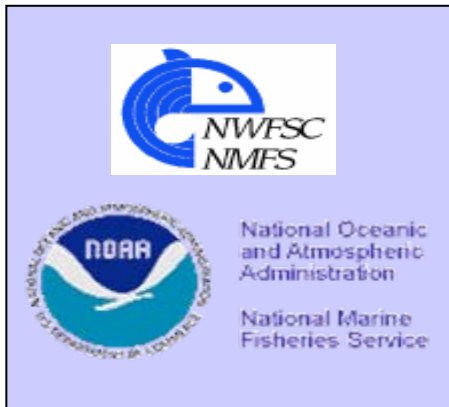


Obstacles to Spawning Migration: An Impetus for Pacific Lamprey Translocation



University of Idaho
College of Natural Resources



Lamprey Life History Triathlon

Juvenile Migration Seaward

Sub-Adult Estuarine and Marine Movements

Adult Spawning Migration

Impediments to Passage

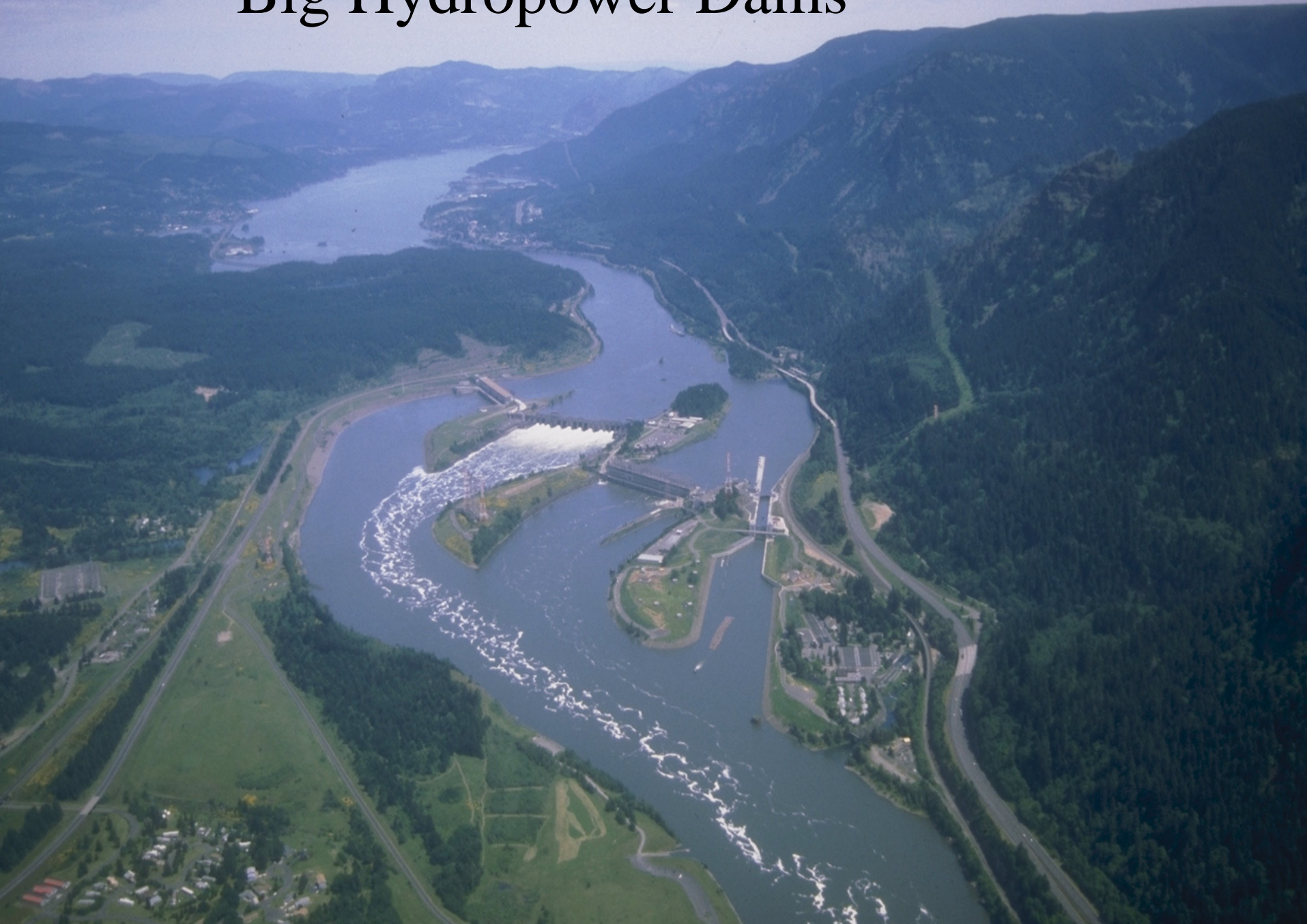
Adults (big hydropower dams)

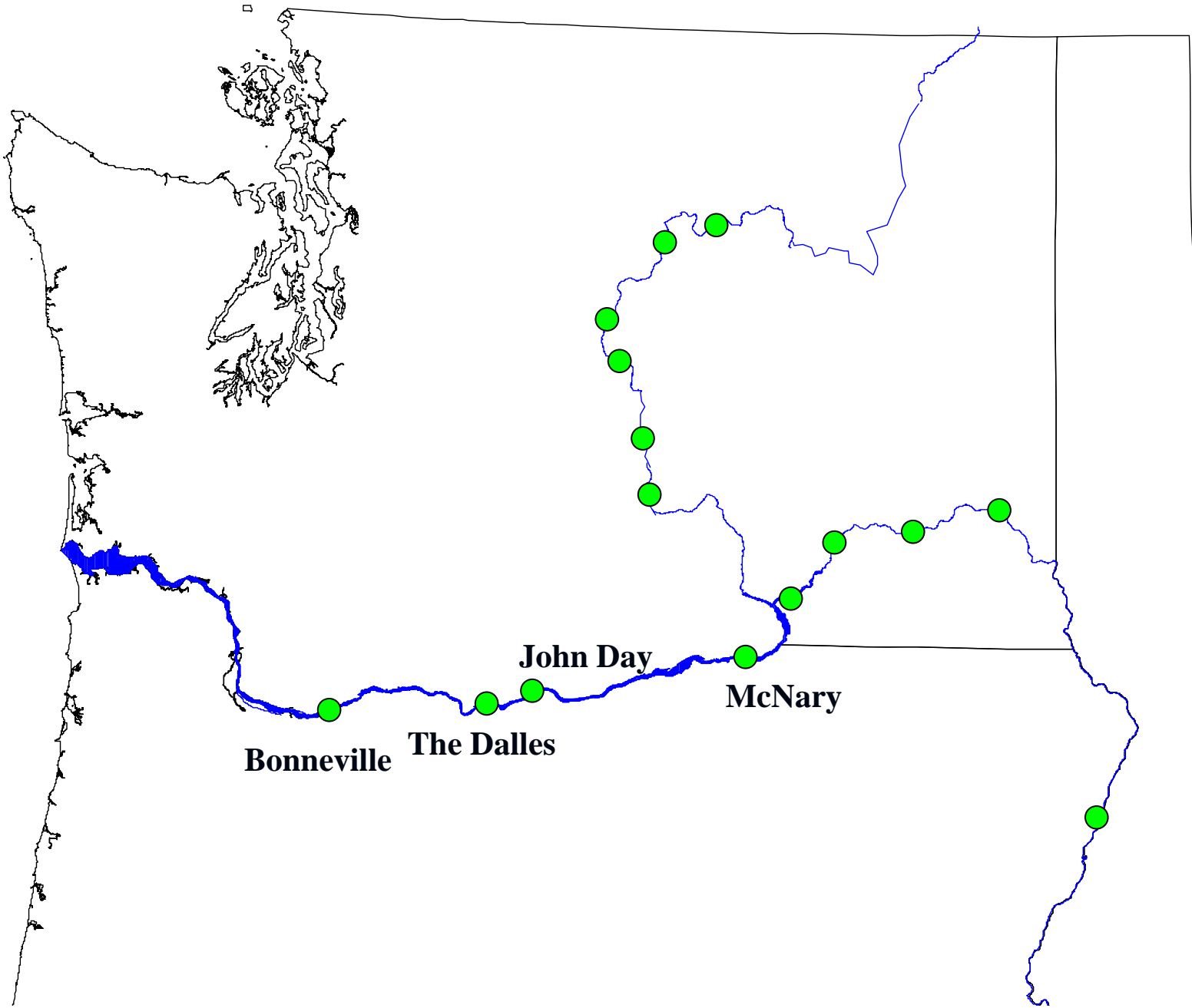
Adults (small irrigation diversion dams)

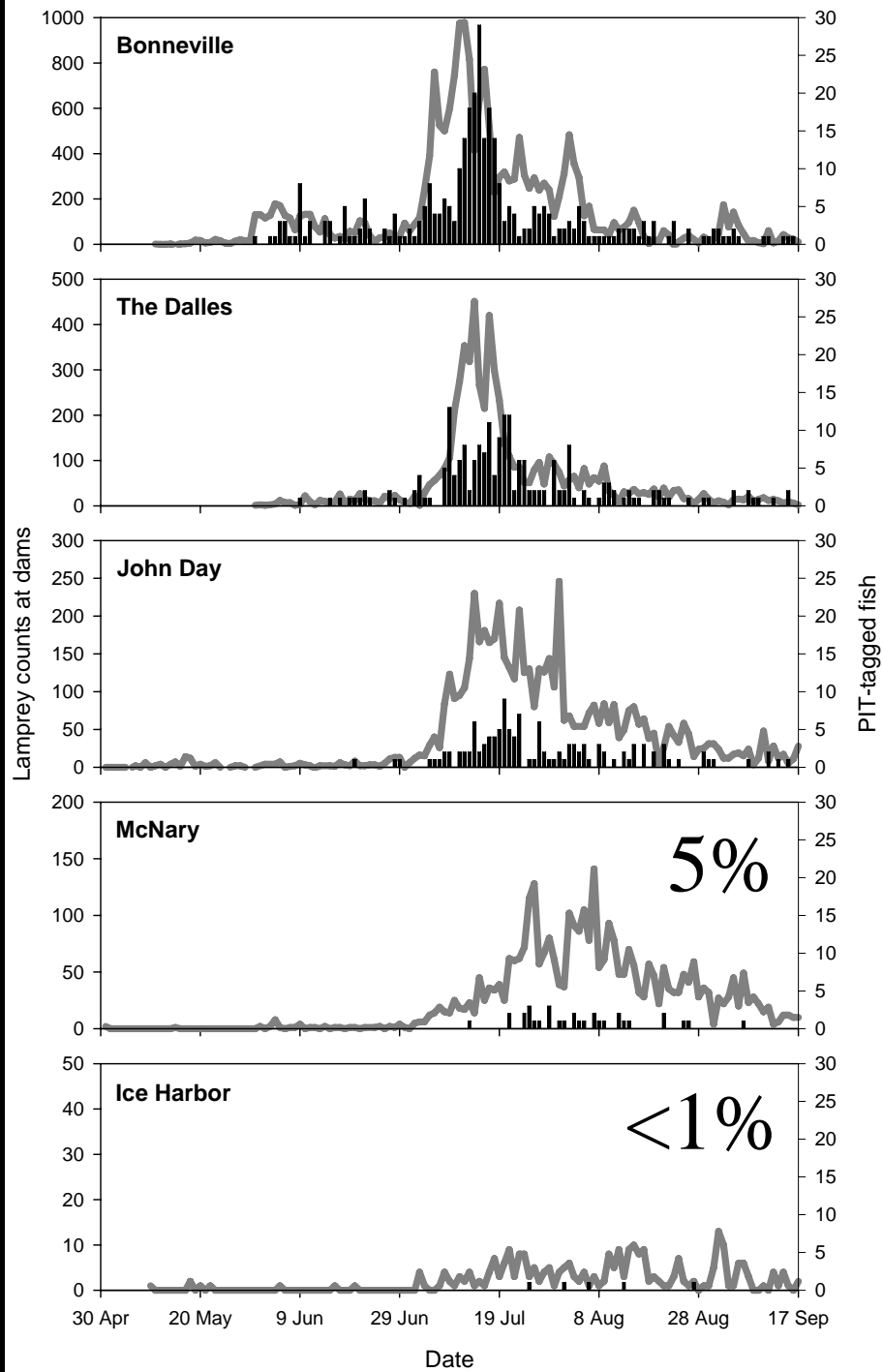
Juveniles (big hydropower dams)

Juveniles (small irrigation diversions)

Big Hydropower Dams





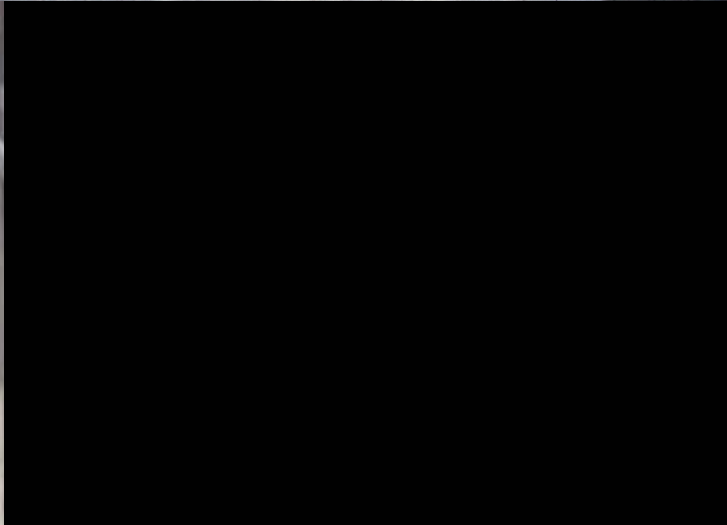


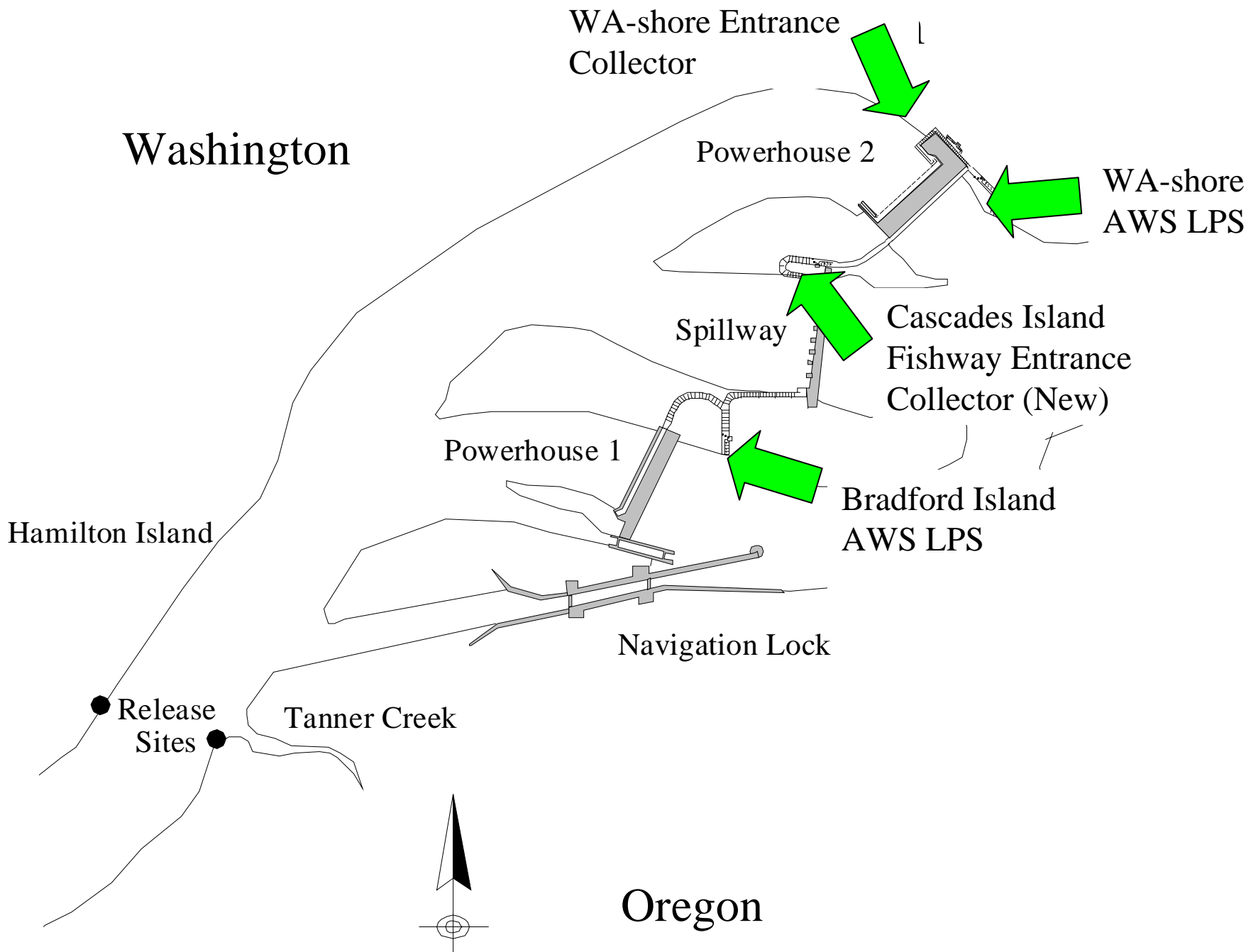














Lamprey Passage Structure (LPS)







Smaller Dams







Columbia River

McNary Dam

Umatilla

Rkm 5.0

Three Mile Falls Dam Rkm 6.0

Rkm 8.0



Dam

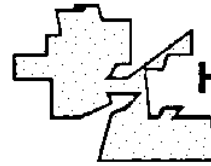


Release location

Boyd's Diversion Rkm 16.1

Rkm 22.0

Maxwell Diversion Rkm 24.5



Hermiston

Dillon Diversion Rkm 39.6

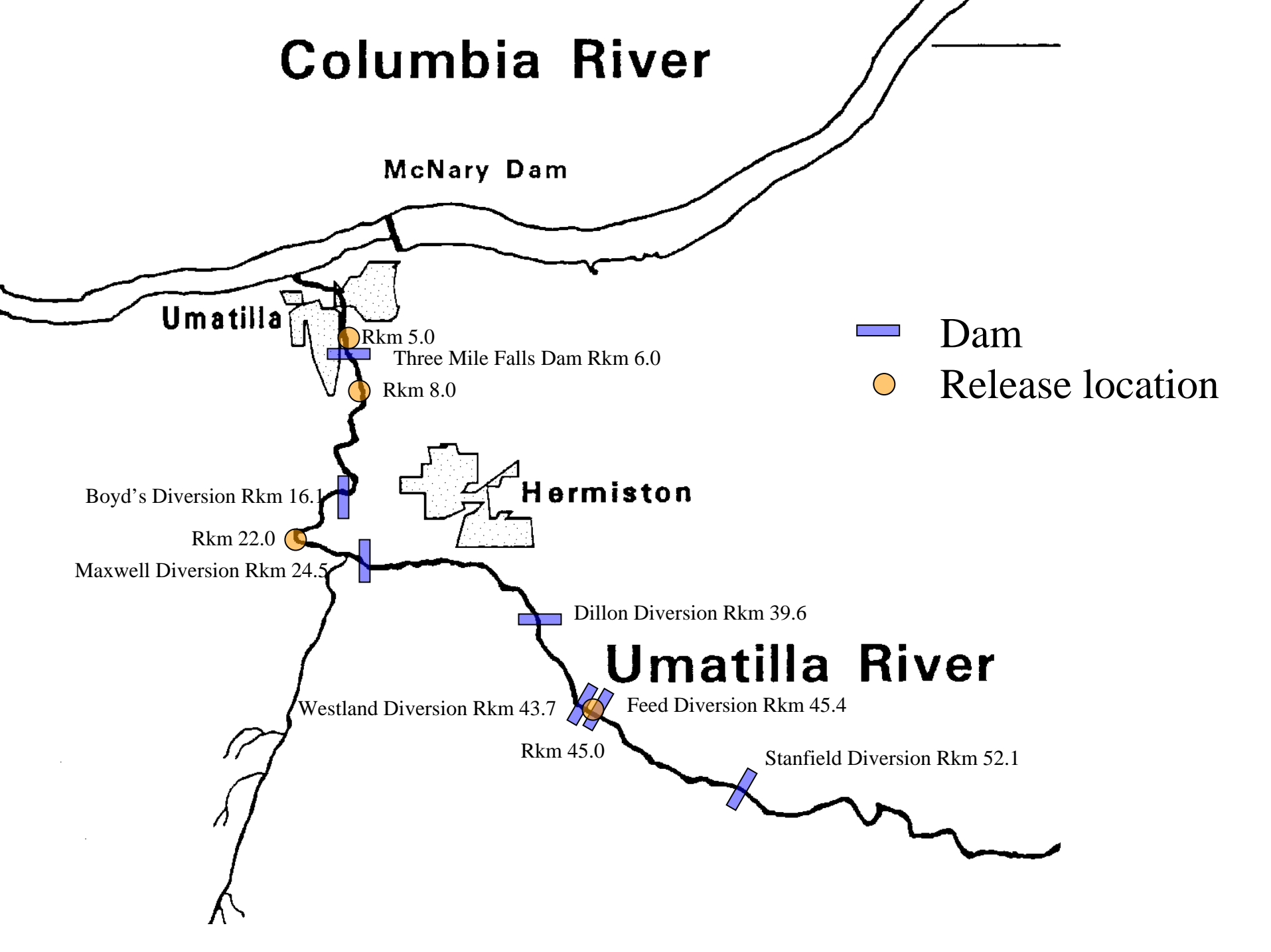
Umatilla River

Westland Diversion Rkm 43.7

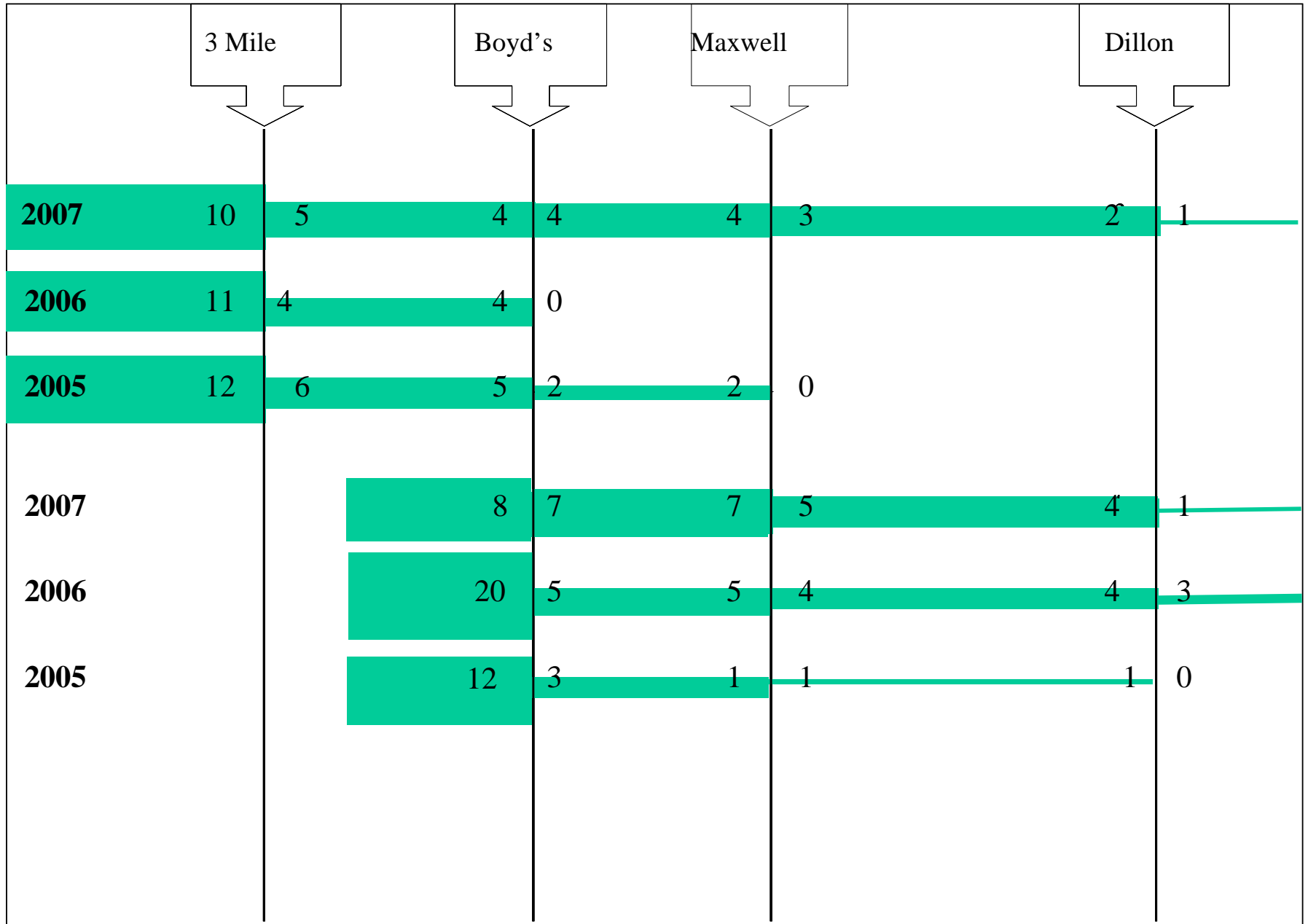
Feed Diversion Rkm 45.4

Rkm 45.0

Stanfield Diversion Rkm 52.1



Spawning-phase Adult Pacific Lamprey



Migratory-phase Adult Pacific Lamprey

3 Mile

Boyd's

Maxwell

Dillon

2008 6 3 2 1 1 1 1 0

2006 9 2 2 2 2 1 1 0

2005 9 1 1 1 1 1 1 0

2008 7 5 4 4 0 0

2006 9 4 4 4 4 0

2008 3 2 1 0

2006 7 7 7 0



Boyd's Diversion Dam Breached

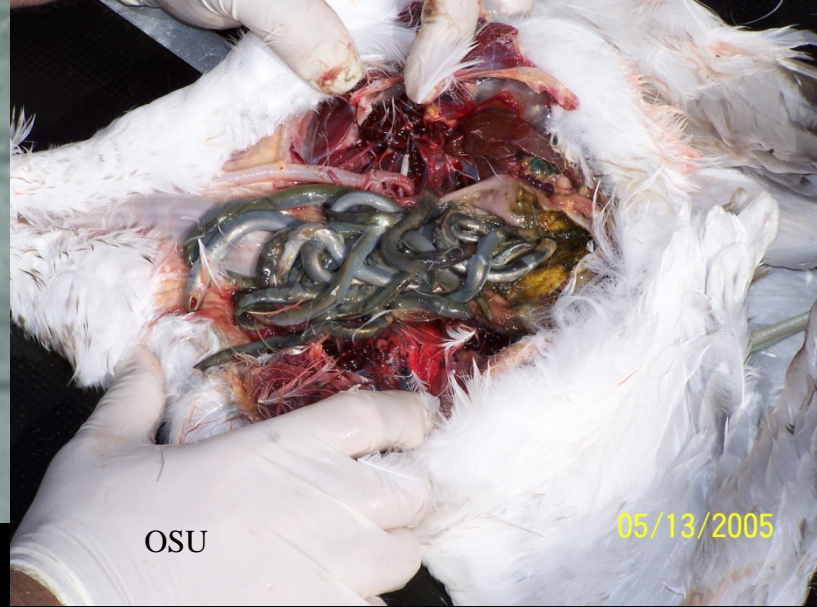








USACE-FFU



OSU

05/13/2005



Pikeminnow gut contents (ODFW)



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