

Project #08-1941, Garrison Creek Watershed Restoration

Submitted by Mary Lou White on 05/31/2011

Accepted by Mike Ramsey on 06/09/2011

CONTACTS

Primary Sponsor: Wild Fish Conservancy

Project Contact: Mary Lou White
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Lead Entity: San Juan Co Comm Dev LE

Billing Contact: Terri Shell
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Managing Agency: Rec. and Conserv. Office

RCO Grant Manager: Mike Ramsey
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DESCRIPTION OF THE COMPLETED PROJECT

Project Start Date: 12/12/2008

FundingEnd Date: 11/29/2010

RCO Closure Date:

Wild Fish Conservancy (WFC), through WRIA 2 SRFB RND 07, received funding to conduct watertyping and spawning surveys in San Juan County. Consequently, several restoration opportunities in the Garrison watershed were identified where changes in the hydrologic regime have caused high stream temperatures, and intermittent summer flows. WFC requested and received funding in SRFB RND 09 to develop preliminary restoration plans focused on increasing adequate flow (to the extent possible) and improving water quality and habitat for all native fish species in the Garrison Creek watershed.

Project objectives were to assess the current floodplain disconnection and hydrologic conditions to develop restoration alternatives which would increase flow, and to develop strategies to improve poor riparian and instream habitat conditions and restore stream connectivity. WFC fulfilled these objectives by completing the following steps:

Step 1. A historical review of the floodplain conditions was documented and analyzed using aerial photographs, traditional and GIS map resources, landowner interviews, historical records, and ground-truthing.

Step 2. Existing relevant baseline data was collected on topography, culvert and fish blockages, water quality, stream flow, and groundwater.

Step 3. A limited number of restoration alternatives were developed. Alternatives focused on the most imperative salmonid limiting factor (water quantity).

Step 4. Collaborators and stakeholders were involved in the process through presentations, group meetings and one-on-one consultation.

Step 5. WFC produced 30% conceptual construction designs.

SITE LOCATION

General Area of Project: San Juan Island

Waterbodies:

Cong District: 02
County: San Juan
HUC: San Juan Islands
Leg District: 40
Salmon Recov Reg 05: Puget Sound
Section: 36
Township/Range: T36NR04W
WAU: SAN JAUN IS
WRIA: San Juan



Sponsor Clarifications:

Sponsor verified the above information is correct and complete.

PROJECT NARRATIVE

Project Identification and History

Wild Fish Conservancy (WFC), through WRIA 2 SRFB RND 07, received funding to conduct watertyping and spawning surveys in San Juan County. Consequently, several restoration opportunities in the Garrison watershed were identified where changes in the hydrologic regime have caused high stream temperatures, and intermittent summer flows. WFC requested and received funding in SRFB RND 09 to develop preliminary restoration plans focused on increasing adequate flow (to the extent possible) and improving water quality and habitat for all native fish species in the Garrison Creek watershed.

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- Step 3. A limited number of restoration alternatives were developed. Alternatives focused on the most imperative salmonid limiting factor (water quantity).
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- Step 5. WFC produced 30% conceptual construction designs.

Watertyping surveys, Topographic surveys, culvert assessments, water right mapping and historical analysis of the aerial photographs were completed by Wild Fish Conservancy staff. Additionally, WFC used the following staff and/or consultants to complete steps 1 through 5:

- 1) A hydrologic assessment of basins contributing flow to Garrison Creek was conducted by Ed McCarthy, PE, PS to characterize flow regimes in the creek.
- 2) Chuck Lindsay and Bridgette August, Associated Earth Sciences, Inc. (AESI) conducted a geologic/hydrogeologic study of the Garrison Creek area, focused specifically on ground water conditions and potential impacts to nearby water supply wells and wetlands. AESI also assisted with collecting data from landowners on their recollections of the recent history of Garrison Creek
- 4) Water quality assessments were conducted by Russell Barsh of Kwiaht: Center for the Historical Ecology of the Salish Sea and information about existing and proposed riparian conditions was supplied by Madrona Murphy of Kwiaht.
- 5) Washington Water Trust spoke with landowners about water right opportunities.
- 6) Conceptual designs were developed by the following agencies/consultants:

Option #1- WFC (Andrew Mc Annich, GIS analyst) / Steve Belluomini (certified engineering geologist).

Option #2 - Ed McCarthy, PE, PS

Option #3 - WFC (Arny Stonkus, Senior Engineer/ Aquatic Ecologist) / WFC Steve Kropp, Hydrologist and Water Resources Engineer)

Change in Work Order Request

Due to delays in WFC receiving draft reports from our consultants and delays in receiving the surface water and wetland reports WFC was not able to meet the June 30th milestone and requested a delay in this milestone until July 12, 2010. Ultimately the project period was extended from 12/12/2008-7/31/2010 to 12/12/2008 to 11/29/2010.

Lessons Learned

Initially, one of the local landowners, Steve Belluomini, a hydrologist/engineer, offered to donate his time to the project. This would have saved the SRFB several thousands of dollars on engineering designs. Since Steve did not live on the Island full-time the project field work was delayed initially so that we could work with Steve's schedule. At the time, this seemed like a good idea as we would be saving dollars with the donated labor, however, Steve discovered that his involvement in the project could jepordize his relationship with his adjacent neighbor who had conflicting ideas. Both Steve and WFC agreed that it would be a good idea to hire another hydrologist/engineer for the project and use Steve as a peer reveiw person on the project. Changing engineers and hiring new contractors mid-way through the project contributed to delays in getting milestone work completed on time.

AMENDMENTS

#	Type	Applied Date	Description
1	Time Extension	02/17/2011	The project period of 12/12/2008 to 07/31/2010 is extended to allow the contracting party until 11/29/2010 to complete the project.

OVERALL PROJECT COSTS

Funding Formula:	Requested		Original		Final	
Salmon Federal Projects:	\$0.00	(0%)	\$150,462.00	(100%)	\$137,009.75	(100%)
Salmon State Projects:	\$150,462.00	(100%)	\$0.00	(0%)	\$0.00	(0%)
Total:	\$150,462.00	(100%)	\$150,462.00	(100%)	\$137,009.75	(100%)
Paid To Date:	\$137,009.75				Last Released Billing:	06/13/2011
Remaining RCO Funds:	\$0.00				Pending Billing:	No
Advance Balance:	\$0.00		Match Bank:	\$0.00	Number of Billings:	16
Admin Limit:	\$0.00		Admin Spent:	\$0.00		
A&E Limit:	\$0.00		A&E Spent:	\$0.00		

Billed Cost Summary:	Original Agreement	Expended	Non-Reimbursable	Total Billed
Non-Capital				
Non-Capital Costs		\$137,009.75		\$137,009.75
Equipment				
Non-Capital Total	\$150,462.00	\$137,009.75		\$137,009.75
Total	\$150,462.00	\$137,009.75		\$137,009.75

Project Cost Metrics:	Original Agreement	Final
PCSRF Federal Funds:		\$137,009.75
State Funds:		\$0.00
Pending Billing - RCO Share Approved:		
Amount of other monetary funding:		\$0.00
Value of Donated Unpaid Labor (Volunteers):		\$0.00
Value of Donated Paid Labor:		\$0.00
Value of Other In-Kind Contributions:		\$0.00
Project identifier for the other monetary funding:		N/A
Source of In-Kind contributions:		None
Source of other monetary funding:		N/A
Number of hours volunteers contributed to the project:		0
Describe how the value of the volunteers was determined:		N/A
Description of other In-Kind contributions:		N/A

PROJECT METRICS

	Original Agreement	Final
Restoration Planning And Coordination Project		
Plan/assessment has been used to guide restoration actions (yes/no):		Yes
Plan/assessment identifies necessary actions needed to meet goals (yes/no):		Yes
Plan/assessment identifies/prioritizes factors limiting production (yes/no):		No
Plan/assessment incorporates biological goals (yes/no):		No
Completion Date		
Projected date of completion:		11/30/2010
Jobs Created		
Number of jobs created by this project:		1.0
Project Goals		
Goals, purpose, and expected benefits:		

WORKSITE #1: Garrison Creek Watershed (Phase I)

Worksite Description: Current land use at the site is primarily agriculture - equestrian, alpaca, and sheep pastures mixed with fallow fields. Mixed within the agriculture parcels are rural residential properties. At present the middle portions of the Garrison Creek valley (were the proposed worksite is located and which historically supported a complex configuration wetlands) has been simplified into a single drainage ditch. The riparian corridor in this ditched segment of the channel is dominated by a monoculture of reed canary grass which is choking the channel. Changes in the hydrologic regime have resulted in drainage problems and intermittent summer flows on the valley parcels.

Driving Directions: From Friday Harbor go Northeast onto First Street. Turn left onto Spring Street travel 0.1 miles; turn right onto Second Street. Second becomes Guard Street and Guard becomes Beaverton Valley road. Travel 4.9 miles on the Beaverton Valley Rd to Blazing Tree Rd. End at 152 Blazing Tree Rd.

Coordinates for Worksite Directions - Latitude: 0.00 **Longitude:** 0.00

Sponsor Clarifications:

Sponsor verified the above information is correct and complete.

WORKSITE #1 COSTS

Worksite Billed Cost:	Estimated	Expended	Non-Reimbursable	Total Billed
Equipment	\$150,462.00			
Non-Capital Costs	\$150,462.00	\$137,009.75		\$137,009.75
Worksite Total	\$300,924.00	\$137,009.75		\$137,009.75

Worksite Costs by Category:

Original Agreement

Final

Habitat Assessment Funding:

Permits Funding:

WORKSITE #1 METRICS

Original Agreement

Final

Targeted salmonid ESU/DPS:

Chum Salmon-Puget Sound/Strait of Georgia ESU, Coho Salmon-Puget Sound/Strait of Georgia ESU

Targeted species (non-ESU species):

Cutthroat, Searun Cutthroat

Area Encompassed (acres):

200.0

Salmonid Habitat Assessment / Inventory

Habitat surveys

Acres of habitat assessed:

200.0

Amount Of Habitat Assessed That Needed Restoration:

200.0

Type of Habitat Assessment:

Overall watershed condition assessment or mapping, Riparian condition

Permits

Obtain permits

Number of permits required for implementation of project:

0

PROPERTY DESCRIPTION (Olson Property)

Activity: Restoration

Control & Tenure:

Instrument Type:

Timing: Proposed

Term Length: Fixed # of years **# yrs:**

Expiration Date:

Landowner Type: Private

Note:

Sponsor Clarifications:

PROPERTY COSTS (Olson Property)

Property Billed Costs:	Estimated	Expended	Non-Reimbursable	Total Billed
Incidentals	\$1,500.00			
Acquisition Total	\$1,500.00			

Sponsor Clarifications:

SPONSOR CERTIFICATION

- I certify that this project has been completed in accordance with the project agreement.
- I certify that, to the best of my knowledge, the information in the Final Report is true and correct.

Submitted by Mary Lou White on 05/31/2011