## STATE OF COLORADO

## **Colorado Water Conservation Board**

**Department of Natural Resources** 

1313 Sherman Street, Room 721 Denver, Colorado 80203 Phone: (303) 866-3441 Fax: (303) 866-4474 www.cwcb.state.co.us



John W. Hickenlooper

DNR Executive Director

Jennifer L. Gimbel CWCB Director

Governor

Mike King

TO:

Colorado Water Conservation Board Members

FROM:

Linda Bassi

Kaylea White

Stream and Lake Protection Section

DATE:

September 14, 2012

SUBJECT:

Consent Agenda Item 2.a, September 27-28, 2012 Board Meeting

Stream and Lake Protection - Temporary Lease of Water Right from Colorado

Water Trust and Aspen Shorefox, LLC for ISF use on the Colorado River

#### Introduction

On April 23, 2012, the Colorado Water Trust ("CWT") issued a "Request for Water" to solicit interested water rights owners to temporarily lease or loan water to the CWCB for instream flow ("ISF") use under section 37-83-105(2), C.R.S. (2011). Under section 37-83-105(2), a water rights owner can lease or loan water to CWCB for ISF use pursuant to a decreed ISF water right for a period not to exceed 120 days in any one calendar year, provided that the State and Division Engineers have determined that the lease/loan will not injure existing water rights. Rule 6k.of the Rules Concerning Colorado's Instream Flow and Natural Level Program ("ISF Rules") authorizes the CWCB Director to accept temporary leases that the State and Division Engineers have approved and requires the Board to ratify, or overturn, the Director's decision at the next regularly scheduled Board meeting.

At the July 2012 CWCB meeting, the Board ratified the Director's acceptance of a lease of water from the Upper Yampa Water Conservancy District for the Yampa River and a loan of water from Colorado Parks and Wildlife for the White River. Staff also informed the Board about the pending request for approval by the State and Division Engineers of a temporary lease of a portion of the Bunte Highline Ditch water right from the Colorado Water Trust and Aspen Shorefox, LLC for ISF use on the Colorado River. See map at Attachment 1. The State and Division Engineers approved the temporary lease on July 26, 2012, and the Director executed the lease on August 1, 2012. See approval letter at and executed lease at Attachment 2 & 3.

#### Staff Recommendation

Staff recommends that the Board ratify the Director's decision to accept the temporary lease from the Colorado Water Trust and Aspen Shorefox, LLC of up to 40 cfs of the Bunte Highline Ditch water right.

#### **Description of Lease**

Under the lease agreement, Aspen Shorefox, LLC ("Shorefox") will lease up to 40 cfs of direct flow water rights from the Bunte Highline Ditch on Willow Creek, tributary to the Colorado River, in Grand County for ISF use by the CWCB on the Colorado River downstream of the diversion headgate. The lease period is to be implemented initially for one year from July 1, 2012 to June 30, 2013, and may be extended for implementation up to two more years in the next ten years, by agreement among the parties and pursuant to section 37-83-105(2), C.R.S.

The ISF	water rights	that can	benefit	from this	lease are	described	below:
1110 101	THE THE THE	tilut cull	OCHICIIC	TI OTH THIS	icase are	ucsci iocu	OCIOW.

CWCB Case No.	Stream/Lake	Amount (cfs)	Approp. Date	Watershed	County
5-90CW300	Colorado River (Outlet Granby Res to Fraser River)	40 (5/1-8/31) 20 (9/1-4/30)	11/27/1990	Colorado headwaters	Grand
5-80CW447	Colorado River (hdgt Windy Gap div'n to Williams Fork River)	90 (1/1-12/31)	7/8/1980	Colorado headwaters	Grand
5-80CW446	Colorado River (Williams Fork River to Troublesome Ck)	135 (1/1-12/31)	7/8/1980	Colorado headwaters	Grand
5-80CW448	Colorado River (Troublesome Ck to Blue River)	150 (1/1-12/31)	7/8/1980	Colorado headwaters	Grand

The upper ISF reach of the Colorado River where the leased water will be used extends approximately 4 miles from the confluence with Willow Creek to the confluence with the Fraser River. The next three downstream ISF reaches of the Colorado River where this water will be used extend approximately 30 miles from the Windy Gap Project diversion to the confluence with the Blue River.

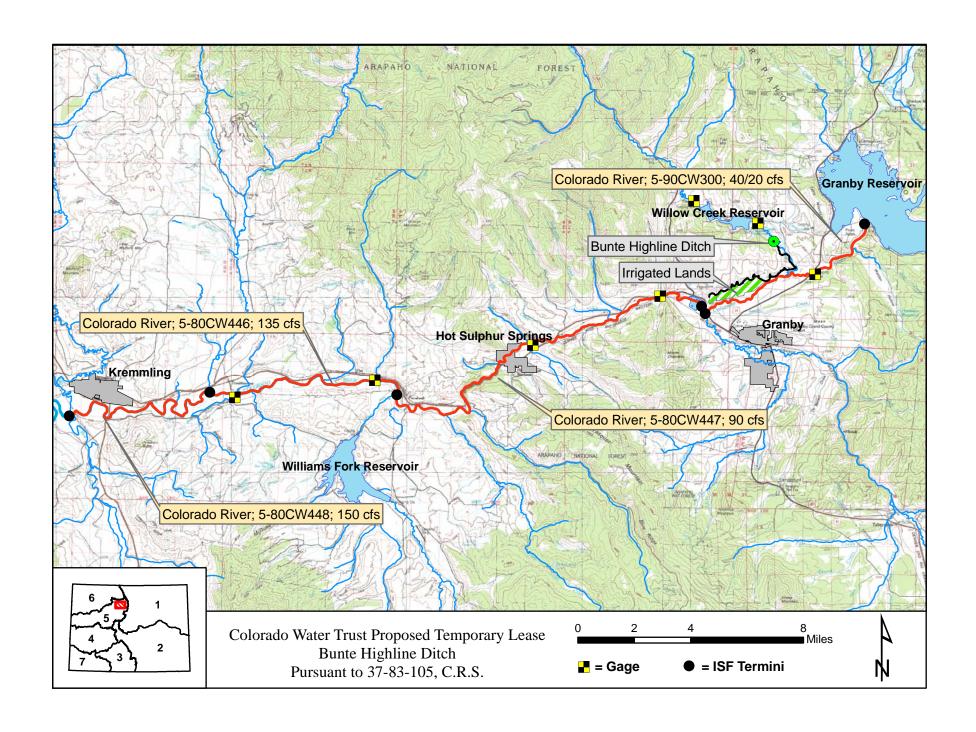
#### Implementation of Lease To Date

CWCB's use of the leased water began on August 9, 2012. On that date, of the 4.5 cfs of the leased water available for use, 1.82 cfs was left in the stream to benefit 3.4 miles of the Colorado River ISF right upstream from the Fraser River confluence, and 2.68 cfs was diverted into an on-site recharge pond to replace delayed return flows and prevent injury to other water users. CWT and CWCB staff have conducted several on-site measurements and inspections to verify flow rates for the leased water.

On August 20, 2012, gages indicated stream flow in the Colorado River ISF reach downstream from Windy Gap dropped below the decreed rate of 90 cfs. Approximately 1.0 cfs attributable to historical consumptive use from the Bunte Highline Ditch has been used to supplement flows in that ISF reach.

Water made available pursuant to this lease has also provided additional water (not protectable under the lease) to the following stream reaches:

- Approximately 2 miles of Willow Creek from Willow Creek Reservoir to the Bunte Highline Ditch headgate;
- Approximately 1 mile of Willow Creek from Bunte Highline Ditch headgate to the Colorado River confluence.



## OF COLOPE STATE A \* 1876 \*

#### DEPARTMENT OF NATURAL RESOURCES

## DIVISION OF WATER RESOURCES

John W. Hickenlooper Governor

Mike King Executive Director

Dick Wolfe, P.E. Director/State Engineer

Alan C. Martellaro, P.E. Division Engineer

July 26, 2012

Ms. Linda J. Bassi Colorado Water Conservation Board 1313 Sherman Street, Room 721 Denver, Colorado 80203

Re: Temporary Loan of Water Rights for Colorado Water Conservation Board for Instream

Pursuant to Section 37-83-105, C.R.S.

Section 11, T 2 N, R 76 W, Section 25, T 2 N, R 77, Section 18, T 1 N, R 78, and Sections 12 and 19, T 1 N, R 80 W  $6^{TH}$  P.M.

Water Division 5, Water District 51, Grand County

Approval Period: July 26, 2012 through June 30, 2022 Contact Phone Number for Ms. Linda J. Bassi: 303-866-3441

Dear Ms. Bassi:

We have reviewed your letter dated July 5, 2012 in which you request approval of a temporary loan of water pursuant to Section 37-83-105, C.R.S., for the Colorado Water Conservation Board ("CWCB" or "Applicant") for instream flow ("ISF") use. As required by § 37-83-105(2)(b)(II), C.R.S., written notice of the request for approval of a temporary loan of water was provided on July 6, 2012 to all parties who have subscribed to the Division 5 Substitute Water Supply Plan ("SWSP") Notification List. The Division of Water Resources ("DWR") did not receive comments during the statutory 15-day comment period. The statutory \$100 filing fee (receipt no. 3656021) was submitted with this request.

#### **Statement of Duration and Description**

CWCB is seeking approval of a temporary loan for water rights leased from Aspen Shorefox, LLC ("Shorefox") via the Colorado Water Trust ("CWT") for ISF use. The water rights leased from Shorefox consist of three direct flow rights in the Bunte Highline Ditch ("Bunte Ditch"), which diverts water from Willow Creek, a tributary of the Colorado River. The term of the temporary water lease agreement ("Agreement") is for the period of July 1, 2012 through June 30, 2022. Although the term of the Agreement is for a 10-year period, for the purpose of this approval the Agreement is only implemented for a one-year term of July 1, 2012 through June 30, 2013. Upon mutual agreement of all

parties, water may be available for an additional one-year term subject to execution of a lease extension. If CWCB seeks to implement the Agreement for a second-year term or a third-year term, CWCB shall notify the Division Engineer of its intention and provide a copy of the Agreement Extension prior to using the Bunte Ditch water for ISF use.

CWCB currently holds ISF water rights on the Colorado River decreed in Case Nos. 80CW446, 80CW447, 80CW448 and 90CW300, which are more specifically described in the table below:

Case Number	Upstream Terminus	Downstream Terminus	ISF decreed amounts (cfs)	Appropriation Date
80CW446	NW1/4 NW1/4, Sec. 18, T 1 N, R 78 W, 6 <sup>th</sup> P.M.	SW1/4 SE1/4, Sec. 12, T 1 N, R 80 W, 6 <sup>th</sup> P.M.	135	July 8, 1980
80CW447	Lat: 40°06'20"N Long:105°58'27"W (SW1/4 NW1/4, Sec. 25, T 2 N, R 77 W, 6 <sup>th</sup> P.M.)	NW1/4 NW1/4, Sec. 18, T 1 N, R 78 W, 6 <sup>th</sup> P.M.	90	July 8, 1980
80CW448	SW1/4 SE1/4, Sec. 12, T 1 N, R 80 W, 6 <sup>th</sup> P.M	NW1/4 NE1/4, Sec. 19, T 1 N, R 80 W, 6 <sup>th</sup> P.M.	150	July 8, 1980
90CW300	NE1/4 SE1/4, Sec. 11, T 2 N, R 76 W, 6 <sup>th</sup> P.M.	Lat: 40°06'01"N Long:105°58'25"W (SW1/4 SW1/4, Sec. 25, T 2 N, R 77 W, 6 <sup>th</sup> P.M.)	40 (May 1- August 31) 20 (September 1-April 30)	November 27, 1990

The Colorado River ISF water rights were decreed to preserve the natural environment to a reasonable degree. The temporary loan of water leased from Shorefox will be for ISF use within the same segments of the Colorado River as identified in Case Nos. 80CW446, 80CW447, 80CW448 and 90CW300 and shown on the attached map, except that the loan water will enter the Colorado River ISF reach at the confluence of Willow Creek and the Colorado River, which is below its upstream terminus. CWCB seeks to use the historical average monthly diversion rate of the Bunte Ditch for ISF use in the 3.5 mile segment of the Colorado River between Willow Creek and the Fraser River, which represents the portion of the ISF reach that historically did not show accretions of return flows from irrigation. However a portion of the historical monthly diversion will be delivered to a recharge pond in order to maintain the historical return flow that occurred below the 3.5 mile segment of the Colorado River. Downstream of the historical return flow location, CWCB seeks to use the historical consumptive use of the Bunte Ditch to benefit the ISF water rights in a 30.7 mile segment of the Colorado River between Windy Gap Reservoir and the confluence of the Colorado River with the Blue River. The ground water return flow from the historically irrigated parcel with the Bunte Ditch water rights will be maintained under this temporary loan approval. The loan water from the Bunte Ditch to CWCB for ISF use will be limited to the amount needed, when combined with the native flow, to achieve the decreed flow rates of each ISF water right. The loan water is expected to increase stream depth and wetted perimeter and to lower water temperature for the fish.

The temporary loan will provide water for up to 120 days in each year, not to exceed 3 years during the 10-year period ending in 2022.

Proponent's legal right to use the loaned water right

CWCB and the CWT have entered into a Temporary Water Lease Agreement ("Agreement") with Aspen Shorefox, LLC ("Shorefox"). Under the Agreement, Shorefox will make water available to CWCB for ISF use from its ownership in the Bunte Ditch water rights when conditions permit. A copy of the Agreement was provided to DWR with this request and is attached to this letter. Shorefox ownership in the Bunte Ditch was evidenced by the Public Trustee Deed that was provided to DWR with this request and a copy is attached to this letter. Based on its ownership in the Bunte Ditch, Shorefox has the right to the water rights in the Bunte Ditch, and, therefore the right to loan the water pursuant to the conditions set forth in Section 37-83-105 (2), C.R.S., and in Rule 6(k) of the Rules Concerning the Colorado Instream Flow and Natural Lake Level Program.

The CWCB existing ISF water rights decreed in Case Nos. 80CW446, 80CW447, 80CW448 and 90CW300 were identified as being more junior than the existing water rights on this segment of the Colorado River and may be out of priority during much or all of the 2012 irrigation season. Consistent with the terms and condition of the Agreement, CWCB shall notify the Division Engineer when the Bunte Ditch water rights are being used for ISF purposes. Shorefox agrees that it may not irrigate with the water rights in the Bunte Ditch while the water rights are being leased to CWCB.

#### Historical Use and Estimate of the Consumptive Use of the loaned water right

The Bunte Ditch water rights that are subject of the Agreement are summarized in the table below:

Appropriation and Priority Number	Decreed Amount (cfs)	Amount Owned by Shorefox (cfs)	Case Number	Appropriation Date	Adjudication Date
168	22.82	17.82	CA183	05/31/1887	08/03/1911
459-10	14.14	14.14	CA814	10/31/1914	10/31/1955
491-11	8.04	8.04	CA814	09/15/1941	10/28/1955

All water rights in the Bunte Ditch were decreed for direct flow irrigation use. The Bunte Ditch diverts water from Willow Creek in the NE1/4 of Section 17, Township 2 North, Range 76 West of the 6<sup>th</sup> P.M., approximately 1 mile downstream from Willow Creek Dam and it was historically used to irrigate approximately 494.6 acres of grasses and legumes (with timothy and clover being the dominant species) on the original Horn Ranch property located in Sections 19, 20 and 30, Township 2 North, Range 76 West of the 6<sup>th</sup> P.M. and Section 25, Township 2 North, Range 77 West of the 6<sup>th</sup> P.M. In 2003 Grand Elk, LLC acquired much of the Horn Ranch property and its water rights for development of a residential and recreational project. Horn Ranch retained the home site and approximately 190 acres in the western portion of the ranch. The 2004 irrigation season was the last year that the Bunte Ditch irrigated the entire property. Horn Ranch continued to use the Bunte Ditch for irrigation on their retained portion and the developer used it in a substitute water supply plan for a gravel mining operation. The Horn Ranch is located adjacent to the Colorado River near the Town of Granby. The irrigated fields under the Bunte Ditch are at an elevation of about 7,940 feet. Approximately 63 acres of the historically irrigated land under the Bunte Ditch are owned by Horn Ranch. The remaining irrigated acreage totals 431.6 acres. This season the Bunte Ditch began diverting water on May 7 for irrigation of the Horn Ranch property and portions of Shorefox property. Irrigation of Shorefox property will cease and instead Shorefox's interest in the Bunte Ditch water right will be bypassed at the headgate less the amount of water required to maintain the historical return flow.

Willow Creek Reservoir, an on-channel reservoir constructed on Willow Creek and operated by the Northern Colorado Water Conservancy District ("NCWCD") is located upstream of the headgate of the Bunte Ditch. The Bunte Ditch water right (priority 168) is senior to Willow Creek Reservoir, therefore the operator of the Willow Creek Reservoir has bypassed inflows in an amount equal to the decreed

amount of downstream diversion. This practice is in accordance with the legislation for the Colorado-Big Thompson Project ("C-BT") which requires the project to operate in a manner to preserve vested water rights. Under the proposed use of the Bunte Ditch water rights for ISF use, CWCB and Shorefox will coordinate with NCWCD for releases of Willow Creek Reservoir water when water is needed at the Bunte Ditch headgate.

The historical consumptive use of the irrigation supply for the 431.6 acres was quantified by Thomas A. Williamsen from Helton & Williamsen, P.C. based on the average monthly diversion for the period 1950 through 2004, using the Modified Blaney-Criddle Method (USDA, 1970) with crop coefficients developed from research conducted in Grand County (Carlson, 1991). Monthly temperature and precipitation data were taken from published records (NOAA 1950-2004) for stations near Grand Lake and Hot Sulphur Springs. The ditch loss from the headgate to the irrigated fields was assumed to be 20 percent and an irrigation efficiency of 40 percent was used. The water not stored in the soil root zone or consumed by the crop was distributed as one third to tail water and two-thirds deep percolation. Water in excess of the irrigation requirement was added to the soil moisture bank, which was assumed to be 10 to 24 inches deep in the fields adjacent to the river and 10 to 14 inches deep on the terrace fields. The average annual historical stream depletion from the senior water rights in the Bunte Ditch is estimated to be about 682.2 acre-feet, as shown in the attached Table 3. The timing of the ground water return flows was lagged to the Colorado River using the Glover method with the following aquifer parameters: X = 1,300 feet, W = 4,000 feet, S=0.2, and T = 170,000 gpd/ft (determined by Wright Water Engineers for the alluvial aquifer of Colorado River using pump tests and recovery tests).

Lagged ground water return flows will be replaced to the Colorado River using a recharge pond located near the center of the historically irrigated property. The recharge pond was excavated to a depth of approximately 13 feet and has a surface area of 14.7 acres. A measuring device will be installed at or near a turnout along the Bunte Ditch to control and measure the water delivered to the recharge site. The amount of water to be delivered to the recharge pond and water available under the Agreement are identified in the table below as a percentage of the water available at the Bunte Ditch headgate:

		APR	MAY	JUNE	JUL	AUG	SEP	OCT
Recharge	Ditch Loss	20%	20%	20%	20%	20%	20%	20%
	Delivery to the Recharge Pond	39.1%	41.2%	45.9%	47.1%	39.6%	36.6%	40.9%
Bypass at Headgate	HCU	21.3%	18.2%	11.1%	9.3%	20.6%	25.0%	18.6%
	Surface water return flow	19.6%	20.6%	23.0%	23.6%	19.8%	18.4%	20.4%
	Total bypass	40.9%	38.8%	34.1%	32.9%	40.4%	43.4%	39.1%

The maximum amount of leased water available for ISF use in the Colorado River segment between Willow Creek and the Fraser River is presented in the following table, which is based on the average monthly diversions less the percentage required for recharge:

Maximum Amount of Water available for ISF Use in the Colorado River between Willow Creek and the Fraser River

	APR	MAY	JUN	JUL	AUG	SEP	ОСТ
Average Monthly diversion (cfs)	1	14.8	34.2	29.2	4.5	1.9	2.1
Amount required for recharge( cfs)	0.59	9.06	22.54	19.59	2.68	1.08	1.28
Amount available for ISF use	0.41	5.74	11.66	9.61	1.82	0.82	0.82

The amount of leased water available for ISF use in the Colorado River segment between Windy Gap Reservoir and the confluence of the Colorado River with the Blue River is identified in the table bellow and is based on the average historical consumptive use of the Bunte Ditch:

Maximum Amount of Water available for ISF Use in the Colorado River between Windy Gap and the Blue River

Month	APR	MAY	JUN	JUL	AUG	SEP	OCT
CFS	0.21	2.69	3.8	2.7	0.93	0.48	0.39

The Division Engineer has reviewed the loan allowing the new time, place and use of this water right and determined, as required by 37-83-105(2)(a) and (2)(b), that it will not injure the existing water rights of others and will not affect Colorado's compact entitlements.

#### **Conditions of Approval**

This temporary loan of water is hereby approved pursuant to Section 37-83-105, C.R.S., subject to the conditions below:

- 1. This approval applies to diversions/releases beginning July 26, 2012 through June 30, 2022.
- If CWCB seeks to implement the Agreement for a second-year term or a third-year term, CWCB shall notify the Division Engineer of its intention and provide a copy of the Agreement Extension prior to using Bunte Ditch water for ISF use.
- 3. Approval of this temporary loan of water is for the purposes stated herein, specifically for temporary lease of Shorefox ownership in the Bunte Ditch water rights for CWCB ISF use on the Colorado River reaches as identified in Case Nos. 80CW446, 80CW447, 80CW448 and 90CW300.
- 4. The Applicant must provide the name, address and phone number of the person who will be responsible for the operation of this temporary loan of water to the SEO, the Division Engineer (Alan Martellaro, P.O. Box 396, Glenwood Springs, CO 81602, telephone 970-945-5665), and the water commissioner (Neal Misbach, P.O. Box 396, Glenwood Springs, CO 81602, 970-531-1159) within 20 days of the receipt of this approval.
- 5. All instream flow shall be measured in a manner acceptable to the Division Engineer. The Applicant shall install and maintain measuring devices as required by the Division Engineer Water Division 5 Glenwood Springs

for operation of this temporary loan.

- 6. The flow into the recharge pond <u>must</u> be metered and equipped with a continuous flow recorder unless the water commissioner in conjunction with the Division Engineer determines that adequate records may be kept without such equipment.
- 7. The recharge pond must be maintained in such a way as to minimize consumptive use of the water by vegetation.
- 8. The Applicant shall perform verification for all parcels of dried up land used to generate credits during the term of this plan. The Applicant shall provide an affidavit and a map to the water commissioner and division engineer that identifies and confirms the lands that are dried up during this irrigation season. If the Agreement is implemented for the second-year term or third-year term, than the Applicant shall provide a written notification to the Water Commissioner and Division Engineer identifying the lands to be dried up for that irrigation season.

The Applicant shall modify accounting to reflect that the credit from any dried up fields containing alfalfa or native grass was assessed in the following manner:

- (a) For fields deep tilled or chemically treated to successfully kill alfalfa or native grass, 100% credit will be given for consumptive use as otherwise computed under the conditions of this approval.
- (b) For fields not deep tilled or chemically treated to successfully kill alfalfa or native grass, records of monthly monitoring of depth to ground water at existing irrigation wells or existing or new monitoring wells or piezometers within ¼-mile of each alfalfa or native grass field must be maintained to the extent required by the Division Engineer. Credits will be reduced according to the following table when depth to ground water is less than the depth assumed to provide no significant contribution to native grass or alfalfa growth. Measurements taken at the start of each month will determine the necessary reduction in credit to be applied during the following month. The applicant may use another methodology upon review and approval by the Division Engineer.

Depth to Ground Water (Feet)	Percent Reduction in CU Credit <sup>1</sup>				
(i cet)	Native Grass	Alfalfa			
1	85%	100%			
2	50%	90%			
3	30%	75%			
4	20%	50%			
5	15%	35%			
6	10%	20%			
7	5%	15%			
8	0%	10%			

- Adapted from EVAPOTRANSPIRATION AND AGRONOMIC RESPONSES IN FORMERLY IRRIGATED MOUNTAIN MEADOWS, South Park, Colorado, March 1, 1990; Revised September 1, 1991
- 9. The Applicant must submit accounting reports to the Division Engineer ((Alan Martellaro, P.O. Box 396, Glenwood Springs, CO 81602, telephone 970-945-5665), and the Water Commissioner (Neal Misbach, P.O. Box 396, Glenwood Springs, CO 81602, 970-531-1159) on a daily basis or other interval acceptable to both of them. The Applicant shall also provide a report to the Division Engineer and water commissioner by November 15<sup>th</sup>, which summarizes diversions/releases made pursuant to this temporary loan of water. Accounting forms are subject to modification and approval by the Division Engineer. Flow rates shall be

reported in cfs, volumes shall be reported in acre-feet.

- 10. This temporary loan of water 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 temporary loan of water.
- 11. The decision of the Division Engineer shall have no precedential or evidentiary force, shall not create any presumptions, shift the burden of proof, or serve as a defense in a water court case or any other legal action that may be initiated concerning the loan. This decision shall not bind the Division Engineer to act in a similar manner in any other applications involving other loans 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 Division Engineer concerning a temporary loan of water pursuant to Section 37-83-105, C.R.S., shall be to the Division 5 Water Judge within fifteen days of the date of this decision.

Should you have any questions regarding this temporary loan of water, please contact me at (970) 945-5665.

Sincerely,

Alan Martellaro, P.E. Division Engineer

ale e. Wastell

Attachments: Map of the ISF reaches

Public Trustee Deed

**Temporary Water Lease Agreement** 

Table 3

cc: Dick Wolfe, State Engineer 1313 Sherman Street, Room 818 Denver, Co 80203 Telephone 303-866-3581

> Neal Misbach, P.O. Box 396 Glenwood Springs CO 81602 Telephone 970-531-1159

# Table 3 Water Budget Summary 1950-2004 Representing Apsen Shorefox, LLC Proportional Interests

(Values in Acre-Feet)

Row	Component	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Annual
1	Diversion (prorated)	0.0	0.0	0.0	0.0	0.0	58.7	911.1	2,034.4	1,793.8	275.6	116.0	132.3	5,322.1
2	Ditch loss	0.0	0.0	0.0	0.0	0.0	11.7	182.2	406.9	358.8	55.1	23.2	26.5	1,064.4
3	Field delivery	0.0	0.0	0.0	0.0	0.0	47.0	728.9	1,627.6	1,435.1	220.5	92.8	105.9	4,257.6
4	Deep percolation	0.0	0.0	0.0	0.0	0.0	23.0	375.1	934.3	845.5	109.0	42.5	54.2	2,383.6
5	Tailwater	0.0	0.0	0.0	0.0	0.0	11.5	187.6	467.2	422.8	54.5	21.3	27.1	1,191.8
6	Crop consumptive use	0.0	0.0	0.0	0.0	0.0	0.0	113.4	168.1	167.9	106.7	96.3	29.8	682.2
7	EOM soil storage	66.6	66.6	66.6	66.6	66.6	79.1	131.9	189.9	188.8	139.0	71.7	66.6	1,200.2
8	Soil storage change	0.0	0.0	0.0	0.0	0.0	12.5	52.8	58.0	-1.1	-49.8	-67.3	-5.1	
9	Surface water return	0.0	0.0	0.0	0.0	0.0	11.5	187.6	467.2	422.8	54.5	21.3	27.1	1,191.8
10	Groundwater return	87.2	34.5	8.2	3.3	1.3	10.1	172.0	526.8	700.7	444.1	237.3	158.2	2,383.6
11	Total return flow	87.2	34.5	8.2	3.3	1.3	21.6	359.5	994.0	1,123.4	498.6	258.6	185.3	3,575.5
12	Stream depletion (ac-ft)	-87.2	-34.5	-8.2	-3.3	-1.3	25.4	369.4	633.6	311.7	-278.1	-165.8	-79.4	682.2
13	Stream depletion (cfs)	-1.5	-0.6	-0.1	-0.1	0.0	0.4	6.2	10.6	5.2	-4.7	-2.8	-1.3	11.5

#### Row description:

- 1) Average monthly diversion by Bunte Highline Ditch adjusted for Aspen Shorefox, LLC prorational interest.
- 2) Ditch seepage loss at 20 percent of diversion.
- 3) Row 1 Row 2.
- 4) Percolation of irrigation application through root zone to ground water.
- 5) Surface water flowing from fields to Colorado River.
- 6) Amount of irrigation application consumed by corp evapotranspiration.
- 7) Previous month's storage + Row 3 Rows 4, 5, and 6. Maximum soil moisture storage is 189.9 acre-feet.

- 8) Change in soil moisture storage.
- 9) From Row 5
- 10) Delayed return from deep percolation.
- 11) Row 9 + Row 10.
- 12) Diversion Total return flow (Row 1 Row 11).
- 13) Row 12 converted to cupic feet per second.

#### TEMPORARY WATER LEASE AGREEMENT: CWT REQUEST FOR WATER 2012

This Water Lease Agreement ("Lease") is entered into by and between COLORADO WATER CONSERVATION BOARD ("CWCB"), an agency of the State of Colorado; the COLORADO WATER TRUST ("CWT"), a Colorado nonprofit corporation; and ASPEN SHOREFOX, LLC, a Nevada limited liability company ("Lessor"), collectively, the Parties.

#### **RECITALS**

- A. Section 37-92-102(3), C.R.S. (2011) authorizes CWCB to acquire by lease or other contractual agreement such water, water rights, or interests in water as CWCB determines may preserve and improve the natural environment to a reasonable degree.
- B. CWT is a Colorado nonprofit dedicated to protecting and restoring streamflows in Colorado through voluntary, market-based efforts. CWT works within CWCB's acquisition program to accomplish this mission. This Lease supports that mission.
- C. Section 37-83-105(2) authorizes water rights owners to lease or loan water to CWCB for instream flow use pursuant to a decreed instream flow water right held by CWCB and administrative approval, subject to certain conditions and procedures ("Short Term Lease Program").
- D. Under the Short Term Lease Program, a lease may have a term for up to ten years, but may only be used for instream flows for three of those ten years. For each year the water right is used in the Short Term Lease Program, it may only be used for instream flows up to 120 days in that calendar year.
- E. Colorado snowpack totals for the spring of 2012 are similar to those of the drought year of 2002. That year, many CWCB decreed instream flows were not satisfied and the lack of water negatively impacted the state's aquatic ecosystems. This year, CWT and CWCB anticipate many decreed instream flows will not be met again. However, CWT and CWCB will use the Short Term Lease Program not available in 2002 to supply water to those decreed, but not met, instream flows to protect Colorado's aquatic ecosystems.
- F. CWT issued a statewide "Request for Water" to solicit water rights to lease into the Short Term Lease Program on April 23, 2012. This Lease is a result of that effort.

- G. Lessor owns three water rights in the Bunte Highline Ditch on Willow Creek, tributary to the Colorado River ("Water Rights"). Lessor wishes to lease the Water Rights to CWCB for instream flow use on the Colorado River, pursuant to the procedures and subject to the conditions set forth herein, in Section 37-83-105(2), and in Rule 6(k) of the Rules Concerning the Colorado Instream Flow and Natural Lake Level Program.
- H. CWCB holds four instream flow water rights on the Colorado River ("Instream Flows"):
  - a. Decreed in Case No. 5-90CW300 for 40 cfs (May 1 to August 31) and 20 cfs (September 1 to April 30), in the reach of the Colorado River extending from the outlet of Granby Reservoir to the Fraser River;
  - b. Decreed in Case No. 5-80CW447 for 90 cfs year round, in the reach of the Colorado River extending from the headgate of the Windy Gap Project diversion to the Williams Fork River;
  - Decreed in Case No. 5-80CW446 for 135 cfs year round, in the reach of the Colorado River extending from the Williams Fork River to Troublesome Creek; and
  - d. Decreed in Case No. 5-80CW448 for 150 cfs year round, in the reach of the Colorado River extending from Troublesome Creek to the Blue River.
- I. Subject to the terms of this Lease, Lessor will lease to CWCB the Water Rights for instream flow purposes. CWCB will use the Water Rights to maintain the Instream Flows for a period not to exceed one hundred twenty days in one calendar year.
- J. Subject to the terms of this Lease, CWT will pay Lessor for the use of the Water Right in the Short Term Lease Program.
- K. The Water Rights to be leased are not decreed for instream flow use. The use of the Water Rights by CWCB for instream flow purposes will require State and Division Engineer approval and final ratification by CWCB Board of Directors, pursuant to section 37-83-105(2).
- L. The amount of water used by CWCB by Lessor under this Lease will not exceed the amount of water decreed to the Instream Flows.

NOW THEREFORE, in consideration of the mutual agreements contained herein and other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, CWCB, CWT, and Lessor agree as follows:

#### **LEASE OF WATER RIGHTS**

#### 1. <u>Term</u>.

- a. The term of this Lease shall be from July 1, 2012, until June 31, 2022 ("Ten-Year Term"), pursuant to section 37-83-105(2) C.R.S. (2010).
- b. The Lease is only implemented this year, from July 1, 2012, until June 31, 2013 ("2012 One-Year Term" and also referred to as a "One-Year Term" for this time period).
- c. The Parties agree in good faith to consult on or before April 1 every year during the Ten-Year Term to determine if the Lease shall be implemented for that upcoming year's one-year term beginning June 1 and concluding the following May 31 (the "One-Year Term"). The decision to implement for one or more additional One-Year Terms shall be solely in the discretion of the Lessor once CWT and CWCB determine that the Water Rights can be used in the Short Term Lease Program.
- d. Implementation for a One-Year Term shall only require the completion and execution of the Temporary Water Lease Agreement Extension in the form attached hereto as Appendix A. If a Temporary Water Lease Agreement Extension form is not signed by CWT, CWCB, and the Lessor prior to May 31 in a given year, it shall be assumed that the Lease is not implemented for a One-Year Term that year.

#### Purchase Price and Payment Procedure.

- a. For and in consideration of the payment of the sum of <u>Eighty-Three Thousand Four Hundred and Fifty-Two</u> Dollars (\$83,452) ("Purchase Price") for the 2012 One-Year Term paid to Lessor by CWT and the keeping and performance of the covenants and agreements contained herein, Lessor shall lease to CWCB the Water Rights, more particularly described below:
  - 17.82 cfs of Priority No. 168 in the Bunte Highline Ditch, decreed by the District Court in and for Grand County on August 3, 1911, in Civil Action No. 183, with an appropriation date of May 31, 1887;
  - ii. 14.14 cfs of Priority No. 459 in the Bunte Highline Ditch, decreed by the District Court in and for Grand County on

- November 11, 1952, in Civil Action No. 814, with an appropriation date of October 31, 1914; and
- iii. 8.04 cfs of Priority No. 491 in the Bunte Highline Ditch, decreed by the District Court in and for Grand County on November 11, 1952, in Civil Action No. 814, with an appropriation date of September 15, 1941.
- b. Payment by CWT to Lessor shall occur only upon the approval by the State and Division Engineers and acceptance by CWCB Director of the use of the Water Rights in the Short Term Lease Program, pursuant to sections 37-83-105(2)(a)(IV) and 37-83-105(2)(b)(VII).
- c. Payment by CWT shall not occur if Division Engineer or State Engineer denies or CWCB Director does not accept the proposed use of the Water Rights in the Short Term Lease Program and the Lease.
- d. CWT shall pay the Lessor half the Purchase Price four weeks after this Lease is approved by the State and Division Engineers and accepted by CWCB Director. CWT shall pay the remaining half by September 30, 2012. This same payment schedule shall apply every year in which CWCB is leasing the Water Rights for a One-Year Term.
- e. For any additional One-Year Terms, the Purchase Price shall be adjusted based on a nationally recognized C.P.I. index to reflect any cumulative increase (or decrease) in the Purchase Price since the 2012 One-Year Term or the last One-Year Term.

#### 3. Operations, Accounting and Monitoring.

- a. CWCB shall notify the State and Division Engineers when the Water Right is being used for instream flow pursuant to this approval for administrative purposes.
- b. The Parties agree to coordinate record keeping and accounting as reasonably required by the State and Division Engineers to administer the water right use for ISF purposes.
- c. The Parties agree to coordinate to install and maintain any measuring devices or structures reasonably required by the State and Division Engineers to administer the water right use for ISF purposes.
- 4. CWCB and Lessor Acceptance of Lease. CWCB's and Lessor's

acceptance of the Lease of the Water Rights is contingent upon the State and Division Engineers' determination that CWCB's use of the Water Rights in the Short Term Lease Program will not injure existing water rights of others and will not affect Colorado's compact entitlements. Approval may include terms and conditions to ensure the non-injury standard is met pursuant to section 37-83-105(2)(b)(VI). If any such conditions are not acceptable to CWCB and/or Lessor then such party shall have the right to terminate this Lease immediately.

- 5. <u>Cessation of Historic Use</u>. Lessor agrees and acknowledges that Lessor may not irrigate with the Water Rights while the Water Rights are being leased by CWCB for a One-Year Term. In any year during the Ten-Year Term of this Lease in which the Water Rights are not leased by CWCB for a One-Year Term, the Lessor may make historic or other use of the Water Rights in any manner.
- 6. <u>Protections of Lessor's Water Rights</u>. During any year in which the Water Rights are leased by CWCB for a One-Year Term, the Lessor's Water Rights are protected from diminishment of historical consumptive use and abandonment under this Lease by sections 37-83-105(2)(c) and 37-92-103(2)(b)(V).
- 7. <u>Use of Water Leased</u>. During any year in which the Water Rights are leased by CWCB for a One-Year Term, CWCB will use the Water Rights to maintain its Instream Flows to preserve the natural environment to a reasonable degree. Downstream of the Instream Flows, the Water Rights will be available for other water users and other beneficial uses.

#### 8. Inspections.

- a. In any year in which the Water Rights are leased by CWCB for a One-Year Term, Lessor grants CWCB or CWT staff and any of their representatives access to inspect all facilities related to the Water Rights (e.g. source, headgate, other diversion structures, ditch system, irrigated acreage) upon request at reasonable times, for the purpose of evaluating the stream and habitat characteristics in the reach of stream that would benefit from the Lease. Lessor's grant of access, however, is subject to the constraints upon its own right of access to the Water Rights facilities as delineated in paragraph 1 of the November 2009 License Agreement between Lessor and CNL Income Granby, LLC ("License Agreement"), or any such other agreements entered into.
- b. In any year in which the Water Rights are leased by CWCB for a One-Year Term, Lessor grants CWCB or CWT staff and any of their representatives access to the land subject to the Lease upon

request at reasonable times to ensure compliance with the terms of the Lease. Lessor's grant of access, however, is subject to the constraints upon its own right of access to the subject land as delineated in paragraph 1 of the License Agreement, or any such other agreements entered into.

#### STATE AND DIVISION ENGINEER APPROVAL OF LEASE

- Statement to State Engineer. Prior to accepting the Lease, CWCB shall compile a statement requesting approval of and explaining the Lease in sufficient detail for the State Engineer to determine that such Lease does not injure existing decreed water rights. Lessor and CWT shall use best efforts to assist CWCB in compiling said statement and in obtaining State and Division Engineer approval of the Lease as described below.
- 10. Request for Approval. CWCB, with CWT's and Lessor's cooperation, shall file a request for approval of the Lease with the State and Division Engineers, which request shall include the following information:
  - a. Evidence of proponent's legal right to use the Water Rights;
  - b. A statement of the duration of the Lease;
  - A description of the original points of diversion, the return flow pattern, the stream reach, and the time, place, and types of use of the Water Rights;
  - d. A description of the stream reach, and the time, place, and types of use of the Water Rights; and
  - e. A reasonable estimate of the historic consumptive use of the Water Rights.
- 11. Notice to Substitute Water Supply Plan. CWCB, with CWT's and Lessor's cooperation, shall provide written notice of the request for approval of the Lease by first-class mail or electronic mail to all parties on the substitute water supply plan notification list established pursuant to section 37-92-308 (6) for the water division in which the proposed Lease is located, and shall file proof of such notice with the Division Engineer.
- 12. <u>Compliance</u>. CWCB, with CWT's and Lessor's cooperation, shall use its best efforts to comply with all the requirements of section 37-83-105(2), to obtain approval of the Lease, and to address any comments submitted by any party concerning potential injury to that party's water rights, either as part of the initial approval process or after a year in which the Lease has been exercised for a One-Year Term.

#### 13. Denial and/or Termination.

- a. Lessor, in its sole discretion, may terminate the Lease immediately upon written notice to CWCB and CWT, except that Lessor may not terminate the Lease during the time period of a One-Year Term in which CWCB is leasing the Water Rights.
- b. If the request for approval is denied in whole or in part, or if the approval is conditioned in such manner as to prevent this Lease from being completely fulfilled, then this Lease may be terminated immediately upon written notice by any party to this Lease.
- c. The Lease shall automatically terminate at the end of the Ten-Year Term.

#### 14. Miscellaneous Provisions

- a. <a href="CWCB Protective Actions">CWCB Protective Actions</a>. During any year in which the Water Rights are leased by CWCB for a One-Year Term, CWCB shall take such action as is required to make use of the Water Rights for instream flow purposes, including, if necessary, placing a call with the Division Engineer for administration of the Water Rights. CWCB agrees to use the Water Rights for instream flow purposes to the maximum extent possible during any One-Year Term. CWT shall work with CWCB to provide information concerning implementation and monitoring of this Lease.
- b. The Parties will implement this Lease in accordance with any terms and conditions imposed by the State and Division Engineers.
- c. <u>Assignability</u>. The Lessor may convey the Water Rights freely, and may assign the Lease freely in conjunction with the Water Rights.
- d. <u>Covenant</u>. This Lease shall be a covenant that runs with the Water Rights and shall be binding upon the Parties hereto, their successors, and assigns. CWCB shall record this Lease with the Clerk and Recorder of Grand County, Colorado, with a conformed copy provided by CWCB to the Lessor and CWT.
- e. CWT shall pay the \$100 filing fee required by section 37-83-105(2)(b)(l).
- 15. <u>Notice</u>. Any notices required or permitted hereunder shall be sent to the addresses or email addresses set forth below, as may be changed from time to time by proper notice.

#### If to CWT:

Colorado Water Trust 1430 Larimer Street, Suite 300 Denver, CO 80202

Attn: Amy Beatie, abeatie@coloradowatertrust.org Attn: Zach Smith, zsmith@coloradowatertrust.org

#### If to CWCB:

Colorado Water Conservation Board Stream and Lake Protection Section 1313 Sherman Street, Room 721 Denver, CO 80203 Attn: Kaylea White, kaylea.white@state.co.us

#### If to Lessor:

Aspen Shorefox, LLC c/o Patrick Miller & Kropf, P.C. attn.: Scott C. Miller, Esq. 730 E. Durant Ave., Suite 200 Aspen, CO 81611

#### 16. <u>Limited Representations By Lessor</u>.

- a. Lessor represents and warrants that it has full power and authority to execute this Lease, lease the Water Rights, and perform its obligations hereunder.
- b. Lessor represents and warrants that the Water Rights have been used in compliance with decreed terms, to the extent Lessor has owned the Water Rights.

#### 17. Costs.

- a. Each Party shall bear their own legal costs.
- b. CWT shall pay the engineering costs associated with Tom Willliamsen's analysis of using the Water Rights in the Short Term Lease Program for CWT, beginning on June 5, 2012.
- c. CWT shall pay the costs of installing and maintaining the infrastructure and/or measuring devices required by the State and

Division Engineer to administer the Water Rights for instream flow purposes.

d. CWT shall pay the costs of the construction of a ditch to carry water to a recharge pond as identified by Tom Williamsen to meet return flow obligations as required by the State and Division Engineer.

#### 18. Enforcement of this Lease.

- a. Pursuant to section 37-92-102(3), the terms of this Lease shall be enforceable by each party as a water matter in a court of competent jurisdiction; provided, however, that before commencing any action for enforcement of this Lease, the party alleging violation shall notify the other Parties in writing of the alleged violation and the Parties shall make a good faith effort to resolve their differences through informal consultation.
- b. Specific performance of this Lease shall be the exclusive remedy for the failure of either party to comply with any provision of this Lease.
- 19. <u>Entire Agreement</u>. This Lease contains the entire agreement of the Parties concerning the subject matter herein and supersedes all prior agreements, if any.
- 20. <u>Interpretation</u>. The Lease shall in all respects be given a fair and reasonable construction and shall not be construed against the drafting party under any applicable law because the Parties acknowledge this Lease is their joint product.
- 21 <u>Counterparts/Facsimile Signatures</u>. This Lease may be executed in counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Facsimile signatures shall be binding as originals.
- 22. <u>Governing Law</u>. This Lease shall be construed under and be governed by the laws of the State of Colorado.
- 23. <u>Severability</u>. This Lease shall be deemed severable. The invalidity of any part of this Lease shall not affect the validity of the remainder of this Lease. In this regard, if any portion of this Lease is determined to be invalid, the court having jurisdiction over this Lease shall be entitled, with the assistance of the Parties, to substitute an alternative provision that is consistent with the intent of the Lease for any invalid portion.

24. Effective Date. The effective date of this Lease shall be the date it is executed by all parties.

IN WITNESS HEREOF, CWCB, CWT, and Lessor have executed this Lease.

ASPEN SHOREFOX, LLC (Lessor) by Aspen Pacific Asset Management,	COLORADO WATER CONSERVATION BOARD
By: NAME: Howard Cohen	By:
TITLE: Manager	TITLE
Date: 6 (22 (12	Date:
COLORADO WATER TRUST	
By: My Beatie	
Executive Director	
Date: 6/25/2012	

24. <u>Effective Date</u>. The effective date of this Lease shall be the date it is executed by all parties.

IN WITNESS HEREOF, CWCB, CWT, and Lessor have executed this Lease.

ASPEN SHOREFOX, LLC (Lessor)	COLORADO WATER CONSERVATION BOARD
By: NAME: Howard Cohen TITLE: Manager	By: Semble Supplement
Date:	Date: Aug ) 2012
COLORADO WATER TRUST	
By: Amy Beatie Executive Director	
Date:	

## **NOTARIZATION**

STATE OF COLORADO )	
) ss.	
, 2012, b	cknowledged before me on this day of as HOREFOX, LLC.
Witness my hand and official sea	al.
	Notary Public
	My commission expires:
	<u> </u>
<u>NOTAF</u>	RIZATION
STATE OF COLORADO ) ss.	
Huguit , 2012, b	cknowledged before me on this \( \frac{\sqrt{st}}{\tag{day}} \) day of \( \frac{\sqrt{st}}{\tag{V}} \) as \( \frac{\tag{DO WATER CONSERVATION BOARD.} \)
Witness my hand and official sea	al. Ollboo Q QQQ
AMBER WENDELL NOTARY PUBLIC	Notary Public
STATE OF COLORADO NOTARY ID 20124040273 MY COMMISSION EXPIRES JUNE 21, 2016	My commission expires:
WIT COMMISSION.	June 21,2010

## **NOTARIZATION**

STATE OF COLORADO	)
COUNTY OF <u>Denyey</u>	) ss. )
The foregoing instru	ment was acknowledged before me on this 25 day of 2012, by Any Beatile as of COLORADO WATER TRUST.
Witness my hand an ARY PUSIC MELANIE F. CABRAL HUIZAR	Notary Public
	My commission expires:
	June 10,2014