



Siuslaw Watershed Council

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Community • Economy • Environment
www.siuslaw.org

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Request for Proposal (RFP)

Date of issue: 3/3/2022

The Siuslaw Watershed Council (SWC) is seeking a qualified contractor to prepare an Alternatives and Final Design, Plans, Specifications, Calculations, Cost Estimates, Forest Service Supplemental Specifications, for 2 Aquatic Organism Passage (AOP) sites on the Siuslaw National Forest on US Forest Service Road 2116.

Submittals are due by 5:00 PM on March 25th,
2022

Mandatory site visit to the North Fork Indian Creek project site will be held on
March 14th, 2022.

Contact information:

Project Manager:
Caleb Mentzer, Siuslaw Watershed Council
Phone: 541-269-3044 (office), 541-513-2604 (cell)
E-mail: projects@siuslaw.org

Siuslaw Watershed Council Mission Statement

The Siuslaw Watershed Council supports sound economic, social and environmental uses of natural and human resources in the Siuslaw River Basin. The Council encourages cooperation among public and private watershed entities to promote awareness and understanding of watershed functions by adopting and implementing a total watershed approach to natural resource management and production.

Request for Proposal
Siuslaw Aquatic Organism Passage (AOP) Design for
2 sites
in the Siuslaw River Watershed: North Fork Indian Creek

Introduction

The Siuslaw Watershed Council (SWC) is seeking a qualified contractor to prepare an Alternatives and Final Design, Plans, Specifications, Calculations, Cost Estimates, Forest Service Supplemental Specifications, for 2 Aquatic Organism Passage (AOP) sites on the Siuslaw National Forest on US Forest Service Road 2116. : North Fork Indian Creek Fish Passage Enhancement (See Exhibit A: Map of the Project Area).

The goal of this project is to enhance fish passage through 2 undersized, perched and failing culverts on unnamed tributaries in the North Fork Indian Creek (also called Mann Cr.) sub-basin of the Upper Indian Creek 6th field HUC 171002060502. These undersized culverts are identified in the USFS 2018 Indian Creek Landscape Management Plan as a high priority for replacement and are identified as priority projects in the 2019 Siuslaw Strategic Action Plan for Coho Recovery. The replacement of the undersized culverts with structures that allow for natural stream simulation enhances natural aquatic and terrestrial species passage, natural transport of debris, and restores a more natural hydrologic connection.

The Siuslaw Watershed Council (also listed as the SWC, Council, or Agency) invites qualified firms (referred to as Contractor) with experience in Aquatic Organism Passage (AOP) design to provide a proposal for the enclosed Tasks.

Background

Historic land use practices, including the building of roads, negatively impacted the quality and quantity of habitat supporting the Oregon Coast Coho population in the Siuslaw Watershed. Roads were built to access the landscape for agricultural, recreation and timber harvest purposes, and those roads often crossed streams without providing adequate passage under the roads to facilitate the natural stream processes that existed prior to road construction. Two unnamed tributary streams that flow under FR 2116 into North Fork Indian Creek have culverts that limit fish passage, blocking access to .5 miles each (for a total of 1 miles) of high quality habitat upstream of the culverts.

General Information

The current road conditions vary depending on the site. There are no known utilities within the areas, but line locates are still required to verify none exist for geotechnical subsurface investigations and the final design. The Hydrology and Hydraulic Analysis shall evaluate and provide the $Q_{bankfull}$, Q_{50} and Q_{100} for the AOP designs.

The design work shall include, but is not be limited to, developing an aquatic organism passage structure that adheres to the design methodology developed in “Stream Simulation: An Ecological Approach to Providing Passage for Aquatic Organism at Road-Stream Crossings(USDA-forest Service, 2008), located at https://www.fs.fed.us/eng/pubs/pdf/StreamSimulation/hi_res/%20FullDoc.pdf, as well as the requirements outlined in Aquatic Restoration Biological Opinion (ARBO II), located at <http://www.fws.gov/oregonfwo/ToolsForLandowners/OtherResources.asp>. In addition, all designs shall comply with the latest version of AASHTO LRFD Bridge Design Specifications. AOP structures may be constructed of steel or concrete. Structures are generally culverts, bottomless arches, bridges, or box culverts. If another type of structure is proposed, this shall be submitted for approval by the CO prior to working on the design. Designs should also include design for any stream construction / simulation needed outside of AOP structure to properly connect the channel due to any pipe alignment adjustments, elevation differences or other needed site changes.

Culverts with spans greater than 20 feet as measured linearly with road, or concrete culverts or other approved structure with less than 12 inches of cover, and/or structures that require curbs/rails will be considered a culvert reported as bridge (CRAB). Bridges and CRAB structures shall have different title blocks, Forest Service provided requirements / typicals and will need additional review by Regional Engineer and Regional Structural Engineer. Bridge designs shall meet all current federal and state design standards.

Plans, specifications, applicable supplemental specifications, cost estimates, design calculations, geotechnical reports and hydraulic information will be provided by the consultant. A bid item is identified each site for geotechnical investigation, which will only be used if intensive investigation is warranted and approved by the SWC and USFS Project Mangers in advance. The intent is to first perform investigations using small scale equipment and professional judgment that is incidental to the base bid item. This bid item will be deleted if determined it is not needed on a site by site basis.

No road closures will be granted for design purposes. For construction purposes, assume the road can be closed. Ensure that the construction schedule adheres to instream construction work windows. Allowable dates for instream work will be provided by the Forest Service.

Design Specifications: Construction specifications shall be Standard Specifications for Construction of Roads and Bridges on Federal Highway Projects, FP-14, with Forest Service Specifications. Plans and Forest Service Supplemental Specifications shall be in English units.

Design Criteria:

Road Surfacing:	Provide for a minimum of 100 ft. aggregate surfacing either side of structure center line.
Guard Railing:	N.A.; unless a bridge is the preferred design alternative
Roadway Width:	Match existing travel way width with minimum 1ft. shoulders from edge of surfacing material.

Side Slope:	Varies, but shall not be steeper than 1 ½:1 (H: V), or flatter than 3:1, unless warranted by the design.
Hydraulics:	Design drainage structures to withstand 100 year flood event, and debris
Signage:	MUTCD;
Design Vehicle:	HL 93;
<u>Minimum</u> Structure Opening:	1.3 X Bankfull width or as directed in ARBO II

The Stream Simulation design should maintain the channel and low flow thalweg so there is no restriction under bankfull conditions. The hydraulic analysis may be completed using one dimensional, steady flow, water surface profile analysis. An acceptable computer program for the Hydraulic Analysis is the latest version of HEC-RAS, unless otherwise noted. If another program other than HEC RAS will be used, it shall first be approved by the CO. Provide a licensed copy of the program that will be used in the analysis if it is not HEC RAS. The program will be used to evaluate the hydraulic analysis that is submitted. Allow 10 days for review of the program prior to approval.

Project Description

The following are project tasks associated with this project. A final Scope of Work (SOW) will be developed between the Siuslaw Watershed Council and the awarded contractor based upon the submitted proposal.

The technical Scope of Work includes hydrologic and hydraulic analyses, a geotechnical/foundation investigation, and stream channel design work. The foundation investigation, as well as determinations regarding the potential for lateral migration of the stream and the ability to provide resilience from scour will be factors in determining the foundation type. As such, the contractor is required to determine the hydrology for the site and the hydraulics of potential structures, perform a subsurface investigation, and provide all survey necessary to complete the hydraulic assessment, structural design, and roadway design. Once the type of road crossing structure is determined, the contractor will provide a design for the streambed under the new structure, including construction drawings and specifications. Contractor must receive SWC and USFS Project Manager approval of proposed design prior continuing with work. Check-ins should also occur at the 30% (Conceptual), 60% and 95% (Advanced) before Final Designs are advanced.

The work descriptions given below are not comprehensive and give a cursory description of work items for bidding purposes only; however, the total bid shall be for all ancillary items to complete the tasks. The Contractor must include adequate provisions in each bid item to account for incidentals required to complete the project.

Scope of work

Task 1. Management: Provide overall management for the technical work and coordination and communication with the Project Managers for Siuslaw Watershed Council and US Forest Service.

Task 2. Field Investigation and Survey: Complete a survey of the project area as necessary to complete all phases of the project. This work shall include all survey and mapping required for hydraulic analysis, bridge design, and related road design.

- Minimum of four rebar with cap control points set off road and referenced in plans

Task 3. Assess hydrology and perform hydraulic assessment and modeling

1. Review available and relevant hydrologic data from local, state, and federal sources.
2. Provide a complete hydraulic analysis of the site. Contractors should describe their proposed techniques for assessing hydrology to input into hydraulic analyses.
 - a) Conduct a site visit to evaluate the hydrologic and hydraulic characteristics of the site.
 - b) Develop a stream profile—including both the design thalweg and probable energy diagram/flow profile.
 - c) Identify geomorphological characteristics that may affect or control stream stability and/or lateral migration potential.
 - d) Determine the Q2 flow elevation for placement of bridge abutments or structural plate arch/box footings.
 - e) Determine the Q100 flow depth/elevation to establish soffit elevation in order to provide recommended required freeboard for debris passage (i.e., 5 feet)
 - f) Determine scour depths and specify size for riprap or revetments for abutment/footing protection.

Task 4. Geotechnical Investigation and Report: Perform a geotechnical site investigation and report of findings as follows:

1. Geotechnical site investigation shall be sufficient to determine subsurface conditions for the design and construction of the proposed new bridge.
2. Include one geotechnical boring at each abutment and/or footing. The depth of the boring will depend on soil/rock conditions encountered.
3. Prepare a geotechnical report that summarizes the investigation, provides a geotechnical evaluation of foundation alternatives, and makes recommendations for the preferred foundation type for each structure type (bridge or culvert), including key footing elevations and/or proposed pile tip elevations.

The geotechnical investigation is an item that may be deleted after field investigation, and borings shall only be approved after a warranted justification write-up by the consultant is approved by the SWC and USFS Project Managers. Borings or test pits should be as close as possible to the proposed footing locations. Boring depths should be 5 feet below calculated scour depth or until refusal is reached. If erodible bedrock is encountered, bore at least 5 feet into erodible bedrock unless determined that it is not needed during the preliminary design phase of the contract.

The geotechnical engineer may submit a proposal to be approved by the SWC and USFS Project Managers to bore to a lesser or greater depth than outlined above. Site mapping should include the locations of any geotechnical borings and utilities (if applicable). The consultant should coordinate the utility locates and any borings with the surveyor to ensure all items are included in the site mapping. The consultant shall also coordinate all utility line locates prior to any geotechnical excavations or borings on the specific site.

Task 5. 30% Design: Summary of Results & Recommended Fish Passage Structure:

1. Provide a report synthesizing results of the geotechnical investigation and hydrology/hydraulics analyses. This will include an evaluation of alternatives that are feasible on the basis of constructability and economics for this site.
 - a) 30% design should provide fish passage structure alternative options with initial cost estimates
2. Conduct a meeting with Siuslaw Watershed Council Project Manager and USFS to present recommended design alternative and discuss next steps.

Task 6. 60% Design: Streambed Design and Construction Drawings:

1. Prepare drawings and specifications to construct or reinforce the streambed below the proposed road crossing structure. Use USFS CAD drafting template and USFS CAD drafting standards. Provide two hard copies and an electronic copy in CAD and as a pdf.
2. Prepare 60% construction drawings and plans incorporating comments from the 30% design meeting with SWC and USFS Project Managers.
 - a) Draft plans with sizes, layout, profile, structure and critical details
3. 95% and Final Design tasks should not be performed until 60% designs are approved by SWC and USFS Project Managers.

Task 7. 95% Design and Final Design:

AOP Structures: Final design for this project shall include a final set of construction plans, a list of applicable standards, applicable special contract requirements, engineering estimate, schedule of items, engineering design, unit cost, design calculations and quantity calculations. Designs shall be based on field observations, stream simulation guidelines, hydraulic analysis,

and construction constraints. Provide the electronic copy of the HEC RAS or other approved applicable program used in the hydraulic analysis as part of the engineering design for review.

- A 95% submittal will be required. After the submittal, the Forest Service will review and provide comments. Allow 30 days for review of Bridges and CRAB's and 15 days for review for other structures.
- Final design plans shall be prepared utilizing a Forest or Regional Forest Service title blocks and borders. All documents shall be prepared using the most current version of the appropriate software, i.e., AutoCAD, MS Word, MS Excel, HEC RAS etc.

Deliverables: All plan sets shall be on 11"x 17" Sheets. The 100% Plans, Specifications and Estimates (PS&E) submittal sets shall, include a set of Plans, a list of applicable standard specifications and special contract requirements, an engineering estimate, a listing of construction submittals reference to the applicable plan sheet or specification section, a schedule of items, construction schedule, applicable engineering design calculations, quantity calculations and unit cost calculations.

- All Final Plans and calculations must be signed and stamped by an Oregon Licensed Professional Engineer.
- Provide two hard copies and an electronic copy in CAD and as a PDF.

Task 8. Permitting Assistance:

The Army Corps of Engineer and Oregon Division of State Lands permit application will be filled out and submitted by the Forest Service. The following shall be provided by the consultant to support the permit work.

1. Data collection and tabulation to support permit requirements;
2. Bankfull Width;
3. Bankfull high water elevation;
4. Q_{100} water elevation upstream and downstream of culvert;
5. Q_{100} flood width upstream and downstream of culvert;
6. Calculation of anticipated width and length of disturbance impacted by construction and anticipated disturbed quantities in cubic yards.

Reasonably Implied Work and Incidental Items

Any part of the work that is not mentioned in the above scope of work, or the contract developed with the selected Contractor, which is necessary or normally required as a part of such work, shall be performed by the Contractor as incidental work without extra cost to the SWC.

Table 1. Project Timeline

Task	Timeframe
Mandatory site visit and meeting	March 14 th , 2022
Proposals due to Council	March 25 th , 2022
Contractor selected, develop contract	March 28 th , 2022
Initiation of work	April 4 th , 2022
30% Design Summary	July 4 th , 2022
60% Design Summary	September 4 th , 2022
95% Design Summary	October 4 th , 2022
Work completed	January 30 th , 2023

Site Visit

A mandatory site visit will be conducted on March 14th, with contractors interested in submitting proposals to the Council. Please contact the SWC Office (541-268-3044) or the SWC Project Manager (projects@siuslaw.org) by 12 PM on March 10th if you would like to attend the site visit. The meeting will provide an opportunity for contractors to view the site and to ask any questions they may have. The SWC and MRT project managers will be present to answer questions. We will meet at the Schindler Landing County Park, which can be found here: [44.08040, -123.79094](#). Travel and access directions will be provided upon receiving a contractor's RSVP.

If you can't attend the 3/14 site visit but are interested in submitting a bid please contact the SWC Project Manager at projects@siuslaw.org prior to March 10th.

Bidding Process

Interested contractors will present the Council with a proposal by 5 PM on March 25th, 2022. The proposal should include a complete bid packet (Items I-IV OR equivalent information in another format). Bidders should send a completed RFP either via email to projects@siuslaw.org or via mail to Siuslaw Watershed Council, 10868 East Mapleton Road, Mapleton Oregon 97453.

Beginning March 28th, SWC and USFS project staff and review team will review and score proposals. Following evaluation and scoring of applications, the selection committee may choose to interview up to three bidders before making a final decision. Interviews, should they take place, will be via Zoom or at the Siuslaw Watershed Council office in Mapleton, Oregon. The SWC may propose modifications to the selected contractor's proposal before finalizing contract. The SWC will award the contract based on the qualifications, experience, and price offered in the contractors' proposals. The SWC reserves the right to ask for clarifications on bid items, and offers contractors the opportunity to clarify and refine their bid items.

The SWC shall enter into a contract with the contractor whose proposal/bid appears to best serve the interest of the Project, MRT, and SWC in terms of qualifications, services to be provided, timeliness and cost. Bidders will be notified of selection results within seven (7) business days of submittal, on or before April 1st, 2022. A project kick-off meeting will be held with the successful bidder within a week of the award, at which time contract documents will be signed and notice to proceed will be given to the contracted firm.

Insurance

Contractor shall, at its expense, obtain and maintain during the period of this Contract, in a form and with companies satisfactory to Siuslaw Watershed Council, insurance coverage corresponding to, at a minimum, SWC's requirements as detailed in Item IV of the Invitation to Bid. Under the contractor's liability insurance, we request that The Siuslaw Watershed Council and the United States Forest Service named as additionally insured. Proof of Insurance shall be required before a contract is executed and shall be subsequently provided to SWC upon request throughout the term of the Project. The insurance coverage required herein shall in no way limit the Contractor's liability under a Contract.

Payments

The Contractor may invoice the Council for the agreed upon bid amount once work is complete. The total amount charged for this project will not exceed available funding for the project. All invoices must be submitted no later than February 28th, 2023. Payments will be made within 45 days of the invoice receipt from contractor, pending SWC receipt of payment from funder. This agreement constitutes a subcontract whereby payment to contractor may be contingent upon reimbursement of invoiced amounts from funder.

A Complete Bid Packet Shall Include the Following:

Items I-IV OR equivalent information in alternate format

Documents provided to Potential Bidders:

Bid Packet (includes Items I-IV)

Proposal Elements Considered by RFP Reviewers

Project Approach (35%)

Describe how the firm's approach to projects of this type qualifies the firm to perform the required tasks in the specified timeline.

Qualifications of the Applicant (35%)

Provide detailed descriptions of relevant work experience the firm has engaged in over the past five years, with an emphasis on tidal systems. The applicant should fully address the applicant's experience in working with the complexities of steep coastal drainages and flashy hydrology associated with rivers such as the Siuslaw. Highlight any work in which the protection of adjacent lands and/or infrastructure were significant components. Identify any built projects

and/or designed projects slated for construction in the near term. Overall, applicants are encouraged to present projects which bear overall resemblance to the North Fork Indian Creek Fish Passage Enhancement Project.

Key Staff to be Involved (10%)

Identify key project staff and what their roles will be. Who will manage the project on the contractor's side and serve as the primary liaison with the SWC? Submit resumes of key project staff to be involved, not to exceed one page in length each. For staff involved, include details of certifications and professional credentials which lend support for their projected work on the project.

Cost estimate (20%)

Applicants should submit a detailed cost proposal which lays out anticipated costs for all project elements, including key project staff and their hourly billing rates, and including all anticipated expenses.

Other proposal requirements

Supply proof of insurance. This insurance must be of type and amount sufficient to meet the requirements for this type of activity, and are listed under Item IV in the enclosed Bid Packet. Under the contractor's liability insurance, we request that The Siuslaw Watershed Council be named as additionally insured. Contract will not be valid until proof of insurance is provided.

Contact Person:

Caleb Mentzer
Restoration Projects Manager
Siuslaw Watershed Council
projects@siuslaw.org
Phone: 541.268.3044 (office)
541.513.2604 (cell)

Issued By:

Siuslaw Watershed Council
PO Box 422
Mapleton, OR 97453
(Mailing address)

Physical Address Location:

Siuslaw Watershed Council
Mapleton School District Campus
10868 East Mapleton Road
Mapleton, OR 97453 (Not Mailing address)

This project is made available through funding from the Oregon Watershed Enhancement Board

"In accordance with Federal law and U.S. Department of Agricultural policy, this institution is prohibited from discriminating on the basis of race, color, national origin, sex, age, or disability. (Not all prohibited bases apply to all programs.) SWC is an equal opportunity provider and employer."

Bid Packet

Item I. Bidder Information

BIDDER FIRM: _____

BIDDER CONTACT PERSON: _____

ADDRESS: _____

PHONE: _____ E-Mail: _____

The undersigned, hereinafter called the Bidder, declares that the only person(s) interested in this Bid are those named herein; that the Bid is in all respects fair and without fraud; and, that it is made without any connection or collusion with any other person making a bid on this project.

The Bidder further declares that they have carefully examined the Request for Proposal Documents, hereinafter referred to as the Document; is satisfied as to the scope of work, and understands that the description of the work in the RFP is brief and is intended only to indicate the general nature of the work.

The Bidder agrees that if this Bid is accepted they will within five (5) working days, not including Saturdays, Sundays and legal holidays, after notification of acceptance execute a Contract with the Siuslaw Watershed Council.

The Bidder further agrees, to the extent of this Bid, to furnish all means of completion of work and do the work in the manner, in the time, and according to the methods as specified in the Document.

The Bidder further agrees to begin work on April 4th, 2022 and shall complete all tasks by January 31st, 2023. Work will not be allowed to commence until a signed Contract is received by the Siuslaw Watershed Council.

The Bidder further agrees to accept as payment for the work proposed under this project, as herein specified and under the provisions included in the Document, the task prices included on the Bid Form. The Bidder further represents a true measure of the labor required to perform the work including all allowances for overhead and profit for each type of work called for.

SIGNATURE OF AUTHORIZED REPRESENTATIVE

DATE

Item II. Schedule of Tasks

		North Fork Indian Creek AOP Design			
<u>Task</u>	<u>DESCRIPTION</u>	<u>Product</u>	<u>Comments</u>	<u>TOTAL AMOUNT</u>	<u>Proposed Completion Date</u>
1	Technical Project Management	Narrative summary			
2	Field Investigation and Surveys	Narrative summary of methods			
3	Hydraulic Assessment and Modeling	Technical report			
4	Geotechnical Investigation and Report	Narrative summary			
5	30% design: Recommend fish passage structure	Narrative Summary			
6	60% design: Streambed design and construction drawings	Narrative summary and technical report			
7	95% Design and Final Design	Narrative summary and technical report			

Total Cost of Work: \$_____

Item III. Bidder AOP Fish Passage Design Project History and References

Bidders with experience performing similar work on AOP fish passage design restoration projects will be favored when proposals are evaluated. Please fill out the following table with your most relevant work or attach a resume/work history with references.

Name of Client, Project Location	Description of Work Completed	Contact Name/Phone Number

Item IV: Bidder Certification

The name of the Bidder submitting this Bid Proposal is:

Doing business at _____
Which is the address to which all communications concerned with the Bid and the Contract shall be sent.

(If Corporation)

In witness whereof the undersigned Corporation had caused this instrument to be executed and its seal affixed by its duly authorized officer's this _____ day of _____

Name of Corporation

By: _____

Title: _____

Attest: _____

(If Partnership)

In witness whereof the undersigned Partnership had caused this instrument to be executed and its seal affixed by its duly authorized officer's this _____ day of _____

Name of Partnership

By: _____

Title: _____

Attest _____

(If Sole Proprietor)

In witness whereof the undersigned has set his hand and caused this instrument to be executed this _____ day of _____

Name of Business

Signature of Bidder: _____

Attest: _____

Item V: Insurance Requirements for Contractor

_____ (“CONTRACTOR”) agrees to carry insurance equal to or greater than that listed below and name Siuslaw Watershed Council.

COMMERCIAL GENERAL LIABILITY AND AUTO LIABILITY

\$1,000,000. Each occurrence

\$2,000,000. General aggregate

\$5,000 Medical expense

- Siuslaw Watershed Council and United States Forest Service must be named as an additional insured. This insurance is required to be primary and non-contributory and include a waiver of subrogation.
- Insurance must be maintained continuously
- Contractor must provide a 30-day notice of cancellation

WORKERS COMPENSATION

\$500,000 employer liability

Complies with all applicable workers’ compensation laws of the state of Oregon

Certificate of insurance only

- Workers compensation must contain a waiver of subrogation

AUTO LIABILITY

\$1,000,000 combined single limit for all owned, non-owned or hired vehicles

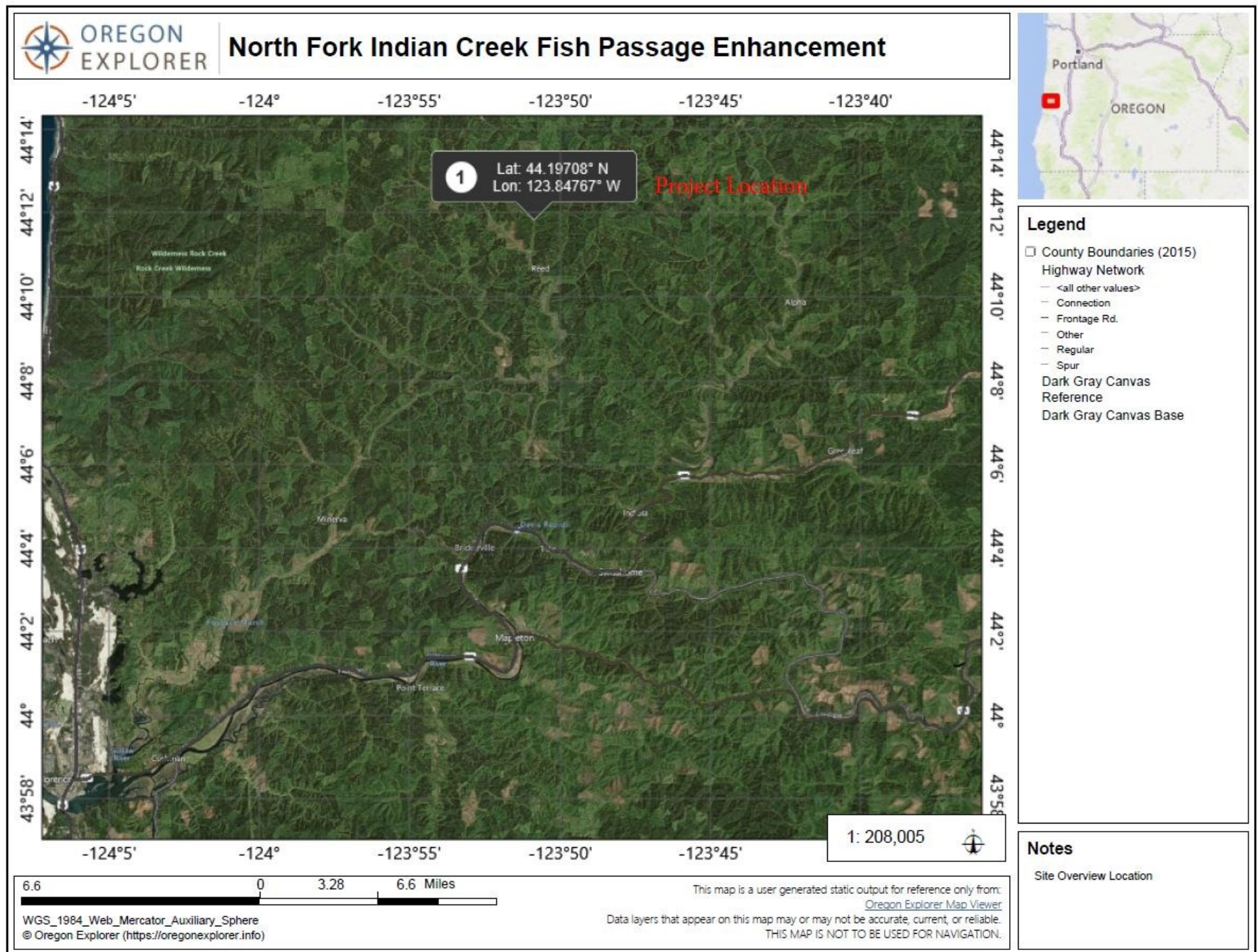
- Siuslaw Watershed Council and United States Forest Service must be named as an additional insured. This insurance is required to be primary and non-contributory and include a waiver of subrogation.

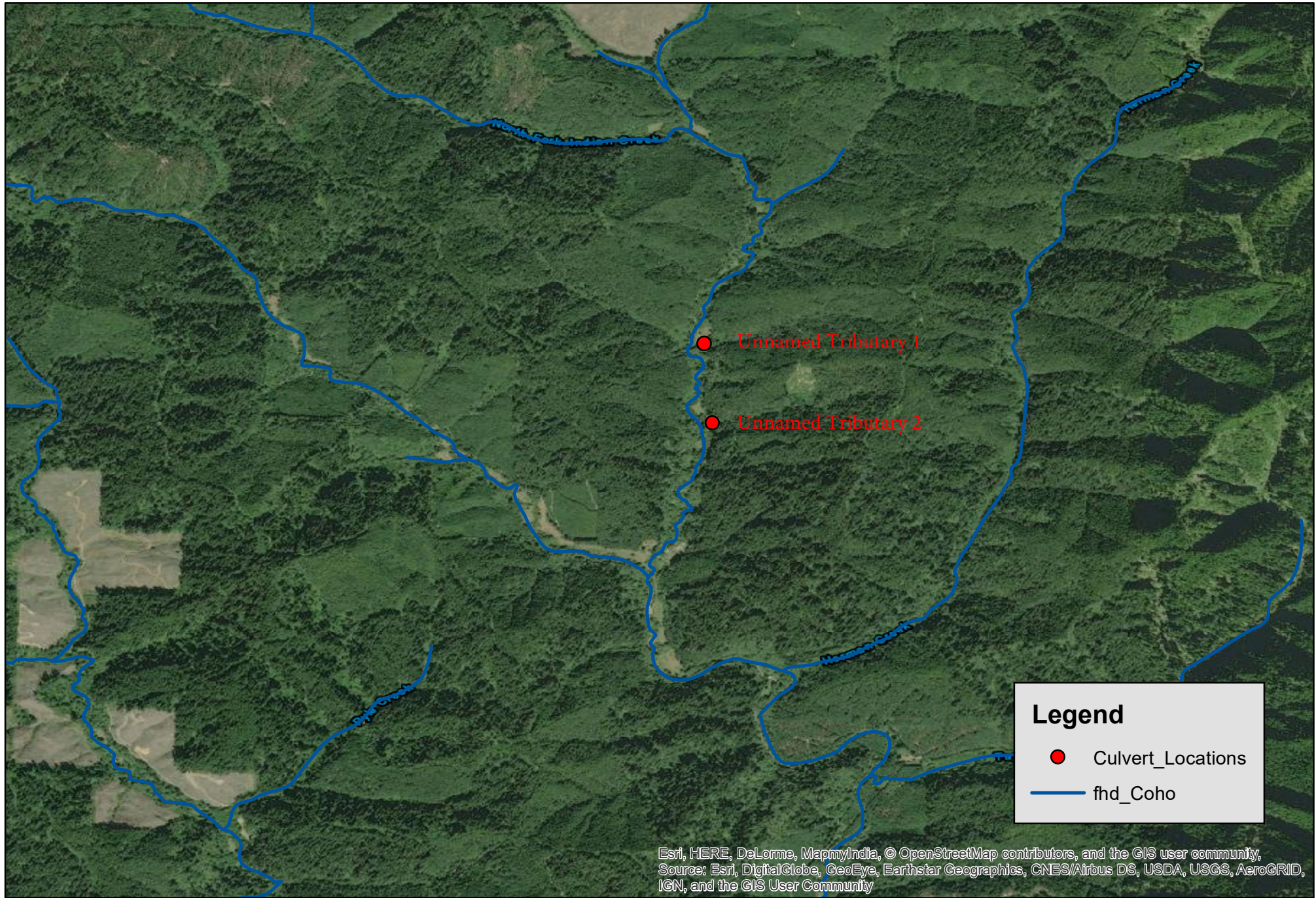
SIGNATURE OF AUTHORIZED REPRESENTATIVE

DATE

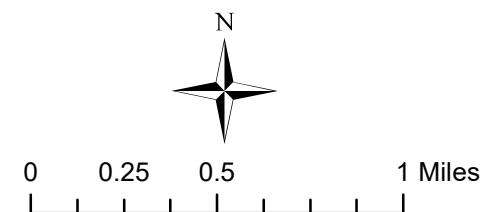
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Appendix A: Map of the Project





North Fork Indian Creek Fish Passage Enhancement



Unnamed Tributary 1: upstream of culvert



Unnamed Tributary 1: downstream of culvert



Unnamed Tributary 2: upstream of culvert



Unnamed Tributary 2: downstream of culvert

