

Project #19-1499, Increase Wood Densities in Asotin IMW Restoration

Current Status: Application Submitted

Project Details

Primary Sponsor: Asotin County Conservation District
Secondary Sponsor: Eco Logical Research Inc.

Primary Contact: Megan Stewart
(509) 552-8100
megan@asotincd.org

Funding Program: Salmon State Projects

Lead Entity: Snake River Salmon Recovery Board
Lead Entity

Project Type: Restoration

Project Description

The Asotin County Conservation District is sponsoring this restoration project to add more wood to sections of Charley Creek, North Fork Asotin Creek, and South Fork Asotin Creek. These creeks are in the Asotin Creek watershed approximately 6 miles south of Clarkston, WA and are part of an Intensively Monitored Watershed project (IMW). The goal of the project is to increase wood density, instream habitat complexity, and floodplain connection which will improve rearing and spawning conditions for wild summer run steelhead. This restoration project should also result in an increase in steelhead productivity and lead to greater understanding of how to improve the efficiency of wood-based stream restoration in small wadeable streams. The project will use monitoring data from the IMW to identify areas where wood density is low and/or where habitat change is limited and target those areas to add more wood. The total area is 9 miles long and we anticipate adding several hundred pieces of wood to each stream using the low-tech process-based restoration method develop in this IMW using post-assisted log structures (PALS) and beaver dam analogs (BDAs).

Project Overall Metrics (Outcomes, Benefits)

Category / Work Type / Metric

Application Answer

Completion Date

Projected date of completion 12/31/2023

Sponsor Match: Monetary Funding

Amount of other monetary funding (A.12) \$0.00
Source of other monetary funding (A.12.a) N/A
Timing of other monetary funding N/A

Sponsor Match: Donated Un-paid Labor (volunteers)

Value of Donated Unpaid Labor (Volunteers) (A.13.a.2) \$0.00
Source of Donated Un-paid labor contributions (A.13.a.4) N/A

Sponsor Match: Donated Paid Labor

Value of Donated Paid Labor (A.13.b.1) \$6,000.00
Source of Donated Paid Contributions (A.13.b.2) Eco Logical Research, Inc

Sponsor Match: Other In-kind Contributions

Value of Other In-Kind Contributions (A.13.c.1) \$1,000.00
Source of Other In-Kind Contributions (A.13.c.3) Snake River SRFB
Description of other In-Kind contributions (A.13.c.2) donation of restoration equipment (10 days of hydraulic post-driver rental at 100/day)

Project Funding

Funding Request		Funding %	Min Match Required	Sponsor Match Source	
Salmon State Projects	\$32,500	82.28 %		Donated Equipment	\$1,000
Sponsor Match	\$7,000	17.72 %	15%	Donated Labor	\$6,000
Total Project Funding	\$39,500	100.00 %			

Project Cost Summary		Project %	Admin/A&E %	Maximum for Selected Program
RESTORATION COSTS				
Restoration	\$32,500			
A&E	\$7,000		21.54 %	\$9,750 (30%)
Subtotal	\$39,500	100.00 %		
Total Cost Estimate	\$39,500	100.00 %		

Worksites and Properties

County: Asotin

Legislative Districts 2012: 09

Congressional Districts 2012: 05
Salmon Recovery Regions: Snake River
DNR Watershed Units (WAU): ASOTIN, SF
DNR Watershed Units (WAU): Tam Tam
4th Field Catalog Units (HUC): LOWER SNAKE/ASOTIN
WRIA: Middle Snake
Sections: 04
Sections: 09
Sections: 15
Township: T09NR44E
Coordinates: 46.28616703
-117.30971798

Worksite #1: Charley Creek river mile 2.5-5.0

Coordinates from Mapped Point: Latitude: 46.28616703 Longitude: -117.30971798
Coordinates from Worksite Latitude: Longitude:
Directions:

Worksite Description: Charley Creek river mile 2.5-5.0. Wood will be placed manually using cone-alongs, no heavy equipment.

Site Access Directions: From Clarkston, WA head east on Highway 129 and turn left onto Asotin Creek Road just before entering the town of Asotin, WA. Drive approximately 12 miles up Asotin Creek Road. Charley Creek enters Asotin Creek at approximately river mile 13.8

Worksite Address:

Restoration Metrics (Outcomes, Benefits)

Category / Work Type / Metric	Application Answer	Work Type Costs
Targeted salmonid ESU/DPS (A.23)	Steelhead-Snake River Basin DPS	
Targeted species (non-ESU species)	Bull Trout	
Miles of Stream and/or Shoreline Treated or Protected (C.0.b)	2.50	
Project Identified In a Plan or Watershed Assessment (C.0.c)	Snake River Salmon Recovery Board (2011 Version) Snake River Salmon Recovery Plan for SE Washington. Dayton, WA. Snake River Salmon Recovery Board (2019 Version) Snake River Salmon Recovery Region Provisional 3-5 Year Work Plan. Dayton, WA.	
Priority in Recovery Plan	This project is identified as a top priority and located in a major spawning area for Steelhead and a priority restoration and p[rotection reaches in the Snake River Salmon Recovery Plan and 3 yr workplan.	
Type Of Monitoring (C.0.d.1)	Implementation Monitoring	
Monitoring Location (C.0.d.2)	Onsite	
Instream Habitat Project		
Total Miles Of Instream Habitat Treated (C.4.b)	2.50	
Channel structure placement (C.4.d.1)		
Total cost for Channel structure placement		\$9,000.00
Material Used For Channel Structure (C.4.d.2)	Individual Logs (Unanchored), Other Engineered Structures, Stumps With Roots Attached (Rootwads)	
Miles of Stream Treated for channel structure placement (C.4.d.3)	2.50	
Pools Created through channel structure placement (C.4.d.5)	10	
Number of structures placed in channel (C.4.d.7)	10	
Architectural & Engineering		
Architectural & Engineering (A&E)		
Total cost for Architectural & Engineering (A&E)		\$2,500.00

Restoration Questions

- 1 of 6

Cultural Resources: Has the worksite been investigated for historical, archeological, or cultural resources? If yes, when did this occur and what agencies and tribes were consulted? Attach related documents (letters, surveys, agreements, etc.) to your project in PRISM.

Yes, Surveys and letters of "no survey required" have been received for all proposed work sites (Charley, North Fork and South Fork Asotin Creek) between 2012-2016. See attached correspondence and permits from 15-1321R.
- 2 of 6

Cultural Resources: What is the current land use of the site? Has there been ground disturbances historically, if so, what are/were those disturbances? Is there any fill where ground disturbance is proposed? If known, how deep is the fill? The answer to this question will be used in cultural resource consultation so please provide detailed information.

The main use of the area is recreation (hunting, fishing, horseback riding, etc.). There have been floods, road building, grazing, logging, and houses built within the valley bottom over the past 150 years. Deposition and erosion has occurred with flooding and building activities have reworked the area of home sites. We are unaware of any fill being used.
- 3 of 6

Is the worksite(s) located within an existing park, wildlife refuge, natural area preserve, or other recreation or habitat site? If yes, name the area and specify if the land is owned by local, state or federal government.

Yes, Asotin Wildlife Area owned by the state

4 of 6	Cultural Resources: Describe any proposed ground disturbing activities that will take place as part of your project. This includes work conducted by hand or mechanized tools. Provide specific information including length, width, and depth of the ground disturbance. Ground disturbing work includes all restoration activities, geotech, fencing, demolition, etc. Avoid subjective phrases such as “ground disturbing activities will be minor”. There are no ground disturbance activities proposed with this project
5 of 6	Give street address for this worksite if available. N/A
6 of 6	Cultural Resources: Are there any structures existing on the property (including tidegates, dikes, residential structures, bridges, rail grades, etc.)? If so, please list all existing structures. Indicate if any of these structures will be altered or demolished as a result of the project, and provide the following for each structure that could be altered or demolished: identifying name, year constructed, year(s) remodeled/renovated. Attach at least one photo of each altered structure. No, there are no structures in the proposed restoration areas and all the work will occur within the active channel

Property for Charley Creek river mile 2.5-5.0 Worksite #1: Asotin Wildlife Area 1

Activity: Restoration

Landowner Washington Department of Fish and Wildlife POB 43200 Olympia, WA 98504-3200	Control and Tenure Instrument Type: Landowner Agreement Purchase Type: Term Length: Fixed # of years (10 years) Expiration Date: 12/31/2029 Note:
Landowner Type: State Government	

Worksite #2: North Fork Asotin Creek River mile 0.0-2.5

Coordinates from Mapped Point:	Latitude: 46.26670903	Longitude: -117.30010497
Coordinates from Worksite	Latitude:	Longitude:
Directions:		

Worksite Description: North Fork Asotin Creek at river mile 0.0-2.5. Wood will be placed manually using cone-alongs, no heavy equipment.

Site Access Directions: From Clarkston, WA head east on Highway 129 and turn left onto Asotin Creek Road just before entering the town of Asotin, WA. Drive approximately 14.5 miles up Asotin Creek Road and North Fork Asotin Creek begins at the confluence with South Fork Asotin Creek just upstream from the bridge crossing known as the "Forks".

Worksite Address:

Restoration Metrics (Outcomes, Benefits)

Category / Work Type / Metric	Application Answer	Work Type Costs
Targeted salmonid ESU/DPS (A.23)	Steelhead-Snake River Basin DPS	
Targeted species (non-ESU species)	Bull Trout	
Miles of Stream and/or Shoreline Treated or Protected (C.0.b)	2.50	
Project Identified In a Plan or Watershed Assessment (C.0.c)	Snake River Salmon Recovery Board (2011 Version) Snake River Salmon Recovery Plan for SE Washington. Dayton, WA. Snake River Salmon Recovery Board (2019 Version) Snake River Salmon Recovery Region Provisional 3-5 Year Work Plan. Dayton, WA.	
Priority in Recovery Plan	This project is identified as a top priority and located in a major spawning area for Steelhead and a priority restoration and p[rotection reaches in the Snake River Salmon Recovery Plan and 3 yr workplan.	
Type Of Monitoring (C.0.d.1)	Implementation Monitoring	
Monitoring Location (C.0.d.2)	Onsite	
Instream Habitat Project		
Total Miles Of Instream Habitat Treated (C.4.b)	2.50	
Channel structure placement (C.4.d.1)		
Total cost for Channel structure placement		\$9,000.00
Material Used For Channel Structure (C.4.d.2)	Individual Logs (Unanchored), Other Engineered Structures, Stumps With Roots Attached (Rootwads)	
Miles of Stream Treated for channel structure placement (C.4.d.3)	2.50	
Pools Created through channel structure placement (C.4.d.5)	10	
Number of structures placed in channel (C.4.d.7)	10	
Cultural Resources		
Cultural resources		
Total cost for Cultural resources		\$7,500.00
Acres surveyed for cultural resources	1.00	
Architectural & Engineering		
Architectural & Engineering (A&E)		
Total cost for Architectural & Engineering (A&E)		\$2,500.00

Restoration Questions

- 1 of 6

Cultural Resources: Has the worksite been investigated for historical, archeological, or cultural resources? If yes, when did this occur and what agencies and tribes were consulted? Attach related documents (letters, surveys, agreements, etc.) to your project in PRISM.

Yes, Surveys and letters of "no survey required" have been received for all proposed work sites (Charley, North Fork and South Fork Asotin Creek) between 2012-2016. See attached correspondence and permits from 15-1321R.
- 2 of 6

Cultural Resources: What is the current land use of the site? Has there been ground disturbances historically, if so, what are/were those disturbances? Is there any fill where ground disturbance is proposed? If known, how deep is the fill? The answer to this question will be used in cultural resource consultation so please provide detailed information.

The main use of the area is recreation (hunting, fishing, horseback riding, etc.). There have been floods, road building, grazing, logging, and houses built within the valley bottom over the past 150 years. Deposition and erosion has occurred with flooding and building activities have reworked the area of home sites. We are unaware of any fill being used.
- 3 of 6

Is the worksite(s) located within an existing park, wildlife refuge, natural area preserve, or other recreation or habitat site? If yes, name the area and specify if the land is owned by local, state or federal government.

Yes, Asotin Wildlife Area owned by the state
- 4 of 6

Cultural Resources: Describe any proposed ground disturbing activities that will take place as part of your project. This includes work conducted by hand or mechanized tools. Provide specific information including length, width, and depth of the ground disturbance. Ground disturbing work includes all restoration activities, geotech, fencing, demolition, etc. Avoid subjective phrases such as "ground disturbing activities will be minor".

There are no ground disturbance activities proposed with this project
- 5 of 6

Give street address for this worksite if available.

NA
- 6 of 6

Cultural Resources: Are there any structures existing on the property (including tidegates, dikes, residential structures, bridges, rail grades, etc.)? If so, please list all existing structures. Indicate if any of these structures will be altered or demolished as a result of the project, and provide the following for each structure that could be altered or demolished: identifying name, year constructed, year(s) remodeled/renovated. Attach at least one photo of each altered structure.

No, there are no structures in the proposed restoration areas and all the work will occur within the active channel

Property for North Fork Asotin Creek River mile 0.0-2.5 Worksite #2: Asotin Wildlife Area 2

Activity: Restoration	
Landowner Washington Department of Fish and Wildlife POB 43200 Olympia, WA 98504-3200	Control and Tenure Instrument Type: Landowner Agreement Purchase Type: Term Length: Fixed # of years (10 years) Expiration Date: 12/31/2029 Note:
Landowner Type: State Government	

Worksite #3: South Fork Asotin Creek River mile 1.3-2.5

Coordinates from Mapped Point:	Latitude: 46.25602703	Longitude: -117.29083497
Coordinates from Worksite	Latitude:	Longitude:
Directions:		

Worksite Description: South Fork Asotin Creek at river mile 1.3-5.0. Wood will be placed manually using cone-alongs, no heavy equipment.

Site Access Directions: From Clarkston, WA head east on Highway 129 and turn left onto Asotin Creek Road just before entering the town of Asotin, WA. Drive approximately 14.5 miles up Asotin Creek Road and South Fork Asotin Creek begins at the confluence with North Fork Asotin Creek just upstream from the bridge crossing known as the "Forks".

Worksite Address:

Restoration Metrics (Outcomes, Benefits)

Category / Work Type / Metric	Application Answer	Work Type Costs
Targeted salmonid ESU/DPS (A.23)	Steelhead-Snake River Basin DPS	
Targeted species (non-ESU species)	Bull Trout	
Miles of Stream and/or Shoreline Treated or Protected (C.0.b)	1.20	
Project Identified In a Plan or Watershed Assessment (C.0.c)	Snake River Salmon Recovery Board (2011 Version) Snake River Salmon Recovery Plan for SE Washington. Dayton, WA. Snake River Salmon Recovery Board (2019 Version) Snake River Salmon Recovery Region Provisional 3-5 Year Work Plan. Dayton, WA.	
Priority in Recovery Plan	This project is identified as a top priority and located in a major spawning area for Steelhead and a priority restoration and p[rotection reaches in the Snake River Salmon Recovery Plan and 3 yr workplan.	
Type Of Monitoring (C.0.d.1)	Implementation Monitoring	
Monitoring Location (C.0.d.2)	Onsite	

Instream Habitat Project

Total Miles Of Instream Habitat Treated (C.4.b)	1.20	
Channel structure placement (C.4.d.1)		
Total cost for Channel structure placement		\$7,000.00
Material Used For Channel Structure (C.4.d.2)	Individual Logs (Unanchored), Other Engineered Structures, Stumps With Roots Attached (Rootwads)	
Miles of Stream Treated for channel structure placement (C.4.d.3)	1.20	
Pools Created through channel structure placement (C.4.d.5)	10	
Number of structures placed in channel (C.4.d.7)	10	

Architectural & Engineering

Architectural & Engineering (A&E)

Total cost for Architectural & Engineering (A&E)		\$2,000.00
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Restoration Questions

- 1 of 6 Cultural Resources: Has the worksite been investigated for historical, archeological, or cultural resources? If yes, when did this occur and what agencies and tribes were consulted? Attach related documents (letters, surveys, agreements, etc.) to your project in PRISM.**
Yes, Surveys and letters of "no survey required" have been received for all proposed work sites (Charley, North Fork and South Fork Asotin Creek) between 2012-2016. See attached correspondence and permits from 15-1321R.
- 2 of 6 Cultural Resources: What is the current land use of the site? Has there been ground disturbances historically, if so, what are/were those disturbances? Is there any fill where ground disturbance is proposed? If known, how deep is the fill? The answer to this question will be used in cultural resource consultation so please provide detailed information.**
The main use of the area is recreation (hunting, fishing, horseback riding, etc.). There have been floods, road building, grazing, logging, and houses built within the valley bottom over the past 150 years. Deposition and erosion has occurred with flooding and building activities have reworked the area of home sites. We are unaware of any fill being used.
- 3 of 6 Is the worksite(s) located within an existing park, wildlife refuge, natural area preserve, or other recreation or habitat site? If yes, name the area and specify if the land is owned by local, state or federal government.**
Yes, Asotin Wildlife Area owned by the state
- 4 of 6 Cultural Resources: Describe any proposed ground disturbing activities that will take place as part of your project. This includes work conducted by hand or mechanized tools. Provide specific information including length, width, and depth of the ground disturbance. Ground disturbing work includes all restoration activities, geotech, fencing, demolition, etc. Avoid subjective phrases such as "ground disturbing activities will be minor".**
There are no ground disturbance activities proposed with this project
- 5 of 6 Give street address for this worksite if available.**
NA
- 6 of 6 Cultural Resources: Are there any structures existing on the property (including tidegates, dikes, residential structures, bridges, rail grades, etc.)? If so, please list all existing structures. Indicate if any of these structures will be altered or demolished as a result of the project, and provide the following for each structure that could be altered or demolished: identifying name, year constructed, year(s) remodeled/renovated. Attach at least one photo of each altered structure.**
No, there are no structures in the proposed restoration areas and all the work will occur within the active channel

Property for South Fork Asotin Creek River mile 1.3-2.5 Worksite #3: Asotin Wildlife Area 3

Activity: Restoration

Landowner

Washington Department of Fish and Wildlife
POB 43200
Olympia, WA 98504-3200

Landowner Type: State Government

Control and Tenure

Instrument Type: Landowner Agreement

Purchase Type:

Term Length: Fixed # of years (10 years)

Expiration Date: 12/31/2029

Note:

Overall Project Questions

- 1 of 6 Is any part of the scope of work included in this application required as mitigation for another project or action? E.g. FERC relicensing, Habitat Conservation Plan, legal settlement, etc. If yes, explain:**
No
- 2 of 6 Do you need state SRFB dollars (not Federal) to match the requirements of any other federal funding you will be using to complete this project. If Yes, please state the amount of state dollars needed out of your total request.**
No
- 3 of 6 Is the project on State Owned Aquatic Lands? Please contact the Washington State Department of Natural Resources to make a determination. (www.dnr.wa.gov/Publications/aqr_land_manager_map.pdf)**
No
- 4 of 6 Does your project address or accommodate the anticipated effects of climate change? If yes or maybe, please describe how.**
Yes, We are installing a large number of low-tech restoration structures that help connect the floodplain, slow flows, recharge groundwater and help attenuate high flows which leads to longer high flows and increased base flows in the summer and fall. These effects can help offset climate change impacts expected to

- 5 of 6** Is your project located in the Puget Sound or Hood Canal region? If yes, is your project referenced in the Puget Sound Action Agenda?
No
- 6 of 6** Will veterans (including the veterans conservation corps) be involved in the project? If yes, please describe.
No

Project Permits

Permit Type	Applied Date	Received Date	Expiration Date	Permit Number
Hydraulics Project Approval [HPA]	05/01/2017	06/30/2017	06/29/2022	2017-1-140+01

- Permit Questions**
- 1 of 2** Will this project require a federal permit? If this project requires a federal permit, will the scope of that permit cover ALL proposed ground disturbing activities included in this project? You may need to request a pre-application meeting with the permitting agency to answer this question.
No
- 2 of 2** Are you planning on using the federal permit streamlining process (Limit 8, www.rco.wa.gov/documents/fact_sheets/Permit_Streamlining_fact_sheet.pdf)?
No

Project Attachments

Attachment Type	Title	Attach Date
Applicant Resolution/Authorizations	Applicant Authorization Resolution - Signed 2019.pdf.pdf	05/06/2019
Application Document	LTPBR-Manual.pdf	05/08/2019
Cost Estimate	Asotin IMWCost_Estimate.xlsx.xlsx	07/08/2019
Design document	Conceptual Drawings.pdf.pdf	04/30/2019
Letters of Support	IMW Certification Memo 19-1499.pdf.pdf	04/30/2019
Map: Multi-site and geographic envelope	3 map 1.pdf.pdf	04/30/2019
Map: Restoration Worksite	3 map 2.pdf.pdf	04/30/2019
Permit	AsotinIMW_RestorationMaintenance_HPAPermit_2017_2022.pdf.pdf	05/01/2019
Photo	PALS_partly intact_postonly.JPG.jpg	05/08/2019
Photo	PALS_SF_completelygone.JPG.jpg	05/08/2019
Photo	SF Asotin LWD.jpg.jpg	04/30/2019
Photo	Site Photo NF Asotin LWD.jpg.jpg	04/30/2019
Photo	Site Photo Charley Creek LWD.jpg.jpg	04/30/2019
Project plan document	IMW REstoration Plan.pdf	05/08/2019
Salmon Project Proposal	C3-Rest 19-1463 Asotin IMW_AFSB.docx.docx	07/08/2019
Salmon Project Proposal	C3-Restoration_AsotinIMW2020_IncreaseWoodDensity.docx.docx	04/30/2019
Visuals	Proposal Presentation.pptx	05/08/2019

Application Status

Application Due Date: 08/08/2019

Status	Status Date	Name	Notes
Application Submitted	08/02/2019	Ali Fitzgerald	Ready for review, Alice. Thanks, Ali
Preapplication	04/05/2019		

I certify that to the best of my knowledge, the information in this application is true and correct. Further, all application requirements due on the application due date have been fully completed to the best of my ability. I understand that if this application is found to be incomplete, it will be rejected by RCO. I understand that I may be required to submit additional documents before evaluation or approval of this project and I agree to provide them. (Ali Fitzgerald, 08/02/2019)