

# **Pacific Lamprey**

## **Regional Implementation Plan for the Mid-Columbia RMU**

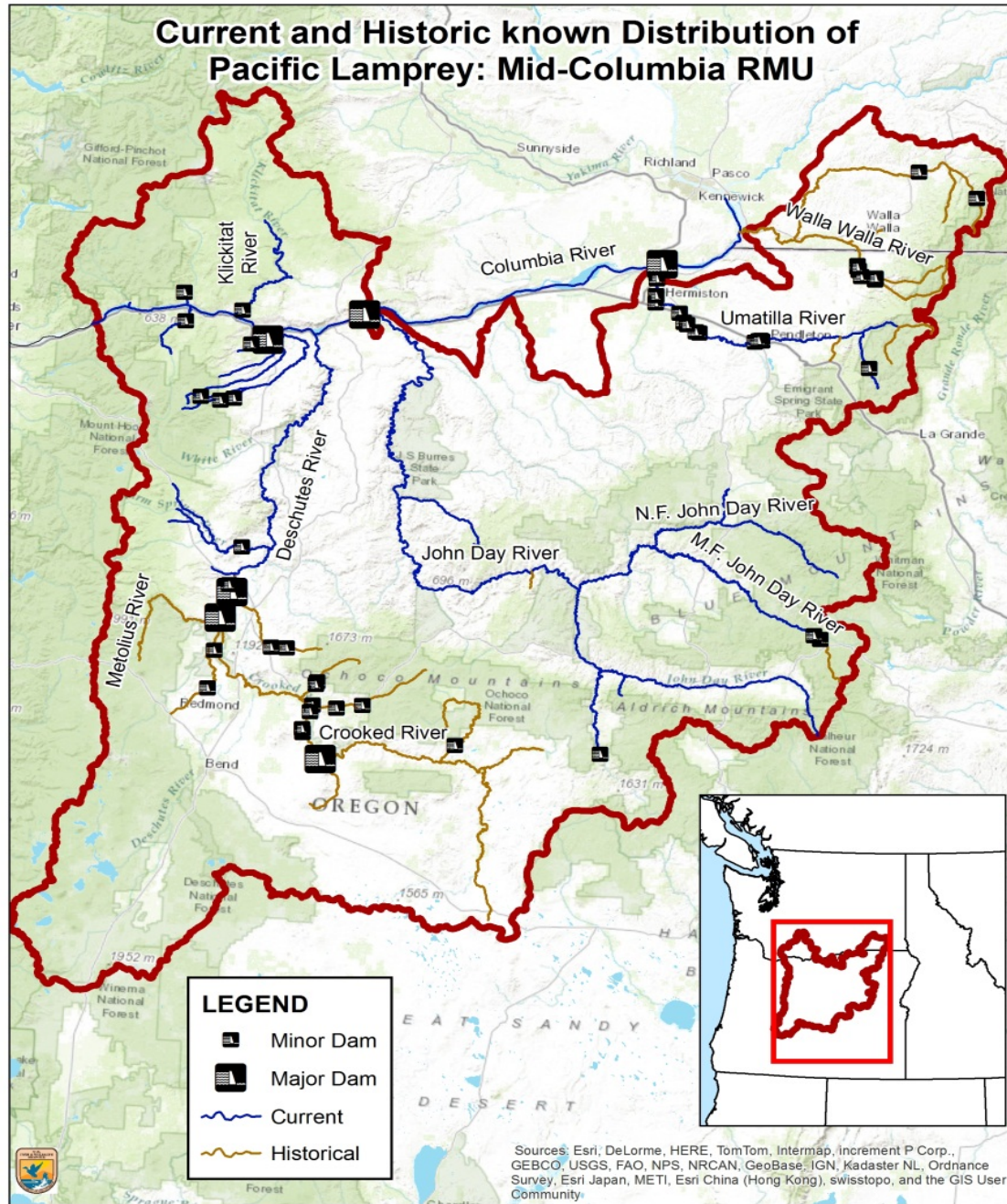


**Conservation Team Meeting June 15, 2015**





## Current and Historic known Distribution of Pacific Lamprey: Mid-Columbia RMU



# Major Threats to Pacific Lamprey in the Mid-Columbia RMU

- High
  - Mainstem Passage
  - Climate Change
- Moderate
  - Stream and Floodplain Degradation
  - Water Quality
  - Dewatering and Flow Management
  - Tributary Passage

# Current Projects

- Tributary passage improvements
  - Three Mile Falls Dam
  - Feed Diversion
  - Westland Diversion
- Translocation and artificial propagation
- Fishway modifications at mainstem dams
- Instream and floodplain habitat restoration for salmonids
- Lamprey surveys throughout Mid-Columbia
- Water savings programs and purchase of irrigation rights

# **Project Proposals for 2015/2016**

1. Characterization of Juvenile Outmigration
2. Develop New Sampling Techniques for Juveniles
3. Development of Screening Criteria
4. Reduction of Dewatering Mortality

# Characterization of Juvenile Outmigration

- Need for passage routes and timing within the Umatilla River and FCRPS dams
- Utilize full duplex PIT tags and receivers
- Regional/basin-wide application
- Concern from tribes over lack of juvenile focused studies
- CTUIR and NOAA to implement
- Existing USBR funding and potentially BPA funding

# Develop New Sampling Techniques for Juveniles

- Need for timing and passage of outmigrating juveniles
- Develop new sampling techniques for juvenile lamprey
- Regional/basin-wide application
- Concern from tribes over lack of juvenile focused studies
- CTUIR and NOAA to implement
- Potential BPA funding



# Development of Screening Criteria

- Irrigation diversions have the potential to entrain large numbers of larval/juvenile lamprey
- Determine new screening criteria for larval/juvenile from laboratory and field trials
- Regional/basin-wide application
- CTUIR, USBR, USFWS, Irrigation districts
- Existing USBR, BPA and private irrigation company funding

# Reduction of Dewatering Mortality

- Provide safe, timely and effective juvenile passage past all irrigation facilities
- Identify ways to reduce mortality of lamprey during dewatering periods and increase salvage efforts
- Regional/basin-wide application
- CTUIR, USBR, USFWS, Irrigation districts
- Existing USBR, BPA and private irrigation company funding

# RIP Completion Schedule

- Mid-Columbia RIP projects were from Umatilla HUC
- RMU to identify unfunded projects from other HUCs
- Finalize RIP by February 1, 2016 deadline