

MEMORANDUM

To: BOARD OF DIRECTORS, CRWCD

FROM: ANDY MUELLER, GENERAL MANAGER

SUBJECT: PROPOSED PROJECT PARTNERSHIP FUNDING PROGRAM FRAMEWORK

DATE: JANUARY 17, 2021

ACTION: Staff requests that the Board Approve the request to contribute, in the form of a grant, one million dollars from the Colorado River District Project Partnership Funding Program for the Windy Gap Bypass /Colorado River Connectivity Channel. Staff further recommends for the purpose of internal River District accounting that the awarded funds be attributed ½ each to the PPFP funding categories: Healthy Rivers and Watershed Health and Water Quality.

STRATEGIC INITIATIVE(S):

- 3. Climate and Hydrologic Uncertainty: Climate and hydrologic uncertainty should be a major driver of what the River District does in the mid- to long-term. The impacts to precipitation are not clear. However, the overwhelming evidence indicates a warming and increasingly variable climate. Hotter temperatures will certainly result in increased demands for agricultural and municipal water supplies due to longer and warmer growing seasons. Patterns of snowpack accumulation and runoff will change. Runoff is projected to occur earlier and quicker, and there will be an earlier return to possibly lower base flows after runoff. These factors will stress storage supplies. On a local and regional basis, storage supplies may prove inadequate.
 - 3. A. The River District will continue to evaluate and pursue options to increase local water storage supplies and optimize and expand, where appropriate, existing water storage.
 - 3. C. The River District will engage in and support water supply planning efforts, local and regional, which include adapting to climate change impacts.
 - 3. D. The River District will work with water users to ensure practicable and cost-effective water use efficiencies in all sectors where appropriate for the local conditions.
- 5. Transmountain Diversions (TMD): The River District was created to protect West Slope interests in the face of transmountain diversions. That role continues today and will likely persist with increased pressure for further Front Range use of Colorado River supplies. The IBCC Conceptual Framework presented in Colorado's Water Plan sets forth seven principles to guide development of any potential new transmountain diversion. The River District will have a leadership role in evaluating any new TMD proposal in the context of the IBCC Conceptual Framework and the District's current policy on transmountain diversions.

- 7. Water Needs/Project Development: Through Colorado's Water Plan and the Basin Implementation Plans, water needs within the River District have been, and will continue to be, refined and prioritized. The River District owns a large portfolio of conditional water rights that may be suitable for meeting a portion of the identified water demands. However, developments in judicial case law have made it more difficult for all water users, including the River District, to maintain conditional water rights.
 - 7. C. The River District will look for opportunities where its efforts are needed as a catalyst to help in-District interests plan for and meet their water needs in a manner that is consistent with the District's compact contingency planning goals and objectives.
 - 7. D. The River District will actively pursue funding sources and provide financial assistance to be used for the refurbishment and modernization of the aging water supply infrastructure within the District in order to help preserve and improve existing supplies and operations.

With the anticipated approval of the Project Partnership Funding Program Framework, staff thought it would be helpful to have a real project to serve as a pilot or model project to demonstrate how the newly adopted Framework will be utilized and applied to projects. We are excited to get our program off the ground and there is one project, which was identified in the District's Implementation Plan for which the timing is perfect, the Windy Gap bypass channel (aka Colorado River Connectivity Channel). In choosing to present this project for selection, we are presenting a project that the River District has been involved with for over a decade. This project has significant regional importance and is supported by the downstream agricultural community, the Grand County government, local municipalities, commercial recreation interests and conservation groups and even front range TMD operators. Significantly the Connectivity Channel is the byproduct of the Windy Gap Intergovernmental Agreement that the River District and several West Slope governmental entities entered into with the Municipal Subdistrict of the Northern Water Conservancy District in 2012.

I. Project Description:

Windy Gap Reservoir is a shallow, on channel reservoir that blocks movement of fish and other aquatic organisms in the Colorado River and degrades downstream aquatic habitat. The health of the river below the reservoir has been in decline since the reservoir was built in the mid-1980s, with documented losses of 38% of macroinvertebrate diversity – including the complete loss of giant stoneflies (a major food source for trout), the loss of native sculpin populations, and a decline in trout biomass in this state-designated Gold Medal Trout fishery. The goal of the Connectivity Channel is to establish a reconstructed river channel around Windy Gap to reconnect the Colorado River and eliminate the reservoir's negative impacts.

When completed, the project is expected to restore lost and declining aquatic species, improve the river's resiliency in the face of increasing water diversions and climate change, and provide significant economic benefits to the small Grand County communities that rely on recreation.

Trans-mountain diversions that supply water to Northern Colorado and the Front Range have had a significant impact on agriculture and aquatic resources in the headwaters of the Colorado River. After years of dispute, an array of partners representing local agriculture, local government, east slope water providers, and conservation groups have come together to implement projects designed to reconnect and restore the Colorado River at a land-scape scale level, covering both public and private lands. Projects include channel improvements in the Fraser River, removal of fish barriers upstream of the reservoir, over \$6 million worth of channel improvement proposed downstream of the reservoir, and a series of projects designed to restore both irrigation and aquatic habitat in the Kremmling area. The Connectivity Channel is the linchpin connecting these restoration efforts. Without it, the likelihood of success of this land-scape scale effort is dramatically reduced. Over \$24 million have been committed to the effort so far, including \$16 million for the Connectivity Channel, but funding is insufficient to begin channel construction.

The project consists of four components:

- 1. Modification of the Windy Gap Reservoir to create room for the construction of the connectivity channel;
- 2. A natural channel, approximately 1 mile long, that connects the Colorado River around the newly configured reservoir;
- 3. A diversion structure that will divert water from the connectivity channel into the reservoir; and
- 4. Removal or alternative means to improve fish passage at a weir upstream of the reservoir.

A fifth, previously identified component of the project, the improvement of the Town of Granby diversion structure on the Fraser River upstream of the reservoir to facilitate fish passage, has been independently completed thanks to funding from the USFWS and the CWCB.

40 percent design and engineering has been completed for all four aspects of the project. Geotechnical work has also been completed and a 60 percent design is expected in March of 2021. Final design is expected in June of 2021.

The project is currently estimated to cost \$23,532,688. A budget of those costs is attached to this memo and bookmarked in the .pdf version. The project proponents have raised commitments totaling \$16,176,100 leaving a shortfall of approximately \$7,356,588. Of the funds raised to date, the two single biggest contributors are the federal government through the National Resource Conservation Service (NRCS) at \$5.6 million and Northern Water Conservancy District and their Municipal Subdistrict/Windy Gap Enterprise at \$5 million. A table showing all funds raised is also attached to this memo and bookmarked in the .pdf version. The project proponents have identified additional sources of funding, but they have requested the Colorado River District's commitment of \$1 million at this time so that they can use our commitment to leverage additional funding sources more successfully.

II. Staff Analysis

A. Mission Alignment:

- <u>District Mission:</u> The Connectivity Channel fulfills the mission of the district to Protect West Slope Water by restoring the vital ecological connection to the headwaters of the Colorado river and by mitigating impacts to the mainstem of the Colorado river caused by the Windy Gap reservoir which is part of the Colorado Big Thompson trans-mountain diversion system.
- <u>Strategic Plan:</u> This project is consistent with the District Strategic Plan goals identified at the top of this memo: 3. Climate and Hydrologic Uncertainty; 5. Transmountain Diversions; and 7. Water Needs/Project Development.
- <u>Policies:</u> This project is consistent with several District Policies including: Transmountain Diversions; Funding Water Infrastructure and programs; Instream Flows; Recreational Water Use; Water Quality; and Agricultural Water Use.

B. Identification of Categories from the Implementation Plan:

This project fits well within two of the District's identified funding buckets: Healthy rivers projects and Watershed health and water quality projects. Staff believes that fifty percent of the funding for this project should come from or be attributed to these two buckets. The reasoning behind this recommendation is as follows:

- <u>Healthy rivers projects:</u> This project is appropriately a healthy rivers project as it supports and sustains fish and wildlife, economically important water based recreation, fish passage construction for new or revised water diversion structures, and it is a stream restoration project.
- <u>Watershed health and water quality project.</u> This project is a project that rehabilitates the vitally important headwaters of the Colorado River and should assist in making the river ecosystem more resilient to warming trends attributable to climate change.

Staff therefore recommends that the District attribute \$500,000 in funding to each of these two categories for the purposes of the District's commitment to track funding between categories.

C. Fund Distribution by Category:

As this is the first ever staff recommendation to fund a project, currently there is not running five year average or any existing accounting of distribution between funds. Should the Board determine to support the Staff recommendation, the running total will be as follows:

Category	Current Year Funding	Five Year Running Average
Productive Agriculture	0	0
Infrastructure	0	0
Healthy Rivers	\$500,000	\$500,000

Watershed health & Water Quality	\$500,000	\$500,000
Conservation and Efficiency	0	0

C. Geographic Equity.

This project is the first to be funded by our program so at the moment there is no analysis to provide with respect to geographic equity other than to note that should the Board determine to fund this project the mainstem Colorado River Basin and Grand County will be \$1 million dollars ahead of all other basins and counties. Given Grand County's position as "ground zero" for some of the largest most impactful trans-mountain diversions in the state, it is not an inappropriate place to commence our partnership project funding program.

D. Analysis of Project Funding and Leverage of CRD Funds.

The project proponents of this project, Northern and the Municipal Subdistrict, Grand County, and Trout Unlimited have all committed to contribute major funding to this project (See attached funding table). It is expected that the project proponents will utilize the River District's commitment to fund to leverage additional funding commitments from the federal government, Northern Water Conservancy, Colorado Parks and Wildlife and potentially Denver Water. We believe this is a highly visible and important project which is an excellent example of how a project proponent can leverage Colorado River District funding. While significant, our funds are anticipated to be only approximately 1/23 of the total cost of the project.

There are no private entities participating in a manner that will result in a profit nor will there be a revenue stream generated from the completed project. Therefore, it is staff recommendation that the funding for this project be made in the form of a grant and not a loan or an investment.

E. Local Community Support.

Attached is a letter of support from the Grand County Commissioners. In addition to verbally supporting this project, Grand County, through its Open Lands Rivers and Trails program has committed \$1 million and likely will be contributing another \$1 million.

F. Human Resource Requirements.

The District will not play any role in overseeing construction of this project. It is possible that River District Staff will participate in communications and meetings with other funding agencies in order to assist the project proponents with leveraging our funding. It is expected that these efforts will be less than ten hours of staff time.

G. Risk Analysis.

• <u>Public health, safety and welfare</u>: There is minimal risk to the public through this project.

- <u>Consequences of project failure</u>: As the primary project proponent and construction supervisor, the Municipal Subdistrict of Norther Water Conservancy District bears the risks of project failure.
- <u>Potential injury to vested absolute water rights</u>: There is no known potential injury to vested absolute water rights. This project should enhance the quality of water available to downstream senior irrigators.
- Potential for ongoing financial need (whether operational or during construction phase): Should this project require unexpected maintenance or ongoing financial need, it is the primary project proponents, including the Municipal Subdistrict and Grand County which bear that risk, not the River District.
- Reputational risk to the District: The only reputational risk to the District posed by this project is the risk posed by a denial of funding. This project has widespread support among our constituents and is a very high priority project for many in the water community.
- <u>Potential for District staff involvement beyond that identified above:</u> Staff is not aware of any other potential involvement by staff than the identified assistance with fundraising.
- Evaluation and disclosure of any potential conflict of interest by District staff or
 Board members: We are not aware of any personal conflict of interest presented
 by this project to any staff or Board member. No member of the staff or board is
 in the position to benefit from the District's funding of this project nor will land
 held by any staff or board member be uniquely benefited by the construction or
 completion of this project.

H. Additional Factors for Consideration.

Other than the items addressed in prior discussion, staff does not believe that there are additional factors to be considered by the District on this project.

\$289.50

\$44,004.00

152.00 LF

Colorado River Connectivity Channel (CRCC) at Windy Gap CM/GC Prepared For: Northern Colorado Water Conservancy District

Project Number: 20-024

4.9.1.3

Vehicle Bridge Guardrail

CEI - 40% Re-Drop pricing based on 30% design package-dated June 2020, and Draft technical specification provided July, 23, 2020 Includes Accepted 40% VE cost savings & revised quantities

	PRICE BREAKDOWN				
ITEM			PAY		
CODE	ITEM DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL COST
Gener	al				\$ 2,506,622.95
2.1.1	Mobilization and Demobilization	1.00	LS	\$284,792.33	\$284,792.3
2.2.1	Erosion Control CDPHE Permit, Initial & Interim BMP's Installation & Setup				
2.2.1.1	Erosion Control Initial & Interim BMP's Installation & Setup	1.00	LS	\$434,929.31	\$434,929.3
2.2.1.2	Erosion Control & BMP Maintenance	20.00	Month	\$5,992.79	\$119,855.8
2.3.1	Project Security and Access Control	1.00	LS	\$19,194.82	\$19,194.8
2.4.1	Temporary Water Diversion and Control	1.00	LS	\$521,428.90	\$521,428.9
2.5.1	Project Dewatering	1.00	LS	\$104,707.16	\$104,707.1
2.6.1	Clearing and Grubbing	83.00	Acre	\$1,004.03	\$83,334.4
2.7.1	Tree Removal	40.00	EA	\$597.27	\$23,890.8
2.8.1	Strip Topsoil	52,000.00	Acre	\$3.21	\$167,111.0
2.9.1	Project Access, Staging, and Haul Road Development	1.00	LS	\$261,460.25	\$261,460.2
2.10.1	Project wide survey and construction staking	1.00	LS	\$180,000.00	\$180,000.0
2.11.1	Project Wide Traffic Control and Maintenance	1.00	LS	\$72,672.45	\$72,672.4
2.12.1	Project Wide Dust Control & construction water storage	1.00	LS	\$210,678.95	\$210,678.9
2.13.1	Owner's Office Facilities	20.00	Month	\$1,128.33	\$22,566.6
Dam F	mbankment & Modification				\$4,337,984.25
		35,000,00	CV	\$3.95	\$138,208.5
3.1.1 3.2.1	Remove Existing Embankment Dam Foundation Excavation (STA 0+00 to 20+00) ******	35,000.00			
3.3.1	Embankment Shell (Option 1) 0+00 - 29+00	18,000.00 95,000.00		\$5.80 \$7.47	\$104,381.3 \$709,355.5
••••••	Embankment shen (option 1) 0 100 -23 100	33,000.00		۷,۰۰	7703,333.3.
3.5.1	Slurry Wall (Option 1)	79,300.00	SF	\$13.22	\$1,048,346.0
3.9.1	Articulated Concrete Blocks - Closed Cell	23,200.00	SF	\$18.12	\$420,412.1
3.10.1	Articulated Concrete Blocks - Open Cell	30,600.00	SF	\$16.06	\$491,478.7
3.11.1	Base-coarse Crest	800.00	CY	\$68.65	\$54,923.4
3.12.1	Riprap - dam embankment	15,000.00	CY	\$56.58	\$848,700.0
3.13.1	Sheetpile South Toe of New Dam PZ-22 at South Embankment (0+00 - 20+00)	15,000.00	SF	\$25.13	\$376,950.0
3.14.1	Spillway Modification (Low Block)	25.00	CY	\$2,509.46	\$62,736.6
3.15.1	Dam Monitoring	1.00		\$40,000.00	\$40,000.0
3.16.1	Reclaim Borrow Area	6.00		\$7,081.99	\$42,491.9
Divers	ion Structure				\$2,815,191.06
4.1.1	Foundation Excavation (STA 20+00 to 32+84)	4,800.00	CY	\$5.80	\$27,857.2
4.2.1	Embankment (STA 20+00 to 32+84)	11,100.00		\$7.47	\$82,882.6
4.3.1	Sheetpile PZ-22 with Concrete Cap at Grade Control	15,750.00	~~~~~~	\$31.03	\$488,722.5
4.4.1	Sheetpile PZ-22 with Diversion Structure	2,700.00	SF	\$29.49	\$79,623.0
4.5.1	Grouted Riprap Boulders including 20% grout by volume	660.00	CY	\$155.00	\$102,303.1
4.6.1	Reinforced Concrete - Slabs	450.00	CY	\$572.45	\$257,602.4
4.7.1	Reinforced Concrete - Walls	200.00	CY	\$924.02	\$184,803.5
4.8.1	Reinforced Concrete - Mechanical Room & Bypass Lids	13.00		\$1,130.55	\$14,697.1
4.9.1	Vehicle Bridge	1.00			
4.9.1.1	Vehicle Bridge Box Beams	456.00	LF	\$206.77	\$94,287.1
4.9.1.2	Vehicle Bridge Concrete Vehicle Surfacing	1,368.00	SF	\$20.02	\$27,391.8
	VI:15:16 1 1	152.00		¢200 F0	¢44.004.00

	ITEM		PA	v	
4.1.1. Control Building 1.00 IS \$50,208.97 \$50,208.97 4.1.2.1. Refreshing from Care (s. x.) 1.00 IS \$21,448.40 \$21,448.40 \$21,448.40 \$21,448.40 \$21,448.40 \$21,448.40 \$21,448.40 \$21,448.40 \$31,248.40 \$32,448.4		ITEM DESCRIPTION			TOTAL COST
	4.10.1	Hinged Crest Gate including hydraulics	1.00 LS	\$1,176,436.18	\$1,176,436.18
	4.11.1	Control Building	1.00 LS	\$50,208.97	\$50,208.97
	4.12.1	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	1.00 LS	\$20,498.49	\$20,498.49
	4.13.1		1.00 LS	\$7,500.00	\$7,500.00
	4.14.1		1.00 LS	\$7,765.26	\$7,765.26
	4.15.1	Low Water Crossing	1.00 Each	\$57,403.70	
Securation - Channel Securation 180,000.00 C/ \$3.76 \$677,4578 \$677,4578 \$72.11 \$90,000.00 C/ \$3.18 \$3286.3558 \$3.21 \$100 pilon Regarding \$5.00 AC \$1.194.43 \$577,6378 \$3.21 \$1.22 \$1	4.17.1	East Parking Lot & Access Road	1.00 LS	\$36,898.97	\$36,898.97
5.2.1. Il Floodplain RelIIII 99,000.00 CV \$3.18 \$28,635,885 5.3.1. Il Floodplain Regrading \$5.00 AC \$1,94,943 \$77,637,87 5.4.1. Select Channef III DSO -30mm 43,000.00 CV \$11,28 \$48,498,80 5.5.1. Il Riffe Structure \$45,000.00 CV \$5.35 \$277,667,87 5.6.1. Topinil \$2,000.00 CV \$5.35 \$277,667,87 5.7.1. Soil Prep Disk/Harrowing) \$7.50 AC \$290.00 \$25,375.00 5.9.1. Soil Amendments and Hydromulch \$7.50 AC \$290.00 \$25,375.00 5.9.1. Type & Stabilization \$1,900.00 LF \$19.29 \$61,742.06 5.10.1. Type & Stabilization \$8,000.00 LF \$19.29 \$61,742.06 5.12.1. Backwater Wetland Fringe 4,700.00 LF \$14.94 \$70,238.51 5.13.1. Zone 2 Seed Mix 2,000.00 LB \$14.90 \$30,450.00 5.16.1. Zone 4 Wetland Seed Mix 1,500.00 LB \$14.50 \$30,450.00 5.16.1. Zone 2 Seed Mix 1,500.00 LB \$14.50 \$30,450.00 5.16.1. Zone 4 Wetland Plugs 7,000.00 LB \$31.50 \$24,750.00 </th <th>Connec</th> <th>ctivity Channel</th> <th></th> <th></th> <th>\$4,533,264.44</th>	Connec	ctivity Channel			\$4,533,264.44
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5.7.1 Soll Prep (Disk/Harowing) 8.7.50 AC \$9,90.0 \$25,375.00 5.8.1 Soll Amendments and Hydromulch 8.7.50 AC \$8,925.00 \$786,937.50 5.9.1 Type A Stabilization 1,900.00 LF \$19.29 \$61,742.06 5.11.1 Type C Stabilization 8,800.00 LF \$19.29 \$61,742.06 5.11.1 Type C Stabilization 8,800.00 LF \$19.29 \$16,790.44 5.12.1 Backwater Wetland Firinge 4,700.00 LF \$19.29 \$40,000.00 5.13.1 Zono.1 Seed Mix 2,000.00 LBS \$32.00 \$40,000.00 5.14.1 Zone.2 Seed Mix 2,100.00 LBS \$31.60 \$30,000.00 5.15.1 Zone.3 Seed Mix 1,500.00 LBS \$31.50 \$34,500.00 5.16.1 Zone.4 Wetland Flugs 7,000.00 LB \$35.55 \$24,850.00 5.17.1 Zone.6 Wetland Seed Mix 1,100.00 LBS \$31.50 \$36,50.5 5.18.1 Shrubs No.5 7,200.00 LB \$35.55 \$24,850.00 5.18.1 Shrubs No.5 7,200.00 LB <t< td=""><td></td><td>Riffle Structures</td><td>3,450.00 CY</td><td>\$40.45</td><td>\$139,552.50</td></t<>		Riffle Structures	3,450.00 CY	\$40.45	\$139,552.50
5.8.1. Soll Amendments and Hydromulch 8.75.0 AC \$8,925.00 \$780,937.50 5.9.1. Type A Stabilization 1,900.00 LF \$157.34 \$108,948.75 5.10.1. Type S Stabilization 8,800.00 LF \$19.29 \$169,790.44 5.12.1. Backwater Wetland Fringe 4,700.00 LBS \$10.90 \$40,000.00 5.13.1. Zone 1 Seed Mix 2,000.00 LBS \$14.50 \$30,400.00 5.14.1. Zone 2 Seed Mix 2,100.00 LBS \$14.50 \$50,400.00 5.15.1. Zone 3 Seed Mix 1,500.00 LBS \$14.50 \$56,600.00 5.15.1. Zone 4 Wetland Seed Mix 1,600.00 LBS \$41.50 \$56,600.00 5.17.1. Zone 4 Wetland Seed Mix 1,600.00 LBS \$31.50 \$52,4750.00 5.17.1. Zone 4 Wetland Seed Mix 1,600.00 LBS \$31.50 \$52,4750.00 5.17.1. Zone 4 Wetland Seed Mix 1,600.00 LBS \$31.50 \$52,4850.00 5.17.1. Zone 4 Wetland Seed Mix 1,600.00 LBS \$31.50 \$52,4850.00 5.17.1. Zone 4 Wetla	5.6.1	•	52,000.00 CY	\$5.35	\$277,969.75
5.9.1 Type A Stabilization 1,900.00 LF S57,34 \$108,948,27 5.10.1 Type B Stabilization 3,200.00 LF S19,29 \$61,742,06 5.11.1 Type C Stabilization 8,800.00 LF \$19,29 \$166,790,48 5.12.1 Backwater Weltand Fringe 4,700.00 LF \$14.04 \$70,238,51 5.13.1 Zone 1 Seed Mix 2,000.00 LBS \$20,00 \$40,000.00 5.15.1 Zone 2 Seed Mix 1,500.00 LBS \$16.50 \$24,750.00 5.15.1 Zone 3 Seed Mix 1,500.00 LBS \$16.50 \$24,750.00 5.16.1 Zone 4 Wetland Seed Mix 1,500.00 LBS \$15.50 \$24,750.00 5.17.1 Zone 4 Wetland Plugs 7,000.00 EA \$35.55 \$24,850.00 5.18.1 Shrubs No 1 4,100.00 EA \$35.55 \$24,850.00 5.18.1 Shrubs No 1 4,100.00 EA \$35.55 \$24,850.00 5.19.1 Shrubs No 1 4,100.00 EA \$35.55 \$24,850.00 5.10.1 Sheetpile (RR Embankment) 14,190.00 SF \$25.13 <td>5.7.1</td> <td>Soil Prep (Disk/Harrowing)</td> <td>87.50 AC</td> <td>\$290.00</td> <td>\$25,375.00</td>	5.7.1	Soil Prep (Disk/Harrowing)	87.50 AC	\$290.00	\$25,375.00
5.0.1. Type B Stabilization 3,200.00 LF \$19.29 \$61,742.06 5.11.1. Type C Stabilization 8,800.00 LF \$19.29 \$165,790.46 5.12.1. Backwater Wetland Fringe 4,700.00 LF \$14.94 \$70,238.51 5.13.1. Zone 1 Seed Mix 2,000.00 LBS \$20.00 \$40,000.00 5.14.1. Zone 2 Seed Mix 2,000.00 LBS \$14.50 \$30,450.00 5.15.1. Zone 3 Seed Mix 1,500.00 LBS \$14.50 \$30,450.00 5.16.1. Zone 4 Wetland Flugs 7,000.00 LB \$41.50 \$6,640.00 5.17.1. Zone 4 Wetland Flugs 7,000.00 LB \$31.55 \$24,850.00 5.18.1. Strubs No 1 4,100.00 LB \$17.55 \$71,955.00 5.19.1. Strubs No 5 7,200.00 LB \$35.25 \$253,800.00 5.19.1. Strubs No 5 7,200.00 LB \$35.25 \$253,800.00 5.19.1. Strubs No 5 7,200.00 LB \$35.25 \$253,800.00 5.19.1. Strubs No 5 7,200.00 LB \$35.25 \$2	5.8.1	Soil Amendments and Hydromulch	87.50 AC	\$8,925.00	\$780,937.50
5.11.1 Type C Stabilization \$,800.00 LF \$19.29 \$16,970.04 LS 5.12.1 Backwater Wetland Fringe 4,700.00 LBS \$20.00 64,000.00 LBS \$20.00 \$20.00.00 LBS \$20.00 \$40.000.00 LBS \$14.50 \$30.450.00 S40.00 LBS \$14.50 \$30.450.00 S40.00 LBS \$14.50 \$30.450.00 S24.750.00 LBS \$14.50 \$30.450.00 S24.750.00 LBS \$14.50 \$24.750.00 LBS \$14.50 \$56.60 .00 S24.750.00 LBS \$14.50 \$56.60 .00 S24.750.00 LBS \$14.50 \$56.60 .00 S24.750.00 LBS \$14.50 \$66.60 .00 S24.750.00 LBS \$14.50 \$19.10 LBS \$10.00 LBS \$10	5.9.1	Type A Stabilization	1,900.00 LF	\$57.34	\$108,948.27
5.12.1 Backwater Welland Fringe 4,700.00 LF \$14,94 \$70,288.51 5.13.1 20ne1 Seed Mix 2,000.00 LBS \$31,450 \$30,400.00 5.14.1 20ne 2 Seed Mix 1,500.00 LBS \$31,450 \$30,450.00 5.15.1 20ne 3 Seed Mix 1,500.00 LBS \$31,650 \$24,750.00 5.16.1 20ne 4 Wetland Seed Mix 1,500.00 LBS \$31,55 \$6,640.00 5.17.1 20ne 4 Wetland Plugs 7,000.00 EA \$33,55 \$24,850.00 5.18.1 Shrubs No 1 4,100.00 EA \$37,55 \$71,955.00 5.18.1 Shrubs No 5 7,200.00 EA \$33,55 \$253,800.00 5.20.1 Sheetpile (RR Embarkment) 14,190.00 SF \$25.13 \$366,94.70 5.21.1 Large Woody Debris (12 in diameter) 40.00 EA \$367,37 \$14,694.73 5.22.1 Erosion Control Blanket beyond channel limits 10,000.00 SY \$4.55 \$45,500.00 5.22.1 Erosion Control Blanket beyond channel limits 10,000.05 \$4,500.00 \$0.00 5.22.1 Erosion Co	5.10.1	Type B Stabilization	3,200.00 LF	\$19.29	\$61,742.06
5.13.1 Zone J Seed Mix 2,000,00 LBS \$10,00 \$14,50 \$30,450,00 5.15.1 Zone J Seed Mix 1,500,00 LBS \$11,50 \$30,450,00 5.16.1 Zone J Seed Mix 1,500,00 LBS \$16,50 \$24,750,00 5.16.1 Zone 4 Wetland Seed Mix 160,00 LBS \$41,50 \$56,840,00 5.17.1 Zone 4 Wetland Plugs 7,000,00 EA \$35,55 \$24,850,00 5.18.1 Strubs No 1 4100,00 EA \$17,55 \$71,955,00 5.19.1 Shrubs No 5 7,200,00 EA \$35,25 \$253,800,00 5.20.1 Sheetplie (RR Embankment) 14,190,00 SF \$25,13 \$356,594,70 5.21.1 Large Woody Debris (12-in diameter) 40,00 EA \$367,37 \$14,694,73 5.21.1 Large Woody Debris (12-in diameter) 10,00 US \$455 \$45,500,00 5.21.2 Erosion Control Blanket beyond channel limits 10,00 US \$0,00 \$0,00 5.22.1 Erosion Control Blanket beyond channel limits 10,00 US \$0,00 \$0,00 5.25.1 <	5.11.1	Type C Stabilization	8,800.00 LF	\$19.29	\$169,790.44
5.14.1 Zone 2 Seed Mix 2,100.00 LBS \$14.50 \$30,450.00 5.15.1 Zone 3 Seed Mix 1,500.00 LBS \$15.50 \$24,750.00 5.16.1 Zone 4 Wetland Seed Mix 16.00 LBS \$41.50 \$6,640.00 5.17.1 Zone 4 Wetland Plugs 7,000.00 EA \$35.55 \$24,850.00 5.18.1 Shrubs No 1 4,100.00 EA \$35.25 \$253,800.00 5.19.1 Shrubs No 5 7,200.00 EA \$35.25 \$253,800.00 5.20.1 Sheetplie (RR Embankment) 14,190.00 SF \$25.13 \$336,594.70 5.21.1 Large Woody Debris (12-in diameter) 40.00 EA \$367.37 \$14,694.73 5.22.1 Erosion Control Blanket beyond channel limits 10,000.00 SY \$45.50 \$45.50 5.22.1 Establishment Watering System 10.00 LIS \$100.00 \$50.00 5.25.1 Stablishment Watering System 10.00 LIS \$10,434.00 \$10.00 5.25.1 Stablishment Watering System 10.00 LIS \$10,340.00 \$0.00 5.25.1 Med Management - Durin	5.12.1	Backwater Wetland Fringe	4,700.00 LF	\$14.94	\$70,238.51
5.15.1 Zone 3 Seed Mix 1,500.00 LBS \$16.50 \$24,750.00 5.16.1 Zone 4 Wetland Feed Mix 160.00 LBS \$41.50 \$5,640.00 5.17.1 Zone 4 Wetland Plugs 7,000.00 EA \$3.55 \$24,850.00 5.18.1 Shrubs No 1 4,100.00 EA \$17.55 \$71,955.00 5.19.1 Shrubs No 5 \$25.31 \$36,994.70 \$36.25 \$253,800.00 5.20.1 Sheepile (RR Embankment) 14,190.00 SF \$25.13 \$366,994.70 5.21.1 Large Woody Debris (12-in diameter) 40.00 EA \$367.37 \$14,694.73 5.22.1 Erosion Control Blanket beyond channel limits 10,000.00 SY \$4.55 \$45,500.00 5.23.1 Establishment Watering System 1.00 LL \$300.00 \$0.00 5.24.1 Establishment Watering System 1.00 LL \$130,430.00 \$30.00 5.25.1 Weed Management - During Construction 0.00 Month \$58,250.00 \$0.00 5.26.1 Veed Management - Post Construction 0.01 L \$130,430.00 \$0.00	5.13.1	Zone 1 Seed Mix	2,000.00 LBS	\$20.00	\$40,000.00
5.16.1 Zone 4 Wetland Seed Mix 160.00 LBS \$41.50 \$6,640.00 5.17.1 Zone 4 Wetland Plugs 7,000.00 EA \$3.55 \$24,850.00 5.18.1 Shrubs No 1 4,100.00 EA \$31.55 \$72,955.00 5.19.1 Shrubs No 5 7,200.00 EA \$35.25 \$253,800.00 5.20.1 Sheetpile (RR Embankment) 14,190.00 SF \$25.13 \$356,594.70 5.21.1 Large Woody Debris (12-4 ndiameter) 40.00 EA \$36.73 \$14,694.73 5.22.1 Erosion Control Blanket beyond channel limits 10,000.00 SY \$4.55.00 \$0.00 5.23.1 Establishment Watering System 1,000.00 SY \$4.55.00 \$0.00 5.24.1 Extablishment Watering System 1,000.00 LS \$30.00 \$0.00 5.25.1 Weed Management - Post Construction 0.00 Month \$55.00.00 \$50.00 5.26.1 Weed Management - Post Construction 0.00 LS \$100.00 Month \$55.00.00 \$50.00 5.27.1 Plantings Warranty 1.00 LS \$32,048.28 \$32,048.28 \$32,048.28<	5.14.1	Zone 2 Seed Mix	2,100.00 LBS	\$14.50	\$30,450.00
5.17.1 Zone 4 Wetland Plugs 7,00.00 EA \$3.55 \$24,850.00 5.18.1 Shrubs No 1 4,100.00 EA \$17.55 \$71,955.00 5.19.1 Shrubs No 5 7,200.00 EA \$35.25 \$253,800.00 5.20.1 Sheetpile (RR Embankment) 14,190.00 F \$25.13 \$356,594,70 5.21.1 Large Woody Debris (12-in diameter) 40.00 EA \$367.37 \$14,694,73 5.22.1 Erosion Control Blanket beyond channel limits 10,000.00 SY \$4.55 \$45,500.00 5.23.1 Establishment Watering System 1.00 LIS \$0.00 \$50.00 5.24.1 Establishment Watering System 1.00 ALL \$100,441.0	5.15.1	Zone 3 Seed Mix	1,500.00 LBS	\$16.50	\$24,750.00
5.17.1 Zone 4 Wetland Plugs 7,00.00 EA \$3.55 \$24,850.00 5.18.1 Shrubs No 1 4,100.00 EA \$17.55 \$71,955.00 5.19.1 Shrubs No 5 7,200.00 EA \$35.25 \$253,800.00 5.20.1 Sheetpile (RR Embankment) 14,190.00 F \$25.13 \$356,594,70 5.21.1 Large Woody Debris (12-in diameter) 40.00 EA \$367.37 \$14,694,73 5.22.1 Erosion Control Blanket beyond channel limits 10,000.00 SY \$4.55 \$45,500.00 5.23.1 Establishment Watering System 1.00 LIS \$0.00 \$50.00 5.24.1 Establishment Watering System 1.00 ALL \$100,441.0	5.16.1	Zone 4 Wetland Seed Mix	160.00 LBS	\$41.50	\$6,640.00
5.18.1 Shrubs No 1 4,100.00 EA \$17.55 \$71,955.00 5.19.1 Shrubs No 5 7,200.00 EA \$35.25 \$253,800.00 5.20.1 Sheetpille (RR Embankment) 14,190.00 SF \$25.13 \$356,594.70 5.21.1 Large Woody Debris (12-in diameter) 40.00 EA \$367.37 \$14,694.73 5.22.1 Erosion Control Blanket beyond channel limits 10,000.00 SY \$4.55 \$45,500.00 5.23.1 Establishment Watering System 1.00 IL \$30,000 \$0.00 5.25.1 Beed Management - During Construction 0.00 Month \$85,500.00 \$50.00 5.26.1 Weed Management - Post Construction 0.00 LIS \$103,000.00 \$50.00 5.27.1 Plantings Warranty 4,000.00 CY \$57,000 \$55,050.00 5.28.1 Additional Imported Fill Material Required (Borrow Pit) 40,000.00 CY \$7.22 \$317,552.1 6.1.1 Demolition 1.00 LS \$32,048.28 \$32,048.28 6.2.1 Channel Regrading Fill 600.00 CY \$8.60 \$5,157.40				\$3.55	
Second Sheetpile (RR Embankment)	5.18.1		4,100.00 EA	\$17.55	\$71,955.00
5.2.1.1 Large Woody Debris (12-in diameter) 40.00 EA \$367.37 \$14,694.73 5.2.2.1 Erosion Control Blanket beyond channel limits 10,000.00 SY \$4.55 \$45,500.00 5.2.3.1 Establishment Watering System 1.00 LS \$0.00 \$0.00 5.2.4.1 Establishment Watering 0.00 Month \$58,250.00 \$0.00 5.2.5.1 Weed Management - During Construction 0.00 Month \$58,250.00 \$0.00 5.2.6.1 Weed Management - Post Construction 0.00 LS \$103,000.00 \$5.00.00 5.2.7.1 Plantings Warranty 4,000.00 CY \$7.22 \$317,552.17 Fraser Gauge Modification \$250,997.92 \$317,552.17 Fraser Gauge Modification \$20,000.00 CY \$7.22 \$317,552.17 Fraser Gauge Modification \$20,000.00 CY \$7.12 \$317,552.17 Fraser Gauge Modification \$0.00 CY \$11.28 \$6,767.28 6.2.1 Channel Regrading Fill 60.00 CY \$11.28 \$6,767.28 6.3.1 Channel Regrading Excavation	5.19.1	Shrubs No 5	7,200.00 EA	\$35.25	\$253,800.00
5.22.1 Erosion Control Blanket beyond channel limits 10,000.00 SY \$4.55 \$45,500.00 5.23.1 Establishment Watering System 1.00 LS \$0.00 \$0.00 5.24.1 Establishment Watering 1.00 ALL \$130,434.00 \$130,434.00 5.25.1 Weed Management - During Construction 0.00 Month \$58,250.00 \$0.00 5.26.1 Weed Management - Post Construction 0.00 LS \$103,000.00 \$0.00 5.27.1 Plantings Warranty 1.00 LS \$55,050.00 \$55,050.00 5.28.1 Additional Imported Fill Material Required (Borrow Pit) 44,000.00 CY \$7.22 \$317,552.17 Fraser Guge Modification 1.00 LS \$32,048.28 \$32,049.28 6.1.1 Demolition 1.00 LS \$32,048.28 \$32,049.28 6.2.1 Channel Regrading Fill 600.00 CY \$11.28 \$6,767.28 6.3.1 Channel Regrading Excavation 600.00 CY \$76.11 \$60,885.22 6.5.1 Riprap - Bank Stabilization 800.00 CY \$76.11 \$60,885.22 6.	5.20.1	Sheetpile (RR Embankment)	14,190.00 SF	\$25.13	\$356,594.70
5.22.1 Erosion Control Blanket beyond channel limits 10,000.00 SY \$4.55 \$45,500.00 5.23.1 Establishment Watering System 1.00 LS \$0.00 \$0.00 5.24.1 Establishment Watering 1.00 ALL \$130,434.00 \$130,434.00 5.25.1 Weed Management - During Construction 0.00 Month \$58,250.00 \$0.00 5.26.1 Weed Management - Post Construction 0.00 LS \$103,000.00 \$0.00 5.27.1 Plantings Warranty 1.00 LS \$55,050.00 \$55,050.00 5.28.1 Additional Imported Fill Material Required (Borrow Pit) 44,000.00 CY \$7.22 \$317,552.17 Frase Wage Modification 1.00 LS \$32,048.28 \$32,049.28 6.1.1 Demolition 1.00 LS \$32,048.28 \$32,049.28 6.2.1 Channel Regrading Fill 600.00 CY \$11.28 \$6,767.28 6.3.1 Channel Regrading Excavation 600.00 CY \$8.60 \$5,157.41 6.4.1 Grade Control Weirs 4.00 EA \$23,349.87 \$93,399.47 6.5.1	5.21.1	Large Woody Debris (12-in diameter)	40.00 EA	\$367.37	\$14,694.73
5.23.1 Establishment Watering System 1.00 LS \$0.00 \$0.00 5.24.1 Establishment Watering 1.00 ALL \$130,434.00 \$130,434.00 5.25.1 Weed Management - During Construction 0.00 Month \$58,250.00 \$0.00 5.27.1 Plantings Warranty 1.00 LS \$55,050.00 \$55,050.00 5.28.1 Additional Imported Fill Material Required (Borrow Pit) 44,000.00 CY \$7.22 \$317,552.17 Fracer Gauge Modification 1.00 LS \$32,048.28 \$32,048.28 6.1.1 Channel Regrading Fill 600.00 CY \$11.28 \$6,767.28 6.3.1 Channel Regrading Excavation 600.00 CY \$8.60 \$5,157.41 6.4.1 Grade Control Weirs 4.00 EA \$23,349.87 \$93,399.47 6.5.1 Riprap - Bank Stabilization 800.00 CY \$76.11 \$60,885.22 6.6.1 Install Gage House & Stilling well 1.00 LS \$32,740.27 \$32,740.27 6.7.1 Relocation of Utility Pole & Electrical Feed 1.00 LS \$10,000.00 \$10,000.00	5.22.1	Erosion Control Blanket beyond channel limits	10,000.00 SY	\$4.55	\$45,500.00
5.24.1 Establishment Watering 1.00 ALL \$130,434.00 \$130,434.00 5.25.1 Weed Management - During Construction 0.00 Month \$58,250.00 \$0.00 5.26.1 Weed Management - Post Construction 0.00 LS \$103,000.00 \$0.00 5.27.1 Plantings Warranty 1.00 LS \$55,050.00 \$55,050.00 5.28.1 Additional Imported Fill Material Required (Borrow Pit) 44,000.00 CY \$7.22 \$317,552.17 Fraser Gauge Modification 1.00 LS \$32,048.28 \$32,048.28 6.1.1 Demolition 1.00 LS \$32,048.28 \$32,048.28 6.2.1 Channel Regrading Fill 600.00 CY \$11.28 \$6,767.28 6.3.1 Channel Regrading Excavation 600.00 CY \$8.60 \$5,157.41 6.4.1 Grade Control Weirs 4.00 EA \$23,349.87 \$93,399.47 6.5.1 Riprap- Bank Stabilization 800.00 CY \$76.11 \$60,885.22 6.6.1 Install Gage House & Stilling well 1.00 LS \$32,740.27 \$32,740.27 6.7.1			1.00 LS	\$0.00	\$0.00
5.25.1 Weed Management - During Construction 0.00 Month \$58,250.00 \$0.00 5.26.1 Weed Management - Post Construction 0.00 LS \$103,000.00 \$5,00.00 5.27.1 Plantings Warranty 1.00 LS \$55,050.00 \$55,050.00 \$55,050.00 \$55,050.00 \$55,050.00 \$55,050.00 \$55,050.00 \$517,552.07 \$12,000.00 \$250,997.92 \$317,552.17 \$250,997.92 \$317,552.17 \$250,997.92 \$32,048.28 \$32,048.28 \$32,048.28 \$32,048.28 \$32,048.28 \$32,048.28 \$32,048.28 \$32,048.28 \$32,048.28 \$32,048.28 \$32,048.28 \$6.767.28 \$6.21 Channel Regrading Fill \$600.00 CY \$11.28 \$6,767.28 \$6.31 Channel Regrading Excavation \$600.00 CY \$11.28 \$6,767.28 \$6.15 \$6.1 Inal Regrading Excavation \$600.00 CY \$8.60 \$5,157.41 \$6.1 \$6.1 Inal Regrading Excavation \$800.00 CY \$76.11 \$60,885.22 \$6.51 \$1.00 Inal Regrading Excavation \$800.00 CY \$76.11 \$60	5.24.1		1.00 ALL	\$130,434.00	\$130,434.00
5.26.1 Weed Management - Post Construction 0.00 LS \$103,000.00 \$0.00 5.27.1 Plantings Warranty 1.00 LS \$55,050.00 \$55,050.00 5.28.1 Additional Imported Fill Material Required (Borrow Pit) 44,000.00 CY \$7.22 \$317,552.17 Fraser Gauge Modification \$250,997.92 \$31.00 LS \$32,048.28 \$32,048.28 6.1.1 Demolition 1.00 LS \$32,048.28 \$32,048.28 6.2.1 Channel Regrading Fill 600.00 CY \$11.28 \$6,767.28 6.3.1 Channel Regrading Excavation 600.00 CY \$8.60 \$5,157.41 6.4.1 Grade Control Weirs 4.00 EA \$23,349.87 \$93,399.47 6.5.1 Riprap - Bank Stabilization 800.00 CY \$76.11 \$60,885.22 6.6.1 Install Gage House & Stilling well 1.00 LS \$32,740.27 \$32,740.27 6.7.1 Relocation of Utility Pole & Electrical Feed 1.00 LS \$10,000.00 \$10,000.00 6.8.1 New Cableway 1.00 LS \$680,638.54 \$680,638.54 7	5.25.1	Weed Management - During Construction	0.00 Mont	h \$58,250.00	\$0.00
5.27.1 Plantings Warranty 1.00 LS \$55,050.00 \$55,050.00 5.28.1 Additional Imported Fill Material Required (Borrow Pit) 44,000.00 CY \$7.22 \$317,552.17 Fraser Gauge Modification \$250,997.92 6.1.1 Demolition 1.00 LS \$32,048.28 \$32,048.28 6.2.1 Channel Regrading Fill 600.00 CY \$11.28 \$6,767.28 6.3.1 Channel Regrading Excavation 600.00 CY \$8.60 \$5,157.41 6.4.1 Grade Control Weirs 4.00 EA \$23,349.87 \$93,399.47 6.5.1 Riprap - Bank Stabilization 800.00 CY \$76.11 \$60,885.22 6.6.1 Install Gage House & Stilling well 1.00 LS \$32,740.27 \$32,740.27 6.7.1 Relocation of Utility Pole & Electrical Feed 1.00 LS \$10,000.00 \$10,000.00 6.8.1 New Cableway 1.00 LS \$680,638.54 \$680,638.54 7.1.1 Project Management Staff 1.00 LS \$67,621.26 \$67,621.26 7.2.1 Project Safety Program & Staff <	5.26.1		0.00 LS		\$0.00
5.28.1 Additional Imported Fill Material Required (Borrow Pit) 44,000.00 CY \$7.22 \$317,552.17 Fraser Gauge Modification \$250,997.92 6.1.1 Demolition 1.00 LS \$32,048.28 \$32,048.28 6.2.1 Channel Regrading Fill 600.00 CY \$11.28 \$6,767.28 6.3.1 Channel Regrading Excavation 600.00 CY \$8.60 \$5,157.41 6.4.1 Grade Control Weirs 4.00 EA \$23,349.87 \$93,399.47 6.5.1 Riprap - Bank Stabilization 800.00 CY \$76.11 \$60,885.22 6.6.1 Install Gage House & Stilling well 1.00 LS \$32,740.27 \$32,740.27 6.7.1 Relocation of Utility Pole & Electrical Feed 1.00 LS \$10,000.00 \$10,000.00 6.8.1 New Cableway 1.00 LS \$10,000.00 \$10,000.00 Indirect Cost \$2,049,732.68 7.1.1 Project Management Staff 1.00 LS \$680,638.54 \$680,638.54 7.2.1 Project Oquality Program & Staff 1.00 LS \$67,621.26 \$67,621.26 7.3.1 Project Quality Program & Staff 1.00 LS \$86,990.28					
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Indirect Cost \$2,049,732.68 7.1.1 Project Management Staff 1.00 LS \$680,638.54 \$680,638.54 7.2.1 Project Safety Program & Staff 1.00 LS \$67,621.26 \$67,621.26 7.3.1 Project Quality Program & Staff 1.00 LS \$157,195.88 \$157,195.88 7.4.1 Project Environmental Program & Staff 1.00 LS \$86,990.28 \$86,990.28 7.5.1 Direct Manhour ST&S 1.00 LS \$0.00 \$0.00 7.6.1 Contractor's Office and Shop Facilities and Utilities 1.00 LS \$74,060.03 \$74,060.03	6.7.1	Relocation of Utility Pole & Electrical Feed	1.00 LS	\$10,000.00	\$10,000.00
7.1.1 Project Management Staff 1.00 LS \$680,638.54 \$680,638.54 7.2.1 Project Safety Program & Staff 1.00 LS \$67,621.26 \$67,621.26 7.3.1 Project Quality Program & Staff 1.00 LS \$157,195.88 \$157,195.88 7.4.1 Project Environmental Program & Staff 1.00 LS \$86,990.28 \$86,990.28 7.5.1 Direct Manhour ST&S 1.00 LS \$0.00 \$0.00 7.6.1 Contractor's Office and Shop Facilities and Utilities 1.00 LS \$74,060.03 \$74,060.03	6.8.1	New Cableway	1.00 LS	\$10,000.00	\$10,000.00
7.2.1 Project Safety Program & Staff 1.00 LS \$67,621.26 \$67,621.26 7.3.1 Project Quality Program & Staff 1.00 LS \$157,195.88 \$157,195.88 7.4.1 Project Environmental Program & Staff 1.00 LS \$86,990.28 \$86,990.28 7.5.1 Direct Manhour ST&S 1.00 LS \$0.00 \$0.00 7.6.1 Contractor's Office and Shop Facilities and Utilities 1.00 LS \$74,060.03 \$74,060.03		t Cost			\$2,049,732.68
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7.6.1 Contractor's Office and Shop Facilities and Utilities 1.00 LS \$74,060.03 \$74,060.03		Project Environmental Program & Staff		\$86,990.28	\$86,990.28
					\$0.00
7.7.1 Third Party Cost 1.00 LS \$0.00 \$0.00					
	7.7.1	Third Party Cost	1.00 LS	\$0.00	\$0.00

ITEM CODE	ITEM DESCRIPTION	QUANTITY	PAY UNIT PRICE	TOTAL COST
7.8.1	Other (Specify)	1.00		
7.9.1	Housing, Relocation, Travel, Subsistence Cost	1.00		
	-			
Subtot	al			\$16,493,793.30
Contra	ctor Contingency and Fee			\$3,274,069.00
8.1.1	Contractors Fee (15%)	1.00	LS \$2,474,069.00	\$2,474,069.00
8.2.1	Contractor Contingency - Plug (Including Unlisted Items)	1.00	LS \$800,000.00	\$800,000.00
Perfori	mance and Payment Bond & Insurance			\$398,325.11
9.1.1	Bond (0.6%) - does not include contingency	1.00	LS \$113,807.17	7 \$113,807.17
9.2.1	Insurance (BR) - does not include contingency	1.00	LS \$284,517.93	\$284,517.93
40% De	esign Contractor Bid Total			\$20,166,187.41
Potent	ial Savings in Design Optimization			-\$2,500,000.00
Final D	esign and Permitting			\$3,366,500.00
10.1.1	Final Design	1.00	LS \$2,359,368.00	\$2,359,368.00
10.2.1	Watershed Plan EA	1.00	LS \$577,810.50	\$577,810.50
10.2.3	Design & Permitting Contingency	1.00	LS \$429,321.50	\$429,321.50
Owner	s Costs of Construction			\$2,500,000.00
11.1.1	Owners Contingency	1.00	LS \$1,500,000.00	\$1,500,000.00
11.2.1	Engineering, Construction Management, QA/QC	1.00	LS \$1,000,000.00	\$1,000,000.00
Project	ted Project Total			\$23,600,000.00

Colorado River Connectivity Channel Contributions (December 22, 2020)

Task	Description	Start Date	End Date	Cash
1	Bypass NEPA & Permitting	10/01/17	06/30/21	\$577,811
2	Bypass Final Design and Engineering	08/01/20	05/31/21	\$2,788,6901
3	Bypass Project Construction	07/01/21	09/30/23	\$20,166,1872
Total				\$23,532,688

Funding Sources	Cash	Status
NRCS (RCPP)	\$5,669,600	Committed
Northern Colorado Water Conservancy District (NCWCD)	\$1,000,000	Committed
Municipal Subdistrict of NCWCD	\$1,000,000	Committed
Windy Gap Firming Project Water Activity Enterprise	\$3,000,000	Committed
CWCB Construction	\$2,200,000	Committed
CWCB Water Plan Grant	\$1,021,500	Committed
Grand County	\$1,000,000	Committed
Colorado River Water Conservation District	\$25,000	Committed
Upper Colorado River Alliance (Landowners)	\$260,000	Committed
Anonymous Donor	\$1,000,000	Committed
Total Funding Committed	\$16,176,100	
Additional Funding Needed	\$7,356,588 ³	
Total	\$23,532,688	

¹ Includes a \$429,322 design and engineering contingency that will be resolved at final design in May 2021.

² Includes an \$800,000 contractor's construction contingency that will be resolved at guaranteed cost bid in May 2021; it also includes a \$1.5 million owners contingency for unexpected complications during construction that will be resolved at end of construction by end of Fall 2023.

³ Potential sources of additional funding include: RESTORE (\$600K applied for); Colorado River Water Conservation District (\$1 million to be requested); Grand County OLRT Fund (\$1 million to be requested); additional NRCS funds (\$2 million to be requested); additional Northern funds (\$1.5 million to cover owners contingency to be requested); CPW funds (\$1 million Habitat Stamp Funds to be requested); additional private donations (approx.. \$500K to be requested).



GRAND COUNTY BOARD OF COMMISSIONERS

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County Attorney

January 12, 2021

Colorado River Water Conservation District 201 Centennial Street; Suite 200 Glenwood Springs, CO 81601

Delivered via Electronic Mail to Mr. Andy Mueller amueller@crwcd.org

Re: Windy Gap Reservoir Connectivity Channel Project

Dear Colorado River District Board of Directors and Mr. Mueller,

On behalf of the citizens and visitors of Grand County, Colorado and the West Slope, the Grand County Board of County Commissioners submits this letter of request and support for funding for the Windy Gap Reservoir Connectivity Channel Project.

The headwaters of the Colorado River are critically important watersheds providing for significant habitat for aquatic and terrestrial species, production agriculture, municipal water supply and important recreation opportunities. Years of negotiations among diverse East and West Slope project partners, including the Colorado River District, with varied interests and a history of disagreement and litigation, have produced significant cooperative efforts to improve the negative effects of transmountain diversions within the headwaters of the Colorado River in Grand County and downriver.

In accordance with the primary purposes of Ballot Issue 7A, as well as being listed as a Colorado Basin Roundtable project acknowledged in the 7A Implementation Plan, the Connectivity Channel project provides a range of benefits that incorporate multiple purposes outlined in the Colorado River District's 7A project categories.

Often referred to as the lynchpin, this project will provide significant environmental and hydrological benefits that will: (1) in essence, reconnect the Colorado River via a connectivity channel to tributaries upstream and downstream of the reservoir (including the Fraser River), thus providing important enhanced habitat range and passage for fish and other aquatic species,

including giant stone fly and sculpin, (2) re-establish sediment transport below the reservoir to reduce stream bed armoring downstream and provide critical spawning beds, (3) reduce the footprint of the existing shallow reservoir, and lower stream temperatures, (4) reduce nutrient loading and the transport of harmful aquatic vegetation from the reservoir to the river below, including to the Town of Hot Sulphur Spring's water intake, and (5) provide over one-mile of new public fishing access for future generations.

Trout Unlimited and the project partners have contributed significant staff resources and secured over \$16 million dollars in funding for the project over the last eight years. Grand County directly committed \$1 million dollars in funding to the project. However, with final engineering design now at over 40%, total project costs have increased and the funding shortfall is now over \$7 million dollars. Grand County and the project partners are certain with continued East and West Slope collaboration, value engineering and leverage of partner funding, we will get to the finish line and complete this important project.

Grand County appreciates our partnership with the Colorado River District and respectfully requests your continued support and funding consideration toward the Windy Gap Reservoir Connectivity Channel Project.

Sincerely,

Merrit Linke

Commissioner Chair

Richard Cimino Commissioner

no Kristen Manguso cr Commissioner

BOCC:em

Cc: Mely Whiting – Trout Unlimited