Annual Early Detection AIS Monitoring in Boundary Reservoir, WA - 2016

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Columbia River Basin Team Meeting
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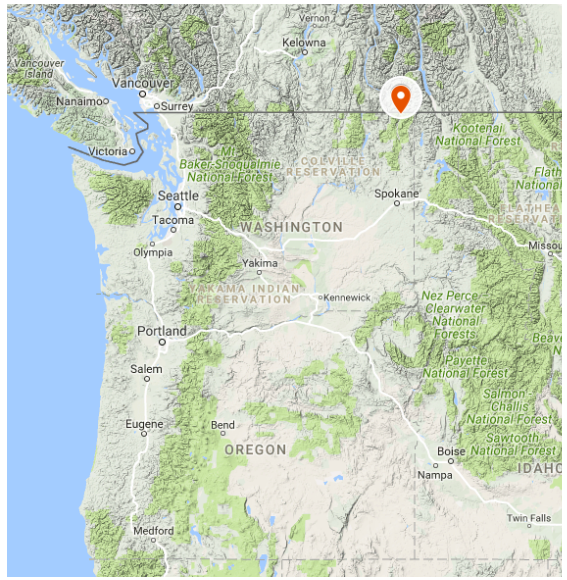
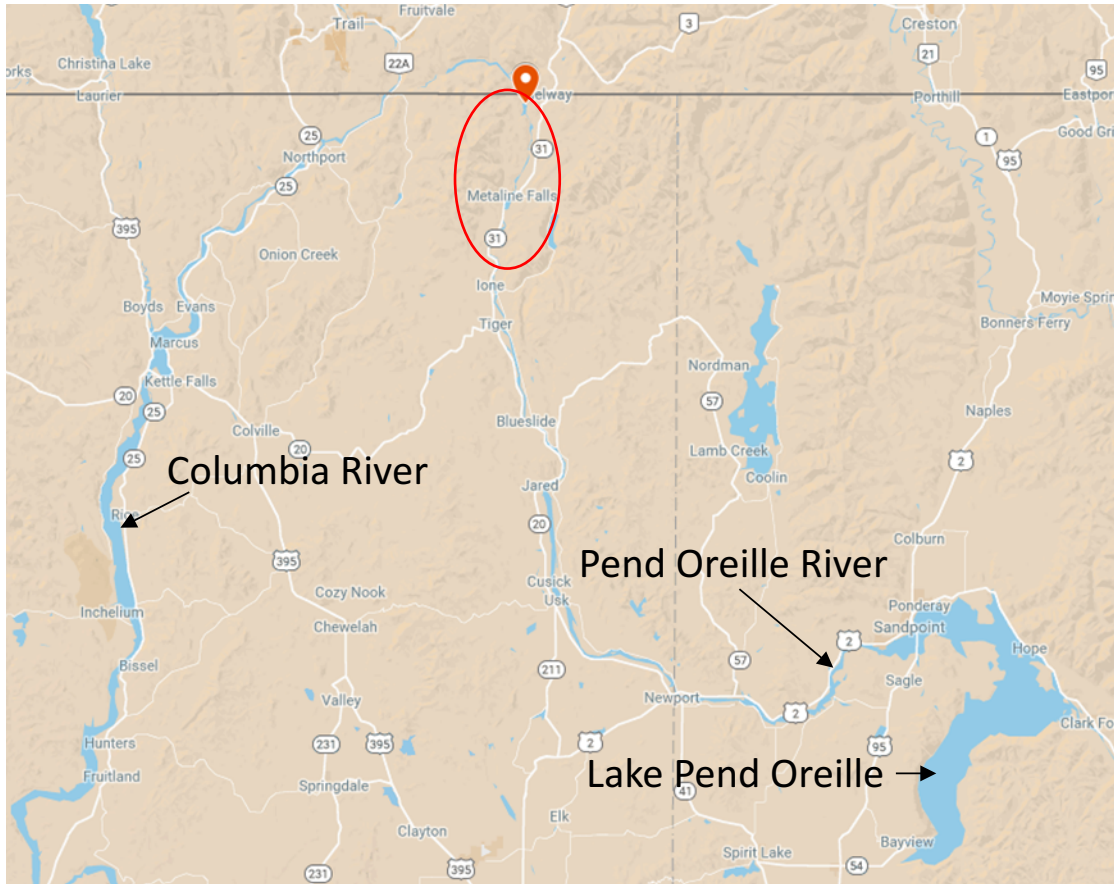
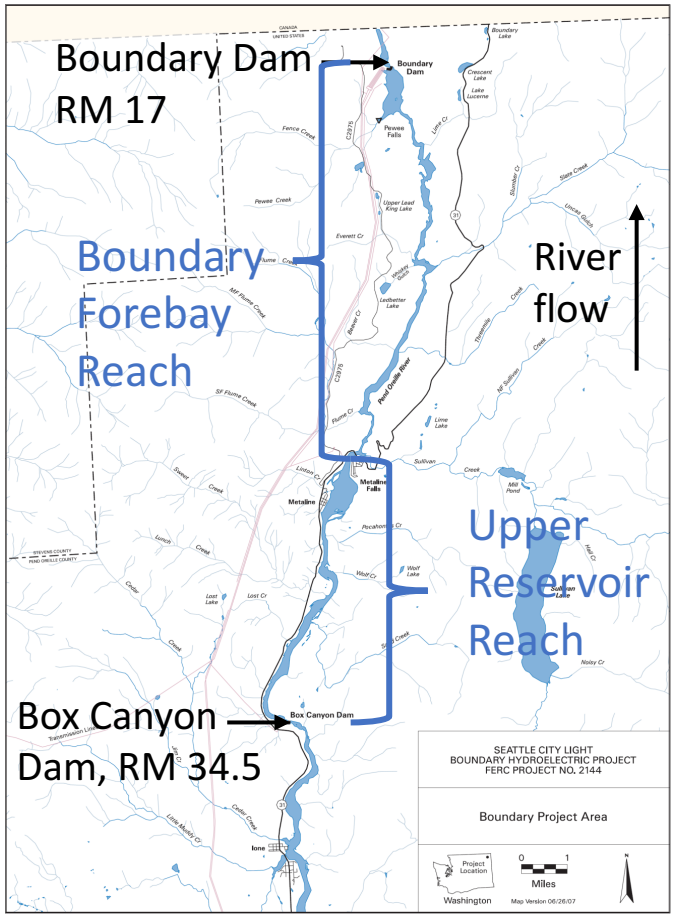
Boundary Reservoir, WA (Pend Oreille River)







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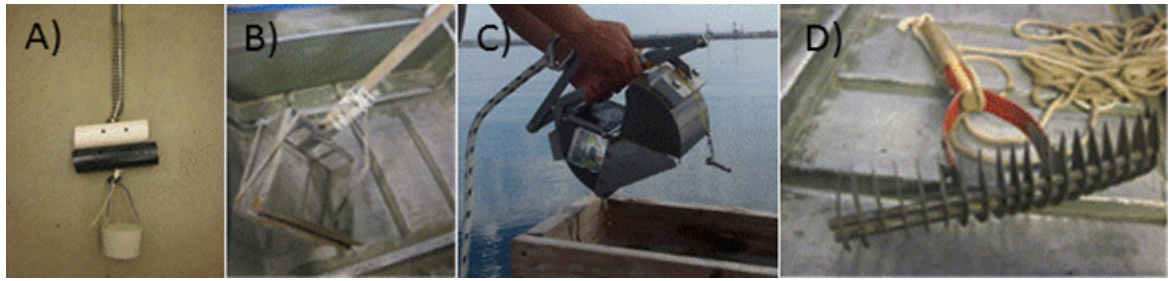
AIS sampling in Boundary Reservoir 2016

- Objective: early detection of target AIS in Boundary Reservoir
  - Zebra and quagga mussels (*Dreissena*)
  - New Zealand mudsnails (*Potamopyrgus antipodarum*)

- 3x annually, July – Sept period

- Plankton veliger sampling
- Adult mussel and snail sampling



Sampling equipment including A) artificial substrate, B) surface scraper, C) grab sampler, and D) plant thatch rake

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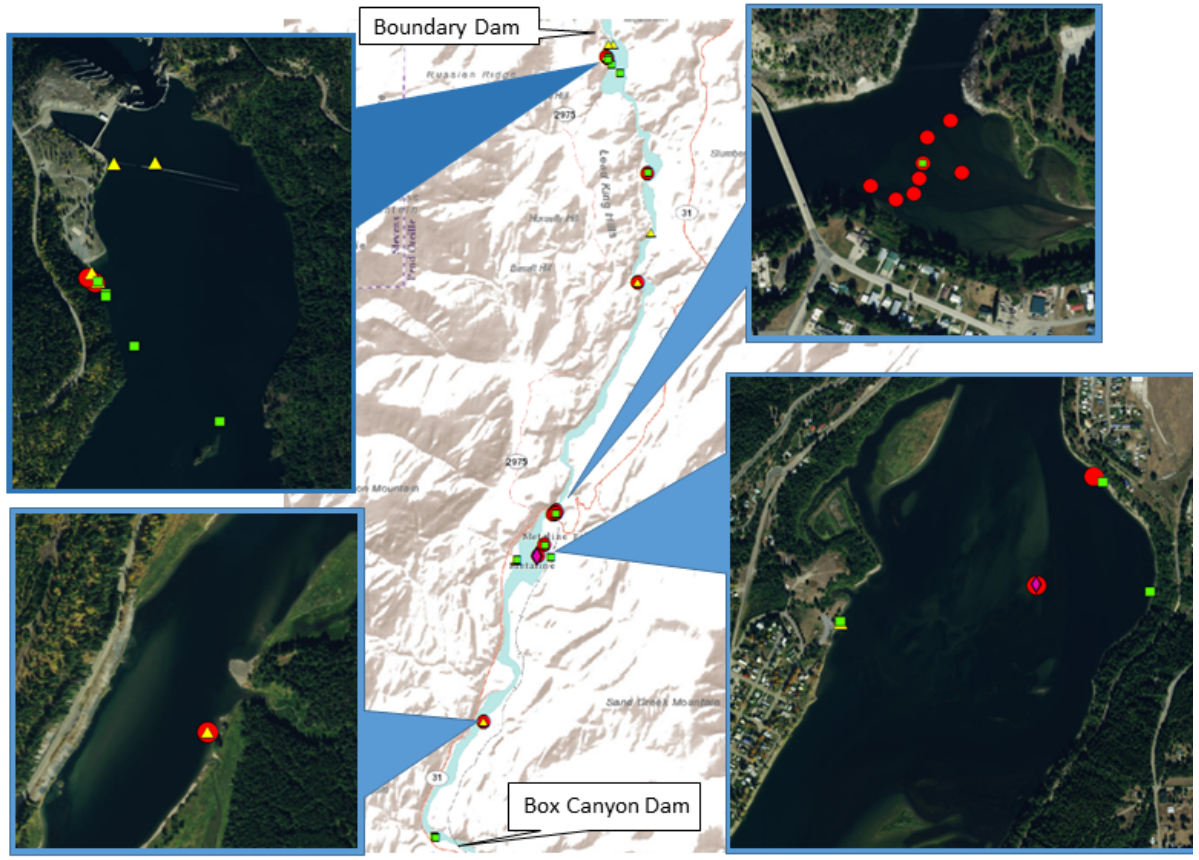
AIS Detections in Boundary Reservoir - 2016

- Non-detect:
  - Zebra and quagga mussels (*Dreissena*)
  - New Zealand mudsnails (*P. antipodarum*)

- Detect:
  - Asian clams (*C. fluminea*)
  - Flowering rush (*Botomus umbellatus)*
  - Radix auricularia (big-ear radix)
  - Curlyleaf pondweed (*Potamogeton crispus*)



Corbicula fluminea, *Radix auricularia*, *Potamogeton crispus*, *Butomus umbellatus*

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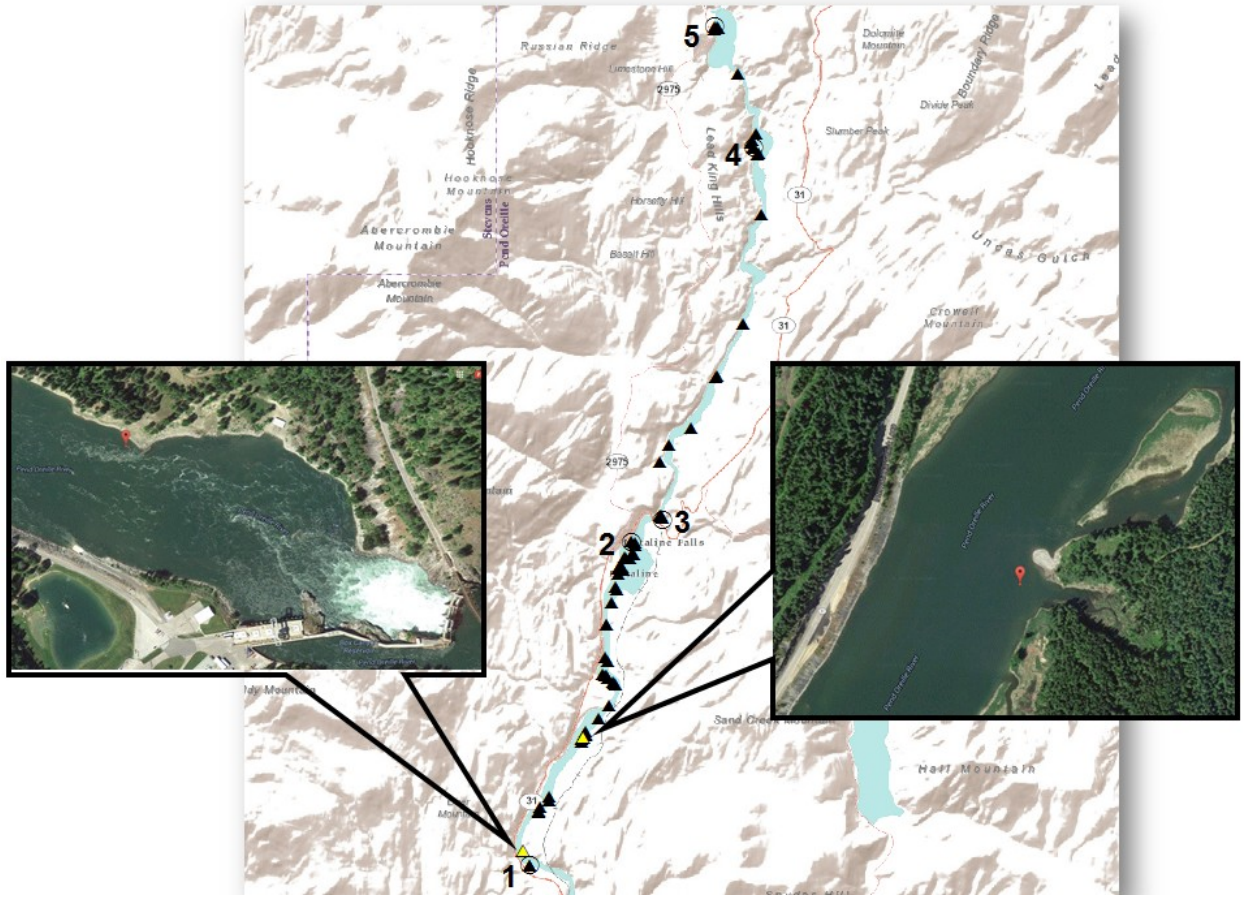
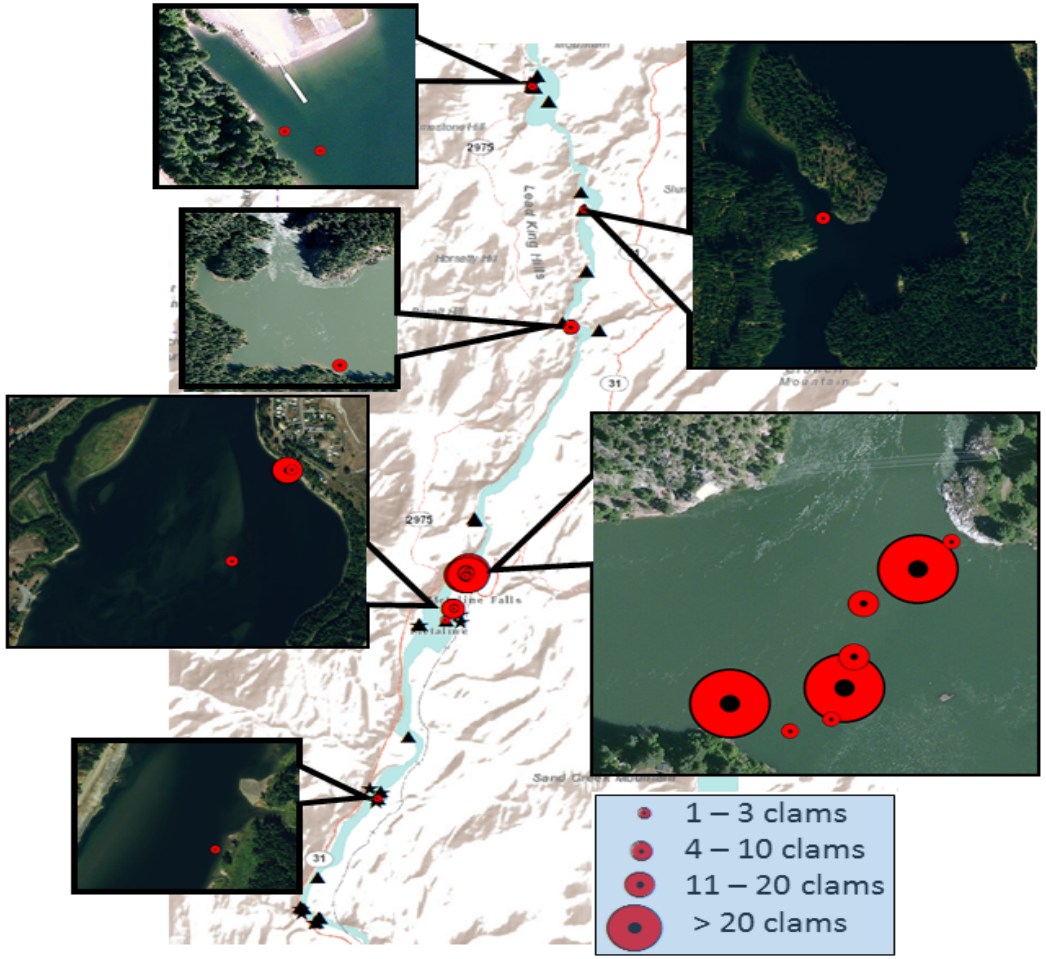
Corbicula fluminea (Asian clam)

2015



2016



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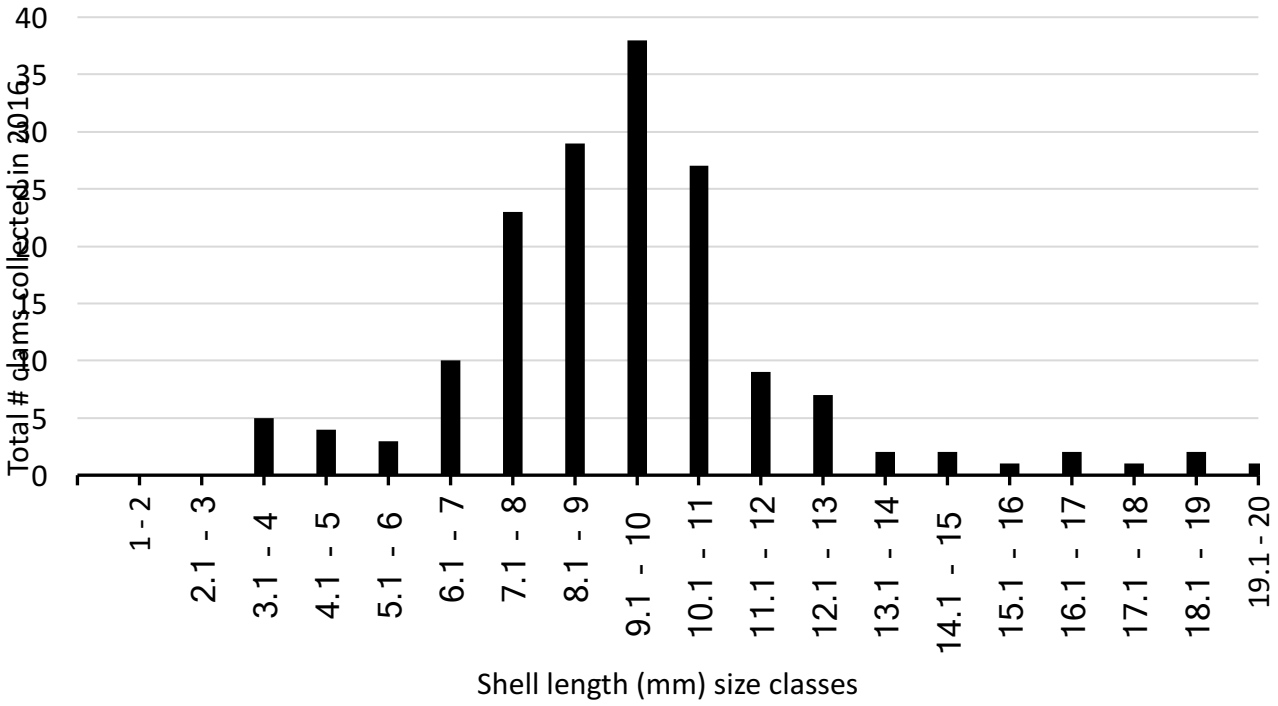
Corbicula fluminea (Asian clam)

Size distribution for live *C. fluminea* clams collected 2016 (n=171)



- Mature 6 to 10-mm SL (McMahon 1983)
- 15-30 mm SL mm first year of life

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Questions

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  - christine.pratt@seattle.gov

- Mark Sytsma, Portland State University
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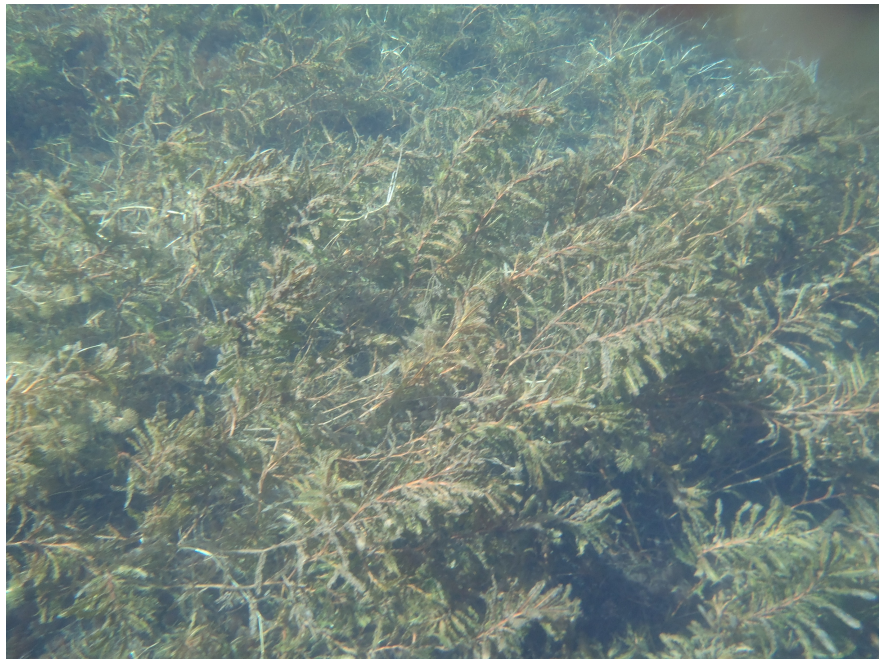

Potamogeton crispus plant bed

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