

National Fish and Wildlife Foundation

Bring Back the Natives / More Fish 2015 - Submit Final Programmatic Report (New Metrics)

Grantee Organization: The Freshwater Trust

Project Title: Upper Sandy River Basin Habitat Restoration (OR)

Project Period 1/01/2016 - 12/31/2016

Project Location Projects sites are in Salmon River and Still Creek; ecologically significant tributaries of Oregon's Sandy River basin. Projects will occur primarily on public land managed by the US Forest Services (Still Creek) and US Bureau of Land Management (Salmon R), as well as private land (Salmon R).

Description (from Proposal) Benefit salmon and steelhead in the Sandy River basin by accelerating the recovery of naturally functioning conditions within the stream channels and floodplain areas of Salmon River and Still Creek.

Project Summary (from Proposal) Project will support the reactivation of flow to six historic side channels, construction of 49 large wood habitat structures, boulder placement, and placement of additional large wood in side channels and on stream margins.

Summary of Accomplishments Summary of the Upper Sandy River Basin Aquatic Habitat Restoration project funded in part by the National Fish and Wildlife Foundation (grant 0901.15.050926): The Freshwater Trust (TFT) in partnership with the USDA Forest Service and the USDI Bureau of Land Management restored habitat to benefit federally listed Chinook salmon, coho salmon and winter steelhead. Major activities completed in 2016 including large wood habitat structure construction, reconnection of surface flow to off-channel habitat (side channel and alcoves) and revegetation of riparian areas, restored aquatic and floodplain habitat on the Salmon River and Still Creek. The completed work is part of a multi-year, basin-scale effort to restore habitat to benefit these fish.

Lessons Learned Project monitoring and field observations demonstrate that we have been effective in achieving the desired habitat and biological response as detailed below:

- Monitoring and field observations strongly show that large wood structure placement in key areas have resulted in the aggregation of suitable size spawning substrate for salmon and steelhead to utilize during critical spawning periods. Pebble counts conducted within the hydraulic shadow of large wood structures strongly support this and have been quantified by TFT monitoring staff.
- In addition to an increase in spawning gravel aggregation and deposition; large wood structures have increased depths of pools that interact with the structure.
- Side channel reconnection and enhancement have resulted in the increase of linear feet of usable fish habitat within the Salmon River and Still Creek for both spawning and rearing.
- A challenge to implementing the project is the availability of large wood. Accessing and delivering the size class sought for project work was achieved but partners experienced difficulties due to Oregon Department of Transportation haul regulations, which precluded off-site delivery of long stem lengths and root fan widths.

Activities and Outcomes

Funding Strategy	Planning, Research, Monitoring
Activity / Outcome	BBNMF - Monitoring - Miles being monitored
Required	Recommended
Description	Enter the number of miles being monitored

Miles being monitored - Current	4.60
Miles being monitored - Grant Completion	4.60

Notes

Funding Strategy	Habitat Restoration
Activity / Outcome	BBNMF - Instream restoration - Miles restored
Required	Recommended
Description	Enter the number of miles restored

Miles restored - Current	4.60
Miles restored - Grant Completion	4.60

Notes



NFWF

Final Programmatic Report Narrative

Bring Back the Natives

Upper Sandy River Basin Habitat Restoration

Period of performance: January 1 – December 31, 2016

Report submitted: 3/31/2017

Instructions: Save this document on your computer and complete the narrative in the format provided. The final narrative should not exceed ten (10) pages; do not delete the text provided below. Once complete, upload this document into the on-line final programmatic report task as instructed.

1. Summary of Accomplishments

In four to five sentences, provide a brief summary of the project's key accomplishments and outcomes that were observed or measured.

This final report summarizes the Upper Sandy River Basin Aquatic Habitat Restoration project funded in part by the National Fish and Wildlife Foundation (grant 0901.15.050926). The Freshwater Trust (TFT) in partnership with the USDA Forest Service and the USDI Bureau of Land Management restored habitat to benefit federally listed Chinook salmon, coho salmon and winter steelhead. Major activities completed in 2016 including large wood habitat structure construction, reconnection of surface flow to off-channel habitat (side channel and alcoves) and revegetation of riparian areas, restored aquatic and floodplain habitat on the Salmon River and Still Creek. The completed work is part of a multi-year, basin-scale effort to restore habitat to benefit these fish.

2. Project Activities & Outcomes

Activities

Describe and quantify (using the approved metrics referenced in your grant agreement) the primary activities conducted during this grant.

Following are descriptions of completed applied restoration and monitoring activities:

- Reconnected off-channel/wetland habitat: Surface flow was restored to historic off-channel habitat including side channels and alcoves on the Salmon River and Still Creek. This action addresses a primary limiting factor for Salmon River and Still Creek salmon and steelhead by increasing off-channel habitat for juvenile rearing and adult spawning.
- Constructed large wood habitat structures and placed boulders and large wood on floodplain and off-channel areas. Large wood and boulders were restored to the Salmon River and Still Creek. This action addresses a primary limiting factor for Salmon River and Still Creek salmon and steelhead by increasing large wood abundance, increasing pool and pool tailouts and increasing off channel habitat.

- Revegetated riparian areas: Project floodplain areas were revegetated with native hardwood shrubs and conifers. This action provides an increase in biotic contributions to the stream channel, stability, shade and increases floodplain roughness.
- Collected pre and post-project monitoring data, which included habitat surveys, photo points, gravel patch surveys, redd surveys, rotary screw trap (used to monitor biological responses to river restoration activities and to compare long-term trends among other Sandy River basin tributaries), total station surveys and post-project data collection.

Outcomes

Describe and quantify progress towards achieving the project outcomes described in your grant agreement. (Quantify using the approved metrics referenced in your grant agreement or by using more relevant metrics not included in the application.) Briefly explain discrepancies between what actually happened compared to what was anticipated to happen. Provide any further information (such as unexpected outcomes) important for understanding project activities and outcome results.

- All outcomes described in the grant agreement were achieved. These habitat restoration activities will result in increased habitat complexity, scour pools, gravel deposition and create cover for juvenile salmon and steelhead. Completed work undertakes recommended actions to address limiting factors, such as lack of side-channels, lack of pool and pool tailouts and lack of large wood, for spring Chinook, coho, and winter steelhead, and will work in concert with active restoration (completed and planned) and passive restoration occurring at the basin scale. Restored sites mimic pre-disturbance conditions to the greatest extent possible. Structures were placed where they would be expected to occur under normal conditions and have been designed to be self-sustaining. The project's long-term goals (ten plus years after completion) are year-round, high quality instream and riparian/floodplain habitat providing spawning and rearing habitat.
- There were no discrepancies between the activities conducted during the grant and the activities agreed upon in the grant agreement.

3. Lessons Learned

Describe the key lessons learned from this project, such as the least and most effective conservation practices or notable aspects of the project's methods, monitoring, or results. How could other conservation organizations adapt their projects to build upon some of these key lessons about what worked best and what did not?

Project monitoring and field observations demonstrate that we have been effective in achieving the desired habitat and biological response as detailed below:

- Monitoring and field observations strongly show that large wood structure placement in key areas have resulted in the aggregation of suitable size spawning substrate for salmon and steelhead to utilize during critical spawning periods. Pebble counts conducted within the hydraulic shadow of large wood structures strongly support this and have been quantified by TFT monitoring staff.
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Oregon Department of Transportation haul regulations, which precluded off-site delivery of long stem lengths and root fan widths.

4. Dissemination

Briefly identify any dissemination of lessons learned or other project results to external audiences, such as the public or other conservation organizations.

Dissemination of lessons learned and project results were communicated through our website, annual Uplift Report, in our Quarterly Impact Report, and via our social media outlets.

5. Project Documents

Include in your final programmatic report, via the Uploads section of this task, the following: Submit 2-10 representative photos from the project. Photos need to have a minimum resolution of 300 dpi and must be accompanied with a legend or caption describing the file name and content of the photos; report publications, GIS data, brochures, videos, outreach tools, press releases, media coverage; any project deliverables per the terms of your grant agreement.

- Submitted photos and their associated captions have been uploaded as attachments to the NFWF web portal.

POSTING OF FINAL REPORT: *This report and attached project documents may be shared by the Foundation and any Funding Source for the Project via their respective websites. In the event that the Recipient intends to claim that its final report or project documents contains material that does not have to be posted on such websites because it is protected from disclosure by statutory or regulatory provisions, the Recipient shall clearly mark all such potentially protected materials as “PROTECTED” and provide an explanation and complete citation to the statutory or regulatory source for such protection.*