Consent Agenda Item 1.i
March 20-21, 2019 Board Meeting
Case No. 18CW0011 (Water Division 2); Gold Basin Mine, LLC

Summary of Water Court Application
This is an Application for Approval of Plan for Augmentation.

Staff Recommendation
Staff recommends that the Board ratify the filing of a Statement of Opposition filed on behalf of the Board in January 2019 to protect CWCB's instream flow water rights.

CWCB Instream Flow Water Rights
The CWCB holds instream flow water rights, including the following water right in Water Division 2 in the Arkansas Headwaters Watershed, that could be injured by this application:

Case Number	Stream	Upper Terminus	Lower Terminus	CFS Rate (Dates)	Approp. Date
98CW0164	Cache Creek	confl unnamed tributary	confl Arkansas River	1 (12/1 - 4/30) 3 (5/1 - 10/14) 1.5 (10/15 - 11/30)	01/29/1998

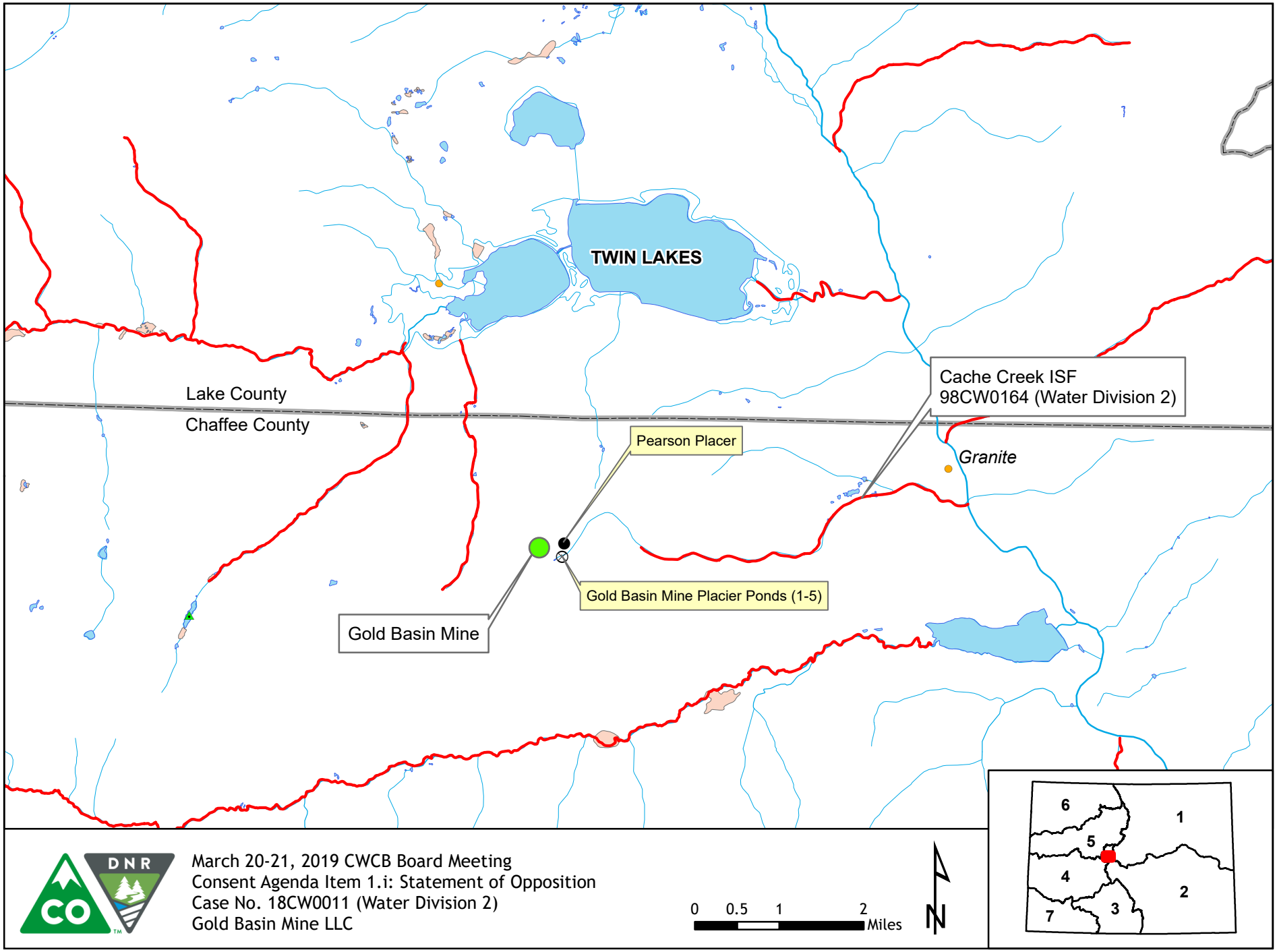
Potential for Injury

- The administrative exchange under Applicant's proposed augmentation plan should be defined clearly with a reference to intervening instream flow water rights.

- The proposed plan for augmentation may not replace depletions in the proper time, place and amount, which could injure the CWCB's instream flow water rights.

Other Objectors
Statements of Opposition were also filed by the Board of County Commissioners of Chaffee County, City of Aurora, and Patricia K. Zampedri and Donald M. Shake.

Attorney Representing CWCB
Andrew B. Nicewicz, Assistant Attorney General, is assigned to this case and can be contacted at andy.nicewicz@coag.gov, or 720-508-6259.


TWIN LAKES
Lake County
Chaffee County
Cache Creek ISF
98CW0164 (Water Division 2)
Pearson Placer
Granite
Gold Basin Mine Placier Ponds (1-5)
Gold Basin Mine
March 20-21, 2019 CWCB Board Meeting
Consent Agenda Item 1.i: Statement of Opposition
Case No. 18CW0011 (Water Division 2)
Gold Basin Mine LLC
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DISTRICT COURT, WATER DIVISION NO. 2, COLORADO

RESUME OF CASES FILED AND/OR ORDERED PUBLISHED DURING DECEMBER 2018 AND INVITATION TO JOIN STATE ENGINEER'S SUBSTITUTE WATER SUPPLY PLAN NOTIFICATION LIST AND/OR THE STATE ENGINEER'S PRODUCED NONTRIBUTARY GROUND WATER NOTIFICATION LIST

TO: ALL INTERESTED PARTIES

Pursuant to C.R.S. 37-92-302, you are hereby notified that the following is a resume of applications and certain amendments filed and/or ordered published during December 2018, in Water Division No. 2. The names and addresses of applicants, description of water rights or conditional water rights involved and description of ruling sought as reflected by said applications, or amendments, are as follows:

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CASE NO. 2018CW11 – GOLD BASIN MINE, LLC, Lauren Leffingwell (Member), 17000 Wadsworth Road, Old Mill Creek, IL 60083; (847) 828-5300

Application for Approval of Plan for Augmentation, as amended

CHAFFEE COUNTY

Name of structures to be augmented: Gold Basin Mine Placer Ponds. **Are structures decreed:** No. **Are there other water rights diverted from this structure?** No. **Legal description of structures:** UTM Coordinates (Zone 13; Units in Meters; NAD 83 Datum): Pond #1: 13S 382782.00 m E; 4321269.00 m N; Pond #2: 13S 382799.00 m E; 4321282 m N; Pond #3: 13S 382820.48 m E; 4321290 m N; Pond #4: 13S 383047 m E; 4321561.00 m N; Pond #5: 13S 383048.00 m E; 4321566.00 m N. See Attachment 1 and Figure 2 on file with the Application. (All exhibits mentioned herein are incorporated

by reference and may be inspected at the office of the clerk of this Court.) **Street Address:** 26020 County Road 398, Granite, CO 81228. **Source of UTMs:** Google Earth 12.13.2018. PLSS Description: Chaffee County, NW ¼ of SE ¼ Section 5, Township 12 South, Range 80 West, 6th P.M., 2225 feet from South line and 1450 feet from East line. (See Figure 3 to the Application). **Water rights to be used for augmentation:** Date of original and all relevant subsequent decrees: April 16, 1993; Case No.: 86CW79. See Attachment 1 on file with the Application. Court: District Court, Water Division 2 – John R. Tracey, Water Judge. Type of Water Right: Surface. Legal description of each point or diversion storage structure: Pearson Placer – SE ¼ NW ¼ SE ¼, T12S, R80W, 6th PM, Chaffee County, Colorado. Source of water: Headwaters of Cache Creek, a tributary to the Upper Arkansas River. Appropriation Date: Initial Priority Date June 30, 1947; Recent: 12/31/1986. See Attachment 1 to the Application. Amount decreed: Absolute 15 cfs – non-consumptive use. Amount to be included in this plan for augmentation: 1.2 acre feet. Decreed uses: Gold placer mining on the June, July and Gold Placer (MS54496) Patented Claims. **Does the Applicant intend to change a water right to provide a source of augmentation?** No. **Complete statement of plan for augmentation:** Plan of Operation: The Bold Basin Mine (Owned by Gold Basin Mine, LLC) is in Chaffee County approximately 7.5 miles west of the town of Granite, in the SE ¼ of Section 5, Township 12 South, Range 80 West of the 6th P.M. (see Figure 1 to the Application) at an elevation of approximately 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 placer mine was reactivated in 1992 under the Colorado Division of Reclamation Mining and Safety ("DRMS") Permit No. M-1992-045. The current permitted mine area (Colorado Division of Reclamation Mining and Safety (CDRMS) – M1992-045) 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 patented claims (MS-54496). The decreed amount of diversion for Pearson Placer is fifteen (15) cfs with a 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 coarse-grained materials, the fine materials and in the separation process that removes the gold from sand concentrates. The washing process is being done using a total of five settling ponds. The three ponds will be processing material in the upper permitted area where two ponds will be used on the lower portion of the mine permit area. Depletions. Evaporation from the processing ponds is the only water depletion from the gold mining operation. Water will be initially diverted through a screen, a shaker and a sluice box. The water in the upper processing area will be conveyed into the first (#1) of three ponds. (See Figure 2 to the Application). After a period of settling out the fine suspended solids, process water will be decanted into the second pond (#2) to allow additional suspended solids to settle. When the second pond reaches holding capacity, water is gravity fed to the third pond to complete the sediment settling polishing process. A pump will be installed in the third polishing pond to recycle water back through the washing process. The lower processing area consists of ponds labelled #4 and #5. Pond #4 will be used as the initial pond for

containing process water where the process water is decanted into the fifth pond (#5) for settling solids from pond four (#4). Water from pond five will be recycled back from pond 5 through the processing cycle. 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. The estimated annual gross evaporation is thirty-six (36) inches. (SWSP ID 5724, WDID 1107813). The evaporation depletion under this augmentation plan is 100% consumptive. The five settling ponds do not expose ground water. Computation of evaporation is reduced during the ice-covered period. Based on Gold Basin's mining experience, the ice-covered period occurs during the months of November, December, January, February, March, April and May. Historical access to the site occurs no sooner than June, and typically access later than October has not occurred. When the mining season ends the ponds typically are dry. However, for this augmentation plan, Gold Basin has included the snow-covered evaporation rate in the evaporation estimate. The gross evaporation depletions from the settling pond water surface area that may occur during the assumed ice-covered period (the months of November, December, January, February, March, April, and May) in the event the settling ponds may not be completely covered by ice. Computation of the gross evaporation during any time that the ponds are not completely covered by ice has been 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 6,500 feet. The State Engineer's Office (SEO) monthly evaporation distribution factors for sites above 6,500 feet were applied to the annual gross evaporation to determine the monthly gross evaporation (See Table 1 below). Annual stream depletions from the water surface area of the settling ponds were estimated (including surcharge) to be approximately 1.0 acre-foot. The Upper Arkansas Water Conservancy District lease requires an additional 0.2 acre-foot for water conveyance allocation. Under this augmentation plan, Gold Basin's total consumptive use is estimated to be 1.2 acre feet. Since the water will be pumped directly from Cache Creek, the depletions are considered to not have a lagged impact on the stream.

Table 1
Monthly Depletion
Augmentation Plan
Gold Basin Mine
Chaffee County, Colorado

MONTHLY EVAPORATION CALCULATIONS FROM GOLD BASIN[1]

Month	Monthly Evaporation Distribution	Depletion Monthly/Gallons
January	1.0%	2,502
February	3.0%	6,156
March	6.0%	12,312
April	9.0%	18,468
May	12.5%	25,650

[1] See Table 2 Climatological Data Summary – Leadville, Colorado

June	15.5%	31,808
July	16%	32,834
August	13%	26,677
September	11%	22,573
October	7.5%	15,391
November	4.0%	8,208
December	1.5%	3,078
TOTAL (GALLONS)[2]		**205,214**
TOTAL (ACRE FEET)		**0.65 ACRE FEET[3]**
Surcharge		**0.35 ACRE FEET**
UAWCD[4]		**0.2 ACRE FEET**
TOTAL CONSUMPTION		**1.2 ACRE FEET**

Table 2
Climate data for Leadville, Colorado

Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Year
Record High °F (°C)	56 (13)	54 (12)	61 (16)	65 (18)	80 (27)	82 (28)	85 (29)	83 (28)	80 (27)	72 (22)	66 (19)	56 (13)	85 (29)
Average high °F (°C)	31.1 (-0.5)	33.6 (0.9)	38.9 (3.8)	45.9 (7.7)	56.7 (13.7)	67.5 (19.7)	72.2 (22.3)	69.5 (20.8)	62.7 (17.1)	51.7 (10.9)	38.4 (3.6)	31.1 (-0.5)	50.0 (10.0)
Daily Mean °F (°C)	17.1 (-8.3)	19.0 (-7.2)	24.9 (-3.9)	32.2 (0.1)	41.7 (5.4)	50.2 (10.1)	55.0 (12.8)	53.4 (11.9)	46.8 (8.2)	37.3 (2.9)	25.2 (-3.8)	17.4 (-8.1)	35.0 (1.7)
Average Low °F (°C)	3.1 (-16.1)	4.5 (-15.3)	10.7 (-11.8)	18.6 (-7.4)	26.7 (-2.9)	32.9 (0.5)	37.8 (3.2)	37.3 (2.9)	30.9 (-0.6)	22.8 (-5.1)	12.1 (-11.1)	3.8 (-15.7)	20.1 (-6.6)
Record low °F (°C)	-27 (-33)	-38 (-39)	-30 (-34)	-17 (-27)	7 (-14)	19 (-7)	26 (-3)	23 (-5)	8 (-13)	-7 (-22)	-24 (-31)	-31 (-35)	-38 (-39)
Precipitation inches (mm)	0.66 (16.8)	0.84 (21.3	0.94 (23.9)	1.06 (26.9)	0.68 (17.3)	0.89 (22.6)	1.75 (44.5)	1.98 (50.3)	1.07 (27.2)	0.74 (18.8)	0.80 (20.3)	0.76 (19.3)	12.17 (309.1)
Snowfall inches (cm)	18.0 (45.7)	18.2 (46.2)	21.5 (54.6)	23.8 (60.5)	8.2 (20.8)	1.8 (4.6)	0.1 (0.3)	0.0 (0)	2.1 (5.3)	10.1 (25.7)	19.5 (49.5)	19.5 (49.5)	142.8 (362.7)
Average Precipitation days (≥0.01 inch)	9	8	10	10	7	6	12	14	9	6	9	9	109

Source: Western Regional Climate Center

Leadville has an alpine subarctic climate with cold winters and mild summers, bordering on a cold semi-arid climate. The average January temperatures are a maximum of 72.2 °F (22.3 °C) and a minimum of 37.8 °F (3.2 °C). There are averages of 278 days annually with freezing temperatures, which can occur in any month of the year. The record high temperature was 86 °F (30 °C) on June 23, 1954. The record low temperatures was -38 °F (-39 °C) on February 21, 1995. Average annual precipitation is 12.19 inches (310 mm). The wettest year was 1957 with 22.14 inches (562 mm) and the driest year was 1994 with 8.81 inches (224 mm). The most precipitation in one month was 4.83 inches (123 mm) in January 1996. The most precipitation in 24 hours was 2.10 inches (53 mm) on December 24, 1983. Average annual snowfall is 142.7

[2] Three Foot Estimated annual evaporation (Leadville, Colorado)
[3] One and two tenths (1.2) Acre foot Augmentation Lease Water from the Upper Arkansas Water Conservancy
[4] UAWCD-Upper Arkansas Water Conservancy District

inches (3,620 mm). The most snowfall in one year was 247.9 inches (6,300 mm) in 1996. The most snowfall in one month was 63.2 inches (1,610 mm) in February 1995.

Replacement. Gold Basin has determined 1.2 acre-feet of fully consumable water are required to meet regulatory augmentation replacement requirements. The necessary augmentation water will be 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 (Attachment 3) is on file with the Application. The term of the lease is for 20 calendar years commencing on the date of the execution of the lease. 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 will 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 three (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 flow in Cache Creek is expected to drop near the in-stream flow requirement is in late July, August or September. **Name(s) and address(es) of owner(s) or reputed owners of the land upon which any new diversion or storage structure, or modification to any existing diversion or storage structure is or will be constructed or upon which water is or will be stored, including any modification to the existing storage pool:** Lauren Leffingwell, 17000 Wadsworth Road, Old Mill Creek, IL 60083.