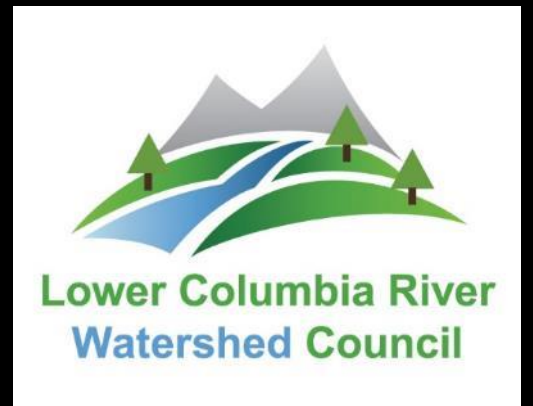


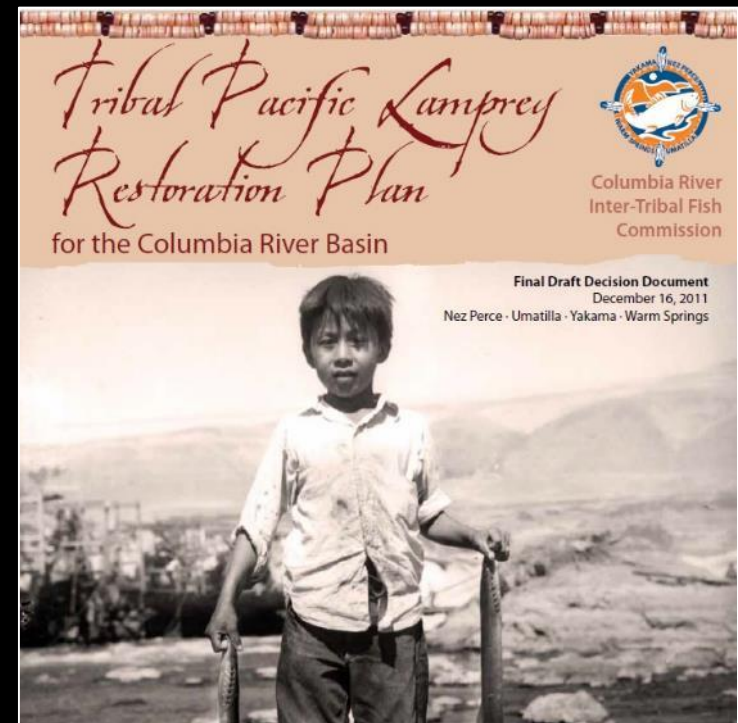
Lower Columbia Pacific Lamprey Barrier Evaluation and Project Prioritization

Allan Whiting, Watershed Council Coordinator



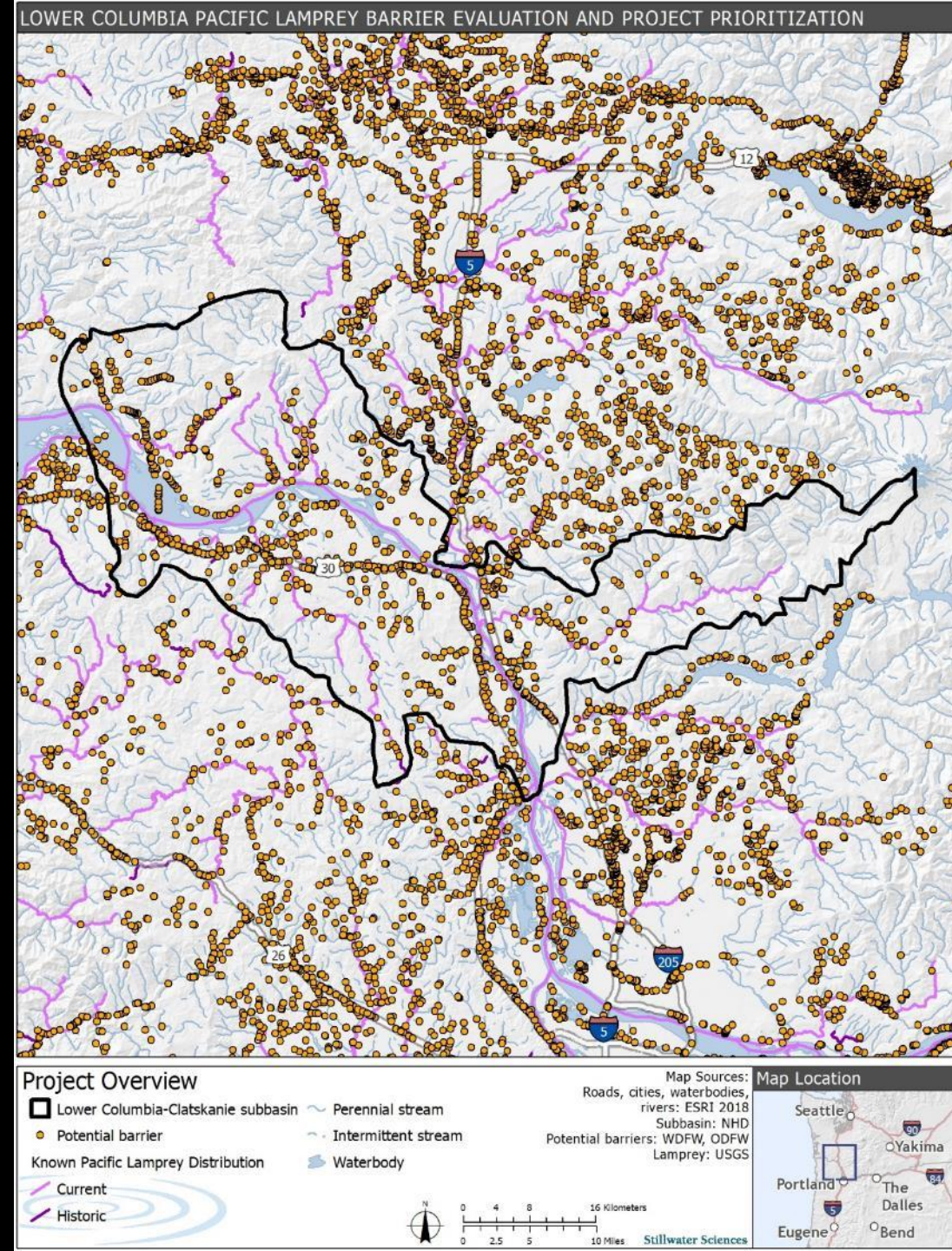
Background & Need

- Nature of Proposal
- Relationships with Lower Columbia entities.
- Project Need:
 - Thousands of road crossings in the region that may block Pacific Lamprey migration have not been assessed.
 - Passage restoration project development
- Opportunity to increase engagement & awareness of lamprey passage issues & habitat requirements in region.
- Project addresses key needs in *PLCI Conservation Agreement, Lower Columbia RIP, NWPCC-Fish and Wildlife Plan, and CRITFIC Tribal Lamprey Restoration Plan, and ODFW Conservation Plan for Lampreys.*
(i.e. fish barrier removal, education/outreach)



Project Goal

- Restore Pacific Lamprey access to blocked high-quality habitats in the Lower Columbia region.



General Approach

- Follow LTW guidelines document
- Build off existing information and other fish passage assessments
- Collaborative management structure involving TAC and local stakeholders
- Select focal Study Area with TAC input

Barriers to Adult Pacific Lamprey at Road Crossings: Guidelines for Evaluating and Providing Passage

Living Document: Version 1.0

June 29, 2020



Lamprey Technical Workgroup

Management Structure

- Project Technical Advisory Committee Members
 - Salmon Recovery Board (Lower Columbia Fish Recovery Board)
 - Local Watershed Council
 - ODOT/WSDOT
 - Columbia Soil & Water Conservation District
 - Cowlitz Indian Tribe
 - Lamprey Technical Workgroup Representatives
 - USFWS
 - BPA
 - ODFW

Project Objectives & Outcomes

Stepwise process, with each step being a contribution:

Objective	Outcomes / deliverables
(1) Inventory potential barriers to adult Pacific Lamprey in Study Area	<ul style="list-style-type: none">• Comprehensive geodatabase of potential barriers in Study Area
(2) Prioritize potential barriers for evaluation of lamprey passage	<ul style="list-style-type: none">• Prioritized list of sites requiring Pacific Lamprey passage evaluation
(3) Determine lamprey passage status at priority sites	<ul style="list-style-type: none">• List of sites that are non-barriers, total barriers, partial barriers, or require further evaluation
(4) Prioritize sites for providing lamprey passage	<ul style="list-style-type: none">• Prioritized list of barrier sites in the Study Area
(5) Develop conceptual options for providing passage at high priority sites	<ul style="list-style-type: none">• Report summarizing process and results• Project concept profiles for high priority sites

SUMMARIZE EXISTING INFO (Objective 1)

Completed Barrier Assessments

- SW Washington
- Scappoose Bay
- LCEP
- Lower Columbia (OR)
- North Coast
- ODFW Database
- WS DOT

Hydrography/Stream Habitat

Lower Columbia RIP

Lamprey Assessments

Completed Guidelines

Historic Distribution of Lamprey
In Lower Columbia



Master Inventory/Metadata



Screening/Field Verification (Objectives 2-4)

Screening Criteria

- Historic Distribution
- RIP Priorities
- Watershed Area focus

Field Candidate Criteria

- Off-site methods
- Guidance document

Project Prioritization

- Inputed criteria ranking
- Social Feasibility/Fatal Flaws

RESTORATION OUTCOMES (Objective 5+)

- PLCI/RIP Program Metrics
- Prioritization Criteria
- Data Gaps
- 3 high priority project profiles
- Increased awareness of Pacific Lamprey threats and needs

Restoration Outcomes

- 3 barrier sites for future proposal development, design, regulatory vetting by local entities
- Implications for regional program metric development
- Applicability to other lamprey assessments in the region
- Identification of data gaps
- Increased awareness of Lamprey threats and habitat needs in the region

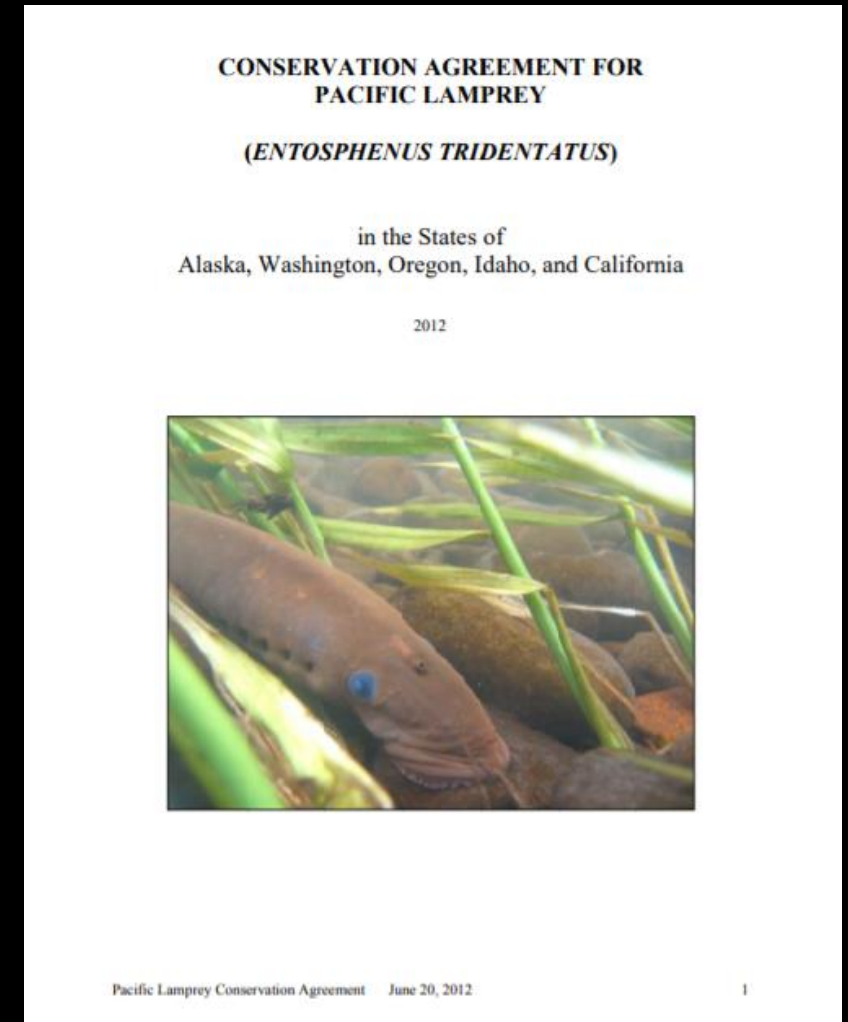


Q & A



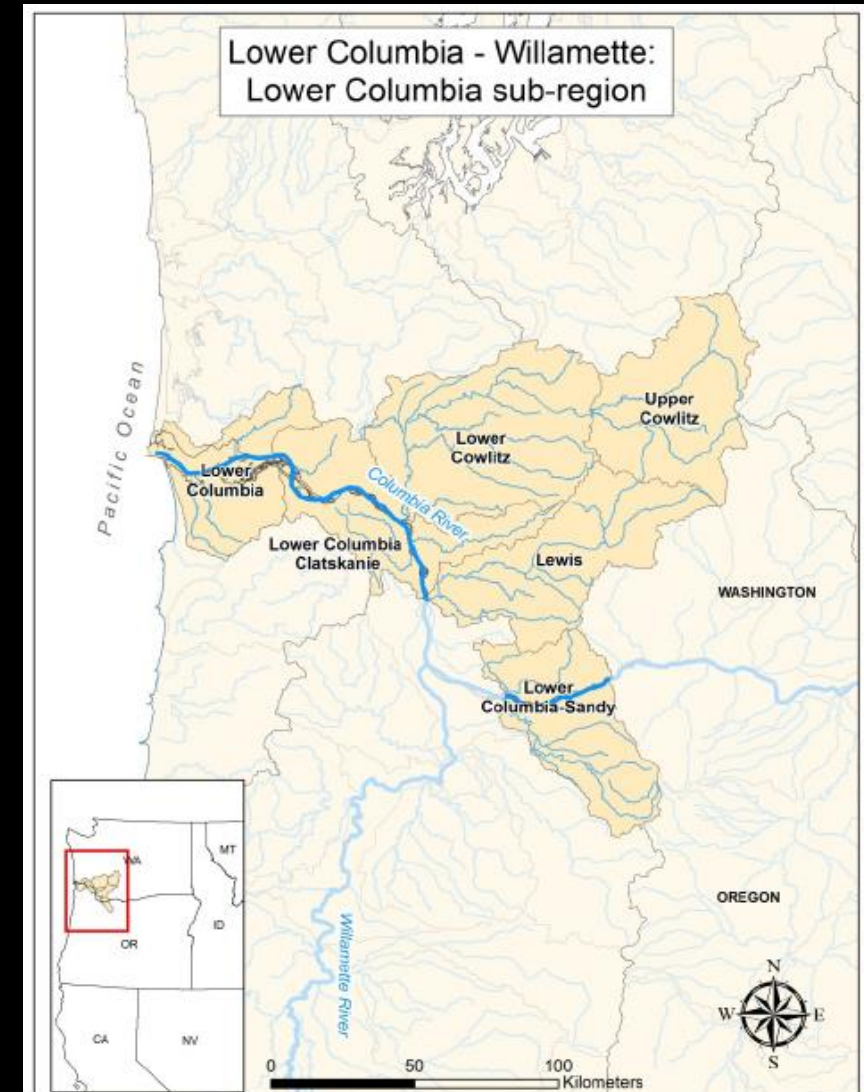
Linkage to PLCI Conservation Agreement

- Objective 3: Public Outreach
- Objective 4: Data sharing
- Objective 6: Identify secure and enhance watershed conditions in the RMUs



Linkage to Lower Columbia Plans

- RIP: Major Threats: Passage, Stream and Floodplain Degradation (Table 2, p.6)
- RIP: Restoration and Research Actions:
Map, assess, and prioritize passage barriers
(p.10)



Linkage to Lower Columbia Plans

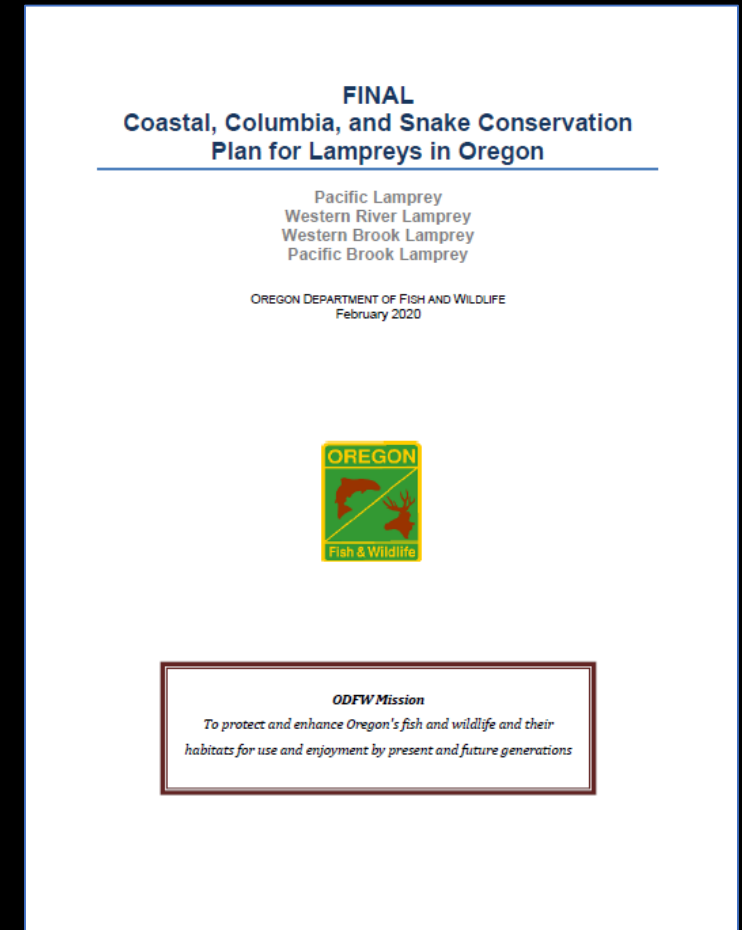
ODFW Conservation Plan

#1 Limiting Factor-Access

Management Priority #1: Education Outreach

#2: Passage and Screening-Develop and Use protocols to prioritize artificial obstructions

#3: Work with habitat restoration implementers to increase restoration activities in lower mainstem rivers and estuaries that may benefit anadromous lampreys



Linkage to Regional Plans

- **NWPCC-Fish and Wildlife Plan**

- IV Strategies-Lamprey-Mainstem and tributary habitat

- The action agencies, in coordination with agencies and tribes, shall:

- Implement instream habitat projects in a manner that minimizes mortality to lamprey by consulting the [Best Management Practices for Pacific Lamprey](#)
 - Continue to identify, protect, and restore habitat areas and ecological functions, such as stream channel complexity and function, that are associated with productive spawning, resting, rearing, and migrating lamprey
 - Install appropriate and effective juvenile lamprey screening for tributary water diversions

- **CRITFIC-Tribal Pacific Lamprey Plan**

- Objective 2: Improve tributary passage and identify, protect, and restore tributary habitat

- Action 4.2.1 Tributary Passage

- Implement structural and operational changes within tributaries to improve adult passage b. Implement structural and operational changes within tributaries to improve juvenile passage