PROJECT: 18-2085 REST, NF TOUCHET FLOODPLAIN & HABITAT REST. RM 3.3-4.3

Sponsor: Umatilla Confederated Tribes Program: Salmon Federal Projects Status: Active
Project Start Date: 12/05/2018 Agreement End Date: 03/31/2021

Final Report Status: Accepted 05/10/2021

Description

PROJECT AGREEMENT DESCRIPTION

The Confederated Tribes of the Umatilla Indian Reservation is joining the interests of local farmers, the City of Dayton, and Columbia County to restore floodplain connectivity and Chinook and steelhead habitat along a 3-mile stretch of the North Touchet River. The project consists of a single worksite on two contiguous properties. This project addresses work that is proposed to commence in 2019 (Phase 1 of 3). The Phase 1 project area is located at two sites along the North Touchet. The primary section of Phase 1 starts upstream at the bridge where the Wolf Fork Road crosses the North Touchet (river mile 4.3) and continues downstream for 1 mile (to river mile 3.3). Project goals include decreasing stream energy, increasing floodplain connectivity, increasing sediment sorting and accumulation, increasing salmonid rearing and spawning habitat. To achieve these goals we propose to relocate approximately 2000 cubic yards of levee material to allow the river to access a greater amount of floodplain and to use large wood and boulders to act as roughness to sort sediment, provide habitat cover, and scour pools. The project also reconnects the floodplain area of an existing conservation easement on the left bank of the North Touchet that extends from the Wolf Fork Road to the confluence with the North Touchet and Wolf Forks and install native ripairain plants for long-term restoration of the riparian area.

FINAL PROJECT DESCRIPTION

This project sought to restore floodplain connectivity by removing old push up berms and to add in stream habitat diversity by adding large wood in the form of debris logs, embedded logs and simple engineered log jams. The project also sought to improve the native vegetation in the riparian area.

All cultural resource clearance was obtained working with CTUIR, BPA and DHAP. We obtained our Section 106 clearance for all activities prior to commencing work. In terms of channel reconfiguration and connectivity we removed the existing levee as described in our project plan. We also constructed the low profile berm to protect infrastructure. In terms of channel structure placements, we added the some 300 pieces of large wood to the active channel. These can be viewed for accuracy in the final as-built designs attached to this grant report. In terms of Riparian habitat planting we planted 625 grand firs, 975 Ponderosa pines, 625 Douglas firs, and approximately 6650 live dogwood and willow stakes.

We achieved the overall goal of moving this 1 mile long reach toward a more functional river channel by using a process based restoration approach. In the two years since construction, we see many positive effects resulting from the project. For example, where once was a single channel riffle dominated thread through much of this reach is now a multi-channel river with many pools, slow and fast waters, and a great deal of sediment sorting. We see flooding onto the floodplain where the push-up berms were removed.

We had two amendments; both extended our time to work on the project. Much of that time was spent conducting adaptive management to account for the February 2020 floods.

Narrative

Several published studies referenced the North Touchet in general and the project reach in particular for protection and restoration. GeoEnginners Inc., 2011 Touchet River Geomorphic Assessment highlighted the project reach as a priority on the North Touchet for restoration. Similarly, the Walla Walla Subbasin Plan (2004), the Middle Columbia Steelhead ESA Recovery Plan (2009), the Salmon Recovery Plan (20110, and the Memorandum of Agreement between the Three Treaty Tribes and FCRPS (2008) all point to either the need to protect or restore the North Touchet River. We used these documents to justify the work we completed on the North Touchet.

We planned to work on a three mile stretch of the North Touchet upstream of Dayton, WA and downstream of the Wolf Fork Road. That section is 100% adjacent to privately owned land. We held community meetings, knocked on doors, had coffee clutches until finally we found willing landowners for our projects. Fortunately, there were only two significant landowners on the RM 3.3 -4.3 (Phase 1) stretch. We had several one-on-one meetings with the landowners and their families. That also included impromptu lunches, coffee table chats, and attending small family gatherings. After what seemed like hours of discussions and going over the reasons for doing river restoration, we were able to have these two landowners sign up for the project. One of the landowners adjacent to the stream had already signed up for a conservation easement, so convincing them to go along with this project was not difficult.

When we began, we knew the river had the characteristics of a river that had not been allowed to flow freely. It was generally dominated by a single thread channel largely comprised of all fast water riffles. We hired Paul DeVries of R2 Environmental Consultants to design the project. We knew Paul from previous projects. He had shown himself to be intelligent, responsive, and cost effective. We worked through the 30%, 60%, 90% designs with the landowner always at the table. Paul showed himself ready to adjust designs to meet the Tribes' and the landowners' goals; and that was no small feat.
When the 100% designs were completed, we let the construction solicitation. We hired a local firm; FandR Construction. FandR is run by an owner operator named Dick Rubensor. His son-in-law, Gary Parsons, did most the excavation work on the project. Both Dick and Gary are extremely efficient. The carried out the designs to the fullest extent possible with very few deviations. As an aside, it is helpful hiring a well-known local to do the work because when the nay-sayers and opponents of the project raise their voices, having a well-respected long time member of the community involved with the project came in handy.

Jerry Middel supervised the grand majority of the construction work as it occurred. Paul DeVries conducted the final inspection and "punch-out" of the project. Paul DeVries also conducted a detailed as-built survey and produced the as-built designs.

Perhaps the most immediately visible change at the project reach occurred after the February 2020 floods. The largest change was seen in sediment accumulation and sediment sorting. Where large cobble dominated a fast water "riffle" reach, the floods caused the newly placed in stream structures to both accumulate and sort sediment. Now there are many small cobbles and clean beautiful gravels in abundance throughout the project area as well as many pools and slow water. The newly sorted sediment provides ample opportunities for salmonid spawning.
The most difficult aspect of this project was maintaining communication before, during, and after the project with the landowner. Before the project, we needed to educate the landowner on the benefits of river restoration. Educating the landowners consumed a lot of time; however, it obviously paid off. During construction outreach efforts fell into place relatively easy since we were on site all the time. Meetings and regularly communicating with the landowner took little extra time or effort. The effort and time spent meeting with the landowner before and during construction unfortunately set up unrealistic expectations on the landowner's part; they assumed that this level of communication would continue after the project was completed. I simple could not meet with the landowner as often as they assumed I would or as much as they wanted me to. I needed to move on to other projects. However, the landowner has expressed doubt about the project in its aftermath. I have tied this doubt directly to me not being available as often as I was before and during the project. I have taken time to meet with the landowner several times since the project completion. At the meetings, they raise concerns. I address the concerns and everything seems fine. That is until they speak or interact with local residents who oppose the project. Then my phone is ringing asking why I am not coming by as often as I previously did. This sets up some conflict that is difficult to resolve. I am not sure how to resolve this issue. It is extremely time consuming. It is almost as if I need to schedule a huge chunk of time to console landowner after a project is complete.

Worksites

Worksite #1: Phase 1

Worksite Address (Optional)

Street Address 514 North Touchet Rd
City Dayton
State, Zip WA 99328

Worksite Details

Worksite #1: Phase 1

Worksite Name Phase 1

WORKSITE DESCRIPTION

This project will mainly occur between North Touchet RM 3.3-4.3. Activities include taking down existing levees and building a setback levee. Additionally, significant quantities of large wood debris and rock will be added to the stream to create channel roughness. Key elements include increasing channel complexity and floodplain connectivity, creating enhanced habitat diversity suitable for both spawning and rearing, improving sediment sorting, enhancing stream velocity and thermal diversity, and promoting natural riparian function.

Geographic Coordinates

From mapped point:	Latitude	46.272538	Longitude	-117.893130
For Directions:	Latitude	46.272242	Longitude	-117.889254

SITE ACCESS DIRECTIONS

From Dayton, Washington Head west on Patit Rd toward E Main St 98 ft
Turn left onto E Main St 0.2 mi
Turn left onto S 4th St 1.5 mi

Continue onto N Touchet Rd
Destination will be on the right 3.5 mi
514 N Touchet Rd
Dayton, WA 99328

Properties

Worksite #	Worksite Name	Property Name	Sponsor Verified	RCO Verified	RCO Verified Map
1	Phase 1	Breithaupt	✓	✓	N/A
1	Phase 1	Fairchild	✓	✓	N/A

Restoration Metrics

	Current Agreement	Final
Worksite: Phase 1 (#1)		
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)	1.00	1.00
Project Identified In a Plan or Watershed Assessment (C.0.c)	Snake River Salmon Recovery Board (SRSRB), 2011, Snake River Salmon Recovery Plan for SE Washington. Dayton, WA. Snake River Salmon Recovery Board, 2018, Snake River Salmon Recovery Region 5-year provisional work plan. Dayton, WA.	*Not Collected at Closure*
Priority in Recovery Plan	The SRSRB Recovery Plan for SE WA list the Walla Walla River Steelhead MPG and specifically the SEWMU Touchet River population at High Risk (Table 6.4, page 208). On pages 159 ad 160 of the Plan, recommendations for instream habitat diversity improvements are listed for the Upper Touchets which include the North Touchet. This proposed projects aligns with the recommendations given on page 160.	*Not Collected at Closure*
Type Of Monitoring (C.0.d.1)	✓ Implementation Monitoring None	Implementation Monitoring ✓ None **Note:** We do occasional visible inspections, but we have no official monitoring protocol set up going forward.
Monitoring Location (C.0.d.2)	No monitoring completed Downstream ✓ Onsite Upslope Upstream	✓ No monitoring completed Downstream Onsite Upslope Upstream

Instream Habitat Project

Total Miles Of Instream Habitat Treated (C.4.b)	1.00	1.00
Channel reconfiguration and connectivity (C.4.c.1)		
Total cost for Channel reconfiguration and connectivity	$341,468	*Not Collected at Closure*
Type of change to channel configuration and connectivity (C.4.c.2)	Channel Bed Restored ✓ Creation of Instream Pools ✓ Creation/Connection to Off-Channel Habitat ✓ Levee removal/Alteration Meanders Added None	Channel Bed Restored ✓ Creation of Instream Pools ✓ Creation/Connection to Off-Channel Habitat ✓ Levee removal/Alteration Meanders Added None
Miles of Stream Treated for channel reconfiguration and connectivity (C.4.c.3)	0.79	0.79

Miles of Off-Channel Stream Created or Connected (C.4.c.4)	0.20	0.20
Acres Of Channel/Off-Channel Connected Or Added (C.4.c.5)	10.0	10.0
Instream Pools Created/Added (C.4.c.6)	15	15 **Note:** It should be noted that pools are transient; that is they fill and form as the channel responds to flow. there is no absolute number to give here.

Channel structure placement (C.4.d.1)

Total cost for Channel structure placement	$366,164	*Not Collected at Closure*
Material Used For Channel Structure (C.4.d.2)	Deflectors/Barbs Flood Fencing Gabions ✓ Individual Logs (Anchored) Individual Logs (Unanchored) ✓ Logs Fastened Together (Logjam) None Other Engineered Structures ✓ Rocks/Boulders (Fastened Or Anchored) Rocks/Boulders (Unanchored) Stumps With Roots Attached (Rootwads) Weirs	Deflectors/Barbs Flood Fencing Gabions ✓ Individual Logs (Anchored) Individual Logs (Unanchored) ✓ Logs Fastened Together (Logjam) None Other Engineered Structures ✓ Rocks/Boulders (Fastened Or Anchored) Rocks/Boulders (Unanchored) Stumps With Roots Attached (Rootwads) Weirs
Miles of Stream Treated for channel structure placement (C.4.d.3)	1.00	1.00
Pools Created through channel structure placement (C.4.d.5)	20	20 **Note:** Again, this is an estimate. Pools form and then fill as the channel responds to flows.
Number of structures placed in channel (C.4.d.7)	30	54 **Note:** This number can be deceiving. I have grouped some logs placed as a single structure, and I have counted some single logs as 1 structure.

Riparian Habitat Project

Total Riparian Miles Streambank Treated (C.5.b.1)	1.00	1.00
Total Riparian Acres Treated (C.5.b.2)	10.0	10.0

Planting (C.5.c.1)

Total cost for Planting	$8,600	*Not Collected at Closure*
Species Of Plants planted in riparian (C.5.c.2)	salix spp., Pseudotsuga menziesii, Pinus ponderosa, Abies grandis	Salix spp., Psuedotsuga menziesii, Pinus ponderosa, Abies grandis
Acres Planted in riparian (C.5.c.3)	10.0	10.0
Miles of streambank planted (C.5.c.4)	1.00	1.00
Average Riparian Width	75	75

Cultural Resources

Cultural resources

Cultural resource work completed	*Collected at Closure*	Number Acres excavated: 0 Hours of monitoring required: 0 Number of structures documented: 0 **Note:** We had one inadvertent discovery of an old wagon wheel. We stopped work at the site, cultural resources came out and inspected the site, and we continued work with their approval.
Total cost for Cultural resources	$6,750	*Not Collected at Closure*
Acres surveyed for cultural resources	25.00	25.00

Architectural & Engineering

Architectural & Engineering (A&E)

Total cost for Architectural & Engineering (A&E)	$94,418	*Not Collected at Closure*
Did A&E costs exceed billed amount (Yes/No)	*Collected at Closure*	No

Overall Metrics

	Current Agreement	Final
Completion Date		
Projected date of completion	12/10/202	03/30/202
Project Goals		
Goals, purpose, and expected benefits (A.17)	Project goals are to restore fluvial and geomorphological conditions and reconnect floodplain habitat in the Touchet River. This will increase rearing and spawning habitat for Chinook and steelhead. To achieve these goals we propose to relocate approximately 2000 CY of levee material to allow the river to access a greater amount of floodplain and to use large wood and boulders to act as roughness to sort sediment, provide habitat cover and scour pools.	Project goals were to restore fluvial and geomorphological conditions and reconnect floodplain habitat in the Touchet River. This increased rearing and spawning habitat for Chinook and steelhead. To achieve these goals relocated approximately 2000 CY of levee material to allow the river to access a greater amount of floodplain and to use large wood and boulders to act as roughness to sort sediment, provide habitat cover and scour pools.

Restoration Costs

Final amounts include a pending billing
Date of Last Released Billing 08/13/2020

Worksite: Phase 1 (#1)

	Proposed	Final
SPLIT OUT FINAL TOTAL BELOW	$817,400.00	$739,585.98
Instream Habitat Costs (C.4.a)	$707,632	$586,874
Riparian Habitat Costs (C.5.a)	$8,600	$55,000
Cultural Resource Costs	$6,750	$7,500
Architectural & Engineering Costs	$94,418	$90,212
Difference		$0

Billed Summary

Final amounts include a pending billing
Date of Last Released Billing 08/13/2020

	Project Agreement		Totals To Date		
Category	**RCO**	**Total**	**Expended**	**Non Reimbursable**	**Total Billed**
Restoration					
Construction	452,952.56	722,982.00	470,269.37	179,105.06	649,374.43
AA&E	59,153.44	94,418.00		90,211.55	90,211.55
Restoration Total	**512,106.00**	**817,400.00**	**470,269.37**	**269,316.61**	**739,585.98**
Total	512,106.00	817,400.00	470,269.37	269,316.61	739,585.98

Sponsor Match

	Proposed	Final
Project Funding		
PCSRF Federal Funds (A.10)	$512,106.00	$458,612.40
State Funds (A.11)		
Pending Billing - RCO Share Approved		$2,283.00
Retainage - RCO amount retained		$2,459.65
Sponsor Match: Monetary Funding		
Amount of other monetary funding (A.12)	$305,294	$264,313
Source of other monetary funding (A.12.a)	Bonneville Power Administration **Note:** Confederated Tribes of the Umatilla Indian Reservation Accord funding through Walla Walla Habitat Project	Bonneville Power Administration
Timing of other monetary funding	Funds will be secured in January of 2019. Funds should be available for 3 years.	*Not Collected at Closure*
Sponsor Match: Donated Un-paid Labor (volunteers)		
Value of Donated Unpaid Labor (Volunteers) (A.13.a.2)	$0	$0
Source of Donated Un-paid labor contributions (A.13.a.4)	NA	NA
Number of hours volunteers contributed to the project (A.13.a.1)	*Collected at Closure*	0
Describe how the value of the volunteers was determined (A.13.a.3)	*Collected at Closure*	NA
Sponsor Match: Donated Paid Labor		
Value of Donated Paid Labor (A.13.b.1)	$0	$11,918
Source of Donated Paid Contributions (A.13.b.2)	NA	CTUIR Staff, BPA Tribal Accords
Sponsor Match: Other In-kind Contributions		
Value of Other In-Kind Contributions (A.13.c.1)	$0	$0
Source of Other In-Kind Contributions (A.13.c.3)	NA	NA
Description of other In-Kind contributions (A.13.c.2)	NA	NA
Amount Total	$817,400	$739,586
Total Billed		$739,586
Difference		$0

Attachments

PHOTOS (JPG, GIF)

Photos (JPG, GIF)


470853


470854


470855


470859

PROJECT DOCUMENTS AND PHOTOS

Project Documents and Photos

File Type	Attach Date	Attachment Type	Title	Person	File Name, Number Associations	Shared
	04/28/2021	Photo	Touchet_0126_.JPG	GeraldM	Touchet_0126_.jpg, 470859 Final Report, 05/10/2021, Accepted	✓
	04/28/2021	Photo	Touchet_20190715_Placed Log-jams and boulders at bend.jpg	GeraldM	Touchet_20190715_Placed Log-jams and boulders at bend.jpg, 470855 Final Report, 05/10/2021, Accepted	✓
	04/28/2021	Photo	Touchet_Exervator bucket hole as workers place them into hol	GeraldM	Touchet_Exervator bucket hole as workers place them into hole..jpg, 470854 Final Report, 05/10/2021, Accepted	✓
	04/28/2021	Photo	Touchet_20191023_Willow pile.jpg	GeraldM	Touchet_20191023_Willow pile.jpg, 470853 Final Report, 05/10/2021, Accepted	✓
	04/28/2021	Design document (as built)	As-Built_2182_wDroneDec2019.pdf	GeraldM	As-Built_2182_wDroneDec2019.pdf, 470852 Final Report, 05/10/2021, Accepted	✓

Certify & Submit

Status History

Report Status	Date	User	Note
Accepted	05/10/2021	Alice Rubin	Jerry, Thanks for all your hard work on this project. Hopefully I will be able to come out and see it soon. I do want to double check that your or someone at CTUIR did sign the landowner agreements. The ones attached only have landowner signatures. Also a reminder that the landowner agreement period starts after the project is completed. Thanks, Alice
Submitted	04/28/2021	Gerald Middel	Hi Alice, Thanks for your patience on this. Let me know if I need to address something. Jerry
Draft	04/26/2021	Gerald Middel	

WASHINGTON STATE Recreation and Conservation Office

Property Report

PROJECT: 18-2085 REST, NF TOUCHET FLOODPLAIN & HABITAT REST. RM 3.3-4.3

Sponsor: Umatilla Confederated Tribes Program: Salmon Federal Projects Status: Active
Project Start Date: 12/05/2018 Agreement End Date: 03/31/2021

Property Basics

Acquisition ✓ **Restoration**

Property Location

Property Name Breithaupt
Property Address (optional)
City
State **Zip**

Property Description The general goals of this project are to return a one mile long reach of the North Fork Touchet River, located on private property in the vicinity of the Wolf Fork confluence, closer to its historic, naturally functioning state, and increase fish habitat.
Associated Worksite Phase 1 (#1)

Landowner

Landowner Name Nancy Breithaupt
Address (optional) 514 N Touchet Rd
City Dayton
State WA **Zip** 99328
Landowner Type Private

Control and Tenure

Instrument Type Landowner Agreement
Timing Existing
Term Type Fixed # of years
 # Yrs 10
Expiration Date 05/12/203
Note

Parcel Numbers

County Name	Parcel Number	Mapped	Notes (optional)
No parcels			

Recording Numbers

Instrument Type	Recording Number	Notes

Sponsor Clarification

✓ **The above information is correct and complete**

RCO Notes

✓ **Property data verified by RCO Staff**

Property Report: Breithaupt (Worksite #1: Phase 1)

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
	04/29/2019	Landowner agreement	Landowner Agreement Breithaupt.pdf	GeraldM	Landowner Agreement Breithaupt.pdf, 388554 Property: Breithaupt	

WASHINGTON STATE Recreation and Conservation Office

Property Report

PROJECT: 18-2085 REST, NF TOUCHET FLOODPLAIN & HABITAT REST. RM 3.3-4.3

Sponsor: Umatilla Confederated Tribes Program: Salmon Federal Projects Status: Active
Project Start Date: 12/05/2018 Agreement End Date: 03/31/2021

Property Basics

✓ **Acquisition** ✓ **Restoration**

Property Location

Property Name Fairchild
Property Address (optional)
City
State **Zip**

Property Description The general goals along this property are to add habitat structure through the use of large wood and boulders.
Associated Worksite Phase 1 (#1)

Landowner

Landowner Name Larry Fairchild
Address (optional) 112 Wolf Fork Road
City Dayton
State WA **Zip** 99328
Landowner Type Private

Control and Tenure

Instrument Type Landowner Agreement
Timing Existing
Term Type Fixed # of years
 # Yrs 10
Expiration Date 05/12/203
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: Fairchild (Worksite #1: Phase 1)

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
	04/29/2019	Landowner agreement	Landowner Agreement Fairchild.pdf	GeraldM	Landowner Agreement Fairchild.pdf, 388556 Property: Fairchild	