



Spokane River Project Aquatic Weed Management Program

David Armes

Terrestrial Resource Specialist

(509) 495-2796

david.ames@avistacorp.com



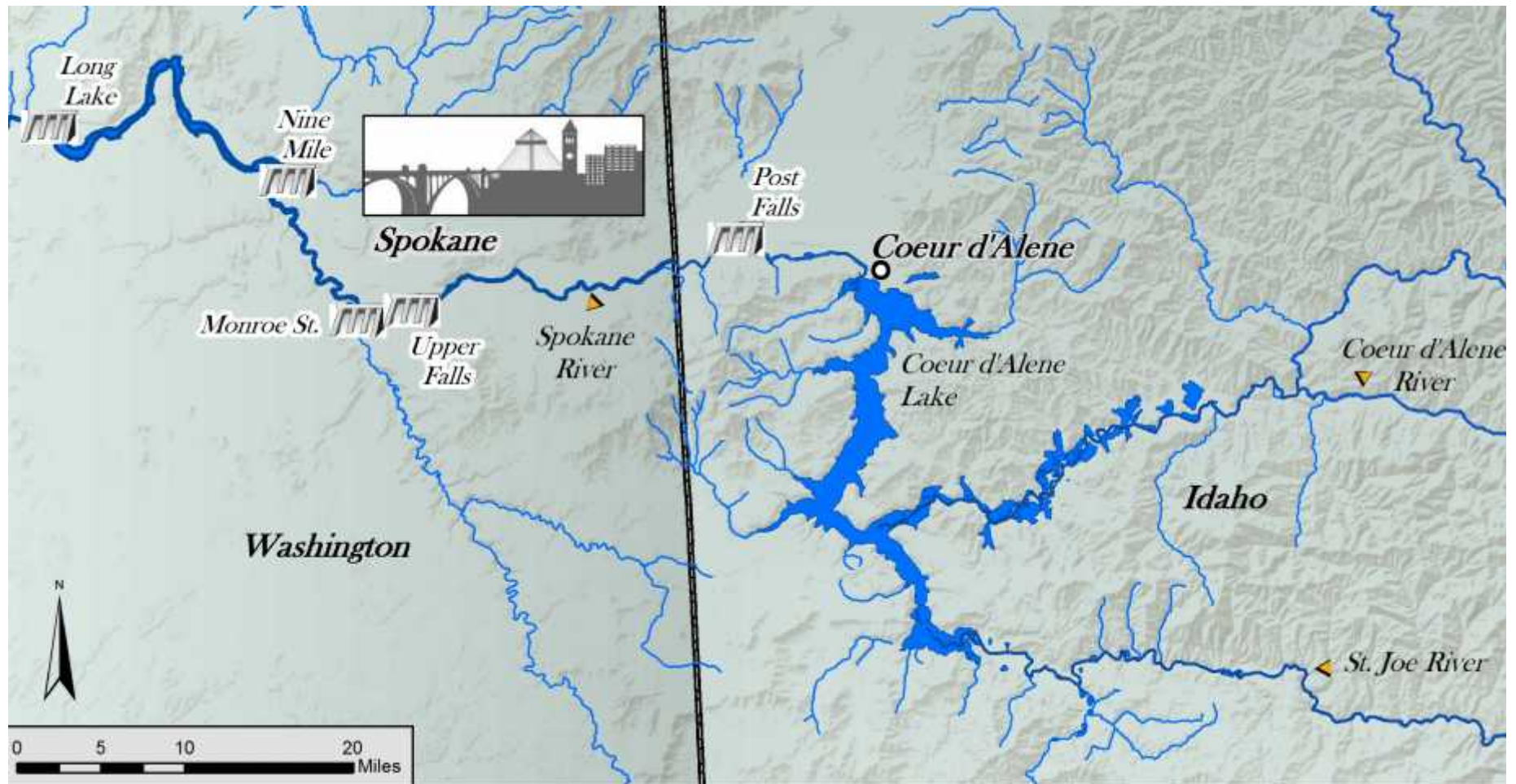
Aquatic Weeds, Why Should You Care?

Invasive aquatic weeds degrade lake beneficial uses including:

- Recreation
- Fisheries, Waterfowl & Wildlife Habitat
- Water Quality
- Aesthetics



Spokane River License Project Area



The Spokane River Project License Aquatic Weed Management Plans:

- Coeur d'Alene Reservation Aquatic Weed Management Plan
- Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters
- Lake Spokane and Nine Mile Reservoir Aquatic Weed Management Program

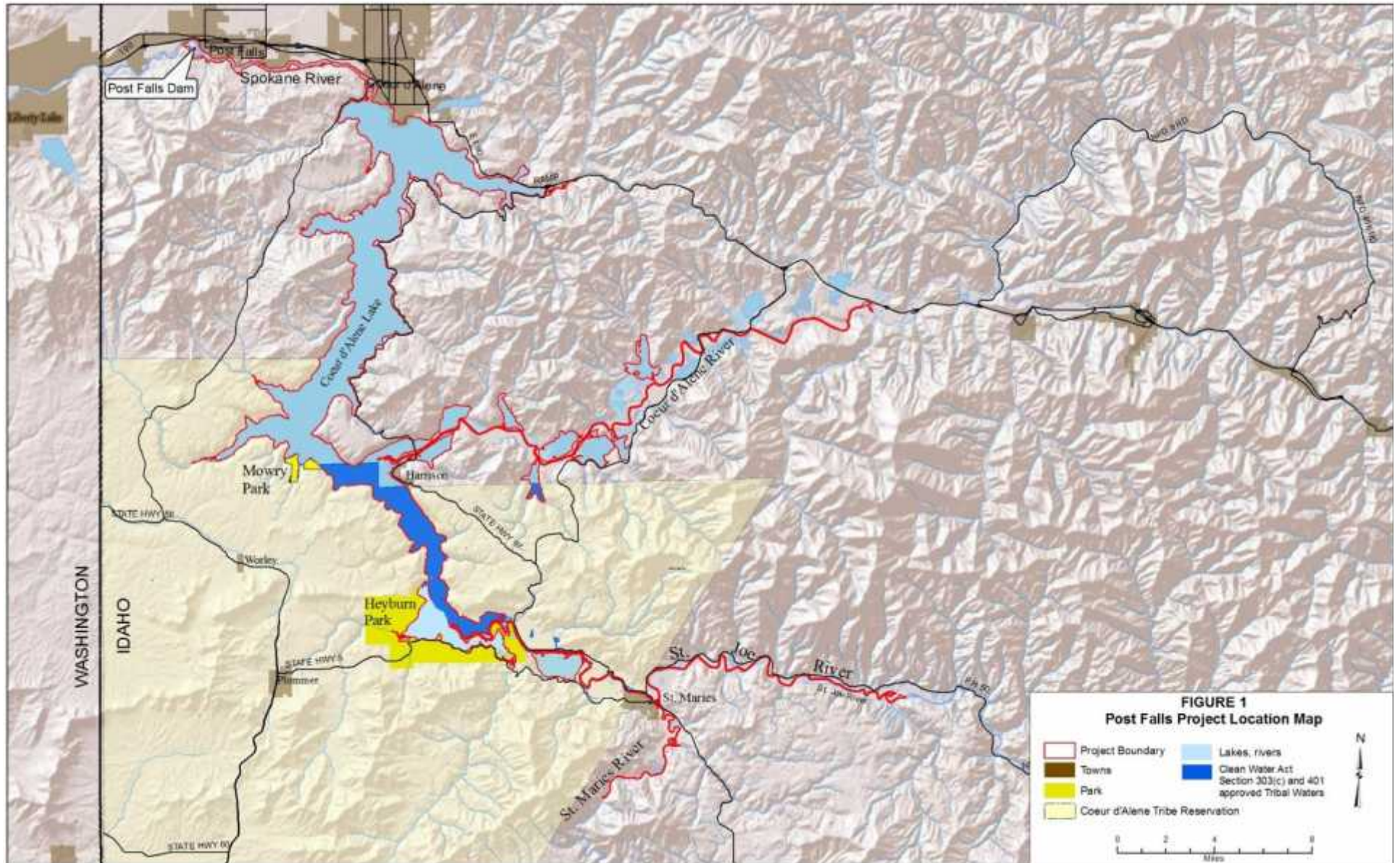


The Primary Elements of All Three Aquatic Weed Management Programs

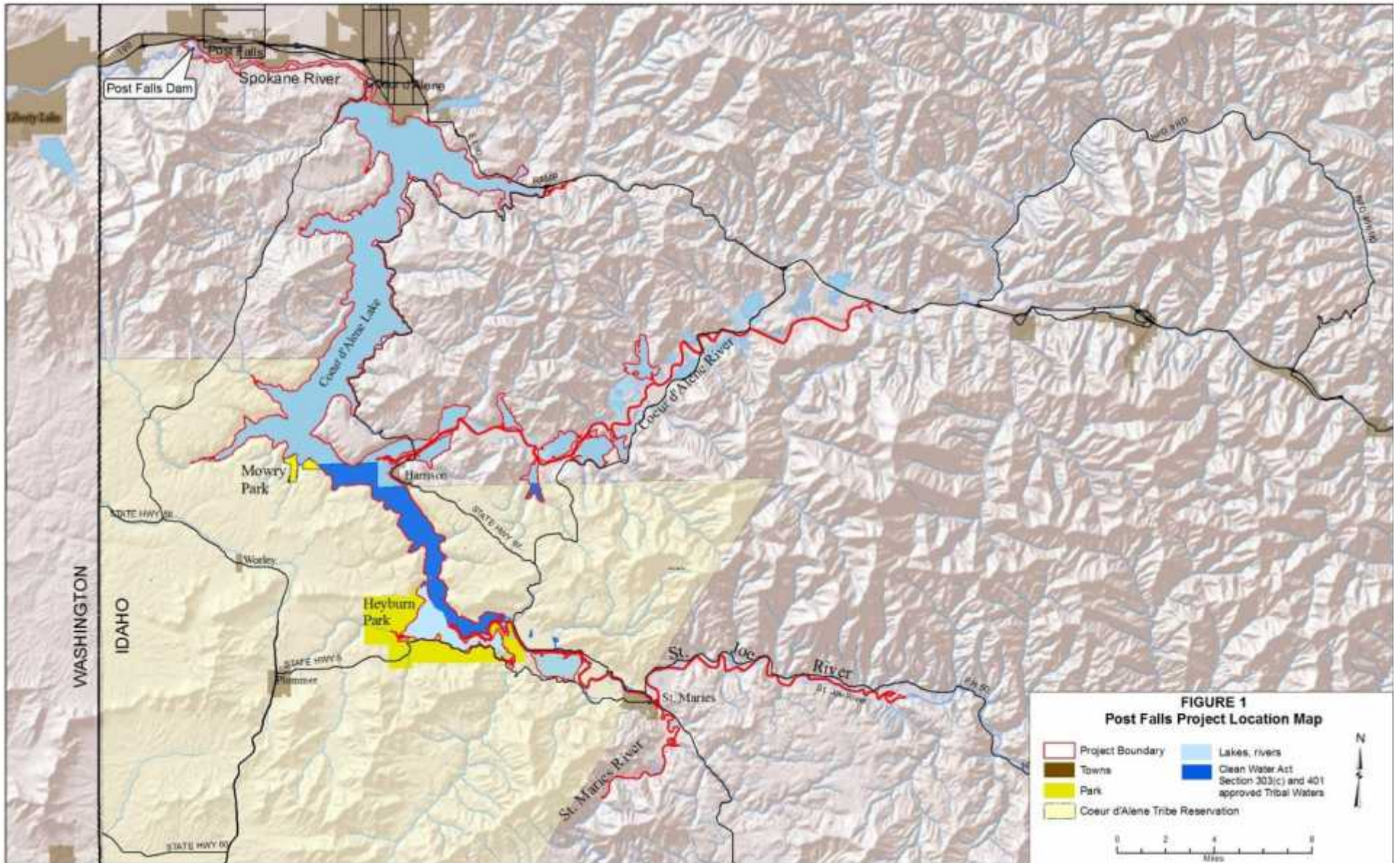
- **Education** - Establish or expand educational programs to keep the public informed of the hazards of invasive aquatic weeds.
- **Monitoring** – Monitor and/or map the distribution of invasive aquatic weeds within the Project area.
- **Management** – Develop strategies to help control invasive aquatic weeds within the Project area.

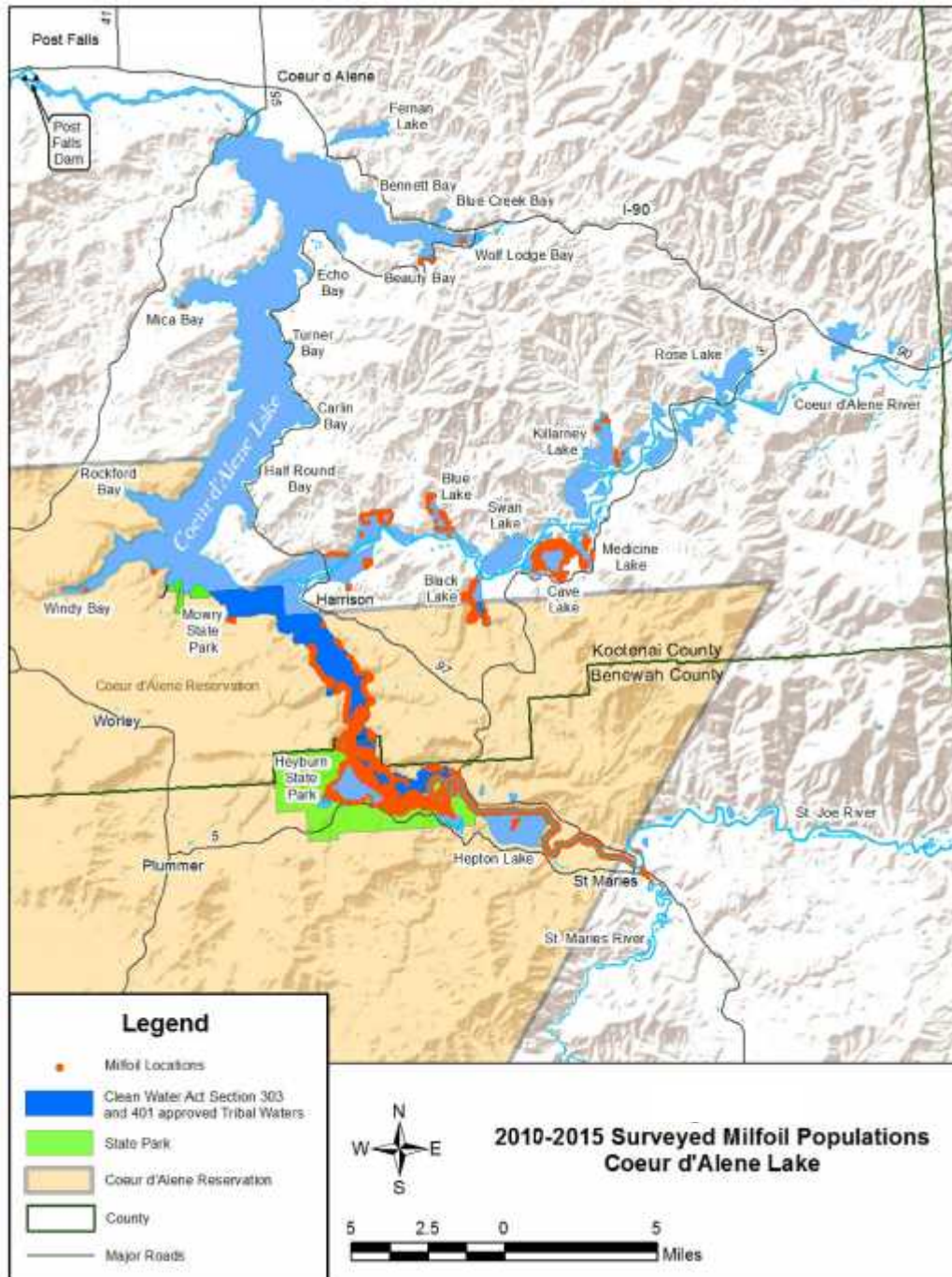


Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters



Coeur d'Alene Reservation Aquatic Weed Management Plan



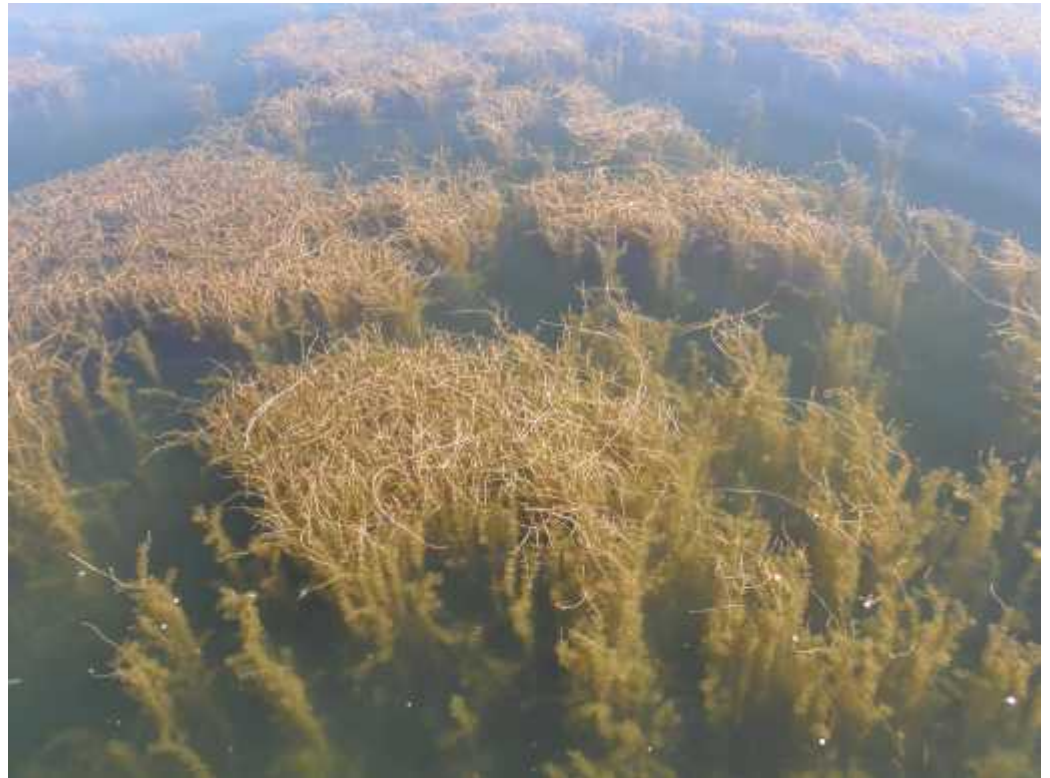


- Since 2010, Avista has partnered with IDEQ, ISDA, Kootenai County and the Tribe to complete annual milfoil surveys in Coeur d'Alene Lake.
- Milfoil locations identified during 2010-2015 surveys.



Coeur d'Alene Reservation Aquatic Weed Management Plan

- Between 2010-2016 Avista and the Tribe have completed annual surveys for milfoil within and adjacent to Tribal waters.
- Management actions have included herbicide treatments, diver suction removal, and placement of bottom barriers of varying acreage totals of milfoil.
- Avista and the Tribe anticipate completing up to 100 acres of herbicide treatments in 2016.



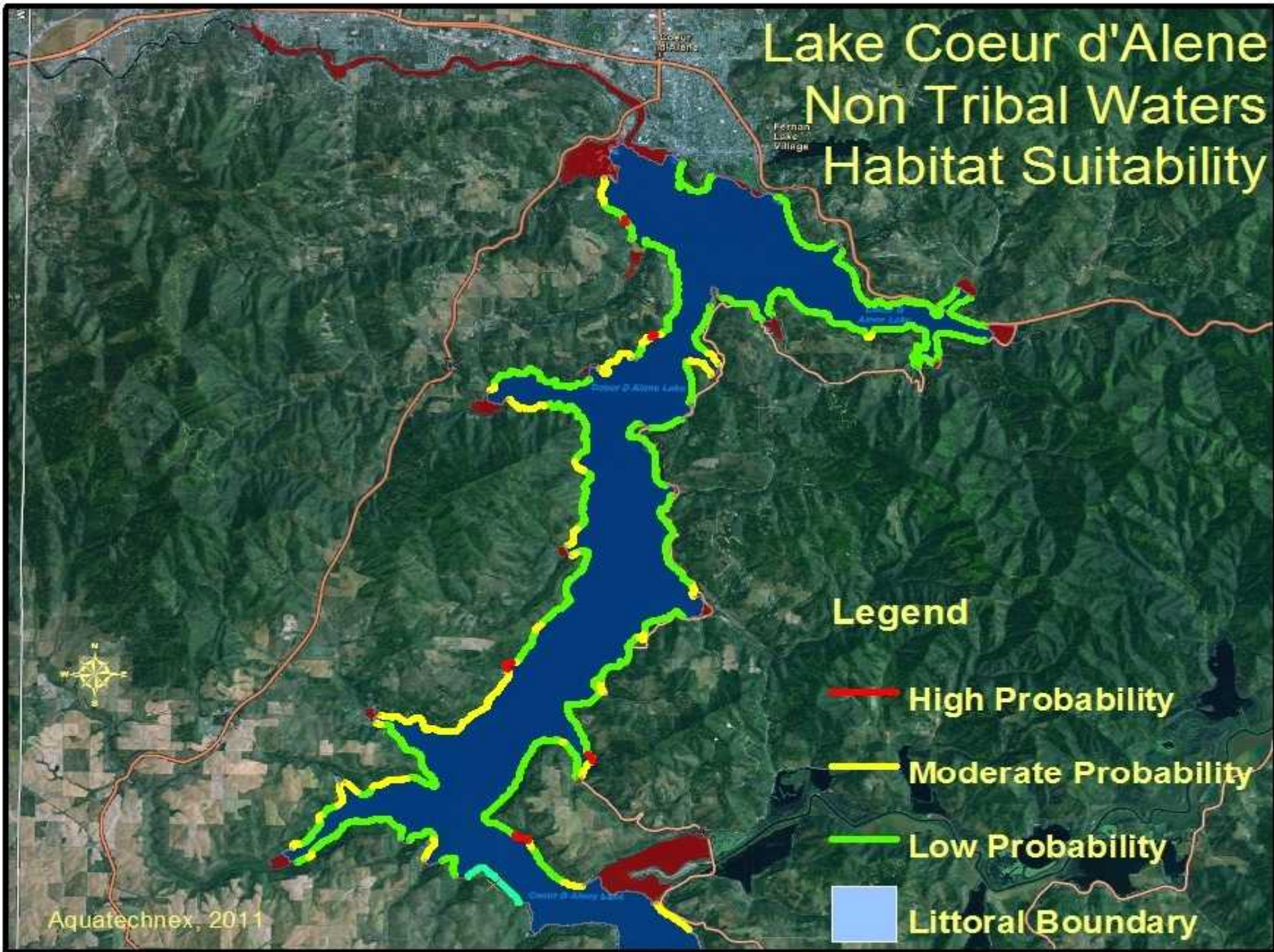
Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters

In 2011, Avista mapped potential milfoil habitat in Coeur d'Alene Lake. Suitable habitat was identified by high, moderate, and low survey priority categories based on susceptibility to infestation.

- High probability areas are surveyed every 3 years.
- Moderate probability areas are surveyed every 4 years.
- Low probability areas are surveyed every 5 years.



Lake Coeur d'Alene Non Tribal Waters Habitat Suitability



Legend

- High Probability
- Moderate Probability
- Low Probability
- Littoral Boundary

- In 2013, milfoil was identified in Mica Bay.
- Avista partnered with ISDA to complete four days of diver hand pulling utilizing a suction dredge on approximately ½ acre of milfoil.



- Divers revisited the area in 2014 and 2015 and removed additional plants.



Mica Bay Diver Suction Milfoil Removal



Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters Herbicide Treatments

- In 2012, Avista treated 15.6 acres of milfoil in Black Lake utilizing a mixture of Triclopyr and Diquat.
- In 2014, Avista treated 37 acres of milfoil in Thompson Lake utilizing a combination of 2,4-D and Aquathol.
- In 2015, Avista treated 44 acres of milfoil in Windy Bay utilizing 2,4-D.



Lake Spokane Aquatic Weed Management Program Goals

- Reduce cover of invasive and nuisance aquatic weeds at public and community boat access points
- Maintain a moderate level of ongoing control of aquatic weeds in areas of 10-14 feet using winter reservoir draw downs
- Support weed control and facilitate coordination among the entities involved in aquatic weed control



Five noxious weeds have been identified in Lake Spokane and Nine Mile Reservoir



Curly-Leaf Pondweed



Flowering Rush



Fragrant Lilly



Yellow Floating Heart



Eurasian Watermilfoil



Lake Spokane and Nine Mile Reservoir Aquatic Weed Management Actions include:

- Annual coordination with cooperating parties
- Annual monitoring of aquatic weeds
- Site-specific herbicide treatments
- Flowering rush control in Lake Spokane and Nine Mile Reservoir
- Winter drawdowns in Lake Spokane of 13 to 14 feet



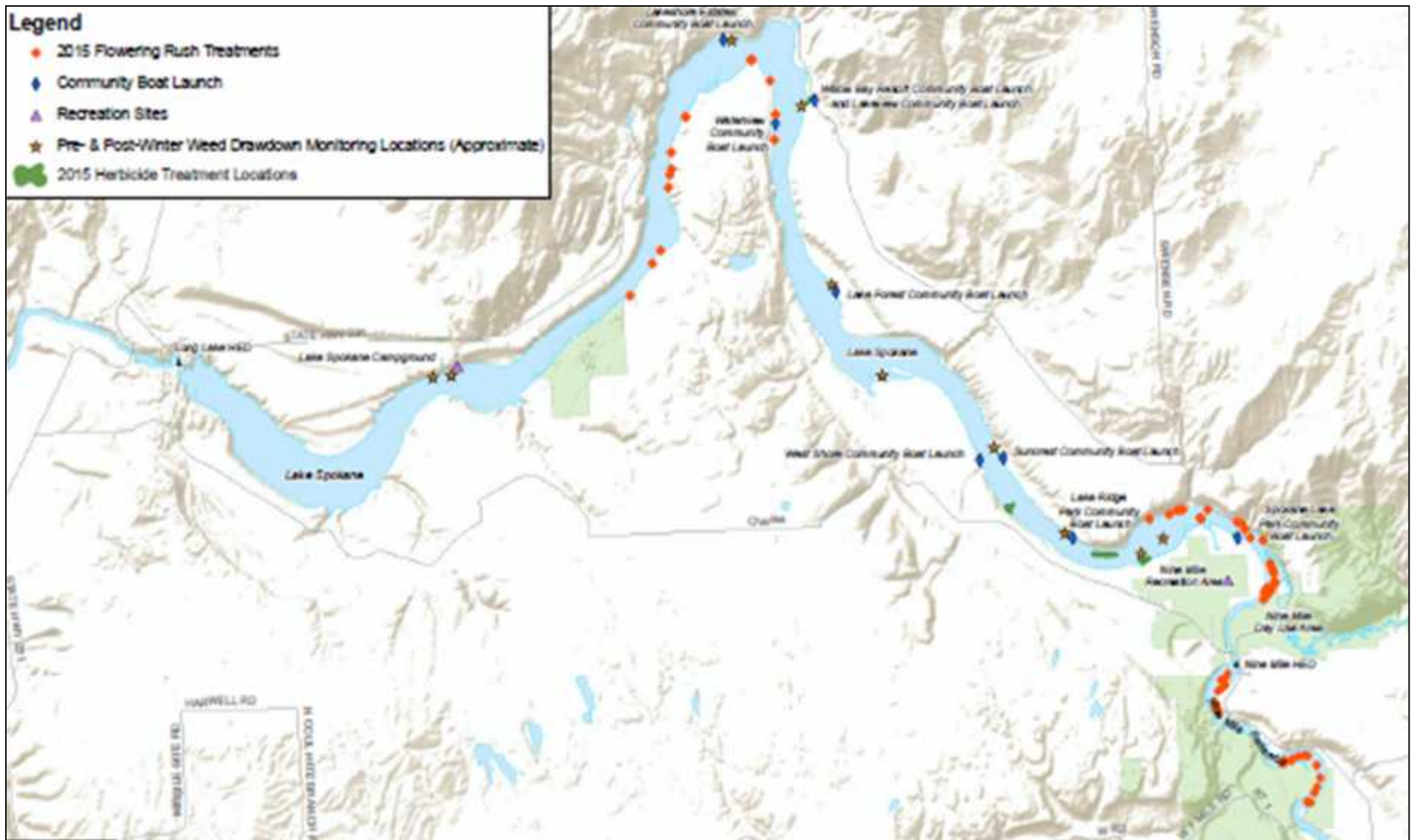
Aquatic Weed Management in Lake Spokane and Nine Mile Reservoir

- Between 2011-2015, Avista has partnered with the Lake Spokane Association to annually treat between 15-40 acres of aquatic weeds associated with public and community boat launches.
- In 2013, Avista treated over 8 acres of milfoil in Nine Mile Reservoir.
- In 2015, 38 acres of aquatic weeds were treated at nine locations in Lake Spokane.



Legend

- 2015 Flowering Rush Treatments
- ◆ Community Boat Launch
- ▲ Recreation Sites
- ★ Pre- & Post-Winter Weed Drawdown Monitoring Locations (Approximate)
- 2015 Herbicide Treatment Locations





Flowering rush survey of Nine Mile Reservoir

- Approximately 1100 plants were identified.
- In 2014 approximately 170 plants were removed.
- In 2015 approximately 160 plants were removed.



Flowering Rush Treatments

Diver Suction Dredge Lake Spokane

- In 2011, removed approximately 200 individual flowering rush plants from Lake Spokane.
- In 2012, removed approximately 900-1000 individual flowering rush plants from Lake Spokane.
- In 2013, removed approximately 485 flowering rush plants from Lake Spokane.
- In 2014, removed approximately 275 flowering rush plants from Lake Spokane.
- In 2015, removed approximately 1,583 flowering rush plants from Lake Spokane.



Thank you!



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