCC MINE WATER SUPPLY ACCOUNTING FORM
44 ACRES OF DRY UP LAND

Year (1)	HGD Diversions (cfs) (2)a	Huntington Portion 37.5% (AF) (3)	Full Supply Dry UP Land CCU (AF) (4)a	Full Supply On-Field Losses (AF) (5)a	Full Supply HT Lat Losses (AF) (6)a	Full Supply HGD to Ht Lat Losses (AF) (7)a	Available Supply to Dry Up Lands (AF) (8)a	Full Supply Divr. To Dry Up Lands (AF) (9)a	CCU to Dry Up Lands (AF) (10)a	Available CCU Water to GCC (AF) (11)	Unlagged Releases to the Creek (AF) (12)a	Releases to the Infiltration Gallery (AF) (13)
=======	========	========	======	======	======	======	========	=======	======	========	======	======
1-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
2-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
3-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
4-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
5-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
6-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
7-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
8-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
9-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
10-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
11-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
12-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
13-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
14-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
15-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
16-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
17-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
18-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
19-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
20-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
21-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
22-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
23-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
24-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
25-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
26-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
27-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
28-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
29-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
30-Sep		0.000	0.304	0.131	0.013	0.034	0.000	0.469	0.000	0.000	0.000	0.000
Total		0.00	9.13	3.92	0.40	1.01	0.00	14.06	0.00	0.00	0.00	0.00

44 Acres of Dry Up Land Daily Accounting Form Column Descriptions

	Column Name	*Descriptions*
1	Year	Day of the Year; starting with May 1
2a	HGD Diversions (cfs)	Hay Gulch Ditch diversions from Division of Water Resources records (manually input on a daily basis)
3	Huntington Portion 37.5% (AF)	Huntington portion is 37.5% of HGD Diversions from column 2a
4a	Full Supply Dry Up Land CCU (AF)	The monthly Blaney-Criddle crop consumptive use for the dry up acres, divided by the days in the month; Refer to Table 2 for the monthly Crop Consumptive Use (CCU)
5a	Full Supply On-Field Losses (AF)	The on-field losses for a full supply to meet the CCU; equal to column 3 in Table 3
6a	Full Supply Ht Lat Losses (AF)	The Huntington Lateral losses for a full supply to meet the CCU; equal to column 4 in Table 3
7a	Full Supply HGD to Ht Lat Losses (AF)	The conveyance losses from the HGD headgate from La Plata to Huntington Lateral for a full supply to meet the CCU; equal to column 5 in Table 3
8a	Available Supply to Dry Up Lands (AF)	The Huntington share of HGD senior diversion allocated to the dry up lands
9a	Full Supply Divr. to Dry Up Lands	The amount of diversion needed to provide the full CCU on the dry up acres including all conveyance losses; equal to the sum of columns 4a, 5a, 6a and 7a
10a	CCU to Dry Up Lands (AF)	If column 8a is equal to or greater than column 9a, then adequate water for full CCU on the dry up acres is available and column 10a equals 9a; if column 8a less than column 9a then CCU reduced proportionally
11	Available CCU Water to GCC (AF)	Equal to column 10a; it is the CCU available to the dry up lands based on the daily available water supply
12a	Unlagged Releases to the Creek (AF)	Amount of water released to Hay Gulch stream channel is 50% of the maximum amount in column 5a if there is full CCU, if not a proportional reduction is done the same way as in column 10a
13	Releases to the Infiltration Gallery (AF)	Amount of water released to the infiltration gallery is 50% of the maximum amount in column 5a if there is full CCU, if not a proportional reduction the same as in column 10a

GCC MINE WATER SUPPLY ACCOUNTING FORM

9 ACRES OF DRY UP LAND

Year (1)	HGD Diversions (cfs) (2)a	Huntington Portion 37.5% (AF) (3)	Full Supply Dry UP Land CCU (AF) (4)b	Full Supply On-Field Losses (AF) (5)b	Full Supply HGD Valley Seg. Losses (AF) (6)b	Full Supply HGD to Ht Lat Losses (AF) (7)b	Available Supply to Dry Up Lands (AF) (8)b	Full Supply Divr. To Dry Up Lands (AF) (9)b	CCU to Dry Up Lands (AF) (10)b	Available CCU Water to GCC (AF) (11)	Unlagged Releases to the Creek (AF) (12)b
1-May	10.50	7.812	0.076	0.051	0.055	0.014	0.123	0.195	0.048	0.048	0.067
2-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
3-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
4-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
5-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
6-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
7-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
8-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
9-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
10-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
11-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
12-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
13-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
14-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
15-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
16-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
17-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
18-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
19-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
20-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
21-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
22-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
23-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
24-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
25-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
26-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
27-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
28-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
29-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
30-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
31-May		0.000	0.076	0.051	0.055	0.014	0.000	0.195	0.000	0.000	0.000
Total		7.81	2.37	1.58	1.69	0.42	0.12	6.060	0.05	0.05	0.07

GCC MINE WATER SUPPLY ACCOUNTING FORM

9 ACRES OF DRY UP LAND

Year (1)	HGD Diversions (cfs) (2)a	Huntington Portion 37.5% (AF) (3)	Full Supply Dry UP Land CCU (AF) (4)b	Full Supply On-Field Losses (AF) (5)b	Full Supply HGD Valley Seg. Losses (AF) (6)b	Full Supply HGD to Ht Lat Losses (AF) (7)b	Available Supply to Dry Up Lands (AF) (8)b	Full Supply Divr. To Dry Up Lands (AF) (9)b	CCU to Dry Up Lands (AF) (10)b	Available CCU Water to GCC (AF) (11)	Unlagged Releases to the Creek (AF) (12)b
1-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
2-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
3-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
4-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
5-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
6-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
7-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
8-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
9-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
10-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
11-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
12-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
13-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
14-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
15-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
16-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
17-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
18-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
19-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
20-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
21-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
22-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
23-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
24-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
25-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
26-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
27-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
28-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
29-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
30-Jun		0.000	0.126	0.084	0.090	0.023	0.000	0.233	0.000	0.000	0.000
Total		0.00	3.78	2.52	2.70	0.68	0.00	6.98	0.00	0.00	0.00

GCC MINE WATER SUPPLY ACCOUNTING FORM

9 ACRES OF DRY UP LAND

Year (1)	HGD Diversions (cfs) (2)a	Huntington Portion 37.5% (AF) (3)	Full Supply Dry UP Land CCU (AF) (4)b	Full Supply On-Field Losses (AF) (5)b	Full Supply HGD Valley Seg. Losses (AF) (6)b	Full Supply HGD to Ht Lat Losses (AF) (7)b	Available Supply to Dry Up Lands (AF) (8)b	Full Supply Divr. To Dry Up Lands (AF) (9)b	CCU to Dry Up Lands (AF) (10)b	Available CCU Water to GCC (AF) (11)	Unlagged Releases to the Creek (AF) (12)b
1-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
2-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
3-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
4-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
5-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
6-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
7-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
8-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
9-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
10-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
11-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
12-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
13-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
14-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
15-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
16-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
17-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
18-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
19-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
20-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
21-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
22-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
23-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
24-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
25-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
26-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
27-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
28-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
29-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
30-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
31-Jul		0.000	0.112	0.075	0.080	0.020	0.000	0.206	0.000	0.000	0.000
Total		0.00	3.47	2.31	2.48	0.62	0.00	6.40	0.00	0.00	0.00

GCC MINE WATER SUPPLY ACCOUNTING FORM

9 ACRES OF DRY UP LAND

Year (1)	HGD Diversions (cfs) (2)a	Huntington Portion 37.5% (AF) (3)	Full Supply Dry UP Land CCU (AF) (4)b	Full Supply On-Field Losses (AF) (5)b	Full Supply HGD Valley Seg. Losses (AF) (6)b	Full Supply HGD to Ht Lat Losses (AF) (7)b	Available Supply to Dry Up Lands (AF) (8)b	Full Supply Divr. To Dry Up Lands (AF) (9)b	CCU to Dry Up Lands (AF) (10)b	Available CCU Water to GCC (AF) (11)	Unlagged Releases to the Creek (AF) (12)b
1-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
2-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
3-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
4-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
5-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
6-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
7-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
8-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
9-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
10-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
11-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
12-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
13-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
14-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
15-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
16-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
17-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
18-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
19-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
20-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
21-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
22-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
23-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
24-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
25-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
26-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
27-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
28-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
29-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
30-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
31-Aug		0.000	0.083	0.055	0.060	0.015	0.000	0.154	0.000	0.000	0.000
Total		0.00	2.59	1.72	1.85	0.46	0.00	4.77	0.00	0.00	0.00

GCC MINE WATER SUPPLY ACCOUNTING FORM

9 ACRES OF DRY UP LAND

Year (1)	HGD Diversions (cfs) (2)a	Huntington Portion 37.5% (AF) (3)	Full Supply Dry UP Land CCU (AF) (4)b	Full Supply On-Field Losses (AF) (5)b	Full Supply HGD Valley Seg. Losses (AF) (6)b	Full Supply HGD to Ht Lat Losses (AF) (7)b	Available Supply to Dry Up Lands (AF) (8)b	Full Supply Divr. To Dry Up Lands (AF) (9)b	CCU to Dry Up Lands (AF) (10)b	Available CCU Water to GCC (AF) (11)	Unlagged Releases to the Creek (AF) (12)b
1-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
2-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
3-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
4-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
5-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
6-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
7-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
8-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
9-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
10-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
11-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
12-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
13-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
14-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
15-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
16-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
17-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
18-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
19-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
20-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
21-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
22-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
23-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
24-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
25-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
26-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
27-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
28-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
29-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
30-Sep		0.000	0.062	0.042	0.044	0.011	0.000	0.115	0.000	0.000	0.000
Total		0.00	1.87	1.25	1.33	0.33	0.00	3.45	0.00	0.00	0.00

9 Acres of Dry Up Land Daily Accounting Form Column Descriptions

	Column Name	*Descriptions*
1	Year	Day of the Year; starting with May 1
2a	HGD Diversions (cfs)	Hay Gulch Ditch diversions from Division of Water Resources records (manually input on a daily basis)
3	Huntington Portion 37.5% (AF)	Huntington portion is 37.5% of HGD Diversions from column 2a
4b	Full Supply Dry Up Land CCU (AF)	The monthly Blaney-Criddle crop consumptive use for the dry up acres, divided by the days in the month; Refer to Table 2 for the monthly Crop Consumptive Use (CCU) in Case No. 07CW100 in Appendix D
5b	Full Supply On-Field Losses (AF)	The on-field losses for a full supply to meet the CCU; equal to column 3 in Table 3 of Case No. 07CW100 in Appendix D
6b	Full Supply HGD Valley Seg. Losses (AF)	The HGD Valley Segment losses for a full supply to meet the CCU; equal to column 4 in Table 3 of Case No. 07CW100 in Appendix D
7b	Full Supply HGD to Ht Lat Losses (AF)	The conveyance losses from the HGD headgate from La Plata to Huntington Lateral for a full supply to meet the CCU; equal to column 5 in Table 3 of Case No. 07CW100 in Appendix D
8b	Available Supply to Dry Up Lands (AF)	The Huntington share of HGD senior diversion allocated to the dry up lands
9b	Full Supply Divr. to Dry Up Lands	The amount of diversion needed to provide the full CCU on the dry up acres including all conveyance losses; equal to the sum of columns 4b, 5b, 6b and 7b
10b	CCU to Dry Up Lands (AF) (Total acres)	If column 8b is equal to or greater than column 9b, then adequate water for full CCU on the dry up acres is available and column 10b equals 9b; if column 8b less than column 9b then CCU reduced proportionally
11	Available CCU Water to GCC (AF)	Equal to column 10b; it is the CCU available to the dry up lands based on the daily available water supply
12b	Unlagged Releases to the Creek (AF)	Amount of water released to Hay Gulch stream channel is the maximum amount of the of sum of columns 5b and 6b if there is full CCU, if not a proportional reduction is done the same way as in column 10b

GCC MINE WATER SUPPLY ACCOUNTING FORM

53 ACRES OF DRY UP LAND

Year (1)	HGD Diversions (cfs) (2)a	Huntington Portion 37.5% (AF) (3)	Full Supply Dry Up Land CCU (AF) (4)c	Full Supply On-Field Losses (AF) (5)c	Full Supply Ht Lat Losses (AF) (6)a	Full Supply HGD Valley Seg. Losses (AF) (6)b	Full Supply HGD to Ht Lat Losses (AF) (7)c	Available Supply to Dry Up Lands (AF) (8)c	Full Supply Divr. To Dry Up Lands (AF) (9)c	CCU to Dry Up Lands (AF) (10)c	Available CCU Water to GCC (AF) (11)	Unlagged Releases to the Creek (AF) (12)c	Releases to the Infiltration Gallery (AF) (13)
=======	========	========	========	========	========	========	========	========	========	========	========	========	======
1-May	10.50	7.812	0.450	0.211	0.017	0.055	0.055	0.670	0.788	0.393	0.393	0.074	0.008
2-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
3-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
4-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
5-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
6-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
7-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
8-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
9-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
10-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
11-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
12-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
13-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
14-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
15-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
16-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
17-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
18-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
19-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
20-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
21-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
22-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
23-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
24-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
25-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
26-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
27-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
28-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
29-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
30-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
31-May		0.000	0.450	0.211	0.017	0.055	0.055	0.000	0.788	0.000	0.000	0.000	0.000
Total		7.81	13.96	6.55	0.51	1.69	1.71	0.67	24.41	0.39	0.39	0.07	0.01

GCC MINE WATER SUPPLY ACCOUNTING FORM

53 ACRES OF DRY UP LAND

Year (1)	HGD Diversions (cfs) (2)a	Huntington Portion 37.5% (AF) (3)	Full Supply Dry Up Land CCU (AF) (4)c	Full Supply On-Field Losses (AF) (5)c	Full Supply Ht Lat Losses (AF) (6)a	Full Supply HGD Valley Seg. Losses (AF) (6)b	Full Supply HGD to Ht Lat Losses (AF) (7)c	Available Supply to Dry Up Lands (AF) (8)c	Full Supply Divr. To Dry Up Lands (AF) (9)c	CCU to Dry Up Lands (AF) (10)c	Available CCU Water to GCC (AF) (11)	Unlagged Releases to the Creek (AF) (12)c	Releases to the Infiltration Gallery (AF) (13)
=======	========	========	========	========	========	========	========	========	========	========	========	========	======
1-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
2-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
3-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
4-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
5-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
6-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
7-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
8-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
9-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
10-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
11-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
12-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
13-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
14-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
15-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
16-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
17-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
18-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
19-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
20-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
21-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
22-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
23-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
24-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
25-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
26-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
27-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
28-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
29-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
30-Jun		0.000	0.742	0.348	0.027	0.090	0.091	0.000	1.181	0.000	0.000	0.000	0.000
Total		0.00	22.26	10.45	0.82	2.70	2.73	0.00	35.44	0.00	0.00	0.00	0.00

GCC MINE WATER SUPPLY ACCOUNTING FORM

53 ACRES OF DRY UP LAND

Year (1)	HGD Diversions (cfs) (2)a	Huntington Portion 37.5% (AF) (3)	Full Supply Dry Up Land CCU (AF) (4)c	Full Supply On-Field Losses (AF) (5)c	Full Supply Ht Lat Losses (AF) (6)a	Full Supply HGD Valley Seg. Losses (AF) (6)b	Full Supply HGD to Ht Lat Losses (AF) (7)c	Available Supply to Dry Up Lands (AF) (8)c	Full Supply Divr. To Dry Up Lands (AF) (9)c	CCU to Dry Up Lands (AF) (10)c	Available CCU Water to GCC (AF) (11)	Unlagged Releases to the Creek (AF) (12)c	Releases to the Infiltration Gallery (AF) (13)
=======	========	========	========	========	========	========	========	========	========	========	========	========	======
1-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
2-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
3-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
4-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
5-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
6-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
7-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
8-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
9-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
10-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
11-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
12-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
13-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
14-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
15-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
16-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
17-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
18-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
19-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
20-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
21-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
22-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
23-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
24-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
25-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
26-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
27-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
28-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
29-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
30-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
31-Jul		0.000	0.658	0.309	0.024	0.080	0.081	0.000	1.048	0.000	0.000	0.000	0.000
Total		0.00	20.41	9.58	0.75	2.48	2.50	0.00	32.48	0.00	0.00	0.00	0.00

GCC MINE WATER SUPPLY ACCOUNTING FORM

53 ACRES OF DRY UP LAND

Year (1)	HGD Diversions (cfs) (2)a	Huntington Portion 37.5% (AF) (3)	Full Supply Dry Up Land CCU (AF) (4)c	Full Supply On-Field Losses (AF) (5)c	Full Supply Ht Lat Losses (AF) (6)a	Full Supply HGD Valley Seg. Losses (AF) (6)b	Full Supply HGD to Ht Lat Losses (AF) (7)c	Available Supply to Dry Up Lands (AF) (8)c	Full Supply Divr. To Dry Up Lands (AF) (9)c	CCU to Dry Up Lands (AF) (10)c	Available CCU Water to GCC (AF) (11)	Unlagged Releases to the Creek (AF) (12)c	Releases to the Infiltration Gallery (AF) (13)
=======	========	========	========	========	========	========	========	========	========	========	========	========	======
1-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
2-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
3-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
4-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
5-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
6-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
7-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
8-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
9-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
10-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
11-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
12-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
13-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
14-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
15-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
16-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
17-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
18-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
19-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
20-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
21-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
22-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
23-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
24-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
25-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
26-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
27-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
28-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
29-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
30-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
31-Aug		0.000	0.492	0.230	0.018	0.060	0.060	0.000	0.782	0.000	0.000	0.000	0.000
Total		0.00	15.24	7.15	0.56	1.85	1.86	0.00	24.25	0.00	0.00	0.00	0.00

GCC MINE WATER SUPPLY ACCOUNTING FORM

53 ACRES OF DRY UP LAND

Year (1)	HGD Diversions (cfs) (2)a	Huntington Portion 37.5% (AF) (3)	Full Supply Dry Up Land CCU (AF) (4)c	Full Supply On-Field Losses (AF) (5)c	Full Supply Ht Lat Losses (AF) (6)a	Full Supply HGD Valley Seg. Losses (AF) (6)b	Full Supply HGD to Ht Lat Losses (AF) (7)c	Available Supply to Dry Up Lands (AF) (8)c	Full Supply Divr. To Dry Up Lands (AF) (9)c	CCU to Dry Up Lands (AF) (10)c	Available CCU Water to GCC (AF) (11)	Unlagged Releases to the Creek (AF) (12)c	Releases to the Infiltration Gallery (AF) (13)
=======	========	========	========	========	========	========	========	========	========	========	========	========	======
1-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
2-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
3-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
4-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
5-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
6-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
7-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
8-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
9-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
10-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
11-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
12-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
13-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
14-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
15-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
16-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
17-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
18-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
19-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
20-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
21-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
22-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
23-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
24-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
25-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
26-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
27-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
28-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
29-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
30-Sep		0.000	0.367	0.172	0.013	0.044	0.045	0.000	0.584	0.000	0.000	0.000	0.000
Total		0.00	11.00	5.17	0.40	1.33	1.34	0.00	17.51	0.00	0.00	0.00	0.00

53 Acres of Dry Up Land Daily Accounting Form Column Descriptions

	Column Name	*Descriptions*
1	Year	Day of the Year; starting with May 1
2a	HGD Diversions (cfs)	Hay Gulch Ditch diversions from Division of Water Resources records (manually input on a daily basis)
3	Huntington Portion 37.5% (AF)	Huntington portion is 37.5% of HGD Diversions from column 2a
4c	Full Supply Dry Up Land CCU (AF) (Total acres)	Equal to the sum of 4a and 4b; it is the combined monthly Blaney-Criddle crop consumptive use for the dry up acres, divided by the days in the month
5c	Full Supply On-Field Losses (AF) (Total acres)	Equal to the sum of columns 5a and 5b; it is the combined on-field losses for a full supply to meet the CCU
6a	Full Supply Ht Lat Losses (AF) (44 acres)	The Huntington Lateral losses for a full supply to meet the CCU; equal to column 4 in Table 3
6b	HGD Valley Seg. Losses (AF) (9 acres)	The HGD Valley Segment losses for a full supply to meet the CCU; equal to column 4 in Table 3 of Case No. 07CW100 in Appendix D
7c	Full Supply HGD to Ht Lat Losses (AF) (Total acres)	Equal to the sum of columns 7a and 7b; it is the combined conveyance losses from the HGD headgate from La Plata to Huntington Lateral for a full supply to meet the CCU
8c	Available Supply to Dry Up Lands (AF) (Total acres)	Equal to the sum of 8a and 8b; it is the Huntington share of HGD senior diversion allocated to the dry up lands
9c	Full Supply Divr. to Dry Up Lands (Total acres)	Equal to the sum of columns 9a and 9b; it is the total amount of diversion needed to provide the full CCU on the total dry up acres including all conveyance losses
10c	CCU to Dry Up Lands (AF) (Total acres)	Equal to the sum of columns 10a and 10b; it is the combined total of water available based on the following analysis: if column 8c is greater than column 9c, then adequate water for full CCU on the dry up acres is available; If column 8c less than column 9c then CCU reduced proportionally
11	Available CCU Water to GCC (AF)	Equal to column 10c; it is the combined total of CCU available to the dry up lands based on the daily available water supply
12c	Unlagged Releases to the Creek (AF) (Total acres)	Equal to the sum of columns 12a and 12b; 12a is the 50% of the maximum amount in column 5a if there is a full CCU, if not a proportional reduction is done the same way is in column 10a; 12b is the maximum amount in column 5b if there is full CCU, if not a proportional reduction is done the same way as in column 10b
13	Releases to the Infiltration Gallery (AF) (44 acres)	Amount of water released to the infiltration gallery is 50% of the maximum amount in column 5a if there is full CCU, if not a proportional reduction the same as in column 10a

HUNTINGTON POND INFLOW/OUTFLOW MONTHLY ACCOUNTING FORM
FOR ALL DRY UP LANDS (53 ACRES)

			Inflow (AF)					Outflows (AF)					
Month (1)	HGD Diversions (cfs) (2)a	Huntington Portion 37.5% (AF) (3)	Available CCU Water to GCC (AF) (15)c	On-Field Losses (AF) (16)c	HGD Valley Seg. Losses (AF) (17)	La Plata River Water from Junior Water Right (AF) (18)	Total Inflow (19)	GCC Water Demand (AF) (20)	Evaporation Loss (AF) (21)	Releases to the Creek (AF) (22)c	Releases to the Infiltration Gallery (AF) (23)	Total Outflow (24)	Huntington Pond EOM Content (AF) (25)
=======	========	========	========	========	========	==========	========	========	========	========	========	========	========
January	135.20	100.59	0.00	0.00	0.00	0.00	0.00	2.89	0.15	0.00	0.00	3.04	14.31
February			0	0	0		0		0	0	0	0	0
March			0	0	0		0		0	0	0	0	0
April			0	0	0		0		0	0	0	0	0
May			0	0	0		0		0	0	0	0	0
June			0	0	0		0		0	0	0	0	0
July			0	0	0		0		0	0	0	0	0
August			0	0	0		0		0	0	0	0	0
September			0	0	0		0		0	0	0	0	0
October			0	0	0		0		0	0	0	0	0
November			0	0	0		0		0	0	0	0	0
December			0	0	0		0		0	0	0	0	0
Total			**0**	**0**	**0**	**0**	**0**	**2.89**	**0.15**	**0**	**0**	**3.04**	

Total Monthly Res.

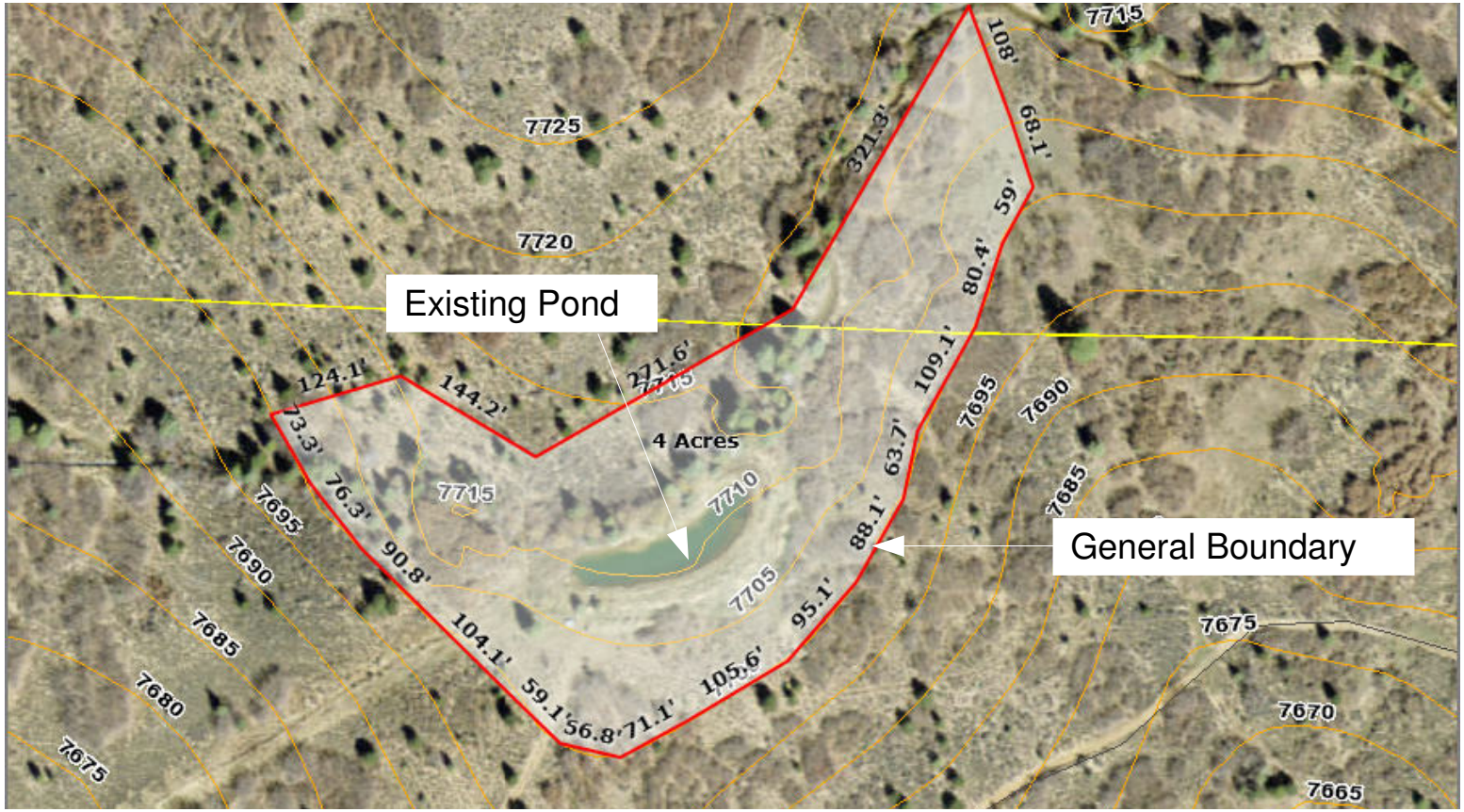
Huntington Pond Inflow/Outflow Monthly Accounting Form Column Descriptions

	Column Name	*Descriptions*
1	Month	Month of the Year; starting with January
2a	HGD Diversions (cfs)	Hay Gulch Ditch diversions from Division of Water Resources records (manually input)
3	Huntington Portion 37.5% (AF)	Huntington portion is 37.5% of HGD Diversions from column 2a
15c	Available CCU Water to GCC (AF)	Equal to the sum of columns 10a and 10b; its is the total CCU to dry up lands determined by the available water supply and reduce proportionally from the maximum when necessary
16c	On-Field Losses	Equal to the sum of columns 16a and 16b; it is the total on-field losses determined by the available water supply and reduce proportionally from the maximum when necessary
17	HGD Valley Seg. Losses (AF)	Equal to column 6b; the HGD Valley segment losses determined by the available water supply and reduce proportionally from the maximum when necessary
18	La Plata River Water from Junior Water Right (AF)	Diversions from the La Plata River when in priority (manually input)
19	Total Inflow	The sum of columns 15c, 16, 17, and 18; total inflow into the pond
20	GCC Water Demand (AF)	Monthly water demand at the Mine
21	Evaporation Loss (AF)	The monthly evaporation losses; based on a surface area of 4 acres; Refer to Table 4
22c	Releases to the Creek (AF)	Equal to the sums of column 17, column 16a divided by 2, and column 16b; monthly releases to the creek
23	Releases to the Infiltration Gallery (AF)	Equal to column 16a divided by 2; monthly release to the infiltration gallery
24	Total Outflow	Equal to the sum of columns 20, 21, 22c, and 23
25	Huntington Pond EOM Content (AF)	The end of month content of the pond

Appendix F

Figure 2. General Location of the Pond
Notice of Intent to Construct Impoundment Structure

Figure 2. General Location



Pond Descriptions

Location: Section 31, Township 35N, Range 11W, PMNM, SE, NE

Pond estimated size: surface area of 4 acres with a volume of 40 acre-feet. Depths ranging from 10 to 15 feet. The dam height 13 feet including 3 feet of free board.

Harris Water Engineering, Inc. 954 E. 2nd. Ave., Ste. #202 Durango, CO 81301 (970)-259-5322	Huntington Pond General Location September 2015	Location Map Image courtesy of: La Plata County GIS

OFFICE OF THE STATE ENGINEER
DIVISION OF WATER RESOURCES
303-866-3581

FOR OFFICE USE ONLY

DAM NAME _____ NO. _____ WATER DIV: _____ DIST: _____

NOTICE OF INTENT TO CONSTRUCT A NON-JURISDICTIONAL WATER IMPOUNDMENT STRUCTURE[1]

This notice is required per Section 37-87-125, C.R.S. (1998).

This notice must be submitted to the Division Engineer's Office a minimum of 45 days prior to construction.

(PLEASE PRINT OR TYPE NOTICE)

OWNER INFORMATION

Name: Dan Huntington (Huntington Ranches, LLC) Telephone: (_____)_____

Address: _____
Street / P.O. Box/ Rural Route City State Zip Code

Responsible Person: Dan Huntington Telephone: (_____)_____

Address: _____
Street / P.O. Box/ Rural Route City State Zip Code

Contractor: Owner (Dan Huntington) Telephone: (_____)_____

STRUCTURE INFORMATION

Name of Dam: Huntington Pond Water Division: 7 Water District: 33

Location[2]:
- Option 1 →
- **OR**
- Option 2 →

¼ / ¼ Sect: NE ¼ of the SE ¼, Sect: 31, Township: 35N, Range: 11W, NM P.M.
Distance of dam from Section lines 200 ft from ☑N ☐S, 750 ft from ☑E ☐W

Utilizing GPS: Set to UTM Datum. Measured on crest of dam above streamline/outlet.
Northing _____ m. Easting _____ m.
Note: GPS settings must be NAD83 CONUS.

Dam Dimensions: Vertical Height[3]: 10 ft., Length: 2,500 ft., Slopes: U/S: 2 H:1V, D/S 1 H:1V

Reservoir: Surface Area[1]: 4 acres, Capacity[1]: 40 acre feet, Drainage Area: 10 acres

Emergency Spillway: Width: 8 ft., Side Slopes: 2 H:1V, Freeboard[4]: 3 ft

Outlet Drain: Type: CMP, Size: _____ inches, Location: _____

Stream Name or Water Source[5]: Hay Gulch Ditch (La Plata River)

Proposed Water Use: Industrial & Domestic Water Court Case No. (If applicable) N/A

_____
Signature of Owner Date

DIVISION ENGINEER'S REQUIREMENTS: _____

DWR (03/07)

_____
Signature of Division Engineer Date

[1] A "Non-Jurisdictional Structure" is a dam creating a reservoir with a capacity of 100 acre-feet or less *and* a surface area of 20 acres or less *and* a vertical height (see footnote 3) of 10 feet or less.

[2] Please see example on reverse side (or page 2) of this form.

[3] "Vertical Height" is measured from the elevation of the lowest point of the natural surface of the ground where that point occurs along the longitudinal centerline of the dam up to the crest of the emergency spillway of the dam.

[4] "Freeboard" is the vertical distance from the bottom of spillway to the crest of the dam.

[5] If construction in reservoir intercepts groundwater, a well permit is required. (Well permit applications can be found at www.water.state.co.us/pubs/forms.asp)

The Craig Law Firm P.C.
Attorney At Law
813 Main Ave., Suite 206
Durango, CO 81301
Telephone: (970) 259-8978
Fax: (970) 259-2690

GEOFFREY M. CRAIG gmcraig@mydurango.net

October 11, 2015

Melissa Peterson
Colorado Division of Water Resources
1313 Sherman St., Suite 818
Denver, CO 80203
melissa.peterson@state.co.us

Re: Request for Approval of Substitute Water Supply Plan for GCC Energy, LLC, Case No. 2015CW3029 (District Court, Water Division 7).

Dear Melissa:

I represent GCC Energy, LLC ("GCC") in relation to its change of water right application filed in Case No. 2015CW3029 (District Court, Water Division 7), and this proposed substitute water supply plan ("SWSP"), which is being submitted pursuant to C.R.S. §37-92-308(4). This SWSP conforms to the State Engineer's Policy 2003-2 and the guidelines for SWSPs in Attachment to Policy 2003-2.

A description of the SWSP, including the items outlined in Policy 2003-2, are set forth in the engineering report from Harris Water Engineering, attached hereto. Also attached is the water decree in Case No. 07CW100 which changed other Huntington Class A Shares in the Hay Gulch Ditch. The change requested in this SWSP is similar to the change in that case.

The on-site operator of the plan will be Dan Huntington, Huntington Ranches, LLC, a Colorado Partnership, whose address is 8796 CR 120, Hesperus, CO 81326, (970) 749-8612; or Trent Peterson, GCC Energy LLC, 6473 CR 120, Hesperus, CO 81326, (970) 385-4528.

Proof of Notice

A certificate of notice is attached to this application. Pursuant to C.R.S. §37-92-308(4)(A)(II), Applicant has provided electronic mail notice to all parties who have subscribed to the substitute water supply plan notification list for Water Division 7. As set forth in C.R.S. §37-92-308(4)(A)(III), those parties shall have 30 days from the date of notice to submit comments on GCC's proposed SWSP.

The Application fee of $300.00 is included with this application.

If you have questions or need additional information, please don't hesitate to contact me.

Thank you for your assistance.

Sincerely,

THE CRAIG LAW FIRM P.C.

By: /s/ Geoffrey M. Craig
Geoffrey M. Craig

cc: client
Steve Harris and Carrie Lile
Rob Genualdi, Division Engineer
All parties on the Division 7 SWSP Notification List

The Craig Law Firm P.C.
Attorney At Law
813 Main Ave., Suite 206
Durango, CO 81301
Telephone: (970) 259-8978
Fax: (970) 259-2690

GEOFFREY M. CRAIG gmcraig@mydurango.net

October 11, 2015

NOTICE: To All Parties on the Water Division 7 SWSP Notification List

Re: Request for Approval of Substitute Water Supply Plan for GCC Energy, LLC, Case No. 2015CW3029 (District Court, Water Division 7).

The letter is to notify you that GCC Energy, LLC ("GCC") has submitted an application for a substitute water supply plan ("SWSP") to the State Engineer's Office pursuant to C.R.S. §37-92-308(4). A copy of the Application and related engineering report is provided with this notice.

As set forth in C.R.S. §37-92-308(4)(A)(III), you have 30 days from the date of this notice to submit comments on GCC's proposed SWSP. Comments should include any claim of injury, any terms and conditions that should be imposed upon the plan to prevent injury to an opposer's water rights or decreed conditional water rights, and any other information an opposer wishes the State Engineer to consider in reviewing the substitute water supply plan request. Any comments should be sent to Melissa Peterson, Colorado Division of Water Resources, 1313 Sherman St., Room 818, Denver, CO 80203, melissa.a.peterson@state.co.us; and to my office at the above mailing address or email address.

In order to be considered a "party to the application" you must respond to this notice within 30 days.

The State Engineer will deliver a copy of his decision to those who submit comments by first-class mail or electronic mail. Please indicate your preferred method of service with your comments.

Sincerely,
THE CRAIG LAW FIRM P.C.

By: /s/ Geoffrey M. Craig
Geoffrey M. Craig

cc: client
Steve Harris and Carrie Lile
Rob Genualdi
Melissa Peterson

EFILED Document
CO La Plata County District Court 6th JD
Filing Date: Apr 20 2011 3:27PM MDT
Filing ID: 37155395
Review Clerk: N/A

DISTRICT COURT, WATER DIVISION No. 7, COLORADO Court Address: 1060 East Second Avenue, Durango, CO 81301 Telephone No.: (970) 247-2304 CONCERNING THE APPLICATION FOR WATER RIGHTS OF GCC ENERGY, LLC, IN THE LA PLATA RIVER WATERSHED IN LA PLATA COUNTY	▲COURT USE ONLY▲
	Case No.: 07CW100 Div.: Ctrm.:

FINDINGS OF FACT, CONCLUSIONS OF LAW, JUDGMENT AND DECREE OF THE COURT

FINDINGS OF FACT

1. The Applicant, GCC Energy, LLC ("GCC"), c/o Trent Peterson, Vice President, 6473 County Road 120, Hesperus, CO 81326, by its attorneys at The Craig Law Firm P.C., filed an Application for A Change of Water Right, A Ground Water Right, A Water Storage Right and for Approval of a Plan for Augmentation on December 31, 2007 (the "Application").

2. The Application was filed in accordance with C.R.S. § 37-92-302 and the water clerk has caused notice of the Application to be published in accordance with subsection 3 of said section. The Application was published both in the resume for Water Division No. 7 and in the Durango Herald newspaper, which has general circulation in La Plata County. Applicant filed proof of publication with the court on February 18, 2008.

3. The La Plata Water Conservancy District (the "District") and CRV Indian Shadow Preserve, LP ("CRV") filed a timely statements of opposition in response to the Application. The time for filing statements of opposition has expired.

4. Applicant, the District and CRV have agreed to the terms of this decree as evidenced by their signatures hereon.

5. The Court has duly considered the stipulations of the parties and any comments of the Division Engineer in entering this ruling.

6. Change of Water Right - Hay Gulch Ditch ("HGD")

6.1. Previous Decree: Case No. 807, Amended Decree, La Plata County District Court, entered on January 12, 1898.

6.2. Decreed point of diversion: The point of diversion for the Hay Gulch Ditch was changed by the court in Case No. 807-B, to a point on the west bank of said La Plata River whence the quarter corner on the north line of said Section 23, T35N, R11W, NMPM, bears South 35°55' East a distance of 1102.7 ft.

6.3. Source: La Plata River.

6.4. Appropriation Date: February 8, 1888, Priority No. 3 in the La Plata River Basin.

6.5. Decreed Amount: 10.5 cfs

6.6. Decreed use: Irrigation.

6.7 Portion of HDG Water Right to be Changed: The water rights in HGD are owned by Hay Gulch Ditch, Inc. ("the Ditch Company"), which allocates water to its shareholders on the basis of 1/16 cfs per share. Huntington Ranches, LLC ("Huntington") owns 63 shares of Class A stock in the Ditch Company. Huntington has leased to GCC the amount of its shares which will allow GCC to divert up to 15 acre-feet of consumptive use of HGD water for the purposes described below ("the Leased Shares"). Huntington has leased the Leased Shares for a period of 50 years from the date of entry of this decree.

6.8 Description of Requested Changes:

6.8.1 POD: The Leased Shares shall continue to be diverted at the headgate of the Hay Gulch Ditch, except when they are diverted through the GCC Well Field as described below.

6.8.2. Alternate place of use: GCC's mining facility, located in Sections 19, 20, 30 and 31 in T35N, R11W; Sections 22, 23, 24, 25, 26, 27, 34, 35, and 36 in T35N, R12W; and Sections 2 and 3 in T34N, R12W, NMPM.

6.8.3. Additional uses: Commercial, industrial, domestic, augmentation as described in paragraph 9, exchange, and storage, as described in paragraph 8 below. The Leased Shares retain their existing decreed use and place of use so that when the Applicant's lease with Huntington is terminated, Huntington may use the water right to irrigate the historically irrigated land using the Leased Shares.

6.8.4. Administration of Consumptive Use for Leased Shares:

The Leased Shares historically irrigated 12 acres, shown on Figure A-1 ("12 Acres"). Due to potential subsurface irrigation, the 12 acres will be removed from irrigation by Huntington's Hay Gulch Ditch shares, but Applicant will receive consumptive use credits for only 9 acres of net dry-up land ("the 9 Acres"). Using a modified Blaney-Criddle formula, with adjustments for high altitude and local climate data, it has been determined, that with a full water supply, the annual crop consumptive use ("CCU") on the 12 Acres is 1.56 acre-feet per acre. See Table 2. With a full water supply, the 9 acres will therefore generate 14.07 acre-feet of consumptive use water on an average annual basis. Table 3, attached hereto shows the daily CCU attributable to the 9 acres assuming a full water supply ("Full Supply CCU").

Huntington's ownership of 63 Class A shares in the Ditch Company entitles it to 3.94 cfs of the 10.5 cfs decreed to the HGD, or 37.5% of the diversions at the HGD POD. Huntington historically used its 37.5% of the headgate diversions to irrigate 237 acres. Through the Leased Shares, Huntington will devote 4.2% of his water to the 9 acres pursuant to this change of water right, which equates to 1.58% of the total diversions made at the POD of the HGD. The daily full supply amounts, ditch losses, on-farm losses, and net CCU amounts are shown on Table 3 for the Leased Shares.

Administration of the CCU for the 9 Acres is not based on historic monthly CCU, but is based on the actual daily CCU available for the 9 Acres based on water availability at the HGD POD. The volume delivered to Applicant each day from the 9 acres will be the full supply CCU, as shown on Table 3, or the actual CCU available to the 9 acres based on diversion into the HGD, whichever is less. Column 6 of Table 3 shows the amount of water which must be diverted from the La Plata River to provide a full irrigation supply to the 9 acres. If 1.58% of the total HGD diversion each day is equal to or more than Column 6, then the amount in Column 2 (full supply CCU) will be delivered to Applicant; and the sum of the amounts in Columns 3 and 4 will be released to Hay Gulch. If 1.58% of the HGD diversion each month is less than the amount shown in Column 6, then the amount delivered to Applicant will be reduced proportionally based on the actual 1.58% of the HGD diversion divided by the amount in Column 6 for the appropriate month; and the sum of the amounts in Columns 3 and 4 for release to Hay Gulch will be reduced by the same proportion.

Applicant will divert, on a daily basis, the amount of daily CCU calculated as described above. On a daily basis, Applicant will account for the HGD headgate diversion, the CCU attributable to the 9 acres, and Applicant's return flow obligation for the 9 acres.

6.8.5. Season of Use. Applicant's diversion of the CCU set forth in Paragraph 6.8.4., above, will be diverted only from May 1st through September 30 of each year.

6.8.6. Return Flows. In order to replicate HGD historical return flow patterns, Applicant will deliver the ditch losses and return flows associated with the 9 Acres to a drainage channel adjacent to or upstream of the 12 Acres as shown on Figure A-1. The amount delivered to replace ditch losses and return flows shall be the sum of Columns 3 and 4 in Table 3, if the full

supply amount is available at the HGD headgate, or a lesser amount based on the lesser proportion of water available at the headgate as described in Section 6.8.4. Applicant will release its return flow obligation to the stream on a weekly basis.

6.8.7. Dry-Up: Huntington will dry-up 12 acres. At the conclusion of Applicant's lease with Huntington, irrigation from the HGD may be resumed for the 12 Acres. The 12 Acres shall be revegetated consistent with C.R.S. 37-92-305(4.5).

6.8.8 Dominion and Control. GCC intends to retain dominion and control over all fully consumable water attributable to the change of water right described herein. GCC's primary use of the water right changed herein (i.e., dust control) is fully consumable. However, to the extent that the Leased Shares are applied to less than fully consumptive uses, such as to supply GCC's domestic water needs, GCC will account for and will use the fully consumable return flows from said uses by diverting additional water from the Hay Gulch Ditch equal to the amount of fully consumable water released to the stream. If the wastewater leach field or discharge point for return flows is within 100 feet of Hay Gulch, return flows will be deemed to be instantaneous, and GCC can divert additional water equal to the return flows from Leased Shares without lagging such diversions. If, however, the leach field or discharge point is farther than 100 feet from Hay Gulch, GCC will perform a lag depletion analysis approved by Objector and DWR prior to diverting additional water from Hay Gulch Ditch equal to the amount of return flows from GCC's Leased Shares.

7. Conditional Ground Water Right - GCC Well Field.

7.1. Location and Description: The GCC Well Field will be comprised of up to three ground water wells located within the SW¼ of Section 36, T35N, R12W, NMPM. The actual location of the GCC Well Field, with distances from section lines, will be provided when GCC files an application to make the GCC Well Field water right absolute. The GCC Well Field will collectively operate as one water right.

7.2. Source: Ground water tributary to Hay Gulch, tributary to the La Plata River.

7.3. Amount: 30 gallons per minute, conditional. This amount is the combined total rate of flow requested for all of the wells operating under this conditional water right.

7.4. Uses: Industrial, commercial, domestic, and augmentation under paragraph 9 herein, including the right to store water as set forth in paragraph 8 herein for subsequent use for the above-identified uses.

7.5. Appropriation Date: December 31, 2007.

7.6. The GCC Well Field may operate out of priority when Applicant replaces the out-of-priority depletions resulting therefrom in accordance with the Plan for Augmentation set forth in

Paragraph 9, below. If the GCC Well Field is within 100 feet from the drainage channel in Hay Gulch, GCC may also use the Well Field to divert its interest in the changed Leased Shares, under the conditions described in Paragraph 6, above.

7.7 The GCC Well Field may be used for all uses set forth in Section 7.4 if the wells serving such uses are located within 100 feet from HGD or the drainage channel in Hay Gulch. Any wells located more than 100 feet from the HGD or the drainage channel in Hay Gulch shall only serve domestic use.

8. Water Storage Right - GCC Reservoir

8.1. Sources:

8.1.1. La Plata River, via the Hay Gulch Ditch.

a. Description of point of diversion: The diversion point for the Hay Gulch Ditch, decreed as a point on the west bank of the La Plata River whence the quarter corner on the north line of said Section 23, T35N, R11W, NMPM, bears South 35°55' East a distance of 1102.7 ft.

b. Rate of diversion for filling reservoir: 1.7 c.f.s.

c. Carriage agreement: Applicant shall maintain a carriage agreement with the Hay Gulch Ditch Company when diverting water under GCC Hay Gulch Ditch Diversion water right.

8.1.2. Consumptive use portion of the HGD Leased Shares, as long as the lease is in effect.

8.1.3. GCC Well Field, as described in Paragraph 7, above.

8.2. Amount: 20 acre-feet conditional, plus ditch loss from the headgate of the Hay Gulch Ditch to the point of delivery, for the new water storage right. The 20 acre-feet new conditional water right is in addition to the 14.07 acre-feet which may be stored pursuant to the change of water right set forth in Paragraph 6, above. Applicant may fill and make successive refills of the GCC Reservoir, not to exceed an annual volume of 34.07 acre-feet.

8.3. Uses: Industrial, commercial, domestic, and augmentation as set forth in paragraph 9 herein, with the right to use, reuse, and successively use to extinction all water stored for such purposes.

8.4. Appropriation Date: December 31, 2007 when filled from the junior La Plata River flows or the GCC Well Field, and the priority of the Leased Shares when filled under the change of water right described in paragraph 6 herein.

8.5. Location and Description of Storage Facility: The water will be stored in an underground reservoir that will be constructed in the NW¼ of Section 36, T35N, R12W, NMPM, La Plata County, Colorado, and in a storage tank located near the reservoir site. The reservoir will be created by the extraction of coal. The location set forth above is a proposed location and may change to conform to the as-built location. GCC will provide an as-built location with distances from section lines when it files an application to make the GCC Reservoir right absolute.

8.6. Administration. All water delivered to and diverted from storage will be metered through a 100,000 gallon water storage tank near the proposed underground reservoir site. Water immediately needed for Applicant's operations will be pumped directly from the tank. Any extra inflow not needed for immediate uses will be conveyed from the tank to the reservoir. If inflows are not adequate for Applicant's uses, water will be conveyed from the reservoir to the tank, and then to the end uses.

9. Augmentation Plan

9.1. Description of Plan: This plan will allow the GCC Well Field to operate out of priority. GCC will replace the out-of-priority depletions that result from out-of-priority diversions from the GCC Well Field in time, amount, and location either by discharging water from the GCC Reservoir, as described in Paragraph 8, above, into Hay Gulch, or by leaving fully consumable water to which GCC is legally entitled in Hay Gulch. Said fully consumable water may be attributable either to the Leased Shares changed herein, or to water diverted in priority under the GCC Reservoir water right, as described in Paragraph 8, above.

9.2. Augmented Structures: GCC Well Field, as described in Paragraph 7, above.

9.3. Replacement Water Supply:

9.3.1. CCU water associated with the Leased Shares, as changed in accordance with Paragraph 6, above.

9.3.2. Water diverted pursuant to the GCC Reservoir water right, as described in Paragraph 8, above.

9.4. Depletions. The water diverted out-of-priority by the GCC Well Field will be used for commercial/industrial, and domestic purposes at the GCC mining facility, the location of which is described in paragraph 6.8.2. The mine's domestic demand is estimated to be 1.16 acre-feet per year. See Table 1. Said use is assumed to be 15% consumptive, due to GCC's utilization of

a nonevaporative sewage disposal system. As a result, the mine's domestic depletion will be 0.17 acre-feet a year. The commercial/industrial use is deemed to be 100% consumptive. The depletions for the GCC Well Field affect Hay Gulch.

9.5. Instantaneous depletions. The GCC Well Field may be used only for commercial/industrial uses if the wells serving such uses are located within 100 feet from HGD or the drainage channel in Hay Gulch. Depletions from wells located within 100 feet from the HGD or Hay Gulch drainage channel shall be deemed to have an instantaneous impact to the stream. Depletions from well diversions for domestic use shall be deemed to be instantaneous to Hay Gulch, whether or not such wells are located 100 feet from the HGD or Hay Gulch drainage channel.

9.6. Administration. Applicant will meter the amount of water withdrawn from the GCC Well Field and will account separately for the amount of water that is used for domestic purposes and the water that is used for commercial/industrial uses. When the diversions from the GCC Well Field are out of priority, Applicant will replace 15% of the water that is applied to domestic use and 100% of the water that is used for commercial/industrial purposes.

9.7. Replacement. The out-of-priority depletions from the GCC Well Field will be replaced by one or a combination of the sources set forth in Paragraph 10.3, above. Said water may be either released from the GCC Reservoir described in Paragraph 8, above, and discharged into the HGD, or the Applicant will forgo the diversion of CCU from the Leased Shares, and discharge such CCU at the return flow location described in Section 6.8.6 to replace out-of-priority depletions.

9.8. Remarks. In the event that the wells drilled pursuant to the GCC Well Field ground water right are unable to produce at the rate of flow necessary to supply the proposed uses, GCC will provide water for said uses by withdrawing water from the GCC Reservoir. In such case, the operation of the augmentation plan under this paragraph 9 will not be necessary.

10. The Court finds that the change of water right described in Paragraph 6, above, will maintain historical conditions on the La Plata River and will not injuriously affect the owners of or persons entitled to use water under a vested water right or a decreed conditional water right.

11. The Court further finds that the Applicant initiated the appropriation for the GCC Well Field and for the GCC Reservoiron December 31, 2007, and that since that date, the Applicant has proceeded with diligence to develop said water rights.

12. The GCC Well Field and the GCC Reservoir are not speculative. Applicant has demonstrated that it can and will apply water diverted pursuant to said water rights to the claimed beneficial uses with diligence and within a reasonable time.

13. The augmentation plan described in Paragraph 9, above, will adequately replace depletions in time, amount, and location.

14. The water rights described above are part of an integrated system pursuant to C.R.S. §37-92-301(4)(b) that will be used to supply water to the Applicant.

CONCLUSIONS OF LAW

15. The foregoing paragraphs are incorporated herein to the extent that said paragraphs contain conclusions of law.

16. The Application having been published as required by law, the Court has jurisdiction over these proceedings and over all persons and water rights affected thereby, whether they have appeared or not.

17. Full and adequate notice of these proceedings and the matters adjudicated herein has been given in the matter required by law.

18. The Division Engineer is lawfully required to administer diversions under the water rights that are the subject of this ruling and decree. The State Engineer and Division Engineer, pursuant to C.R.S. §37-92-305(8), shall curtail all out-of-priority diversions, the depletions from which are not so replaced pursuant to this decree as to prevent injury to vested water rights.

19. Applicant has met all burdens of proof and complied with all standards and burdens of proof applicable to changes of water rights, new appropriations for conditional water rights, and augmentation plans.

20. The change of water right, new water rights, and plan of augmentation described above are contemplated and authorized by law, and will not injuriously affect the owners of or persons entitled to use water under a vested water right or a decreed conditional water right.

IT IS THEREFORE, ADJUDGED AND DECREED that:

21. The provisions of paragraphs 1-20 are incorporated herein.

22. The change of water rights described in Paragraph 6 is approved.

23. The conditional water rights described in Paragraph 7 and 8 are approved. The priorities for these water rights shall be 2007 pursuant to an application filed in the Water Court in 2007, and shall be junior to all water rights filed in previous years, and senior to all water rights filed in later years. As between rights filed in the same calender year, priorities shall be determined by historic dates of appropriation.

24. The plan of augmentation described in Paragraph 9 is approved.

25. Applicant shall comply with reasonable orders of the State or Division Engineer to install measuring devices that are necessary for the administration of the water rights decreed herein and shall make reports as reasonably requested by the State or Division Engineer.

26. Pursuant to C.R.S. §37-92-304(6), the Court shall retain jurisdiction over the change of water rights decreed herein for a period of five (5) years following entry of this decree, and the plan of augmentation decreed herein for a period of five (5) years following the GCC Well Field water right, or a portion thereof, being made absolute, to reconsider the question of injury to the vested water rights of others.

27. The terms of this decree and the water engineering employed herein are applicable to this case only, and shall not be construed as setting a precedent for future proceedings.

28. During the month of April, 2017, and every six (6) years thereafter, until the water rights decreed as conditional herein are decreed absolute, the owner or user thereof, if it desires to maintain the same, shall file an application for a finding of reasonable diligence with the Water Clerk of this Court.

Dated this 20th day of April, 2011.

BY THE COURT

Gregory G. Lyman

Gregory G. Lyman
Water Judge
Water Division No. 7

APPROVED AS TO FORM:

THE CRAIG LAW FIRM P.C.

By: Geoffrey M. Craig Date: 4/15/2011
Geoffrey M. Craig, #26370
813 Main Ave., Suite 206
Durango, CO 81301
Attorney for Applicant

MAYNES, BRADFORD, SHIPPS & SHEFTEL, LLP

By: Adam Reeves Date: 4/14/2011
Adam Reeves, #26230
835 E. 2nd Ave., Suite 123
Durango, CO 81301
Attorneys for Objector the La Plata Water Conservancy District

CARLSON, HAMMOND & PADDOCK, LLC

By:_____ Date:_____
Lee Johnson, #18852
1700 Lincoln Street, Suite 3900
Denver, CO 80203
Attorney for Objector CRV Indian Shadow Preserve, LP

CHECKED FOR FORM AND ADMINISTRABILITY:

_____ Date:_____
Rege W. Leach, Division Engineer
Colorado Division of Water Resources
Division No. 7
160 Rock Point Dr., Suite E
Durango, Colorado 81301
(970) 247-1845

APPROVED AS TO FORM:

THE CRAIG LAW FIRM P.C.

By:_____ Date:_____
Geoffrey M. Craig, #26370
813 Main Ave., Suite 206
Durango, CO 81301
Attorney for Applicant

MAYNES, BRADFORD, SHIPPS & SHEFTEL, LLP

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