
Pacific Lamprey Fish Habitat Partnership

Proposal for Candidate NHFAP Partnership

October 20, 2015

Howard Schaller - USFWS

Bob Rose - Yakama Nation

Christina Wang - USFWS



Pacific Lamprey Fish Habitat Partnership

Recognition for the Pacific
Lamprey Conservation Initiative
as a NFHAP partnership

Why should we care about Pacific lamprey?

Tribal Culture & Food Source



Food for Numerous Species



Buffer for Salmon Predation



“Farmer of the Underwater”



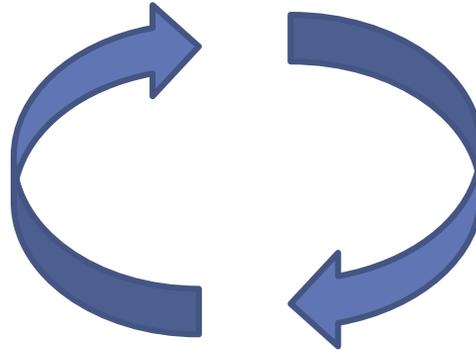
Pacific Lamprey Life Cycle



Adults migrate to freshwater and overwinter



Adults are parasitic in the ocean for 1-3 years



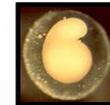
Adults spawn in gravel nests



Larvae transform to juveniles and migrate to the ocean

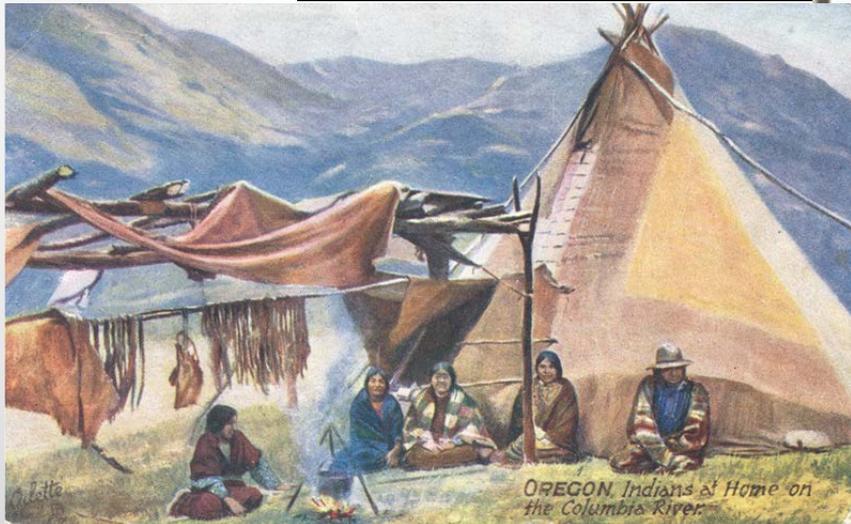


Larvae live in fine substrates and filter feed for 3 - 7 years



Eggs hatch into larvae and drift downstream to slow velocity area

Tribal Importance





Tribal Importance

“Native American tribes revere Pacific lamprey for cultural, spiritual, ceremonial, medicinal, subsistence and ecological values*”.

- Loss of lamprey from the ecological circle and the tribal way of life.
- Loss of cultural heritage, especially for young tribal members—many have never even seen a lamprey.
- Loss of fishing opportunities in traditional fishing areas.

** from Tribal Pacific Lamprey Restoration Plan for the Columbia River Basin*

Pacific Lamprey Conservation Initiative

- Integration of many plans
- Achieve long term persistence of Pacific Lamprey and support traditional tribal cultural use
 - Assessment
 - Conservation Agreement
 - Regional Implementation Plans

CONSERVATION AGREEMENT FOR PACIFIC LAMPREY

(*ENTOSPHEMUS TRIDENTATUS*)

in the States of
Alaska, Washington, Oregon, Idaho, and California

2012



U.S. Fish & Wildlife Service

Arcata Fisheries Technical Report TR 2015-DRAFT

Regional Implementation Plan for Measures to Conserve Pacific Lamprey (*Entosphenus tridentatus*), California – South Central Coast Regional Management Unit

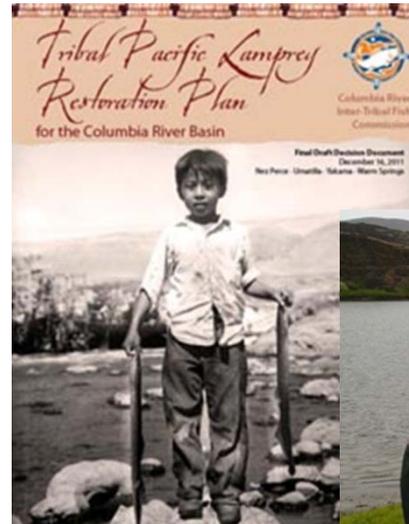
Damon H. Goodman and Stewart B. Reid



U.S. Fish and Wildlife Service
Arcata Fish and Wildlife Office
1655 Heindon Road
Arcata, CA 95521
(707) 822-7201



February 2015



Partner Involvement



Yakama Nation

Umatilla Tribes

Warm Springs Tribes

Cow Creek Band of Umpquas

Grand Ronde Tribes

Siletz Tribes

Blue Lake Rancheria Tribe

Mechoopda Tribe

Wiyot Tribe

Yurok Tribe

Coos, Lower Umpqua Siuslaw Tribes

California Dept of Fish and Wildlife

Oregon Dept of Fish and Wildlife

Idaho Dept of Fish and Game

Washington Dept of Fish and Wildlife

Alaska Dept of Fish and Game

Bonneville Power Administration

U.S. Bureau of Indian Affairs

U.S. Bureau of Land Management – CA, ID & OR

U.S. Bureau of Reclamation

US Fish and Wildlife Service – Regions 1, 7 & 8

U.S. Forest Service – Regions 1, 4, 5 & 6

National Marine Fisheries Service

Pacific States Marine Fish Commission

Lower Columbia River Estuary Partnership

Portland General Electric

Columbia Land Trust

Salmon Creek Watershed Council

California Dept of Water Resources

City of Portland Environmental Services

U.S. Environmental Protection Agency – Region 10

Grant County PUD

Chelan County PUD

Portland Metro

Channel Restoration

The collective movement to restore salmonid habitat in the western states presents a valuable opportunity to restore habitat for lamprey.



By considering lamprey from the onset of project development it is possible to include lamprey specific project elements at little or no additional cost (e.g., restoring fine sediments)

Lamprey Passage on Umatilla and Umpqua Rivers



Lamprey Passage on Columbia River



Integration with PLFHP

- Integrate Pacific Lamprey Conservation Initiative with Pacific Lamprey Fish Habitat Partnership
- Formation of the PLFHP will be a key component in helping prioritize and assist in funding conservation actions for Pacific Lamprey
- Important phase for maintaining and growing the partnership



Goals of PLFHP

Implement measures that restore and protect fish habitat that:

1. improve lamprey populations to support traditional tribal cultural use;
2. restore Pacific Lamprey populations and their habitats to improve ecosystem function;
3. fill gaps and augment existing partnerships; and
4. support goals of NFHAP.



Specific Habitat Goals

For Pacific Lamprey throughout west coast rivers from California, Oregon, Washington, Idaho and Alaska

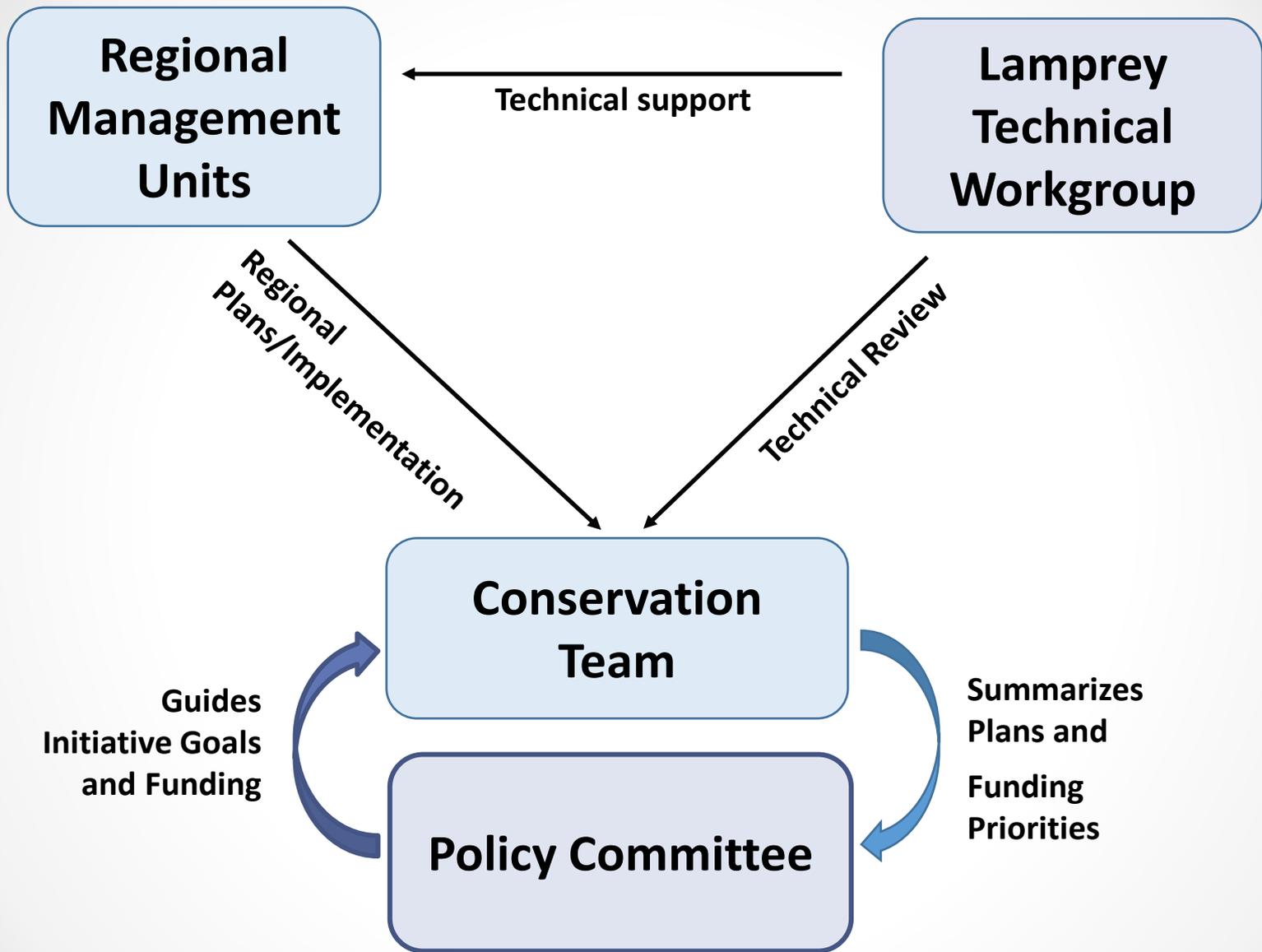
1. Increase access to and improve adult overwintering and spawning habitat
2. Improve connectivity and condition of larval rearing habitat
3. Improve migration conditions for all life stages of lamprey



Establishing the PLFHP

Strong and Diverse Partnerships

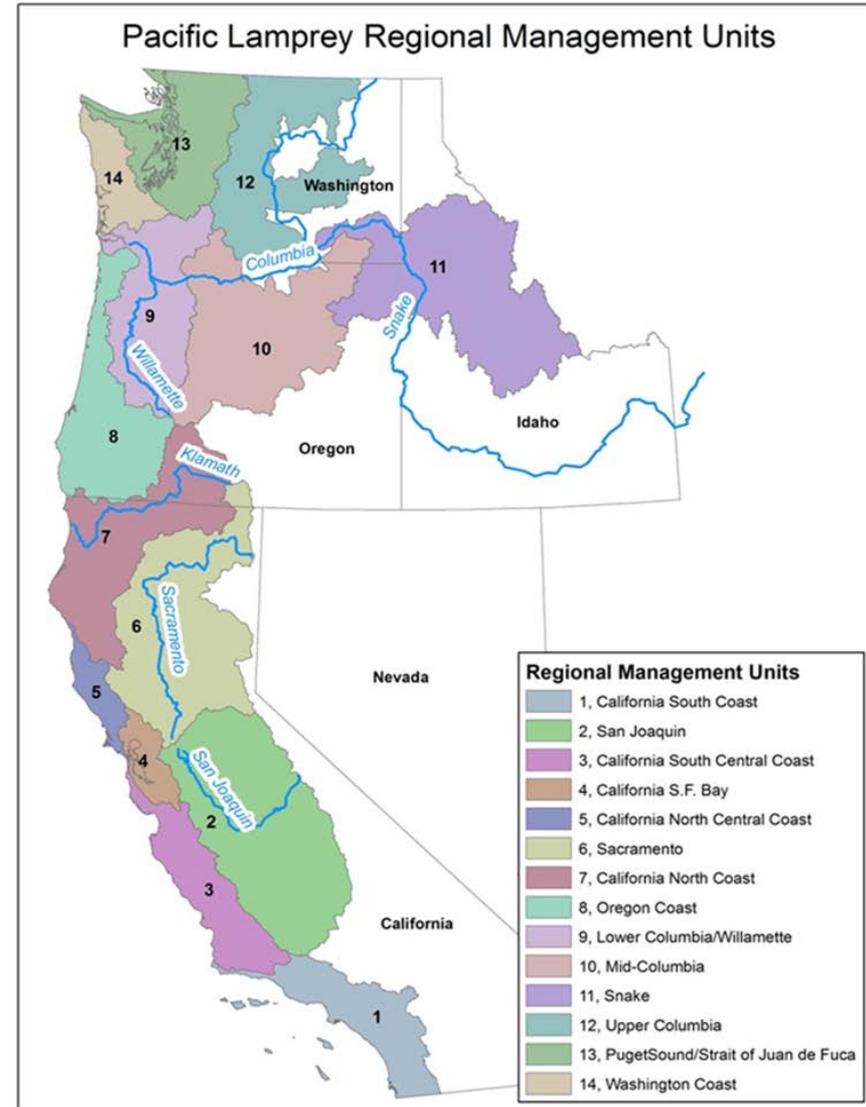
- PLCI is a self-run collaboration of partners working to conserve Pacific Lamprey throughout U.S. range
- Conservation Agreement signed in 2012
- Feds, 5 states, 11 tribes, municipal, local, private – organized into Conservation Team
- Infrastructure of PLCI is established with defined schedule



Establishing the PLFHP

Geographic Focus

- Geographic scope is CA, OR, WA, ID and AK.
- Freshwater tributary and mainstem habitats including migration corridors, estuaries and marine environments
- Scope of issues and priorities are geographically large (500,000 square miles), ecologically significant and culturally important





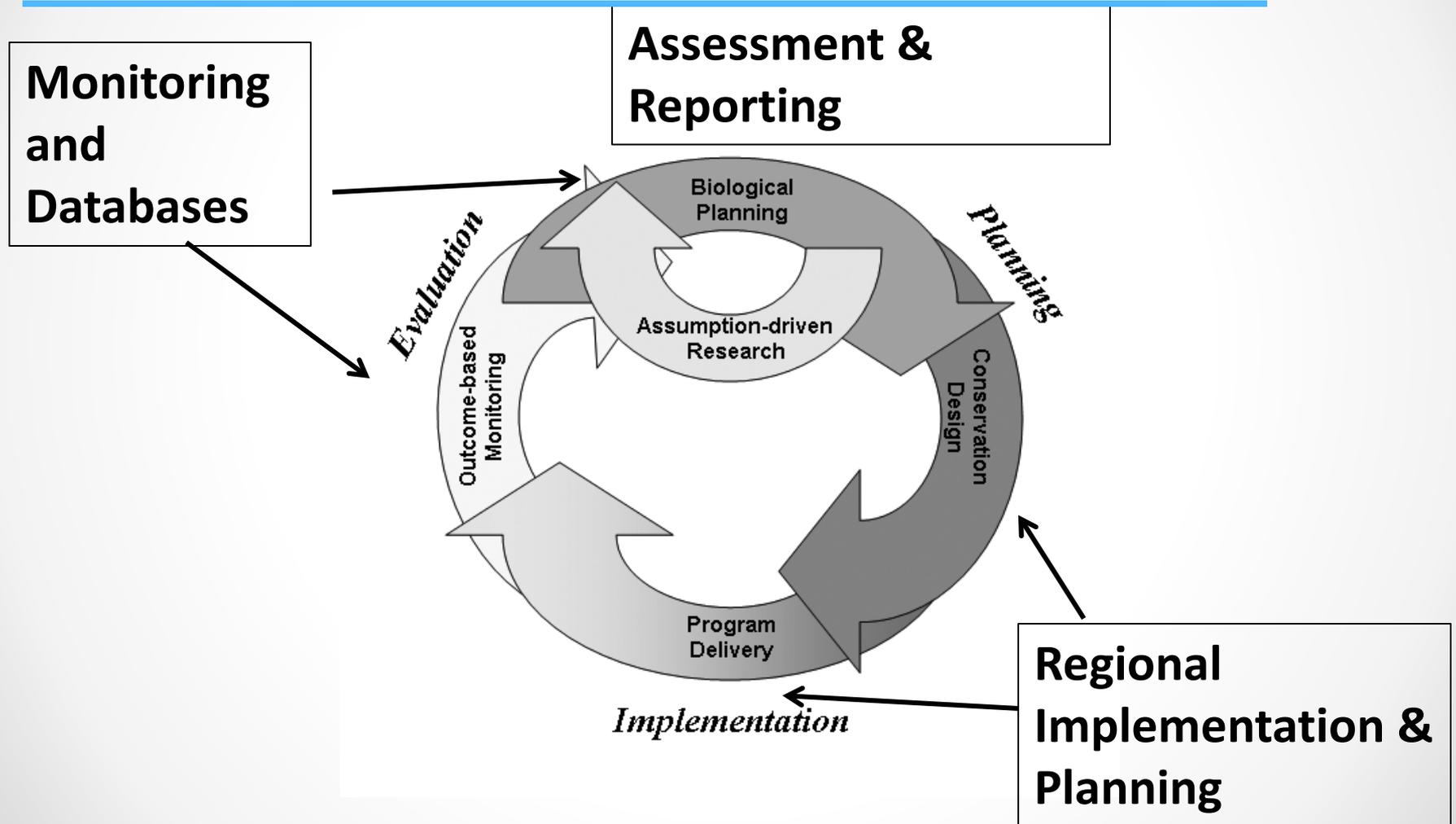
Establishing the PLFHP

Strategic Planning and Capabilities for Scientific Assessment

The Foundation:

- Assessment – identify risk and threats
- Conservation Agreement – goal for collaborative agreement and strategic plan
- Regional Implementation Plans – outline specific conservation actions and research needs by region
- Strategic Habitat Conservation Framework

Strategic Habitat Conservation Framework



Why the PLFHP?

- Covers large geographic area, diverse habitats and ecosystems
- Bridges or fills gaps from existing partnerships
- Good for lamprey and many other aquatic species, and restoring a key component of the ecosystem
- Elevates need for restoration of important cultural resources
- Increases support of large tribal base for NFHAP



Dave Herasimtschuk © FI

Credit: USFWS