

PIT Detection Barge: new approach for challenging monitoring locations

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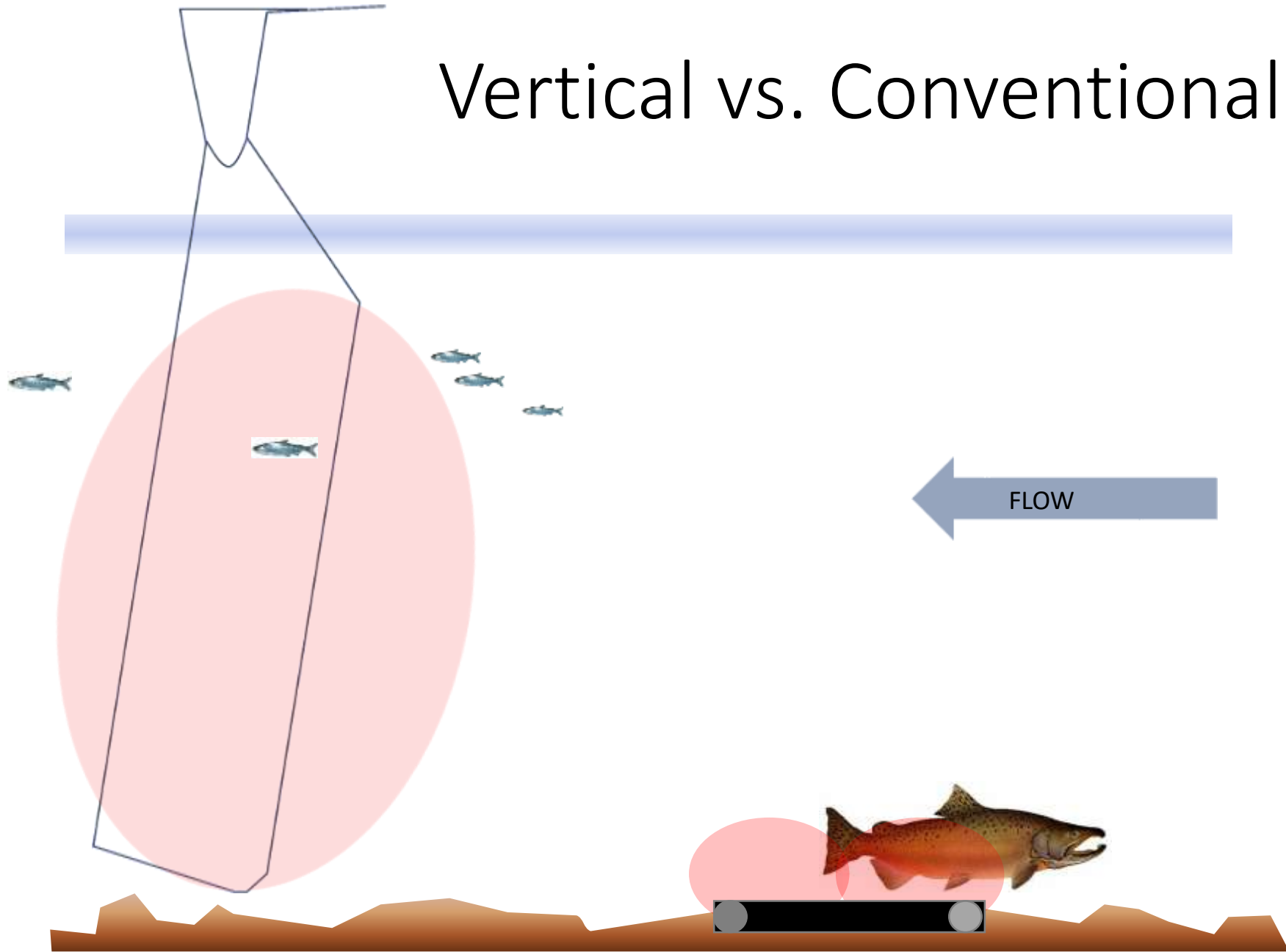


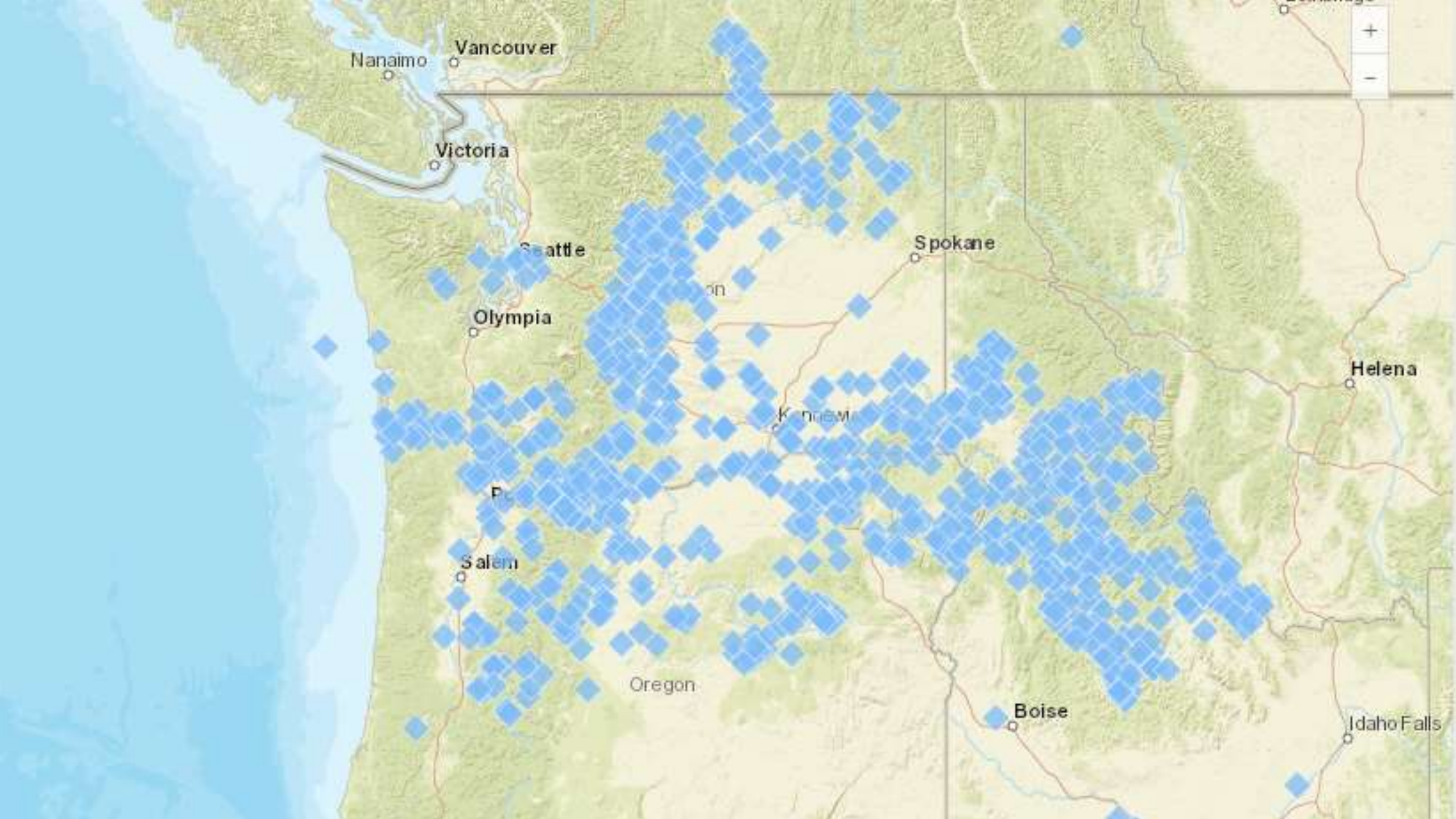
Bremerton, Washington

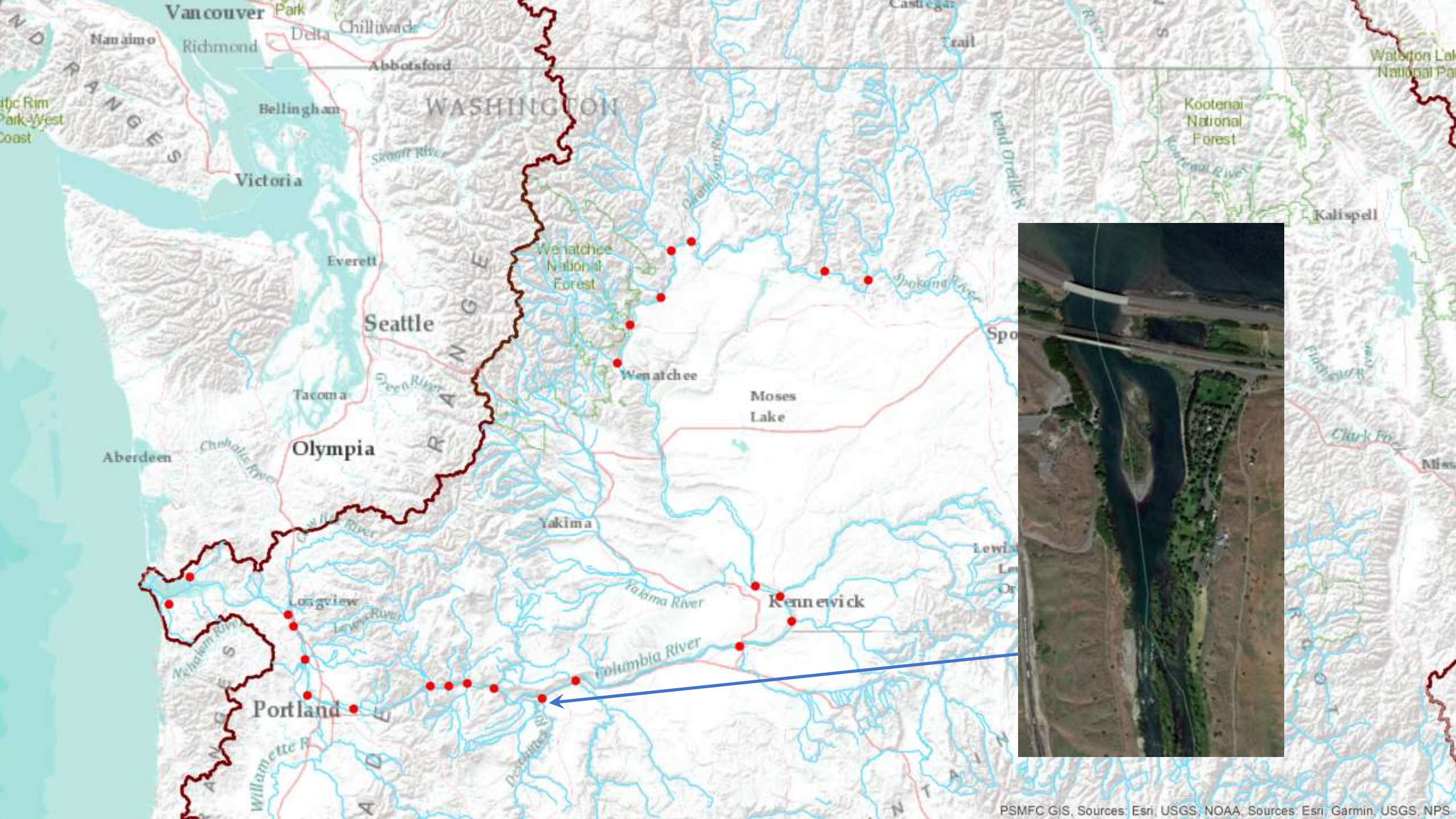
April 8-11, 2019



Vertical vs. Conventional









Assembly on shore

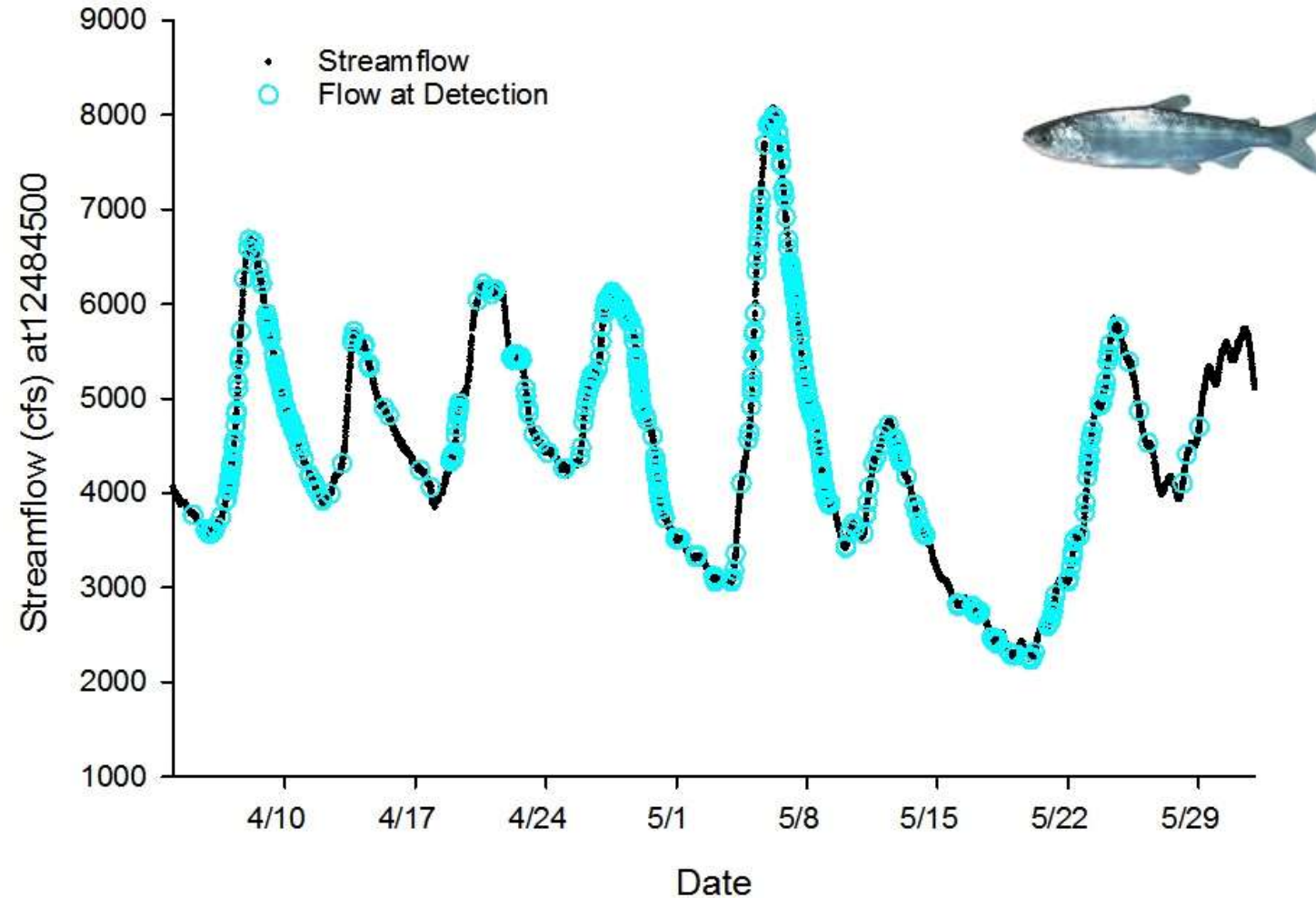
Push or pull into place



Yakima Deployment 2017



Yakima Barge Detections with Flow

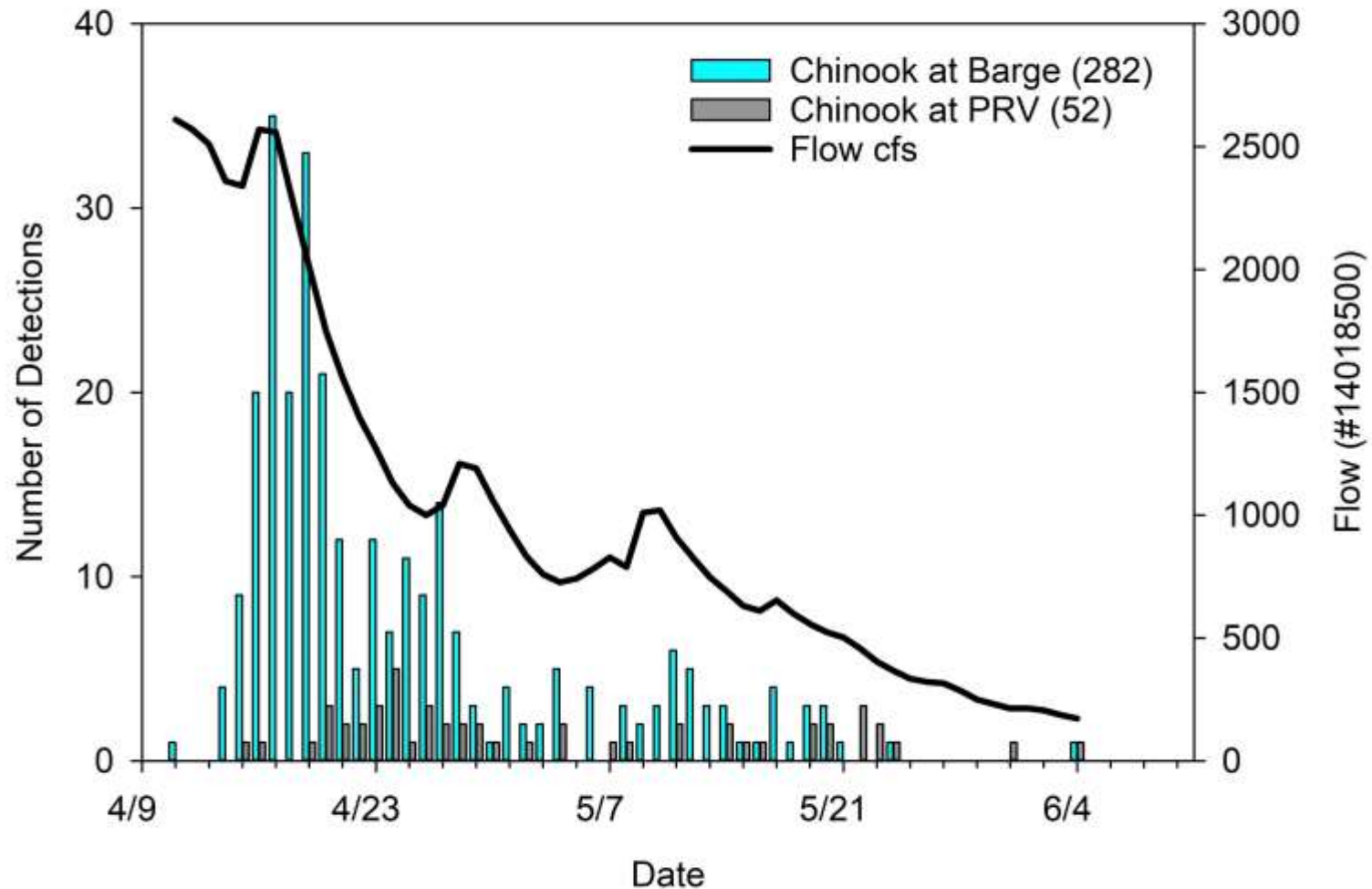


Walla Walla Deployment 2018



Chinook Detections Walla Walla River Spring 2018

Flat Plate versus Barge



Columbia Deployment 2018





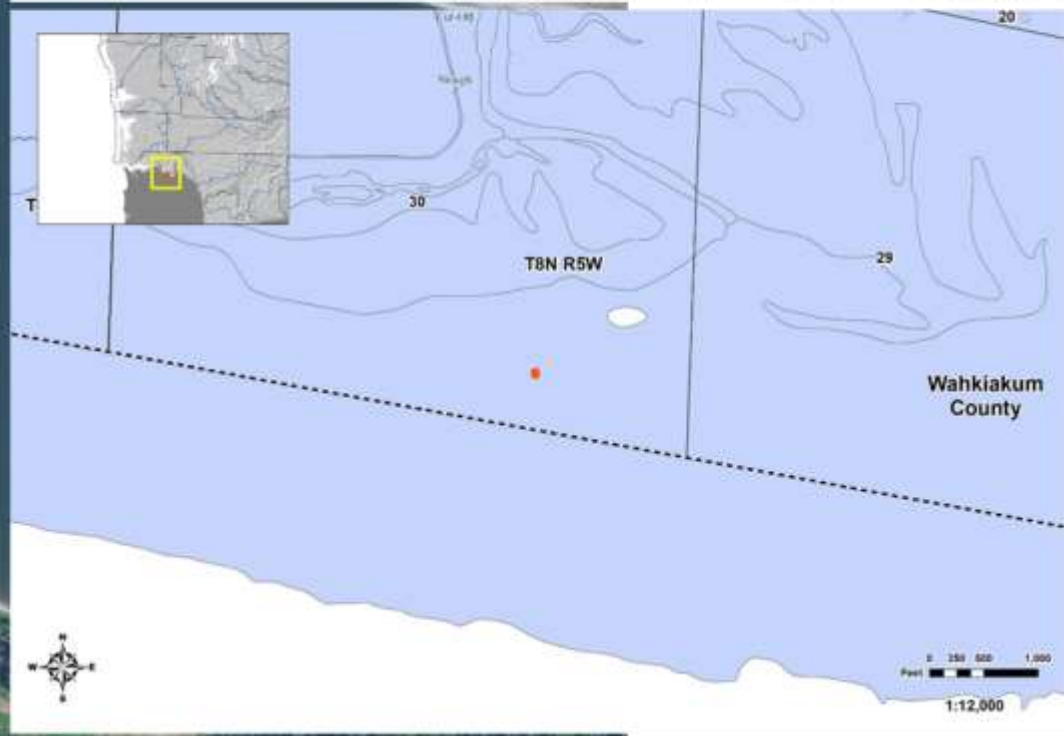
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Wahkiakum
County

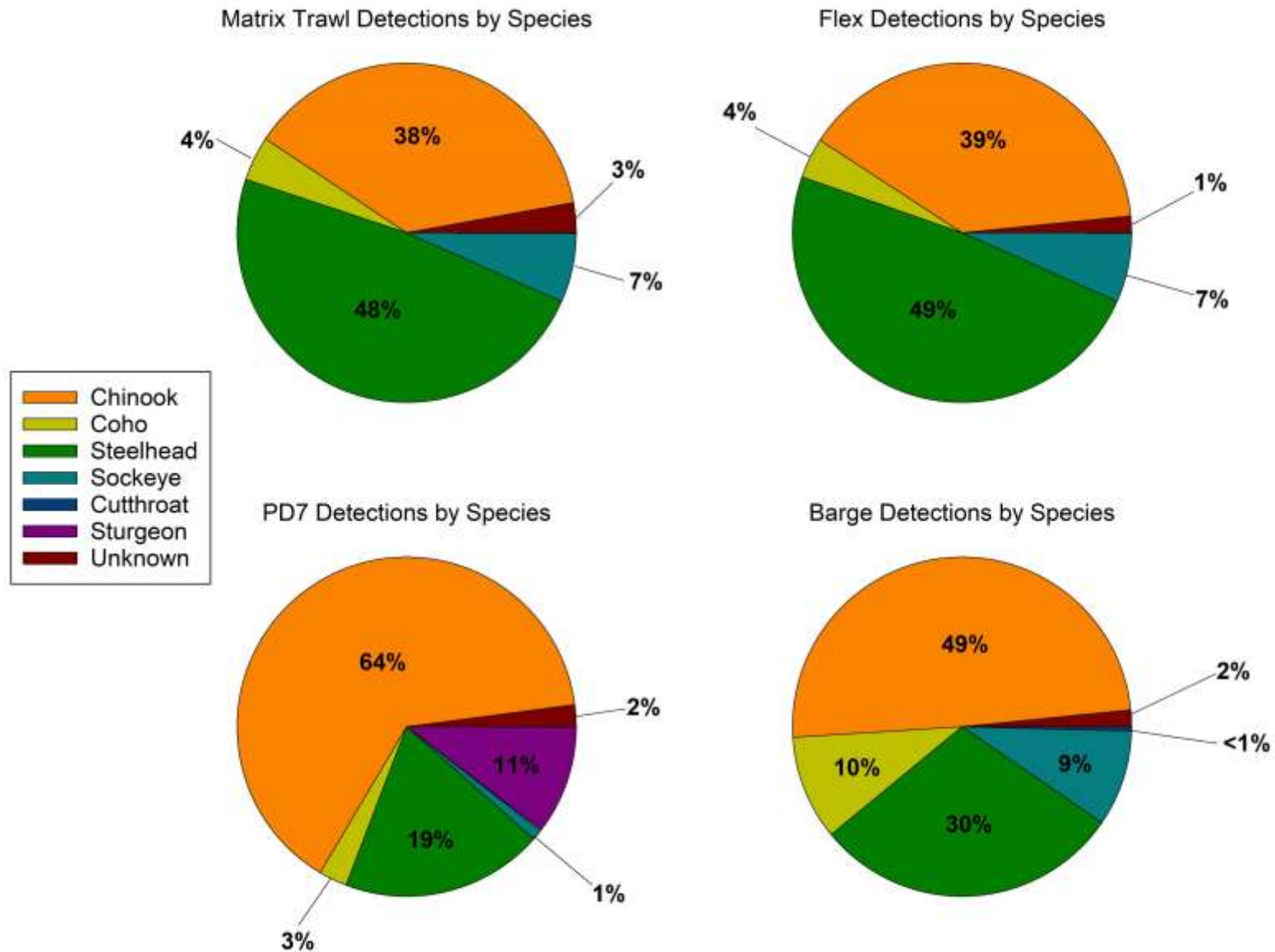


1:400



1:12,000

Species Composition: Four Sampling Methods



Summary Comparison

Barge (vertical antennas)

- Location (mobile and flexible)
- Install anytime
- Cost (comparable to +25%)
- Maintenance (down time minimal)
- Detect over all flows
- Juveniles good / adults variable

Flat Plates (horizontal antennas)

- Location (stationary and fixed)
- Install low flow only
- Cost (comparable to -25%)
- Maintenance (down time great)
- Detect narrow range of flows
- Juveniles poor / adults good

2019 Enhancements

- Bigger pontoons
- Design changes for less drag
- Longer antennas
- Automated debris clearance
- Modular (expandable for greater coverage)

