



DEPARTMENT OF NATURAL RESOURCES

DIVISION OF WATER RESOURCES

February 8, 2016

George M.L. Robinson  
R<sup>2</sup> Incorporated Environmental and Engineering Services  
3926 North Highway 67  
Sedalia, CO 80135

John W. Hickenlooper  
Governor

Mike King  
Executive Director

Dick Wolfe, P.E.  
Director/State Engineer

RE: Gold Basin Mine Substitute Water Supply Plan  
SE1/4, Section 5, T12S, R80W, 6<sup>th</sup> P.M.  
Water Division 2, Water District 11  
SWSP ID 5724, WDID 1107813

Approval Period: February 8, 2016 through July 13, 2016 or January 31, 2017 (subject to condition no. 1)

Contact phone number for Mr. Robinson: 303-688-4718

Dear Mr. Robinson:

We have reviewed your letter dated August 13, 2015, requesting approval of a Substitute Water Supply Plan ("SWSP") for Gold Basin Mine, LLC ("Applicant"), pursuant to § 37-92-308(5), C.R.S. The purpose of this SWSP is to replace evaporative depletions associated with five settling ponds used at the Gold Basin Mine. Notice was sent to all parties on the Water Division 2 Notification List on July 24, 2015. The State Engineer's Office ("SEO") received comments during the statutory 35-day comment period from the Colorado Water Conservation Board ("CWCB") and the SEO has considered those comments. The required \$300 filing fee has been received (receipt no. 3671084).

An application for approval of a change of water right or a plan for augmentation has not been filed with the water court and the depletions associated with the proposed water uses will not exceed five years, therefore this request has been submitted pursuant to § 37-92-308(5), C.R.S. In accordance with § 37-92-308(5), C.R.S., SWSPs may be approved for new water use plans involving out-of-priority diversions or a change of water right, if no application for approval of a plan for augmentation or a change of water right has been filed with the water court and the water use plan or change proposed and the depletions associated with such water use plan or change will be for a limited duration not to exceed five years. This plan is the first year of operation for this SWSP.

#### Plan of Operation

The Gold Basin Mine is located in Chaffee County approximately 7.5 miles west of the town of Granite, in the SE1/4 of Section 5, Township 12 South, Range 80 West of the 6<sup>th</sup> P.M., at an elevation of 12,100 feet. The mine is located on Cache Creek, a tributary of the Arkansas River. Approximately 15 acres within the Gold Basin Mine were disturbed by past mining activities. The mine was reactivated in 1992 under the Colorado Division of Reclamation Mining and Safety ("DRMS") Permit No. M-1992-045. The current permitted area totals 32.3 acres. The mine is characterized as a surface mining operation allowing the removal of gold minerals. A water court decree approved in case no. 86CW79 for Pearson Placer acknowledges the use of the water from Cache Creek for Placer mining on June Placer, July Placer and Gold Basin Placer. The decreed amount of diversion for Pearson Placer is 15 cfs with a

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priority of June 30, 1947 (however this is junior to all priorities awarded in cases filed prior to 1986). The Applicant is seeking to divert water from Cache Creek under case no. 86CW79 for gold mining activities within the permitted boundary of Permit No. M-1992-045. Water diverted from Cache Creek will be used for washing the coarse grained materials, the fine materials and in the separation process that removes the gold from sand concentrates. The washing process is being done through the use of five settling ponds. This SWSP was requested for the purpose of replacing the out-of-priority evaporation depletions from the settling ponds.

## Depletions

The only depletion that results from the gold mining operation over the period of this SWSP is from evaporation from the settling ponds. Water will be initially diverted through a screen, a shaker and a sluice box. The water will then be conveyed into the first three ponds. After a period of settling out the fine suspended solids, process water will be decanted into the fourth pond to allow additional suspended solids to settle. When the fourth pond reaches holding capacity, water is gravity fed to the fifth pond to complete the sediment settling polishing process. A pump will be installed in the fifth polishing pond to recycle water back through the washing process. The evaporation depletion under this SWSP is 100 % consumptive. The five settling ponds do not expose ground water.

The maximum water surface area of the settling ponds is estimated as follows: Pond 1-2,735 square-feet, Pond 2-1,485 square-feet, Pond 3-1,360 square-feet, Pond 4-2,885 square-feet and Pond 5-680 square-feet, totaling 9,145 square-feet. You have determined the gross annual evaporation rate at the gold mine location to be 29.68 inches based on an annual pan evaporation rate of 39.58 inches taken from the Western Regional Climate Center at the Twin Lake Reservoir station and an evaporation factor of 0.75 of the pan evaporation rate. However, based upon evaporation atlases in NOAA Technical Report NWS 33, the SEO estimated annual gross evaporation as approximately 36 inches. For the purposes of this SWSP, an annual gross evaporation amount of 36 inches will be used. The SEO monthly distribution factors for sites above 6,500 feet were applied to the annual gross evaporation to determine the monthly gross evaporation (Table 2). Annual stream depletions from the water surface area of the settling ponds were estimated at approximately 0.65 acre-feet.

Computation of evaporation under this SWSP was reduced during the ice covered period. You have assumed the ice covered period will occur during the months of November, December, January, February, March, April and May based on the Leadville weather station average temperatures of 12.1°F for November, 3.8°F for December, 3.1°F for January, 4.5°F for February, 10.7°F for March, and 18.6°F for April, and 26.7°F for May. However, for the purpose of this SWSP, the Applicant shall replace the gross evaporation depletions from the water surface area of the settling ponds that may occur during the assumed ice covered period (the months of November, December, January, February, March, April, and May) for any time that the water surface area of the settling ponds is not completely covered by ice.

Computation of the gross evaporation during any time that the ponds are not completely covered by ice shall be determined as the pro-rata amount of the monthly gross evaporation rate distribution amount identified in the State Engineer's *General Guidelines for Substitute Supply Plans for Sand and Gravel Pits*, for sites above 6500 feet.

Since the water will be pumped directly from Cache Creek, the depletions are considered to not have a lagged impact on the stream.

## Replacement

Applicant will provide 1 acre-foot of fully consumable water obtained by agreement from the Upper Arkansas Water Conservancy District ("UAWCD") through the Upper Arkansas Water Activity Enterprise. A copy of the lease agreement with UAWCD was provided to this office with the SWSP request and is attached to this letter. The term of the lease is for one calendar year commencing on the date of the execution of the lease. The lease was entered between the Applicant and UAWCD on July 14, 2015. The current lease terminates on July 13, 2016. This SWSP will therefore expire on July 13, 2016 unless a new lease for replacement water is submitted to the SEO by that date.

The leased water will be delivered to the Arkansas River at or above the point of depletion at a location to be determined by the District. Releases of replacement water may be made from Twin Lakes Reservoir, which is located above the point of depletion. Releases may be made from Pueblo Reservoir at times there are no intervening calls or exchanges that would be injured by a Pueblo Reservoir release. Operation of this plan can only occur without injury so long as there is not a local call in effect on Cache Creek. Conveyance loss for delivery of augmentation water is subject to assessment and modification as determined by the Water Commissioner and/or Division Engineer.

There is one water right on the reach of Cache Creek between the Gold Basin Mine and the confluence with the Arkansas River that may be impacted during drought periods. The Colorado Water Conservation Board ("CWCB") has an in-stream flow right from the confluence of an unnamed tributary at latitude 39°02'04"N and longitude 106°20'10"W to the confluence of the Arkansas River for 3 cfs from May 1 through September 14; 1.5 cfs from September 15 through November 30; and 1 cfs from December 1 through April 30. The only time the flow in Cache Creek is expected to drop near the in-stream flow requirement is in late July, August or September.

## Conditions of Approval

This SWSP is hereby approved pursuant to § 37-92-308(5), C.R.S., subject to the conditions below:

1. This SWSP shall be valid for the period of February 8, 2016 through July 13, 2016, unless otherwise revoked, modified, or superseded by decree. The plan will be extended until January 31, 2017 if a new lease with the UAWCD is submitted to this office by July 13, 2016. Should an additional SWSP be requested, the provisions of § 37-92-308(5)(b), C.R.S., shall apply. The statutory fee of \$300 will be required pursuant to § 37-92-308(8), C.R.S. Any request for an additional SWSP must be submitted to this office no later than November 1, 2016.
2. In accordance with § 37-92-308(5), C.R.S., this SWSP cannot be renewed or approved for more than five years. This approval is for the first year of operation.
3. Approval of this SWSP is for the purposes stated herein and diversions are limited to Cache Creek at the location described in case no. 86CW79. In addition, evaporation is limited to the surface area of the five settling ponds. Additional diversion structures and/or additional uses for the water that is the subject of this SWSP will be allowed only if a new SWSP is approved for those additional structures/uses. Should a new SWSP be requested, the provisions of § 37-

92-308(5), C.R.S., shall apply. The statutory fee of \$300 will be required pursuant to § 37-92-308(8), C.R.S. The replacement water, which is the subject of this SWSP, cannot be sold or leased to any other entity during the term of this SWSP without prior approval of the Division Engineer.

4. The maximum combined water surface area of the five ponds shall not exceed 9,145 square-feet. Documentation of pond size may be required by the Division Engineer in the form of an aerial photo evaluation or survey by a Professional Land Surveyor during the plan year or years covered by subsequent renewals of this SWSP.
5. Accounting of water in this plan, including pumping, stream depletions, and replacement water deliveries must be provided to the Water Commissioner and Division Engineer by the 10<sup>th</sup> of the month following the end of each month. The accounting must be emailed to the Division Engineer ([Augmentation.Coordinator@state.co.us](mailto:Augmentation.Coordinator@state.co.us)) and the Water Commissioner ([Brian.Sutton@state.co.us](mailto:Brian.Sutton@state.co.us)), within 10 days after the end of the month for which the accounting applies. Accounting and reporting procedures are subject to approval and modification by the Division Engineer. NOTE: The Applicant shall verify that the entity making replacement, in this case UAWCD has included them on their accounting submitted to the Division office.
6. Conveyance loss for delivery of augmentation water is subject to assessment and modification as determined by the Water Commissioner and/or Division Engineer.
7. The name, address, and phone number of the contact person who will be responsible for the operation and accounting of this SWSP must be provided with the accounting forms to the Division Engineer and Water Commissioner.
8. Replacement water shall be made available to cover all out-of-priority depletions in time, place, and amount and shall be made available under the direction and/or approval of the Water Commissioner.
9. The CWCB has an instream flow right that could place a call within the reach of depletions, however CWCB has no measurement structure in place currently to administer a call. Should CWCB properly construct a measuring structure and place a call, depletions from this operation would have to be curtailed to meet that call.
10. This SWSP may be revoked or modified at any time should it be determined that injury to other vested water rights has occurred or will occur as a result of the operation of this SWSP. Should this SWSP expire without renewal or be revoked prior to adjudication of a permanent plan for augmentation, all use of water under this SWSP must cease immediately.
11. The decision of the State Engineer shall have no precedential or evidentiary force, shall not create any presumptions, shift the burden of proof, or serve as a defense in any pending water court case or any other legal action that may be initiated concerning the SWSP. This decision shall not bind the State Engineer to act in a similar manner in any other applications involving other SWSPs or in any proposed renewal of this SWSP, and shall not imply concurrence with any findings of fact or conclusions of law contained herein, or with the engineering methodologies used by the Applicant. Any appeal of a decision made by the State Engineer concerning an SWSP pursuant to § 37-92-308(5), C.R.S. shall be to the Division 2 Water Judge within thirty days of the date of this decision.

Should you have any questions, please contact Melissa Peterson of this office or Charlie DiDomenico in our Division 2 office in Pueblo at (719) 542-3368.

Sincerely,



Jeff Deatherage, P.E.  
Chief of Water Supply

Attachment: Table 2, UAWCD lease

cc: Steve Witte, Division Engineer  
Bill Tyner and Julie Pearson, Assistant Division Engineers  
Brian Sutton, Water Commissioner  
Dan DiRezza, Ground Water Commissioner  
Charlie DiDomenico, Augmentation Coordinator  
Don West, CWCB

JD/MAP/idc-Gold Basin Mine 2016

**Gold Basin Mine  
Gold Basin Mine, LLC  
Supplemental Water Supply Plan**

Table 2

**MONTHLY EVAPORATION CALCULATIONS FROM GOLD BASIN**

| <b>Month</b>                 | <b>Evaporation Distribution</b> | <b>Time/Placement<br/>100 % Depletion Est<br/>plus Surcharge/Total<br/>Gallons</b> |
|------------------------------|---------------------------------|--|
| January                      | Ice Covered <sup>1</sup>        |  |
| February                     | Ice Covered                     |  |
| March                        | Ice Covered                     |  |
| April                        | Ice Covered                     |  |
| May                          | Ice Covered                     |  |
| June                         | 15.5%                           | 50,500/28,600/79,100   |
| July                         | 16%                             | 52,100/29,700/81,800   |
| August                       | 13%                             | 42,400/24,600/66,400   |
| September                    | 11%                             | 35,800/21,000/56,800   |
| October                      | 7.5%                            | 24,500/13,700/38,200   |
| November                     | Ice Covered                     |  |
| December                     | Ice Covered                     |  |
|                              |                                 |  |
| <b>TOTAL (GALLONS)</b>       |                                 | <b>205200</b>  |
| <b>TOTAL (ACRE FEET)</b>     |                                 | <b>0.65 ACRE FEET</b>  |
| <b>Total (Acre Feet)</b>     | <b>Surcharge</b>                | <b>0.35 Acre Feet</b>  |
| <b>Total Consumptive Use</b> |                                 | <b>1.0 Acre feet</b>   |

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<sup>1</sup> See Table 1 Climatological Data Summary –Leadville Colorado  
Gold Basin Mine  
Chaffee County, Colorado  
July17, 2015

**WATER LEASE AGREEMENT**  
**(One year lease)**

THIS AGREEMENT is entered into this 14<sup>th</sup> day of July 2015, by and between GOLD BASIN MINE, LLC (hereinafter referred to as "Lessee"), whose address is Laurens Leffingwell, c/o Simpson Estates, 30 North LaSalle Street, Suite 1232, Chicago, Illinois, and the Upper Arkansas Water Conservancy District through its water activity enterprise, known as Upper Arkansas Water Activity Enterprise (hereinafter referred to as "District"), whose address is P.O. Box 1090, Salida, Colorado, 81201.

**RECITALS**

A. Lessee needs a temporary supply of replacement water to meet out-of-priority depletions. Lessee desires for this water to be made available in the Arkansas River basin from the District's water supplies in Twin Lakes Reservoir, Pueblo Reservoir or from other District owned or controlled sources in order to meet the requirements of a court or administratively approved substitute supply plan, replacement plan, or similar plan for the replacement of out-of-priority depletions ("Lessee's Replacement Plan").

The location of the Lessee's operations is ("Place of Need"): approximately 18 miles south of Leadville and south of Twin Lakes, located at 16020 Co. Rd. 298, located in the NE1/4 of Section 5, Township 12 South, Range 80 West of the 6th P.M.

B. The District owns, leases, or controls fully consumable water supplies from various sources, including but not limited to water attributable to shares of stock in Twin Lakes Reservoir and Canal Company (collectively "District Consumable Water").

C. Lessee desires to lease a portion of such water from the District for use in Lessee's Replacement Plan; and the District is willing to lease such water to Lessee under the terms and conditions hereof.

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

1. Lease of Water. Lessee shall lease from District, and District shall lease to Lessee, **one (1) acre-foot** of District Consumable Water. This amount shall be both the minimum and the maximum quantity of water to be paid for and delivered under this Lease. Lessee's failure to take delivery of its full leased amount of water shall not entitle Lessee to an extension of the terms of this lease.

2. Purpose. The water delivered pursuant to this Lease may be used by Lessee only to replace depletions pursuant to Lessee's Replacement Plan. District will cooperate with Lessee to identify the sources of the District's Consumable Water delivered pursuant to this Lease. Lessee

shall be responsible for drafting any such plan, obtaining necessary approvals for any such plan, administration and accounting for any such plan, and for all costs associated with such plan.

3. Rental. In consideration of the water to be delivered under this Lease, Lessee shall pay District the following:

(a) a nonrefundable original application fee of \$200.00; and

(b) a lease payment of \$286.00 per acre foot (\$121.00 as a per acre foot water fee and \$165.00 per acre foot for annual storage, maintenance and administration fee);

for a total lease payment of \$486.00 due and payable upon execution of this Lease.

4. Term. This Lease shall be effective for one calendar year commencing on the date of full execution of this Lease. The District shall not be responsible for delivering water to replace any depletions from Lessee's Replacement Plan, including any post-plan depletions after the term of this Lease.

5. Water. The water to be delivered pursuant to this Lease will be raw, untreated water from any one or a combination of sources available to the District. Once such water is delivered to Lessee pursuant to this Lease, Lessee shall have the right to recapture, reuse, and dispose of such water to its extinction. The District does not warrant and shall not be responsible for the quality of the water or the adequacy of such quality for any specific purpose.

6. Location of Delivery of Water. The District will deliver the leased water to the Arkansas River basin at a location or locations to be determined by the District. Although the District shall consult with Lessee and make reasonable attempts to deliver the leased water at a location or locations sufficient to meet the requirements of Lessee's Replacement Plan, the District does not warrant that the leased water can or will be delivered at a location sufficient for Lessee's Replacement Plan. If the leased water is from stored sources, the District may deliver it to the reservoir or at the outlet to the reservoir. If the leased water is not from storage, the District may deliver it at the location where such water flows into the stream. The District shall not be responsible for any diversion, measuring, or storage of the leased water after delivery of the water by the District.

7. Rate of Delivery of Water. The District shall deliver the leased water at times and rates to be determined by the District. Upon execution of this Lease, Lessee shall provide the District with a proposed monthly delivery schedule for the term of the Lease. The proposed delivery schedule shall include monthly totals in terms of acre-feet per month and maximum and minimum daily rates in terms of acre-feet per day. Although the District shall make reasonable attempts to deliver the leased water at times and rates specified in the proposed schedule, the District does not warrant delivery of the leased water at times and rates sufficient for Lessee's Replacement Plan.

8. Determination of Water Availability by the District Board. The District Board allows



surplus water to be leased to others on a temporary basis, such as this lease, until the same is needed by participants in the District's augmentation, substitute supply, or replacement plans. The extent to which surplus water is needed by participants in the District's plans is a fact to be determined by the District Board in the exercise of its reasonable discretion from time to time as occasion may require.

9. Interruption of Water Supply Beyond District Control. Both parties to this Lease recognize that the District's Consumable Water is variable in quantity for reasons beyond the control of the District. The District shall not be liable in tort or contract for any failure to accurately anticipate availability of water supply or because of an actual failure to supply water due to circumstances beyond the reasonable control of the District, including but not limited to act of God, strike, war, insurrection, or inability to serve arising out of the order of any court, or the lawful order of any governmental administrative body or agency clothed with authority to regulate matters pertaining to water, public utilities, public health or pollution control.

10. Emergency Water Limitations. The parties agree that from time to time emergency situations may require the District to limit leases of or the use of water leased from the District. The parties agree that the necessity for such limitation is a fact to be determined by the District in the exercise of its reasonable discretion from time to time, as occasion may require. The parties agree that the District may adopt such reasonable restrictions on the use of this leased water or priorities for curtailed use, as may be necessary to adapt to such emergency conditions, including limitations on Lessee's supplies pursuant to this Lease. The District shall not be liable in tort or contract for imposing such reasonable restrictions. In the event that the District is unable to deliver the leased water as specified in this Lease, then Lessee's payment for water shall be reduced or refunded in proportion to the amount of any reduction of deliveries by the District.

11. Not a Permanent Supply. The parties understand and agree that this Lease is not to be interpreted as any commitment on the part of the District to furnish water to Lessee on a permanent basis, but rather to assist Lessee in supplementing Lessee's own supplies by the leased water from the District for a temporary period.

12. Right to Object. The parties understand and agree that the District specifically reserves its right to object and may object to any Replacement Plan filed by Lessee to protect its interests in the water and this Agreement and to ensure compliance with applicable law, including the prevention of injury to other vested or conditional water rights, regardless of how Lessee uses the water.

13. Time of Essence/Remedies. Time is of the essence, and if any obligation created by this Lease is not performed by either party, then the nondefaulting party shall have all remedies available to it in law and equity.

14. This Lease may be assigned by Lessee only upon prior written consent of the District and at the District's sole discretion.

15. This Lease does not give Lessee any legal or equitable title in or to the water rights

from which the water is derived or any water or water rights of the District. This Lease does not entitle Lessee to seek judicial approval of permanent commitment of or a change in the water rights from which the water is derived.

16. In the event of litigation regarding this Lease, the prevailing party shall be awarded its costs, including reasonable attorneys' fees.

17. This Lease shall be governed by the laws of the State of Colorado.

IN WITNESS WHEREOF, the parties hereto have set their hands and seals on the day and year first above written.

UPPER ARKANSAS WATER CONSERVANCY DISTRICT, by and through its  
UPPER ARKANSAS WATER ACTIVITY ENTERPRISE

By



LESSEE: GOLD BASIN MINE, LLC

  
By: George M.L. Robinson

Title: Agent