

Early Progress on Fifteenmile Creek and Hood River Lamprey Projects

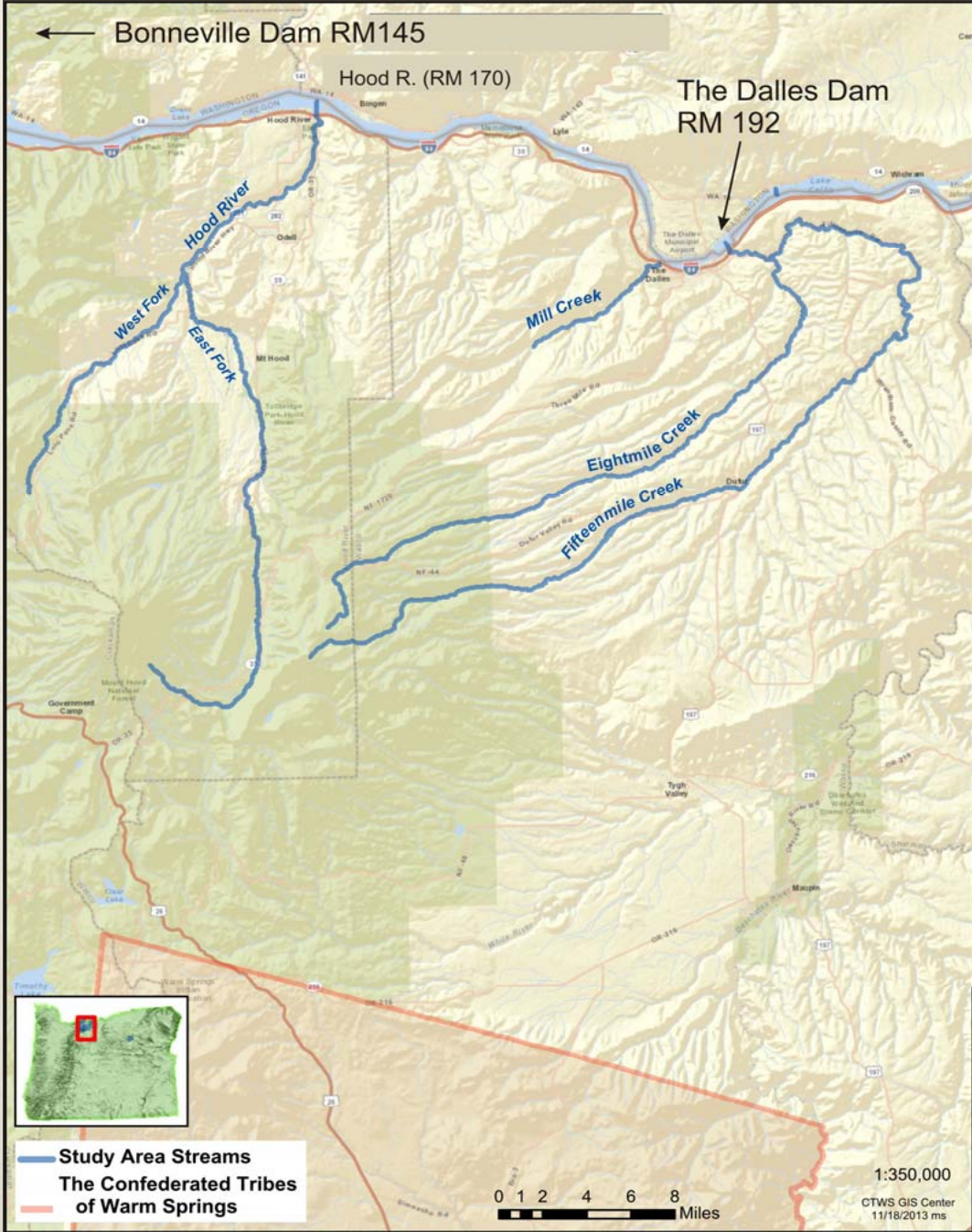
Andrew Wildbill
Confederated Tribes of the Warm Springs



Overview

- * Hood River
 - * Recolonization Since Dam Removal
 - * Larval Population Monitoring
 - * Adult Population Monitoring
- * Fifteenmile Creek
 - * Adult and Larval Monitoring

Study Area



Hood River & 15 mile- Methods

Larval Abundance & Distribution

- Electrofishing Surveys
- Abundance Estimate

14 Operating Half Duplex Sites (HDX)

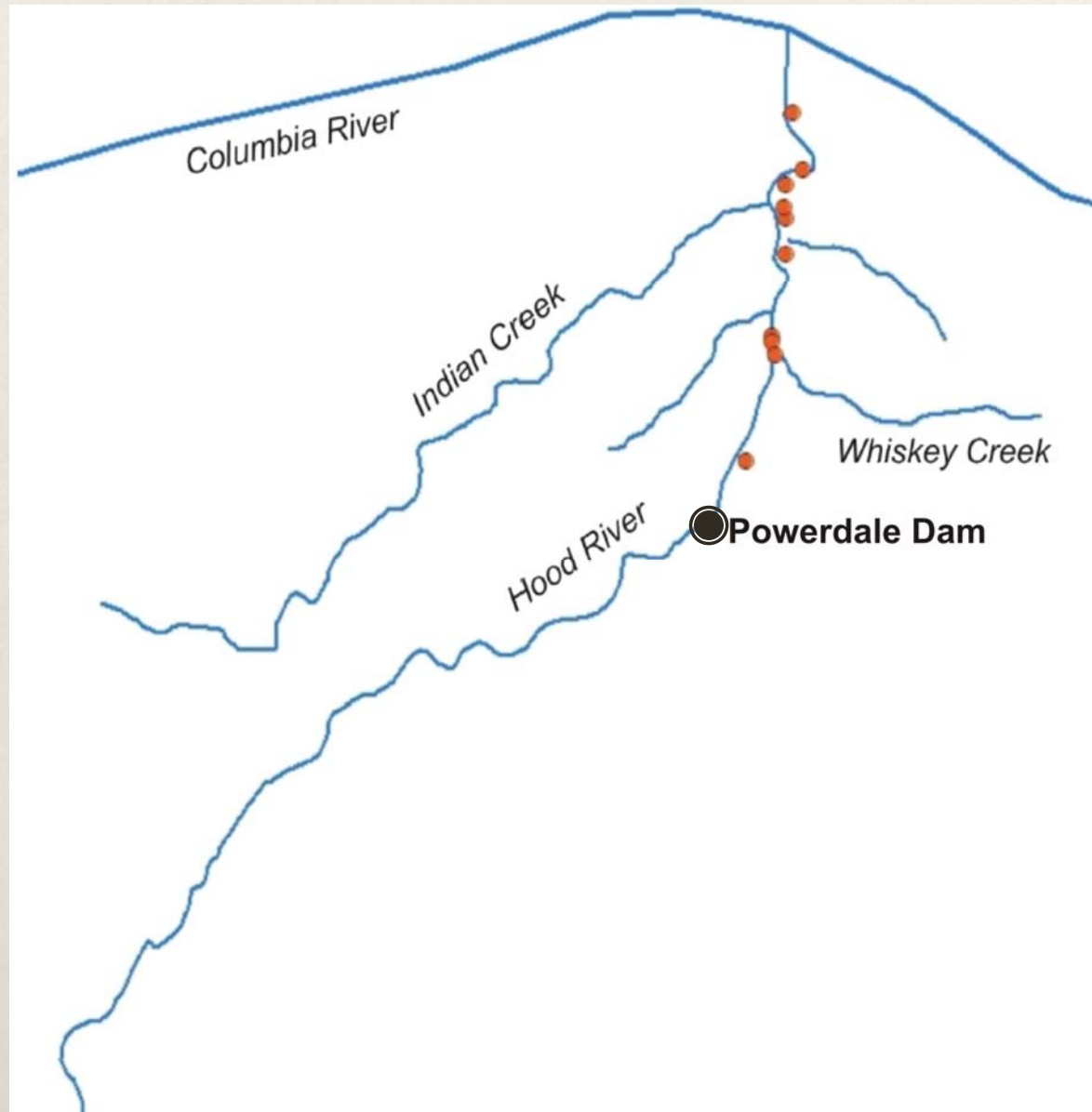
- Monitor Fish Movement

Creel/ Night Monitor 15mi

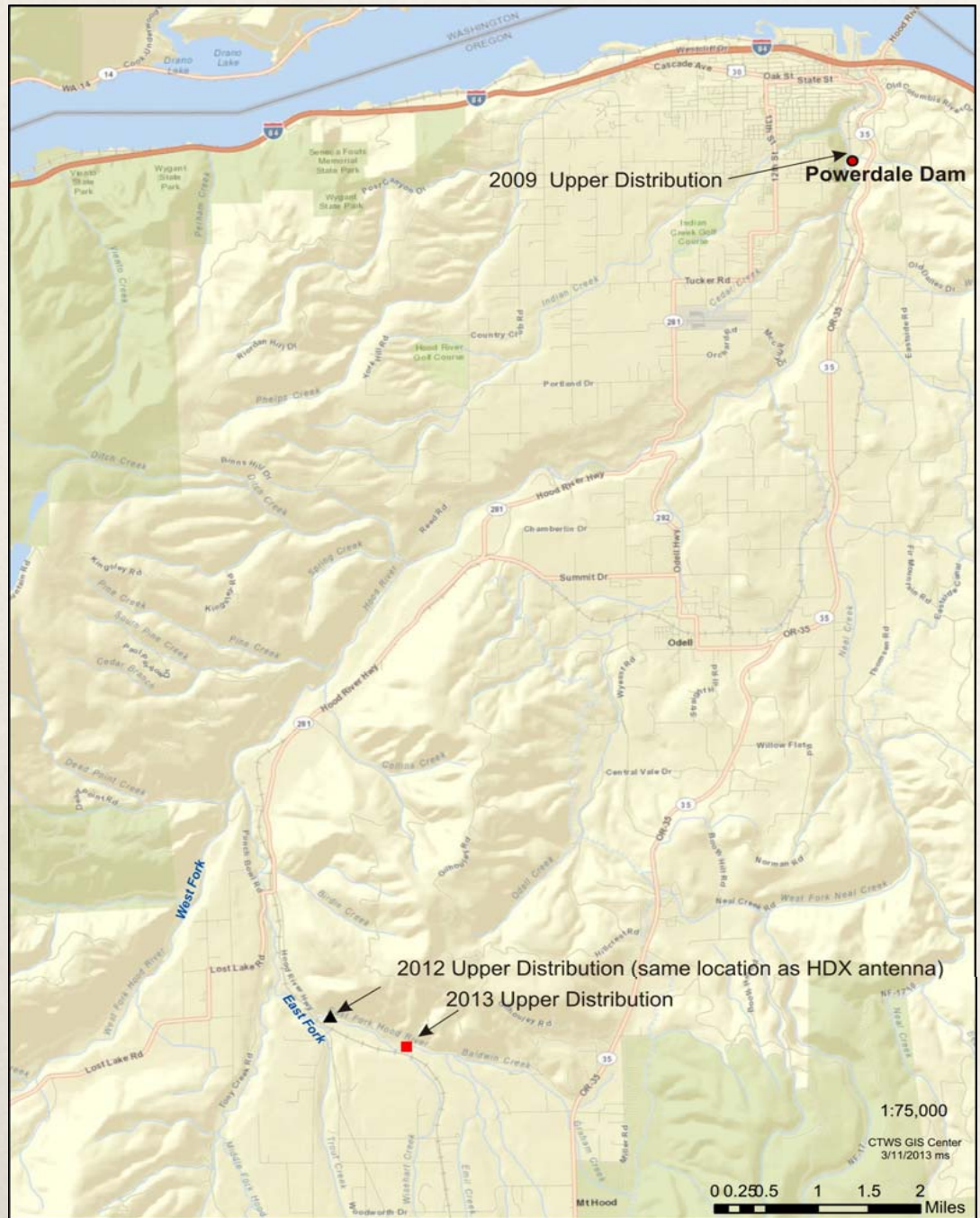
Powerdale Dam 1923-2010



Hood River Subbasin



Larval Distribution



HDX Install January 2013





COLUMBIA RIVER

Hood River

HDX

Town of Hood River

0 0.1 0.2 0.3 0.4 Kilometers

4/23/2013
CTWS GIS ms

E. Fork and Tucker Park HDX Sites

E. Fork installed May

-2 Detections 2013

-0 in 2014

Tucker Park installed Oct

-1 Detection 2013

-0 Detection 2014

Total Detections at HDX Sites = 25 BON Fish

-18 in 2013

-7 in 2014

Hood River- Results

2012-2014

Pacific lamprey natural recolonization <2 years

- Distribution increased 2013 ~1mi & 2014 ~3mi
- First verified adult 2012 (ODFW)
- 13 adults captured by ODFW in 2014
- Fish detections at HDX sites (UI)
 - 18 BON Fish(HDX important for info – technology important for this research)

HDX Interrogation Sites

- 15Mi (7)
- 8Mi (3)
- Mill (1)

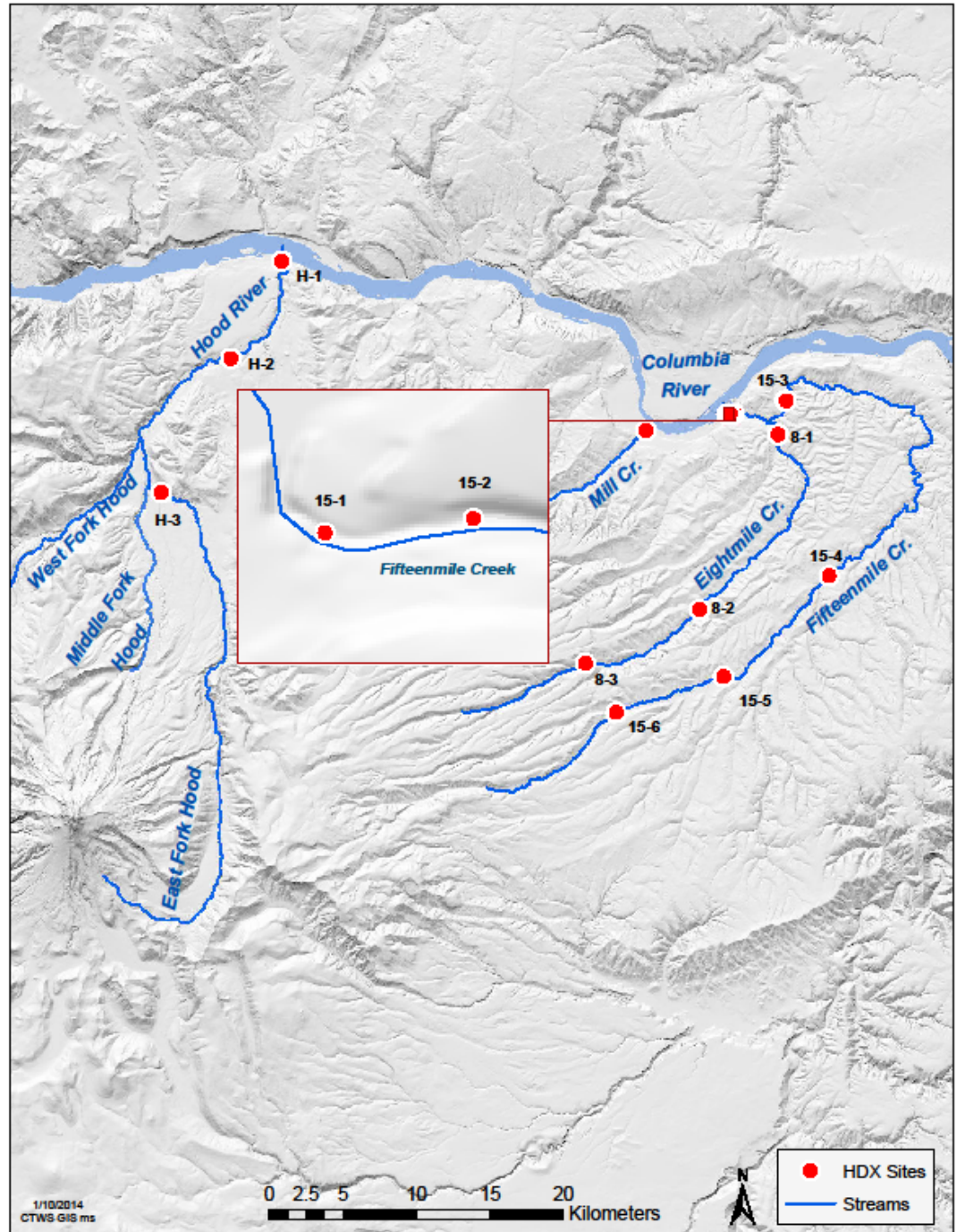
2011-2014

637 lamprey used for M-R
– Recap 49%

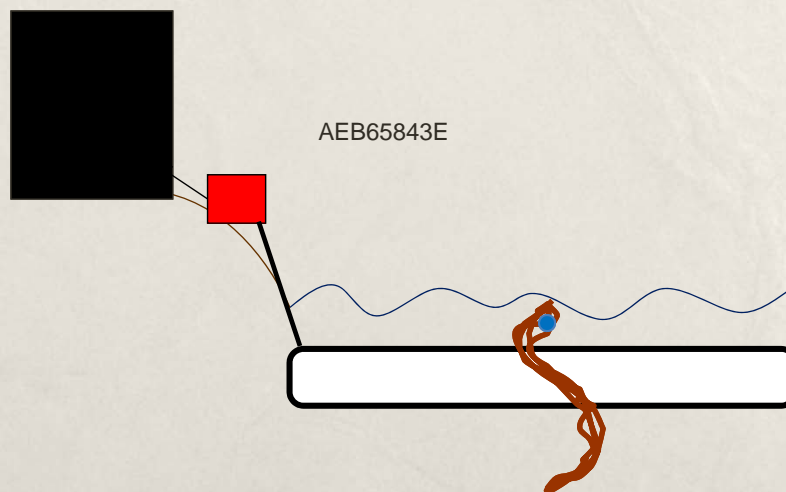
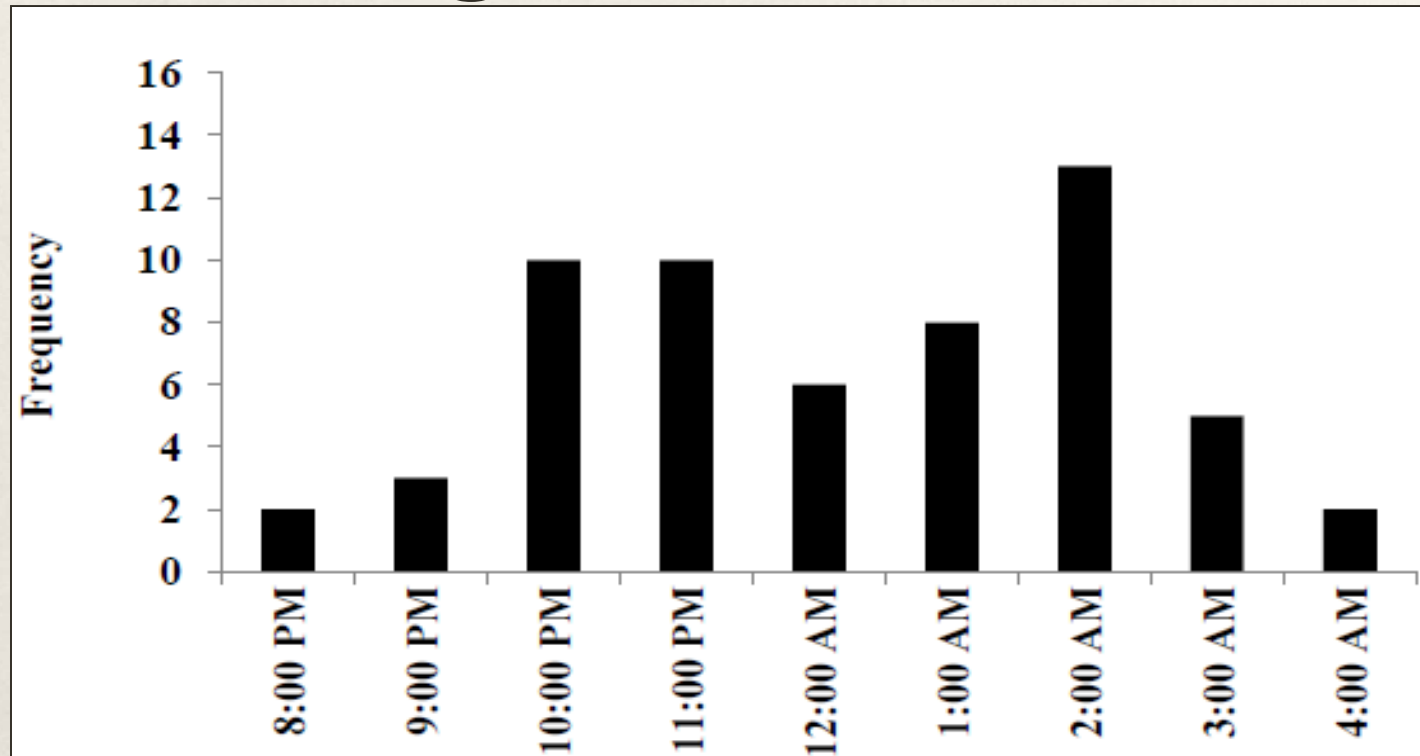
Detection Efficiency >91% at
most

11 fish detected 2 years old

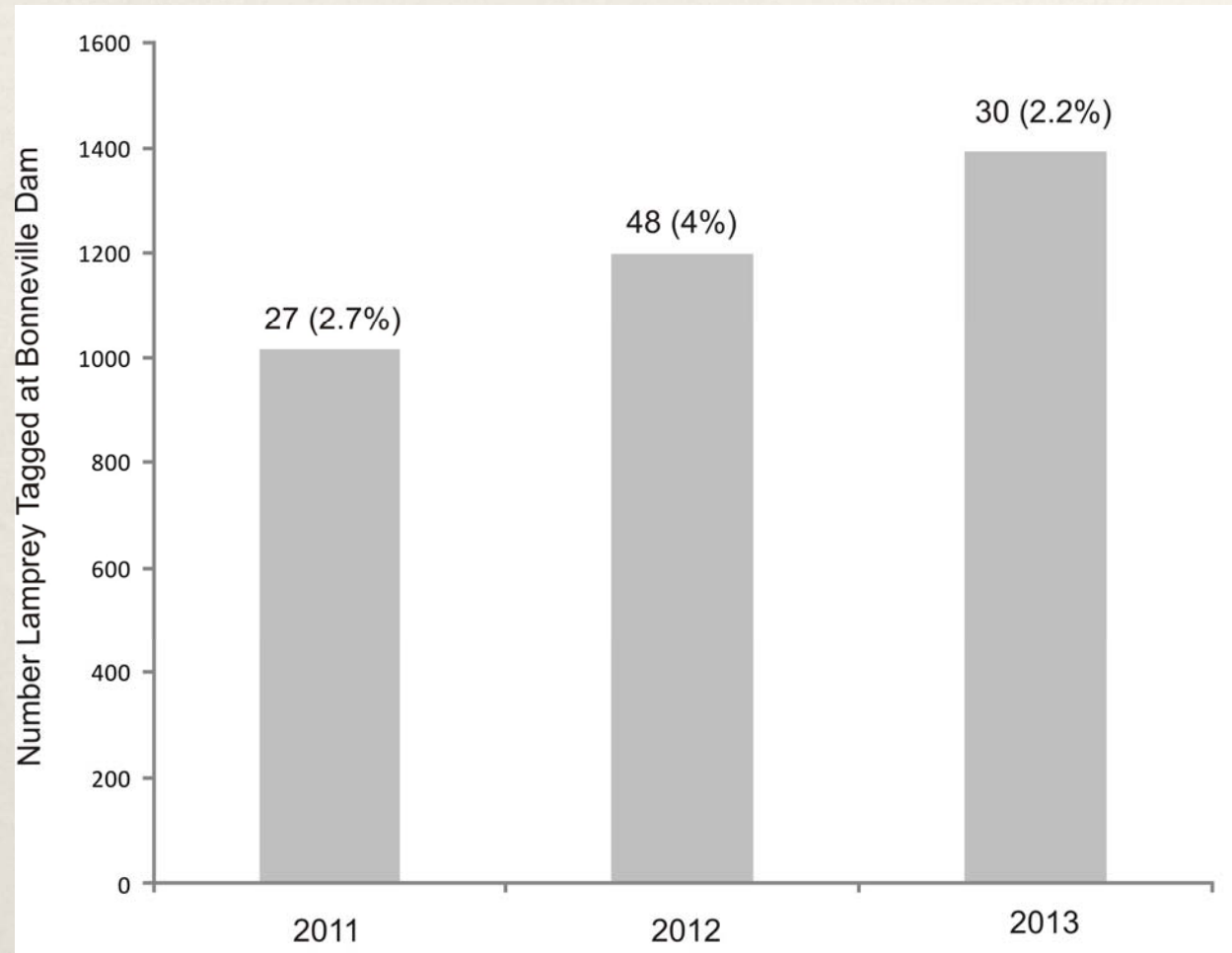
Back outs -TDA and Mill



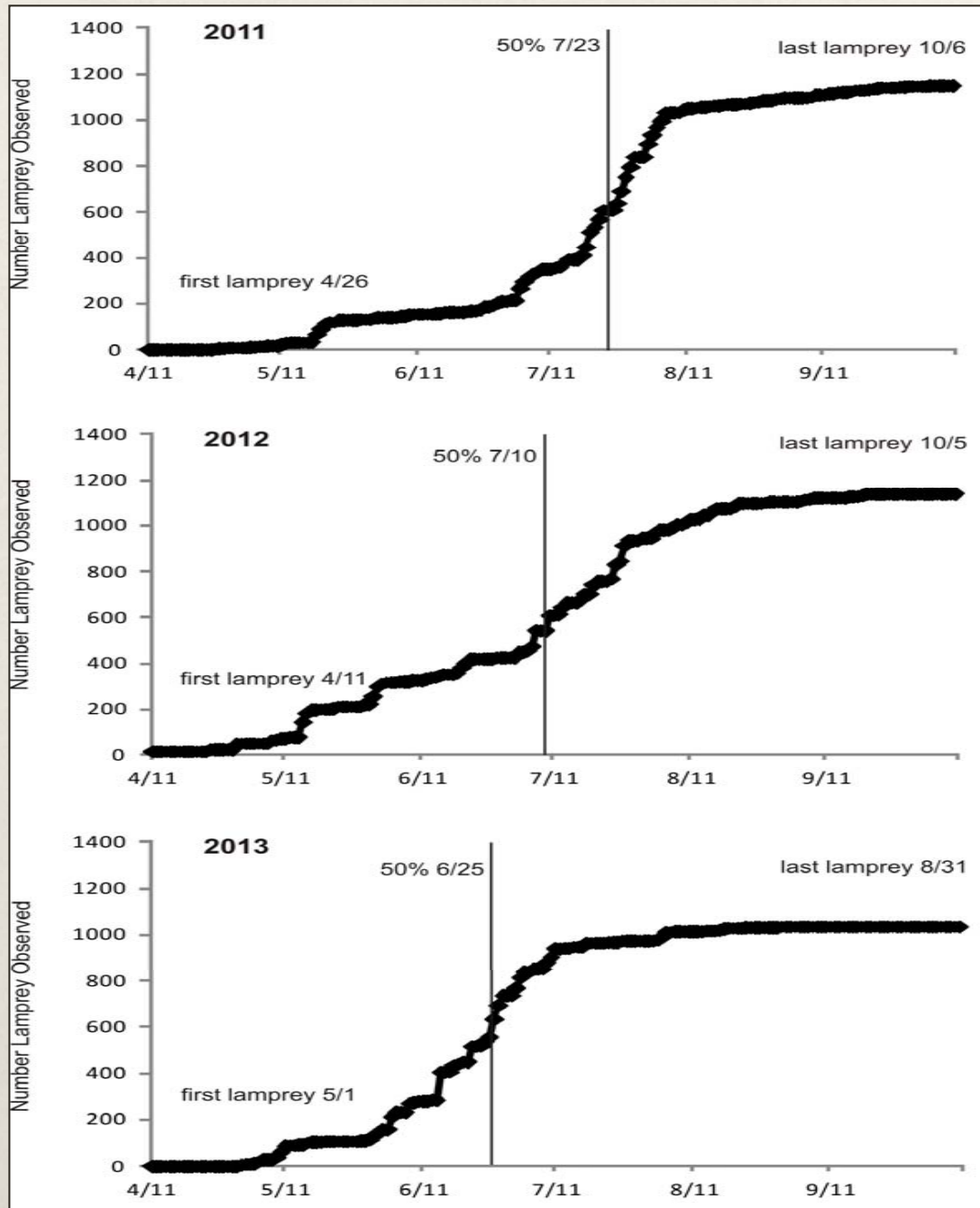
HDX Interrogation Sites

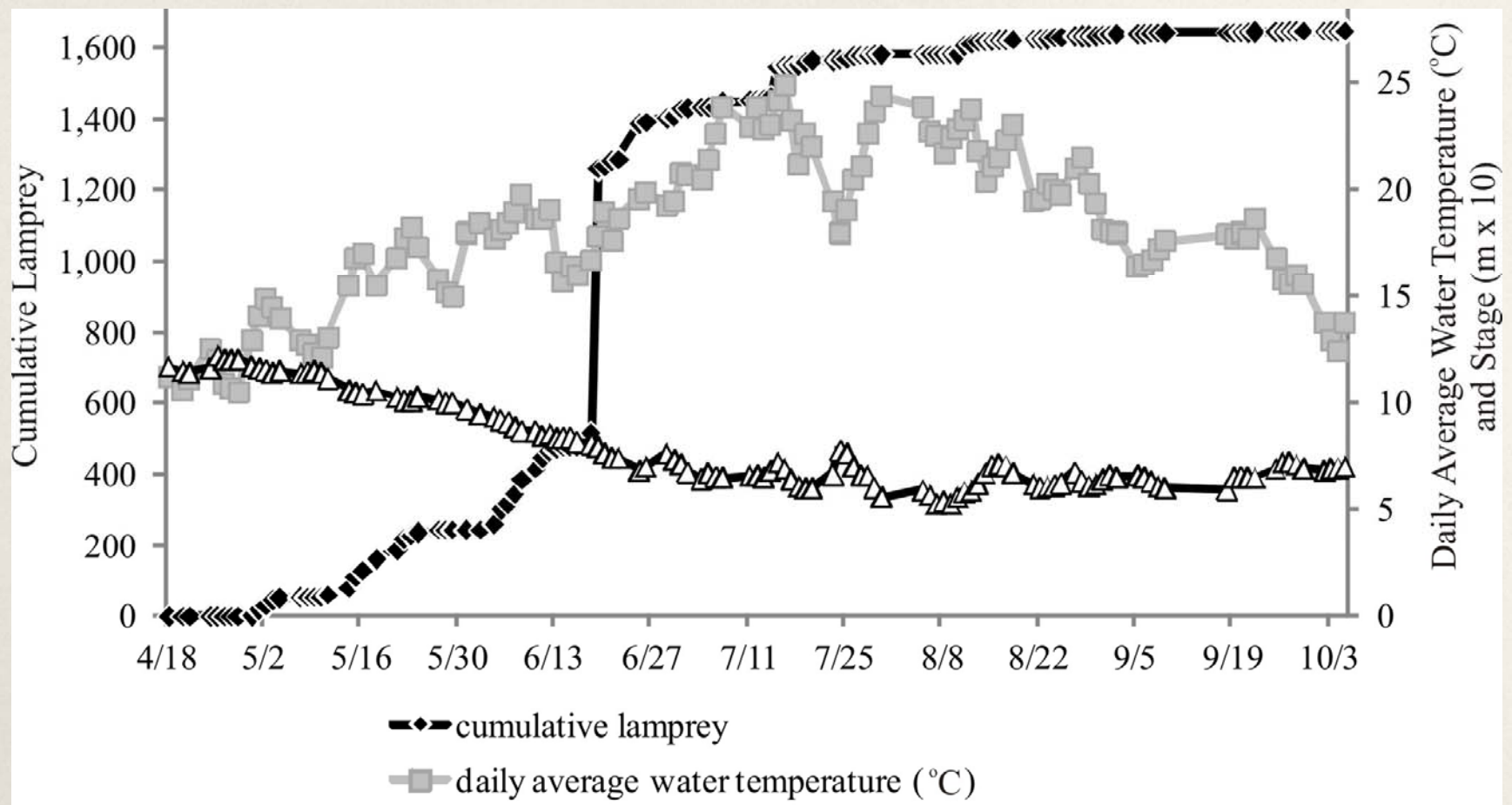


15Mi Detections 2011-2013



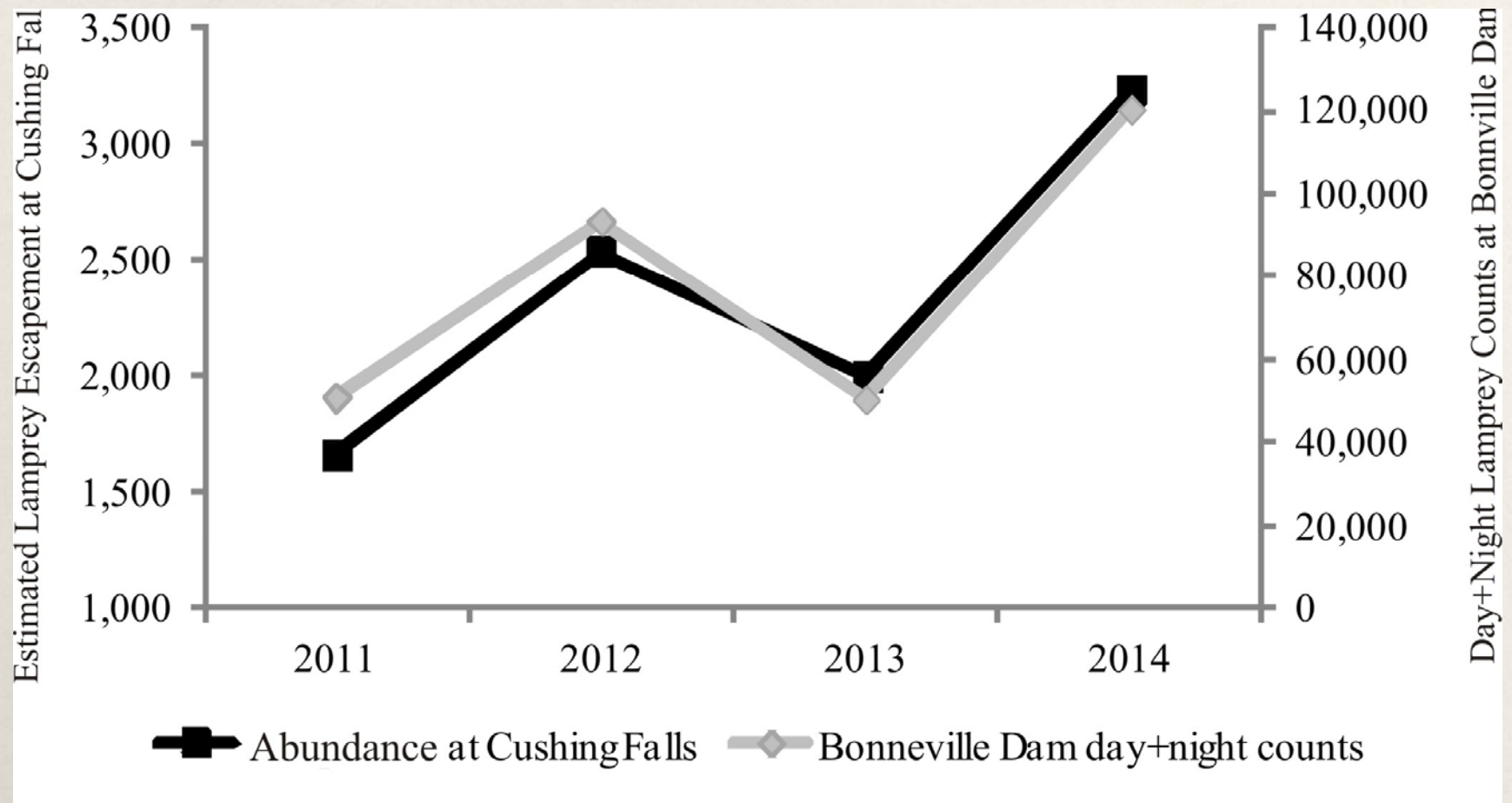
Overall BON tagged 5,459
Total detections in 15Mi 157
2014 detections 54 (2.9%)



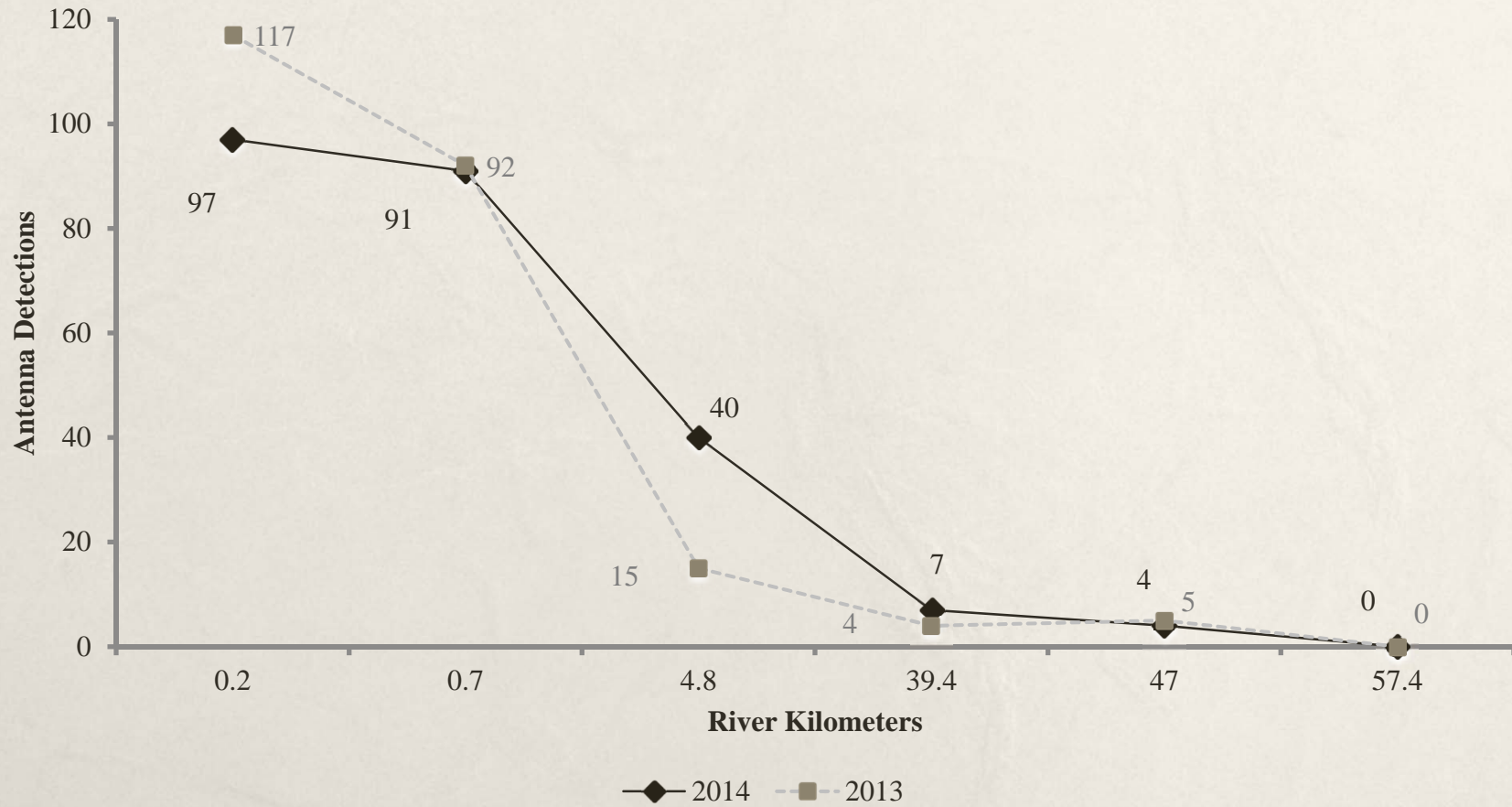


2014 Cumulative lamprey count

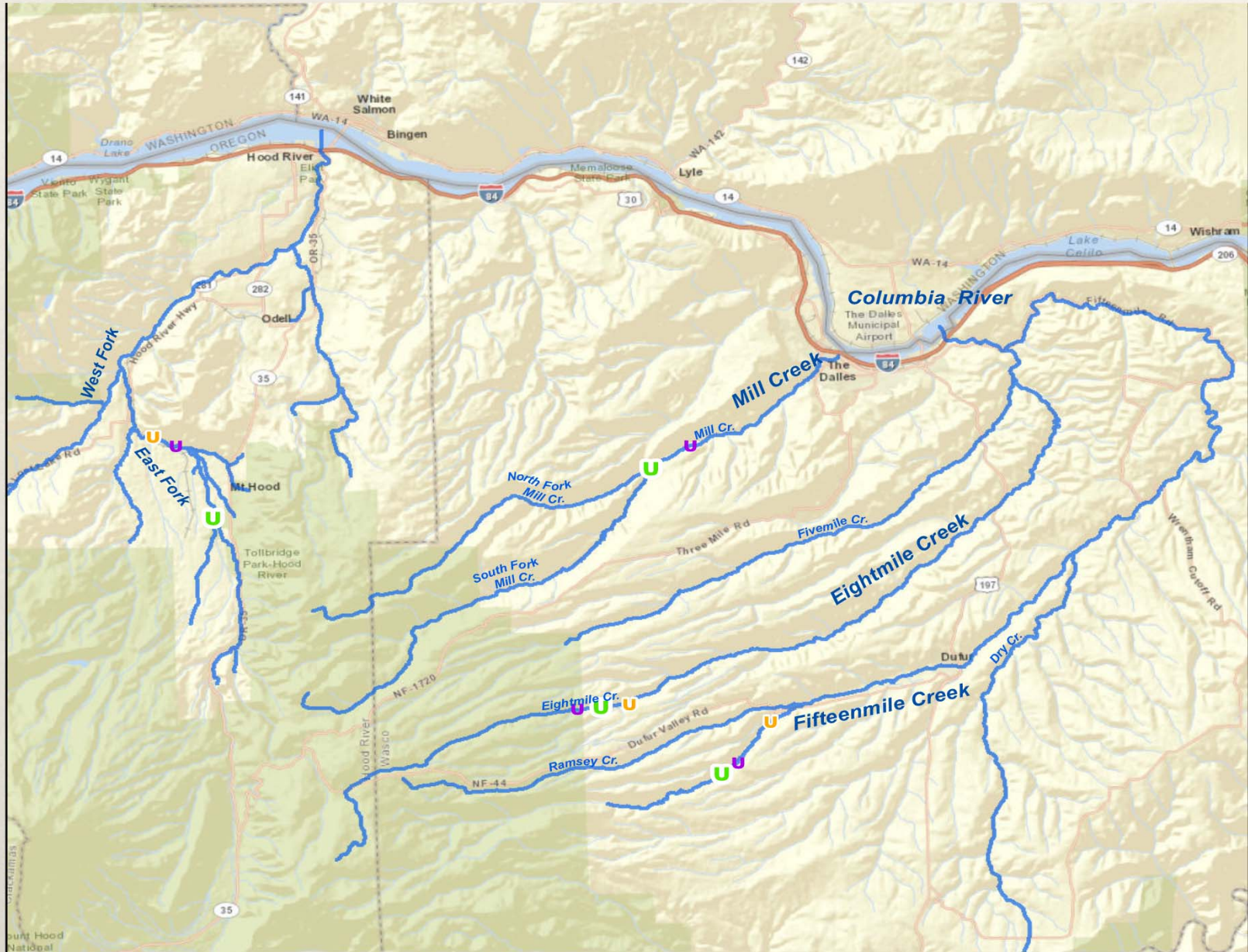
Fifteenmile Abundance and BON counts 2011-2014



Individual Detections 2013-2014



Larval Distribution 2012-2014



Fifteenmile-Results

Adult Population

- * 2011- 1,589 Insp. 1,149
- * 2012- 1,928 Insp. 1,138
- * 2013- 2,363 Insp. 1,034
- * 2014- 2,646 Insp. 1,645

Larval Distribution

Research partners - acknowledgements

- ✦ Funded by BPA Columbia River Accords
- ✦ Oregon Department of Fish and Wildlife
- ✦ Farmer's Irrigation District
- ✦ U.S. Forest Service, Hood River District
- ✦ Oregon Water Resources Department
- ✦ Fifteenmile Watershed Council
- ✦ Hood River Watershed Council
- ✦ Private land owners
- ✦ CRITFC Hagerman Lab