
PROJECT: 19-1613 REST, MILL CREEK FISH PASSAGE - DIVISION TO ROOSEVELT

Sponsor: Tri-State Steelheaders Inc Program: FBRB Watershed Pathway Status: Active

Project Start Date: 07/01/2019 Agreement End Date: 12/31/2023

Final Report Status: Accepted 12/19/2023

Description

PROJECT AGREEMENT DESCRIPTION

Flood control measures on Mill Creek include a concrete channel that extends over two miles through Walla Walla. The Mill Creek Barrier Assessment completed in 2009 identified and described barriers for Endangered Species Act (ESA) listed steelhead and bull trout and for reintroduced spring Chinook. Returning adults encounter flow dependent depth and velocity barriers, and a lack of resting opportunities. Juvenile fish encounter low spring flows, and high water temperatures in late spring. Often by mid-May, adults and juveniles become trapped in the flood control channel where they experience lethal temperatures. Many of these passage issues are considered imminent threats in the Snake River Salmon Recovery Plan. The Mill Creek channel upstream of the flood control project is a critical and under-utilized area for spawning and rearing of ESA listed species. Restoring fish passage to upper Mill Creek provides an important recovery opportunity for ESA listed fish, as well as good habitat for other native fish and reintroduced spring Chinook. Designs for remodeling the concrete channel to improve water velocities and depths have been implemented and tested in three previous construction projects. This project will complete construction of the Division to Roosevelt portion of the concrete channel. This project is one of multiple projects that are necessary to correct fish passage problems in the Mill Creek flood control project.

FINAL PROJECT DESCRIPTION

This project completed fish passage improvements to 2,244 feet of the two mile-long Mill Creek flood control channel. Modifications of the concrete channel provided depth and velocity conditions favorable to passage of Mid-Columbia summer steelhead, bull trout, and spring Chinook. Under pre-project conditions, returning adults encountered velocities that were too high for too long of a distance, without any resting opportunities. To improve passage, part of the existing channel was cut and removed. Pre-cast "roughness panels" replaced the removed concrete. The roughness panels have block-shaped projections which create friction in the water, slowing it to a velocity that the fish can swim for the full distance of the project. Resting pools were also added as an additional measure. During low flow, under pre-project conditions, baffles in the channel created hydraulic conditions that were a barrier to juveniles. The baffles were removed and replaced with new baffles that were sized and spaced to provide volitional passage for juveniles.

Narrative

The Mill Creek Barrier Assessment (project #06-2203) described flow-dependent passage barriers to adult and juvenile salmonids in the Mill Creek flood control channel. This project was the sixth of multiple phases of implementation of the passage concept developed in the assessment. In 2017, plans were completed for the uppermost mile of the concrete channel. The Division to Roosevelt segment was a sub-set of that plan, and was the last remaining section of the upper section to be treated for passage. Project engineers Pat Powers (Waterfall Engineering) and Jay Kidder (Chinook Engineering) designed the project, and provided construction oversight. Implementation started in 2022 with Strider Construction. Because of rapid cost inflation the project scope was shortened (to about 60% of the full scope) to maximize the project length to be completed in the 2022 work window. Additional funds were secured with 21-1631 allowing work to be completed in 2023 by Royse Hydroseeding and Excavation.

Final Report, Project 19-1613

Worksites

Worksite #1: Mill Creek channel - Division St to Roosevelt St

Worksite Address (Optional)

Street Address

City

State, Zip

Worksite Details

Worksite #1: Mill Creek channel - Division St to Roosevelt St

Worksite Name Mill Creek channel - Division St to Roosevelt St

WORKSITE DESCRIPTION

Mill Creek flood channel between Division St and Roosevelt St.

Existing concrete in the flood channel will be removed and replaced to provide hydraulic conditions favorable to fish passage.

Geographic Coordinates

From mapped point: Latitude 46.069189 Longitude -118.319536

For Directions: Latitude 46.069913 Longitude -118.319599

SITE ACCESS DIRECTIONS

From HWY 12, take Wilbur Ave exit. Follow Wilbur Ave south to a stoplight at Isaacs St. Turn Right onto Isaacs. At the next light, turn left (south) onto Roosevelt St. Proceed on Roosevelt to the bridge crossing Mill Creek. Street parking or park in church parking lot.

Properties

Worksite #	Worksite Name	Property Name	Sponsor Verified	RCO Verified	RCO Verified Map
1	Mill Creek channel - Division St to Roosevelt St	Mill Creek channel	✓	✓	N/A

Restoration Metrics

Current Agreement

Final

Worksite: Mill Creek channel - Division St to Roosevelt St (#1)

Final Report, Project 19-1613

Targeted salmonid ESU/DPS (A.23)	☐ No Salmon ESU or Steelhead DPS ☐ Chinook Salmon-Middle Columbia River spring-run ESU ☐ Chinook Salmon-unidentified ESU ☒ Steelhead-Middle Columbia River DPS ☐ Steelhead/Trout-unidentified DPS	☐ No Salmon ESU or Steelhead DPS ☐ Chinook Salmon-Middle Columbia River spring-run ESU ☐ Chinook Salmon-unidentified ESU ☒ Steelhead-Middle Columbia River DPS ☐ Steelhead/Trout-unidentified DPS
Targeted species (non-ESU species)	None Unknown Brook Trout Brown Trout ☒ Bull Trout Cutthroat Forage Fish Kokanee Lamprey ☒ Rainbow Searun Cutthroat	None Unknown Brook Trout Brown Trout ☒ Bull Trout Cutthroat Forage Fish Kokanee Lamprey ☒ Rainbow Searun Cutthroat
Miles of Stream and/or Shoreline Treated or Protected (C.0.b)	0.23	0.23
Project Identified In a Plan or Watershed Assessment (C.0.c)	Snake River Salmon Recovery Board, 2011, Snake River Salmon Recovery Plan for Southeast Washington, http://snakeriverboard.org/wpi/wp-content/uploads/2013/01/Full-Version-SE-WA-recovery-plan-121211.pdf	<i>Not Collected at Closure</i>
Priority in Recovery Plan		<i>Not Collected at Closure</i>
Type Of Monitoring (C.0.d.1)	Implementation Monitoring ☒ None	Implementation Monitoring ☒ None
Monitoring Location (C.0.d.2)	☒ No monitoring completed ☐ Downstream ☐ Onsite ☐ Upslope ☐ Upstream	☒ No monitoring completed ☐ Downstream ☐ Onsite ☐ Upslope ☐ Upstream

Fish Passage Improvement

Final Report, Project 19-1613

Miles Of Stream Made Accessible (FBRB)	0.23	0.23
Miles Of Stream Made Accessible (SRFB) (C.2.b.1)	0	0
Note: Passage is improved for 2,000 feet of concrete channel, adjoining improvements made previously to the upstream end of the concrete channel. Above the concrete channel, adult passage is opened to 50 or more miles of Mill Creek and tributary streams.		
Habitat made accessible (2489)	<i>Collected on Application</i>	<i>Not Collected at Closure</i>
Additional barriers (2490)	<i>Collected on Application</i>	<i>Not Collected at Closure</i>
Type Of Barrier (C.2.b.3)	☐ Boulders or rock barriers ☐ Bridge ☐ Culvert ☐ Debris ☐ Diversion Dam ☐ Ford ☐ Landslide ☐ Logs ☐ Push-Up Dam ☒ Weir ☐ Wood Or Concrete Dam ☐ None	☐ Boulders or rock barriers ☐ Bridge ☐ Culvert ☐ Debris ☐ Diversion Dam ☐ Ford ☐ Landslide ☐ Logs ☐ Push-Up Dam ☒ Weir ☐ Wood Or Concrete Dam ☐ None
Note: The barrier is not a point barrier, but due to the shape of the channel for 2,000 feet.		
Number of blockages / impediments / barriers impeding passage (C.2.b.4)	1	1
Note: The shape of the channel, for 2,000 feet is the barrier.		
Describe the current barrier (2486)	<i>Collected on Application</i>	<i>Not Collected at Closure</i>
Passage problem (2487)	<i>Collected on Application</i>	<i>Not Collected at Closure</i>
Passability (2488)	<i>Collected on Application</i>	<i>Not Collected at Closure</i>
Fishway chutes or pools installed (C.2.d.1)		
Total cost for Fishway chutes or pools installed	\$2,546,712	<i>Not Collected at Closure</i>
Number Of Fishway Chutes/Pools Installed (C.2.d.2)	18	18
Note: 32 resting pools AR changed to 18 for amendmen 2t. Sponsor will enter final number in final report.		
Permits		
<i>Obtain permits</i>		
Total cost to Obtain permits	\$1,200	<i>Not Collected at Closure</i>
Number of permits required for implementation of project	3	3
Architectural & Engineering		
Architectural & Engineering (A&E)		
Total cost for Architectural & Engineering (A&E)	\$96,097	<i>Not Collected at Closure</i>
Did A&E costs exceed billed amount (Yes/No)	<i>Collected at Closure</i>	No

Final Report, Project 19-1613

Overall Metrics

	Current Agreement	Final
Completion Date		
Projected date of completion	11/30/2021	10/12/2023
Priority Watershed		
Select the priority watershed the proposed project is located. If N/A select None.	<i>Collected on Application</i> Note: Do not see Mill Creek as NEW priority pathway in option choices	<i>Not Collected at Closure</i>

Project Goals

Goals, purpose, and expected benefits (A.17)	The goal of this project is to provide Snake River steelhead access to habitat in the Mill Creek watershed. This project will address passage issues in the flood control flume in Walla from Division to Roosevelt streets by replacing the weirs with more channel roughness that provides pools and resting areas for fish to pass through this piece of infrastructure.	Goals are: provide high flow passage for adults, provide low flow passage for juveniles, and provide resting pools. The intended benefit is to provide passage for adult Mid-Columbia summer steelhead, bull trout, and spring Chinook through the flood channel and access to upper Mill Creek. Juvenile fish will have volitional passage to cope with thermal conditions during low flow.
--	--	--

Restoration Costs

	<i>Final amounts include a pending billing</i> <i>Date of Last Released Billing 04/11/2023</i>	
	Proposed	Final
Worksite: Mill Creek channel - Division St to Roosevelt St (#1)		
SPLIT OUT FINAL TOTAL BELOW	\$2,644,009	\$2,131,763
Fish Passage Costs (C.2.a)	\$2,546,712	\$2,063,885
<i>Permits Costs</i>	\$1,200	\$0
Architectural & Engineering Costs	\$96,097	\$67,878
Difference		\$0

Billed Summary

	<i>Final amounts include a pending billing</i> <i>Date of Last Released Billing 04/11/2023</i>				
Category	Project Agreement		Totals To Date		
	RCO	Total	Expended	Non Reimbursable	Total Billed
Restoration					
Construction	1,592,724.72	2,035,666.00	1,604,167.43	459,717.22	2,063,884.65
AA&E	75,187.28	96,097.00	63,744.44	4,133.91	67,878.35
Restoration Total	1,667,912.00	2,131,763.00	1,667,911.87	463,851.13	2,131,763.00
Total	1,667,912.00	2,131,763.00	1,667,911.87	463,851.13	2,131,763.00

Final Report, Project 19-1613

Sponsor Match

	Proposed	Final
Project Funding		
Federal Funds		
State Funds (A.11)	\$1,667,912.00	\$1,663,419.68
Pending Billing - RCO Share Approved	<i>Collected at Closure</i>	\$4,492.19

Match Details

Match Category	Match Type	Proposed	Final
State Funding	Grant - RCO Salmon		
Amount		\$826,097.00	\$0.00
Funding Organization			
Other Monetary Funding	Grant - Other		
Amount		N/A	\$25,798.95
Funding Organization			Bonneville Power Administration (BPA)
Grant Program			Contract 85449
Other Monetary Funding	Grant - Other		
Amount		\$150,000.00	\$4,133.91
Funding Organization			WDFW
Grant Program			RFEG contracts 18-10693 and 19-13701
Other Monetary Funding	Grant - Private		<i>Unable to tie Billed match to Proposed match. Please make corrections as needed, or leave if correct.</i>
Amount		N/A	\$324,922.76
Funding Organization			Bonneville Power Administration (BPA)
Grant Program			2009-026-00 EXP MILL CREEK FISH PASSAGE IMPROVEMENTS
Other Monetary Funding	Grant - State		<i>Unable to tie Billed match to Proposed match. Please make corrections as needed, or leave if correct.</i>
Amount		N/A	\$27,076.90
Funding Organization			Bonneville Power Administration (BPA)
Grant Program			contract 89828
Other Monetary Funding	Grant - State		<i>Unable to tie Billed match to Proposed match. Please make</i>

Final Report, Project 19-1613

corrections as needed, or leave if correct.

Amount	N/A	\$81,918.61
Funding Organization		Recreation and Conservation Office (RCO)
Grant Program		Salmon Recovery Funding Board #19-1718

Project Funding Total	\$1,667,912.00	63.08 %	\$1,667,911.87	78.24 %
Sponsor Match Total	\$976,097.00	36.92 %	\$463,851.13	21.76 %
Project Total	\$2,644,009.00	100.00 %	\$2,131,763.00	100.00 %
Total Billed			\$2,131,763.00	
Difference			\$0.00	

Attachments

PHOTOS (JPG, GIF)
Photos (JPG, GIF)

PROJECT DOCUMENTS AND PHOTOS
Project Documents and Photos

File Type	Attach Date	Attachment Type	Title	Person	File Name, Number Associations	Share
No attachments match filter criteria						

Certify & Submit

Status History			
Report Status	Date	User	Note
Accepted	12/19/2023	Alice Rubin	
Submitted	12/15/2023	Brian Burns	
Draft	10/12/2023	Morgan Morris	

PROJECT: 19-1613 REST, MILL CREEK FISH PASSAGE - DIVISION TO ROOSEVELT

Sponsor: Tri-State Steelheaders Inc Program: FBRB Watershed Pathway Status: Active
Project Start Date: 07/01/2019 Agreement End Date: 12/31/2023

PROPERTY: Mill Creek channel (1: Mill Creek channel - Division St to Roosevelt St)

Property Basics

Acquisition ☐ Restoration ☒

Property Location

Property Name	Mill Creek channel	Property Description	Mill Creek concrete channel between Division St. and Roosevelt St.
Property Address (optional)		Associated Worksite	Mill Creek channel - Division St to Roosev
City			
State	Zip		

Landowner

Landowner Name	Walla Walla County Public Works Depart
Address (optional)	990 Navion Lane
City	Walla Walla
State	WA Zip 99362
Landowner Type	Local

Control and Tenure

Instrument Type	Landowner Agreement
Timing	Proposed
Term Type	Fixed # of years
# Yrs	10
Expiration Date	12/16/203;
Note	

Parcel Numbers

County Name	Parcel Number	Mapped	Notes (optional)
No parcels			

Recording Numbers

Instrument Type	Recording Number	Notes
No recordings		

Sponsor Clarification

☒ The above information is correct and complete

RCO Notes

☒ Property data verified by RCO Staff

Property Report: Mill Creek channel (Worksite #1: Mill Creek channel - Division St to Roosevelt St)

Attachments

PHOTOS (JPG, GIF)
Photos (JPG, GIF)

PROJECT DOCUMENTS AND PHOTOS
Project Documents and Photos

File Type	Attach Date	Attachment Type	Title	Person	File Name, Number Associations	Shared
No attachments match filter criteria						