

Attachment 1

PROPOSAL FORM - *Lewis River Aquatic Fund*

1. Project Title: North Fork Lewis River RM13.5 Restoration Project, Phase II
2. Project Manager: LCFEG Project Manager: Peter Barber
3. Identification of problem or opportunity to be addressed

The aquatic and riparian habitat conditions of the North Fork (NF) Lewis River has been heavily impacted by past clearing and snagging, past gravel mining, residential development, blockage of large wood transport due to hydro-electric dams, and flow regulation (Inter-Fluve et al 2008, historic aerial photo analysis, and site visits). These cumulative impacts have reduced wood loading, reduced channel complexity, reduced the development of side-channels and off-channels, and have reduced habitat-forming processes (e.g. floods) necessary for creating and maintaining complex habitats. Restoration of this area has been recommended as part of multiple previous reports including the large wood study (Inter-Fluve et al. 2008) and the LCFRB habitat assessment (R2 Resource Consultants 2004).

The North Fork Lewis River RM 13.5 Restoration Project, Phase II project addresses Aquatic Fund priorities #1 & #3:

Priority 1: *Benefit fish recovery throughout the North Fork Lewis River, with priority to Federal ESA-listed species*

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Priority 3: *Enhance fish habitat in the Lewis River Basin-, with priority given to the North Fork Lewis River.*

The North Fork Lewis River RM 13.5 Restoration Project, Phase II will maximize salmonid productivity at this site by eliminating known stranding areas and creating a network of new perennial side channels containing numerous pieces of wood/log complexity. This project will also increase fish access to an existing 2,800ft side channel and removing non-native weed species (Scotch Broom & Japanese Knotweed) from a minimum of two acres NF Lewis floodplain. Native tree/shrub species will be replanted after noxious weed removal.

This project will contribute to the recovery of ESA listed Chinook, chum, Coho and steelhead species by increasing the amount and quality of complex rearing and spawning habitat in the NF Lewis River.

4. Background

Provide information related to how this project fits into greater watershed objectives and any previously collected information at the project site (e.g. fish surveys, habitat delineation, etc.)

During 2008, the WA Salmon Recovery Funding Board (SRFB) funded the NF Lewis RM 13.5 restoration project (#08-1733) which placed margin and off-channel Large Woody Debris (LWD) along the left (east) bank. In addition, LCFEG received SRFB support for the NF Lewis Side-channel Design project (#08-2059) that led to the future construction of a 2,800 foot long side channel along the floodplain terrace. These projects have been monitored since completion (2011) and we have documented a dramatic increase in spawning activity by returning NF Lewis salmonid populations.

The NF Lewis River RM 13.5 Restoration Project, Phase II will build upon those previous projects and the lessons learned that continue to limiting the full productivity of this project site. Three specific areas have been identified within this RM 13.5 Phase II project reach that continue to handicap the productivity, including;

1.) Ephemeral side channel conversion: Post completion of the SRFB project #08-1733, monitoring activities by project staff and the local landowner, we have documented ephemeral side channels that frequently strand hundreds of chinook & coho sack fry, due to fluctuating river levels. We are proposing to excavate two new side channels (1,100ft & 750ft) and connecting the documented stranding depressions located in the floodplain. The new side channels will contain surface flow even at summer low flows. The 750ft side channel outlet will enter a 2.5 acre off channel pond that periodically become stagnant/anaerobic due lack of flow interchange with the NF Lewis main stem. We believe this off channel will once again become productive with an active year-round side channel connection. The side channels will also contain an abundance of LWD secured to log piles to create a grand total of 1,850 feet of complex perennial side channel habitat. Fish Benefits: salmonid sac-fry, sub-yearlings, yearlings, spawning adult steelhead & coho.

2.) Side channel sediment wedge: Post completion of SRFB project #10-1498 and the creation of a 2,800ft side channel, project staff have observed the formation of a large sand wedge at the outlet of the active side channel. The sand wedge continues to seasonally restrict juvenile and adult access into the new side channel habitat. We propose to address this issue by diverting surface flows, isolating the worksite and excavating a portion of the sediment wedge from the channel between the left bank and island. To ensure this sediment doesn't form in the future, we will install a few pieces of strategically placed LWD along the shoreline to scour a low flow connective channel. The LWD will constrict flows and induce scour that will allow a better connection to the main stem. Fish Benefits: Adult and juvenile chinook, coho and steelhead.

3.) Riparian Enhancement: After the completion of side channel construction activities a huge number of scotch broom seeds sprouted and overwhelmed the floodplain understory. The scotch broom seeds can remain viable for 5-60 years and become active after a ground disturbance or flood. We propose to remove all noxious weed species, such as Scotch Broom and Japanese Knotweed from the surrounding floodplain and replant with native tree/shrub floodplain species such as willow, dogwood, and nine bark. The project site will be maintained for 3 years.

5. Project Objective(s)

The goal of the project is to restore long-term habitat function and to provide an immediate increase in habitat availability, quality, and complexity in order to benefit NF Lewis River ESA-listed Chinook, steelhead, Coho, and chum. This proposal requests ACC funds to acquire and transport large wood in the event supplies of suitable wood in the reservoirs are unavailable. The donated wood value will be utilized as cost-share to increase support for a future 2015 Salmon Recovery Funding Board grant proposal. If SRFB NF Lewis 13.5 Phase II construction funds are not secured during 2015, the entire sum of ACC Funds will be returned.

The following restoration objectives have been developed to address process impairments, and to create and enhance habitats from lesson learned from experience at the project site. This effort is based upon recent observations of habitat function and fish use resulting from implementation of project #08-1733 & #10-1498.

Project Objectives:

1. Enhance fish access to 2,800ft of side channel/off channel habitat by installing 700 feet of LWD and removing a portion of the sand wedge.
2. Enhance connectivity to 2.5 acres of off-channel rearing habitat by excavating new 750-foot low flow side channel and adding large wood structures.
3. Create 1,100 feet of new low flow side-channel spawning and enhancing rearing/spawning side channel habitat by adding large wood structures.
4. Remove a minimum of 2.0 acres of invasive plant species (Himalayan blackberry, scotch broom, Japanese knotweed) and under-planting with greater than 5,000 native riparian plantings.

The project area falls within reach Lewis 5, a Tier 1 reach according to the Lower Columbia Salmon Recovery and Fish & Wildlife Sub-basin Plan (LCFRB 2010). The proposed NF Lewis RM 13.5 Phase II project site is located between RM 13.2 & 13.7 of the NF Lewis River. The reach is one of the highest priority reaches for chum and Coho. Lewis River Chinook and chum are designated as ‘primary’ populations with respect to regional recovery objectives, which include objectives to meet NOAA Technical Recovery Team species recovery targets. This project satisfies two of the measures included in the North Fork Lewis River Sub-basin Plan: “Restore channel structure and stability”, and “Restore riparian conditions throughout the basin” (LCFRB 2010). The project area is owned Samuel Kysar and DNR State Owned Aquatic Lands (SOAL).

6. Tasks

Key Assumption – LCFEG is successful in securing SRFB funding during 2015.

Engineering designs will be completed by Interfluve using data they previously collected during development of designs for project #08-1733 & #10-1498. Additional data to be acquired in support of this proposal should be minimal. The following tasks will be conducted in order to address the project objectives and habitat impairments described previously:

Task 1: Dec. 2015 – July 2016 Update design. This task involves acquiring updated topographic and hydraulic data to support designs for the various project elements. Interfluve will be the design consultant.

Task 2: Dec 2015 – Feb 2016 Permitting. Permit applications (including HPA, USACE, and DNR Right of Entry) will be submitted in sufficient time to acquire permits in time for summer 2016 construction.

Task 3: June 2016 Materials acquisition/Construction contractor selection. This process will begin in 2015 and be completed in time for construction in 2016.

Task 4: August – September 2016 Project implementation. In-water work will occur only within the in-water work window that is allowable according to the permit requirements.

Task 5: Oct 2016 – May 2017 Periodic project monitoring. Observation and photo documentation of project results, coordination with WDFW and PacifiCorp spawning surveyors.

Task 6: August – September 2017. Maintenance of side channel and LWD structures as needed.

Task 7: March - June 2018. Summarize results, project final report.

Schedule: The project will be constructed in summer 2016. Project monitoring and maintenance (if needed) will extend to 2017. Boater warning signage is already posted within the proposed project reach.

7. Methods

Methods for design and construction will follow established protocols that have a proven track record for successfully improving habitat conditions in the Lewis River Basin and in the Lower Columbia Region as a whole. Design, engineering and construction techniques, as well as benefits of proposed enhancements for fish habitat, are well-documented (e.g. Washington Stream Habitat Restoration Guidelines). The project sponsor (LCFEG) and project consultant (Inter-Fluve) have an extensive experience designing these types of enhancement features and successfully placed and secured 22 log complexity structures and constructed a 2,800ft side channel within the project reach. We expect to hire a contractor with tracked excavators with capabilities to drive log piles and implement the permitted construction designs. Access for construction will occur from Samuel Kysars property. Any areas disturbed by construction will be monitored for Scotch Broom and re-planted with native riparian species and follow accepted stream restoration and engineering standards, best management practices and guidelines (e.g. Saldi-Caromile et al. 2004).

8. Specific Work Products

Benefits of project will be increased habitat complexity, sorting of spawning gravels, enhanced off channel rearing, flood refugia, increased spawning and rearing habitat associated with LWD placement, noxious weed removal and riparian plantings. We expect to see an increased number of juvenile Chinook, Coho and steelhead occupying the new complex habitat additions similar to the results observed after the completion of the 2,800 side channel.

Deliverables:

- 1) Preliminary Design, Final designs
- 2) Permits
- 3) Construction, placement of >100 pieces of wood
- 4) As-built drawings
- 5) Tech memo of monitoring results

Habitat Enhancement Deliverables:

- 1) Placement > 15 side channel complexity log structures
- 2) Enhancement of 2 acres of floodplain understory via the removal of non-native plant species
- 3) Planted a minimum of 5,000 native tree/shrub species
- 4) Increase juvenile and adult salmonid access by the removal of a sand wedge near the outlet of the 2,800 foot side channel
- 5) Placement > 10 off channel complexity log structures
- 6) Increase in observed juvenile and adult fish use/productivity near LWD structures

9. Project Duration

- a. Identify project duration.

Project will be initiated once 2015 SRFB funding is secured. We would expect to start the project during Jan 1 2016 and complete all project objects by Dec 31 2018 (at the latest).

- b. Provide a detailed project schedule to include:

Feb 2015 thru July 2015

- Complete/Submit SRFB NF Lewis 13.5 Restoration Phase II project proposal.

December 2015 - June 2016 (if SRFB are secured)

- Finalize project design, coordinate with partners
- Collect landowner agreements
- Submit permitting documents for construction
- Contractor selection
- Material acquisition
- Photo documentation

July 2016 thru September 2016

- Construction: Side channel excavation, LWD placement in side channel & backwater channel
- Photo documentation

November 2016 - June 2017

- Installation of riparian plantings in disturbed areas
- Monitoring of wood structures and fish response, documentation of channel changes
- Begin clearing two acres of flood plain invasive plant species (Scotch Broom)
- Photo documentation

July 2017 thru September 2018

- Side channel and LWD maintenance (if needed)
- Photo documentation

October 2018 thru December 2018

- As-built survey, photo documentation
- Installation of riparian plantings
- Complete final reports, closeout project

10. Permits and Authorizations

The North Fork Lewis River RM13.5 Restoration Project, Phase II will require the following permitting documents; USACE NWP 27, WDFW HPA, WDFW Streamlined permit, NOAA Limit 8, and landowner agreements with one private landowner (Samuel Kysar) and WA DNR.

11. Matching Funds and In-kind Contributions

Larch Mountain Corrections – IK Inmate labor

Sam and Joan Kysar – Landowner, \$15,000 IK slash/woody debris donation

WA SRFB – Future restoration project funding partner

12. Peer Review of Proposed Project

This proposal was reviewed during 2014 by and approved as an alternate for funding by numerous resource professionals on behalf of the Lower Columbia Fish Recovery Board and Salmon Recovery Funding Board (SRFB). We have since strengthened the proposal and expect it to secure SRFB funding during 2015.

13. Budget

See detailed budget attached.

Summary

Total budget: \$363,875
2015 SRFB request: \$260,100
SRFB Match/Cost-share: \$53,775
ACC Request: \$50,000 + \$22,000 (insurance) = \$77,000

14. Photo Documentation (Per National Marine Fisheries Service's Biological Opinion for Relicensing of the Lewis River Hydroelectric Projects):

Monitoring procedures will be developed collaboratively with Interfluve. Reporting of results will be done using ACC protocols (if existing), or standard SRFB protocols which include a final as-built report and photo summary (before/after).

15. Insurance. All qualifying applicants shall comply with PacifiCorp's insurance requirements set forth in Appendix E. The policy limits are deemed sufficient by PacifiCorp for project activities involving significant risk, including placement of large woody debris in navigable waterways, and are presumed to be sufficient for all activities likely to be funded under this RFP. Should applicant's insurance program not meet these requirements, bid pricing should include any additional costs applicant would incur to comply with these requirements.

Attachment 2

ACC Comments and Questions on Pre-Proposal North Fork Lewis River RM 13.5 Restoration Project, Phase II project

Note: Questions that follow are directly from emails and/or discussions by the ACC.

All projects: Proposals should demonstrate that the project is scientifically supported, has a clear nexus to the Lewis River hydroelectric projects, and clearly supports the Aquatic Fund objectives. Please prepare the document with the assumption that the reader is not familiar with the Lewis River basin, its issues, or its resources.

North Fork Lewis River RM 13.5 Restoration Project, Phase II

LCFRB: Placement of mainstem structures will need to be strategically placed to not impact any spawning or rearing currently occurring in this reach.

LCFEG Response: We have discussed this concern with Interfluve and their design engineers and we have ultimately decided to remove the main stem margin LWD component from this final proposal.

The ACC would also like each project applicant to acknowledge or provide written affirmation in its full proposal that they have contacted landowner(s) associated with project access and the landowner(s) are aware of required access agreements/approvals.

Appendix E

Insurance Requirements

1. INSURANCE

Without limiting any liabilities or any other obligations of [CONTRACTOR], [CONTRACTOR] shall, prior to commencing the Project, secure and continuously carry with insurers having an A.M. Best Insurance Reports rating of A-:VII or better the following insurance coverage:

1.1 Workers' Compensation. [CONTRACTOR] shall comply with all applicable Workers' Compensation Laws and shall furnish proof thereof satisfactory to PacifiCorp prior to commencing the Project.

All Workers' Compensation policies shall contain provisions that the insurance companies will have no right of recovery or subrogation against PacifiCorp, its parent, divisions, affiliates, subsidiary companies, co-lessees, or co-venturers, agents, directors, officers, employees, servants, and insurers, it being the intention of the parties that the insurance as effected shall protect all parties.

1.2 Employers' Liability. Insurance with a minimum single limit of \$1,000,000 each accident, \$1,000,000 disease each employee, and \$1,000,000 disease policy limit.

1.3 Commercial General Liability. The most recently approved ISO policy, or its equivalent, written on an occurrence basis, with limits not less than \$1,000,000 per occurrence/ \$2,000,000 general aggregate (on a per location and/or per job basis) bodily injury (with no exclusions applicable to injuries sustained by volunteers working or participating in the Project) and property damage, including the following coverages:

- a. Premises and operations coverage
- b. Independent contractor's coverage
- c. Contractual liability
- d. Products and completed operations coverage
- e. Coverage for explosion, collapse, and underground property damage
- f. Broad form property damage liability
- g. Personal and advertising injury liability, with the contractual exclusion removed
- h. Sudden and accidental pollution liability, if appropriate
- i. Watercraft liability, either included or insured under a separate policy

1.4 Business Automobile Liability. The most recently approved ISO policy, or its equivalent, with a minimum single limit of \$1,000,000 each accident for bodily injury and property damage including sudden and accidental pollution liability, with respect to

[CONTRACTOR]'s vehicles whether owned, hired or non-owned, assigned to or used in the performance of the Project.

1.5 Umbrella Liability. Insurance with a minimum limit of \$4,000,000 each occurrence/aggregate where applicable to be provided on a following form basis in excess of the coverages and limits required in Employers' Liability insurance, Commercial General Liability insurance and Business Automobile Liability insurance above. [CONTRACTOR] shall notify PacifiCorp, if at any time their minimum umbrella limit is not available during the term of this Agreement, and will purchase additional limits, if requested by PacifiCorp.

1.6 In addition to the requirements stated above any and all parties providing underground locate, engineering, design, or soil sample testing services including [CONTRACTOR], subcontractor and all other independent contractors shall be required to provide the followings insurance:

Professional Liability: [CONTRACTOR] (or its contractors) shall maintain Professional Liability insurance covering damages arising out of negligent acts, errors or omissions committed by [CONTRACTOR] (or its contractors) in the performance of this Agreement, with a liability limit of not less than \$1,000,000 each claim. [CONTRACTOR] (or its subcontractors of any tier) shall maintain this policy for a minimum of two (2) years after completion of the work or shall arrange for a two (2) year extended discovery (tail) provision if the policy is not renewed. The intent of this policy is to provide coverage for claims arising out of the performance of work or services contracted or permitted under this Agreement and caused by any error, omission for which the [CONTRACTOR] its subcontractor or other independent contractor is held liable.

Except for Workers' Compensation insurance, the policies required herein shall include provisions or endorsements naming PacifiCorp, its affiliates, officers, directors, agents, and employees as additional insureds.

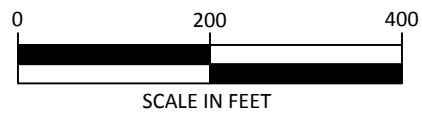
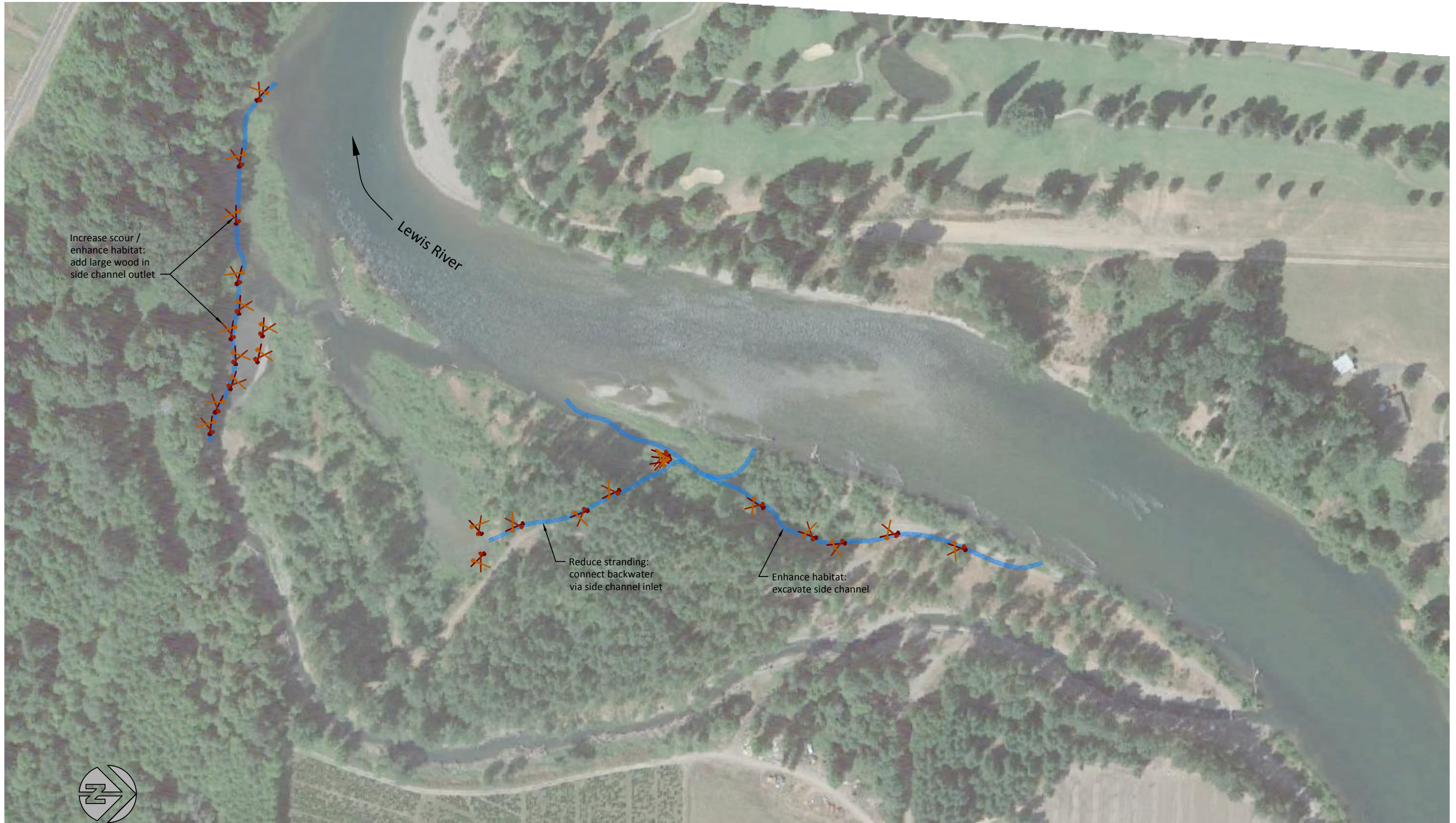
To the extent of [CONTRACTOR]'s negligent acts or omission, all policies required by this Agreement shall include provisions that such insurance is primary insurance with respect to the interests of PacifiCorp and that any other insurance maintained by PacifiCorp is excess and not contributory insurance with the insurance required hereunder, provisions that the policy contain a cross liability or severability of interest clause or endorsement, and that [CONTRACTOR] shall notify PacifiCorp immediately upon receipt of notice of cancellation, and shall provide proof of replacement insurance prior to the effective date of cancellation. No required insurance policies, except Workers' Compensation, shall contain any provisions prohibiting waivers of subrogation. Unless prohibited by applicable law, all required insurance policies shall contain provisions that the insurer will have no right of recovery or subrogation against PacifiCorp, its parent, affiliates, subsidiary companies, co-lessees, agents, directors, officers, employees, servants, and insurers, it being the intention of the Parties that the insurance as effected shall protect all parties.

A certificate in a form satisfactory to PacifiCorp certifying to the issuance of such insurance shall be furnished to PacifiCorp prior to commencement of the Project by [CONTRACTOR] or its volunteers or contractors. If requested, [CONTRACTOR] shall

provide a copy of each insurance policy, certified as a true copy by an authorized representative of the issuing insurance company, to PacifiCorp.

[CONTRACTOR] shall require subcontractors who perform work at the Project to carry liability insurance (auto, commercial general liability and excess) workers' compensation/employers' or stop gap liability and professional liability (as required) insurance commensurate with their respective scopes of work. [CONTRACTOR] shall remain responsible for any claims, lawsuits, losses and expenses including defense costs that exceed any of its subcontractors' insurance limits or for uninsured claims or losses.

PacifiCorp does not represent that the insurance coverage's specified herein (whether in scope of coverage or amounts of coverage) are adequate to protect the obligations [CONTRACTOR], and [CONTRACTOR] shall be solely responsible for any deficiencies thereof.

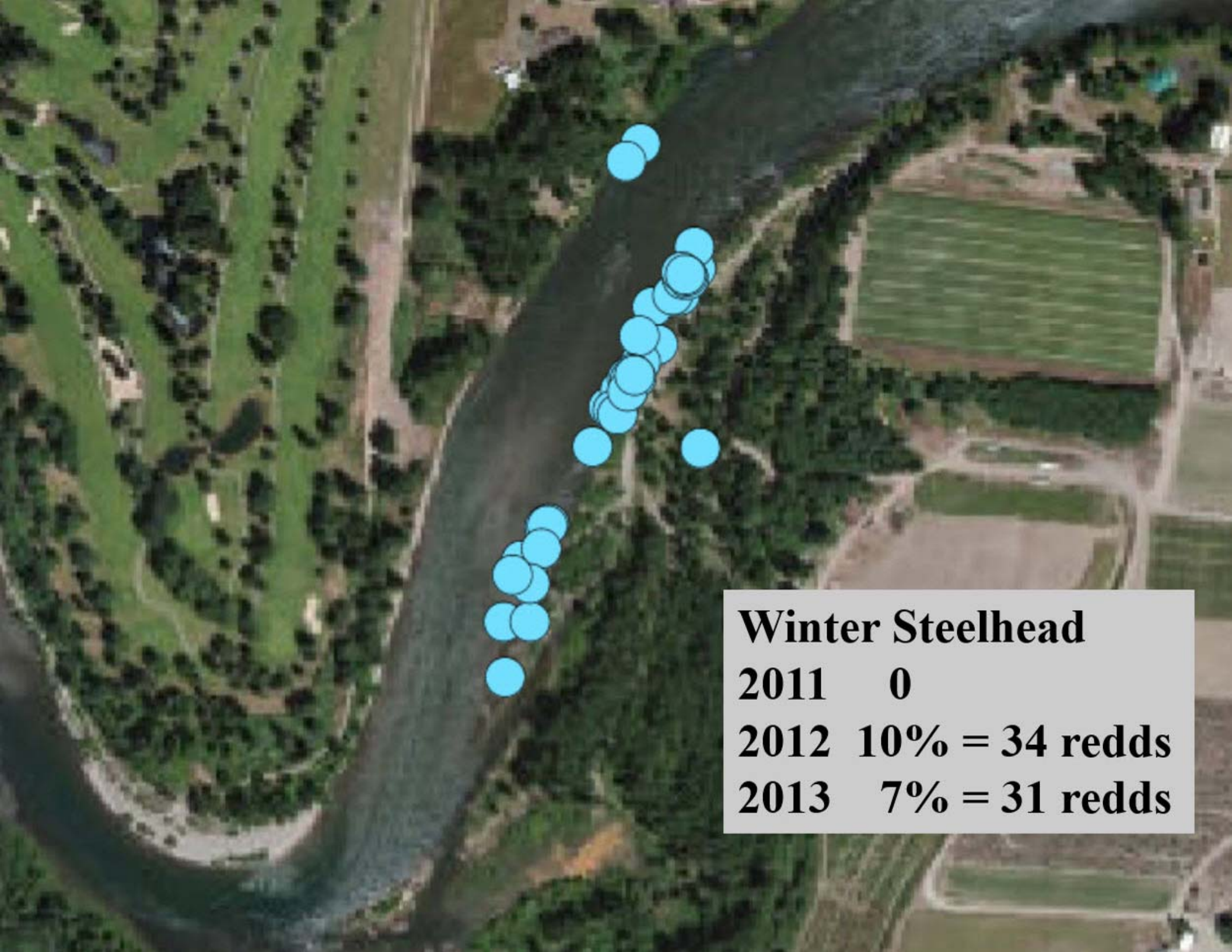


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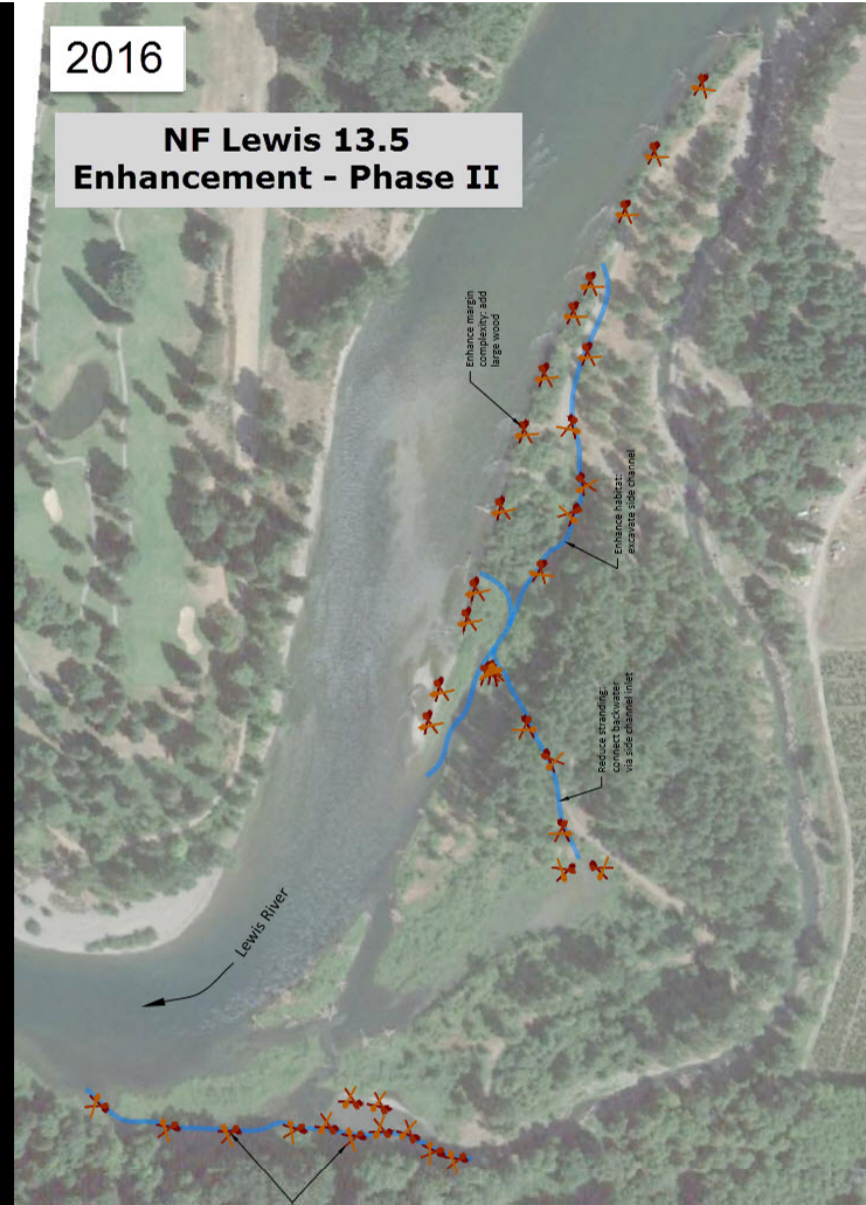
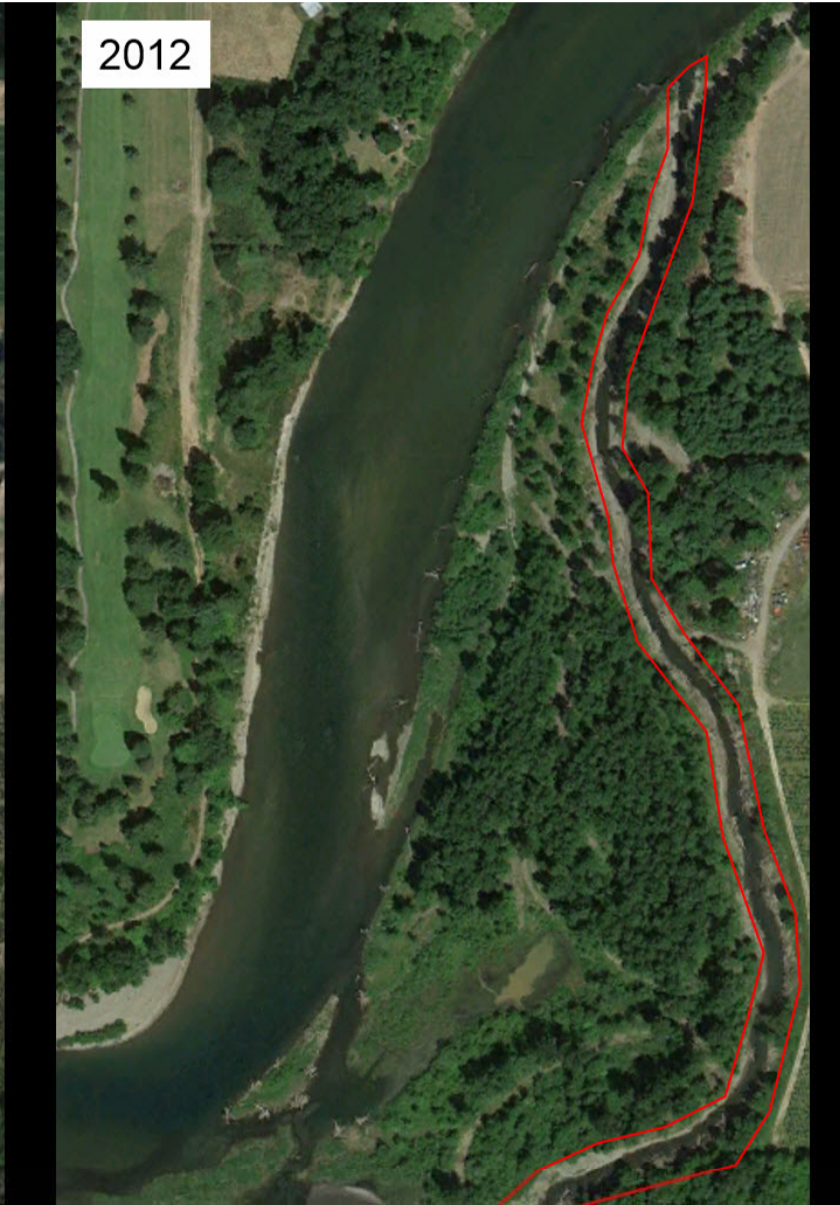


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Lewis River
River Mile 13.5
Fish Enhancement Concepts



Winter Steelhead
2011 0
2012 10% = 34 redds
2013 7% = 31 redds



NF Lewis RM 13.5, Phase II Restoration

SRFB budget and ACC request

				OVERALL PROJECT	GRANT	MATCH	ACC Request
Category	Qty	Rate	Amount	Amount	Request	Match	Grant/match
Mobilization and demobilization	1	\$ 10,000	\$ 10,000	\$ 10,000	\$ -	\$ -	\$ -
Site Access Measures	1	\$ 8,000	\$ 8,000	\$ 8,000	\$ -	\$ -	\$ -
Dewatering and environmental protection measures	1	\$ 5,000	\$ 5,000	\$ 5,000	\$ -	\$ -	\$ -
Misc. Project Materials	1	\$ 15,000	\$ 15,000	\$ 15,000	\$ -	\$ -	\$ -
Misc. rented tools and equipment repair	1	\$ 10,000	\$ 10,000	\$ 10,000	\$ -	\$ -	\$ -
STotal			\$ 48,000	\$ 48,000	\$ -	\$ -	\$ -
Riparian Enhancement							
Riparian plants- rooted Dee pot Willow/Dogwood	3,000	\$1.05	\$ 3,150	\$ -	\$ 3,150	\$ -	\$ -
Riparian plants, T-1 One gallon containerized	2,000	\$2.50	\$ 5,000	\$ 5,000	\$ -	\$ -	\$ -
Riparian plants- Native live-cuttings Willow sp.	2,500	\$0.81	\$ 2,025	\$ -	\$ 2,025	\$ -	\$ -
Potting Soil	40	\$40	\$ 1,600	\$ 1,600	\$ -	\$ -	\$ -
Licensed Herbicide applicator	2	\$900	\$ 1,800	\$ 1,800	\$ -	\$ -	\$ -
STotal			\$ 13,575	\$ 8,400	\$ 5,175	\$ -	\$ -
Side Channel Construction Component							
LWD- 40ft logs 18-32" dia & rootwads	50	\$ 600	\$ 30,000	\$ -	\$ -	\$ 30,000	\$ -
Purchase & Install LWD/vertical piles	1	\$ 18,000	\$ 18,000	\$ 18,000	\$ -	\$ -	\$ -
Slash/brush	5	\$ 1,500	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ -
Bulk Excavation/hauling - Side channel construction	2,800	\$ 10	\$ 28,000	\$ 28,000	\$ -	\$ -	\$ -
STotal			\$ 83,500	\$ 46,000	\$ 7,500	\$ 30,000	\$ -
Off channel Restoration							
LWD- 40ft logs 18-32" dia & rootwads	50	\$ 600	\$ 30,000	\$ 10,000	\$ -	\$ 20,000	\$ -
Purchase & Install LWD/vertical piles	1	\$ 18,000	\$ 18,000	\$ 18,000	\$ -	\$ -	\$ -
Slash/brush	5	\$ 1,500	\$ 7,500	\$ -	\$ 7,500	\$ -	\$ -
STotal			\$ 55,500	\$ 28,000	\$ 7,500	\$ 20,000	\$ -
Construction Stotal			\$ 200,575	\$ 130,400	\$ 20,175	\$ 50,000	\$ -
Contract Labor							
Labor- LCFEG Construction Mgmt. Hrly	180	\$65	\$ 11,700	\$ 11,700	\$ -	\$ -	\$ -
Labor- LCFEG Crew Supervision per day	40	\$300	\$ 12,000	\$ 12,000	\$ -	\$ -	\$ -
Labor- DOC Contract/officer per day	30	\$200	\$ 6,000	\$ 6,000	\$ -	\$ -	\$ -
Labor- Donated (DOC Larch Mtn Crew)	2,400	\$14	\$ 33,600	\$ -	\$ 33,600	\$ -	\$ -
STotal			\$ 63,300	\$ 29,700	\$ 33,600	\$ -	\$ -
Design/Environmental Compliance							
Interfluve Inc; Final Designs, as-built, tech memo	Engineering	1.00	\$ 30,000.00	\$ 30,000	\$ 30,000	\$ -	\$ -
Permitting; USACE, WDFW HPA, Landowner agreement	Permits	1.00	\$ 10,000.00	\$ 10,000	\$ 10,000	\$ -	\$ -
STotal			\$ 40,000	\$ 40,000	\$ -	\$ -	\$ -
Section Total			\$ 303,875	\$ 200,100	\$ 53,775	\$ 50,000	\$ -
A&E							
A&E-audit, accounting, operations, project management			\$ 60,000	\$ 60,000	\$ -	\$ -	\$ -
Insurance coverage for ACC grant			\$ 27,000	\$ -	\$ -	\$ 27,000	\$ -
GTOTAL			\$ 363,875	\$ 260,100	\$ 53,775	\$ 77,000	\$ -