

# **AVISTA CORPORATION**

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## **COEUR D'ALENE LAKE AQUATIC WEED MANAGEMENT PLAN FOR NON-TRIBAL WATERS 2018 SUMMARY REPORT**

**SPOKANE RIVER LICENSE ARTICLE 410**

**SPOKANE RIVER HYDROELECTRIC PROJECT  
FERC PROJECT No. 2545**

Prepared By:  
Avista Corporation

*February 28, 2019*

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## 1.0 INTRODUCTION

The purpose of the Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters (Plan) is to control and reduce the distribution of aquatic noxious weeds within Coeur d'Alene Lake. To achieve this, Avista cooperates with and supports a multitude of agencies that have existing aquatic weed management programs on Coeur d'Alene Lake. This report summarizes the measures completed by Avista, in cooperation with the Idaho Department of Environmental Quality (IDEQ), Kootenai County Noxious Weed Control Board (KCNWCB), Idaho State Department of Agriculture (ISDA), and the Coeur d'Alene Tribe (Tribe), together known as the Cooperating Parties.

### 1.1 Background

On June 18, 2009, the Federal Energy Regulatory Commission (FERC) issued a License for Avista's Spokane River Hydroelectric Project (Project) for a 50-year term (FERC 2009). The Project includes operation of five Hydroelectric Developments (HEDs) on the Spokane River; one in Idaho (Post Falls HED) and four in the state of Washington (Upper Falls, Monroe Street, Nine Mile, and Long Lake HEDs). Article 410 of the License required the development of the Plan (Avista 2010), which FERC approved on January 19, 2011 (FERC Order 2545-129). The Plan is specific to Avista's Post Falls HED, which is located on the Spokane River approximately nine miles downstream from the outlet of Coeur d'Alene Lake.

### 1.2 Coeur d'Alene Lake Aquatic Weed Management Plan

Article 410 of the License required Avista to develop the Plan in consultation with the Idaho Department of Fish and Game, and the United States Fish and Wildlife Service. The Plan provides for the management of aquatic noxious weeds within the Post Falls HED Project boundary, excluding the Coeur d'Alene Indian Reservation (Reservation) (Figure 1). It includes the following elements:

- Provisions to establish or expand aquatic noxious weed educational programs;
- A framework for annual monitoring to determine the distribution of aquatic noxious weeds; and
- Management strategies for controlling aquatic noxious weeds.

The Plan also identifies the Cooperating Parties (Refer to Section 1.0) that are currently involved in managing aquatic noxious weeds within the Project boundary and a schedule, within which Avista implements the various measures. Avista cooperates with and supports the Cooperating Parties in implementing relevant aquatic weed management programs within the Post Falls HED Project boundary.

Surveys of portions of the littoral habitat in Coeur d'Alene Lake have been conducted each year since 2006 to identify aquatic noxious weeds within the Project boundary, with areas more susceptible to weed infestation surveyed more frequently. During these surveys, three types of milfoil have been identified which includes native northern watermilfoil (*Myriophyllum sibiricum*), non-native Eurasian watermilfoil (*M. spicatum*) and a hybrid of the two. Until 2018, non-native Eurasian watermilfoil and the hybrid Eurasian watermilfoil, hereafter collectively referred to as milfoil, were the only two aquatic noxious weeds that had been identified in the Project boundary and are the noxious weeds addressed by the Plan.

Infestations of milfoil have been identified in Harrison Slough, Heyburn State Park, and within the chain lakes along the Coeur d'Alene River (Cave, Medicine, Blue, Thompson, Anderson, Killarney and Black Lakes) (Coeur d'Alene Tribe 2006, 2007, 2008, 2009, 2010; Avista 2011, 2013). In addition, Avista and the Tribe (2008-2018) have identified infestations of milfoil within the Reservation boundary, which are managed under the Coeur d'Alene Reservation Aquatic Weed Management Plan (Coeur d'Alene Tribe and Avista 2017).

In July of 2018, Curly leaf pondweed (*Potamogeton crispus*; CLP) was found around the 3rd Street Boat Launch and Hagadone Marina in the northwest section of Coeur d'Alene Lake. This was the first time CLP had been found in Coeur d'Alene Lake. During 2018, Avista worked with the Cooperating Parties to identify its distribution and intends to eradicate it before a population can become established elsewhere in the lake.

## 2.0 COORDINATION

Avista met with the Cooperating Parties on March 15, 2018 to develop the following task list:

- Coordinate aquatic weed monitoring, education and outreach, and treatment efforts;
- Partner with IDEQ and ISDA to survey and monitor for milfoil;
- Complete treatments on milfoil, using a diver suction dredge or herbicide in priority bays or other locations as needed;
- Coordinate milfoil management with the Tribe within Tribal waters; and
- Partner with Kootenai County to provide educational funding for 2018 activities.

## 3.0 SURVEYS

In 2011, Avista and IDEQ mapped suitable milfoil habitat and identified a survey rotation based on susceptibility to milfoil infestation within Coeur d'Alene Lake (Avista 2011). This survey rotation is implemented annually per the following schedule: high priority suitable habitats are surveyed a minimum of once per three-year period and low priority suitable habitats and shoreline segments are surveyed a minimum of once per five-year period (Figure 2). Surveys completed from 2011-2018, identified varying amounts of milfoil in bays located within the non-tribal waters of Coeur d'Alene Lake. Additionally, an estimated 600-700 acres of milfoil was identified in the chain lakes, including Anderson, Black, Blue, Cave, Killarney, Medicine and Thompson lakes.

In September 2018, Avista coordinated visual and biobase surveys in Harrison Slough, Windy Bay and Wolf Lodge Bay. During the surveys, 63.3 acres of milfoil were identified in Harrison Slough, 19.6 acres in Windy Bay, and 5.4 acres in Wolf Lodge Bay. Additionally, IDEQ completed visual surveys in Bell, 16 to 1, Windy, Sun Up, Loffs, Carlin, Mica, Bennett, Neachen, Kid Island, Rockford, Cave, and Wolf Lodge bays, as well as the Silver Beach and Blackwell Marinas. The ISDA also completed systematic surveys in Cougar Bay (Figure 3). Altogether, milfoil was identified in Silver Beach Marina, Bell Bay, Harrison Slough, Cougar Bay, Windy Bay, and Wolf Lodge Bay.

Additionally, the 3rd Street Boat Launch, Sanders Beach, Independence Point, and Hagadone Marina were surveyed for CLP and milfoil (Figure 3). Curly leaf pondweed was identified only at the 3rd Street Boat Launch and Hagadone Marina in early July. Members of the Cooperating Parties, including ISDA and IDEQ, responded quickly to verify the presence of the plant by conducting rake toss and visual surveys. Curly leaf pondweed was found sporadically in four areas around the 3rd Street Boat Launch and Hagadone Marina, cumulatively covering an area of approximately 1.2 acres (Figure 4).

#### **4.0 MANAGEMENT / TREATMENTS**

Avista initiated suction dredge treatments in five locations in 2018 (Figure 5). On September 19, a treatment was conducted at the 3rd Street Boat Launch and Hagadone Marina to target CLP and milfoil (Figure 6). Ten small milfoil plants, as well as approximately 60 lbs (wet weight) of milfoil were removed during this treatment. Curly leaf pondweed was not able to be removed because the plants had already senesced and the stalks were no longer attached to the roots.

Mica Bay was treated on September 19 and 20, 2018 (Figure 7). A large scale herbicide treatment was conducted in Mica Bay in 2016 and hand pulling treatments have been conducted each year thereafter. The 2018 hand pulling treatment removed 10 individual plants from the bay, which was less than were found in 2017, indicating the herbicide treatment and follow up hand pulling spot treatments are having a positive impact on controlling milfoil at this location.

Approximately 100 lbs (wet weight) of milfoil was removed from Bell Bay on September 20, 2018 (Figure 8). Suction dredging had also occurred at this location in 2017, with fewer plants being encountered in 2018 than were found in 2017. The dense native vegetation in this bay make it difficult to find and remove the milfoil plants by hand. Milfoil was also identified east of the survey location, which requires a more thorough survey next year to identify the full extent of the plants in this bay.

Cougar Bay was treated on September 25, 2018 when approximately 80 lbs of milfoil (wet weight) was removed from a small but densely infested area (Figure 9). Cougar Bay is a large complex bay and the sparse milfoil population makes it difficult to find and re-find individual plants between visual surveys and treatments.

On September 25, approximately 150 lbs (wet weight) of milfoil was removed from Silver Beach Marina (Figure 10). Most of the milfoil was found between the shore and the east side of the marina's entrance ramp from the parking lot.

#### **5.0 MILFOIL MANAGEMENT IN COEUR D'ALENE LAKE TRIBAL WATERS**

In addition to working with the Cooperating Parties to monitor and control aquatic weeds on Coeur d'Alene Lake in non-tribal waters, Avista also funded aquatic weed control efforts in

Tribal waters in 2018. The areas that were treated, the methods used to control aquatic weeds and the efficacy ratings are per the Coeur d’Alene Reservation Aquatic Weed Management Plan and are listed below. Efficacy is rated as either excellent, fair, or poor. Treatments are considered excellent when all to most of the milfoil is removed, a fair treatment will have a moderate level of milfoil removed, and a poor treatment will have little to no milfoil removed.

Bottom Barriers

The Tribe placed bottom barriers on approximately 3,100 square feet of milfoil and problematic aquatic weeds in Cottonwood Bay (Camp Larson swim area). The 10 foot x 10 foot barrier panels were placed over dense patches of aquatic weeds and were left in place for approximately 16 weeks. The efficacy for the bottom barrier treatment was excellent.

Herbicide Treatments

Avista and the Tribe hired Clean Lakes, Inc. to complete an herbicide treatment on approximately 15 acres of milfoil in Benewah Lake using Aquathol K (Endothol), which was applied using a sub-surface distribution method. The efficacy for the herbicide treatment was rated as fair.

Mechanical Weed Harvesting

Avista and the Tribe hired Aquatic Harvesting Inc. to complete mechanical weed harvesting on approximately 71 acres of milfoil in Benewah, Chatcolet, and Round lakes. Two harvesters were used to remove milfoil and approximately 345,000 lbs (wet weight) of vegetation was removed from the lakes. The efficacy of the harvester treatments was rated from fair to excellent.

**6.0 2018 EDUCATION / OUTREACH**

Avista partnered with the KCNWCB by providing \$2,000 for weed identification handbooks, brochures and educational outreach materials with the theme “Stop the Spread of Noxious Weeds” to distribute at the 2018 North Idaho Fair. Other members of the Cooperating Parties participated in a number of educational outreach events focused on Coeur d’Alene Lake milfoil and CLP management including the Big Horn Outdoor Adventure Show, CoeurFest, an Aquatic Plant ID workshop, and a Bay Watchers training.

**7.0 FUNDING**

Avista made the following funding available for aquatic weed management under this Plan:

**Table 1. 2018 Aquatic Weed Funding**

ACE Diving Hand Pulling Milfoil	\$3,450.00
Kootenai County Noxious Weed Control Board	\$2,000.00
<b>TOTAL</b>	<b>\$5,450.00</b>

## **8.0 PLANNED ACTIVITIES FOR 2019**

As outlined in the Plan, Avista annually identifies areas for upcoming surveys, reviews available funding, and schedules an annual meeting with the Cooperating Parties to develop and coordinate the aquatic weed management activities. The annual meeting will be held in March and a final task list will be completed prior to May 1. Avista will continue public outreach, educational and notification activities in 2019 as they arise.

The highest priority action in 2019 will be treating the CLP, which was found in the lake for the first time in 2018. The Cooperating Parties anticipate treating the location with herbicides in early spring and re-surveying the location again in fall to determine the need for additional treatment. In addition, the Cooperating Parties will coordinate to ensure the annual milfoil surveys planned for 2019 are implemented, as well as prioritize locations for treatments. In 2019, a total of 39 bays and shoreline sites are proposed to be surveyed in Coeur d'Alene Lake, along with 12 sites on the mainstem lower Coeur d'Alene River and associated lakes. The Cooperating Parties will work to develop a strategy on how best to treat the large milfoil infestations identified in Wolf Lodge and Windy Bay that were unable to be treated during 2018.

## **9.0 PROPOSED CHANGES TO THE PLAN**

Avista is not proposing any new changes to the Plan. This recognizes though, that Avista and the Cooperating Parties have combined the habitats that were previously rated as Moderate (survey every 4 years) into the High (survey every 3 years) and Low (survey every 5 years) categories for efficiency. This provided for a more effective manner in which the surveys for aquatic weeds could be implemented around the lake and within the Project boundary. No changes were made to the methods used to survey or to the minimum survey time periods, with the High category still being surveyed a minimum of once per three-year period and the Low category still being surveyed once per five-year period.

## 10.0 REFERENCES

Avista. 2010. Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters. Spokane River Hydroelectric Project FERC Project No. 2545-091.

Avista. 2011. Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters 2011 Summary Report.

Avista. 2013. Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters 2013 Summary Report.

Coeur d'Alene Tribe and Avista. 2017. Coeur d'Alene Reservation Aquatic Weed Management Plan. Spokane River Hydroelectric Project FERC Project No. 2545-091. February.

Coeur d'Alene Tribe Lake Management Department. 2006. 2006 Coeur d'Alene Tribe Eurasian Watermilfoil Control Program Project Completion Report. Coeur d'Alene Tribe Lake Management Department, Plummer, ID.

Coeur d'Alene Tribe Lake Management Department. 2007 Coeur d'Alene Tribe Eurasian Watermilfoil Control Program Project Completion Report. Coeur d'Alene Tribe Lake Management Department, Plummer, ID.

Coeur d'Alene Tribe Lake Management Department. 2008 Coeur d'Alene Tribe Eurasian Watermilfoil Control Program Project Completion Report. Coeur d'Alene Tribe Lake Management Department, Plummer, ID.

Coeur d'Alene Tribe Lake Management Department. 2009 Coeur d'Alene Tribe Eurasian Watermilfoil Control Program Project Completion Report. Coeur d'Alene Tribe Lake Management Department, Plummer, ID.

Coeur d'Alene Tribe Lake Management Department. 2010 Coeur d'Alene Tribe Eurasian Watermilfoil Control Program Project Completion Report. Coeur d'Alene Tribe Lake Management Department, Plummer, ID.

Federal Energy Regulatory Commission (FERC). 2009. Project Nos. 2545-091, 12606-000, Order Issuing New License and Approving Annual Charges for Use of Reservation Lands. Issued June 18. 167 pp.



## FIGURES

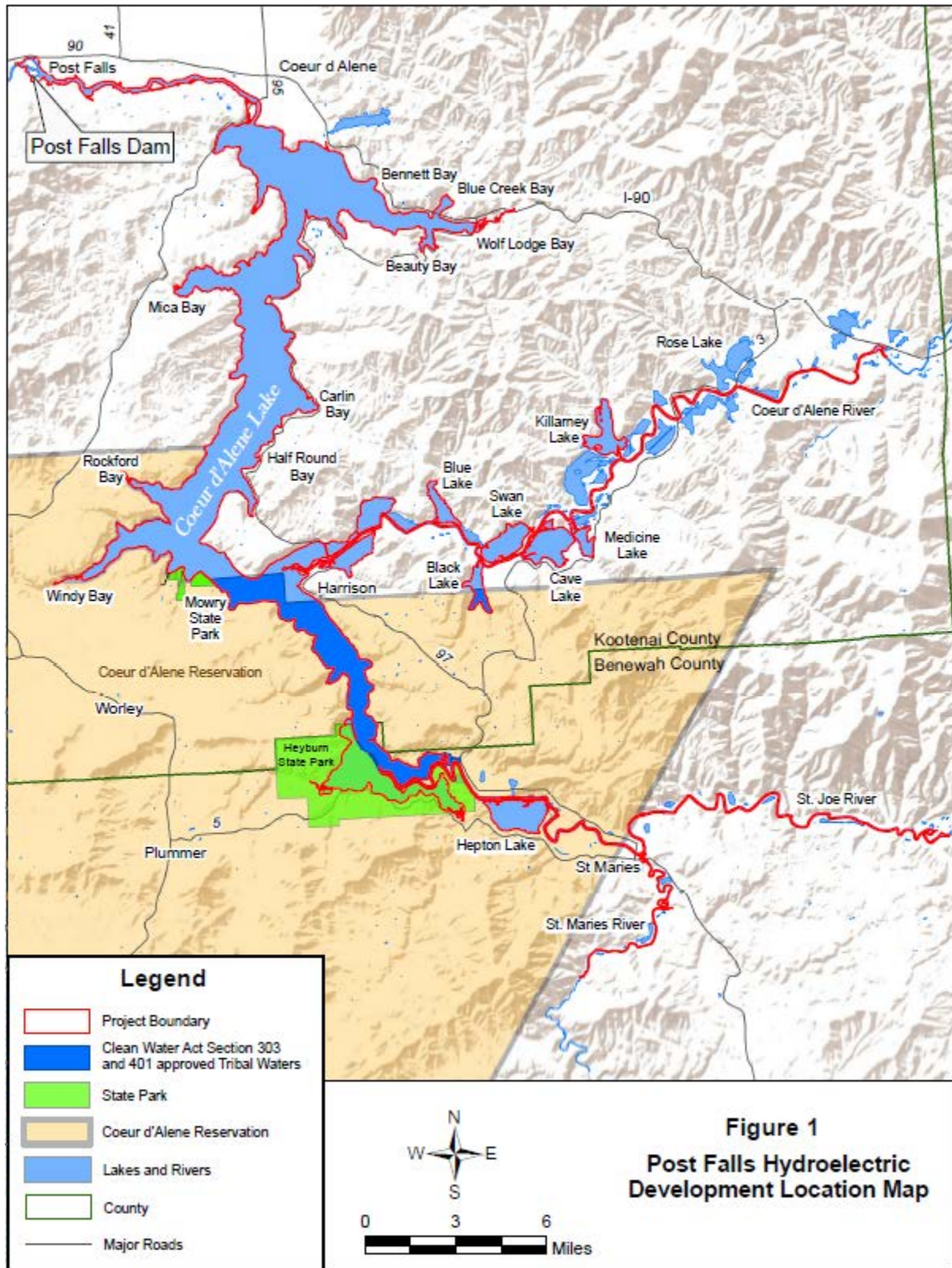


Figure 1. Post Falls Hydroelectric Development Location Map.

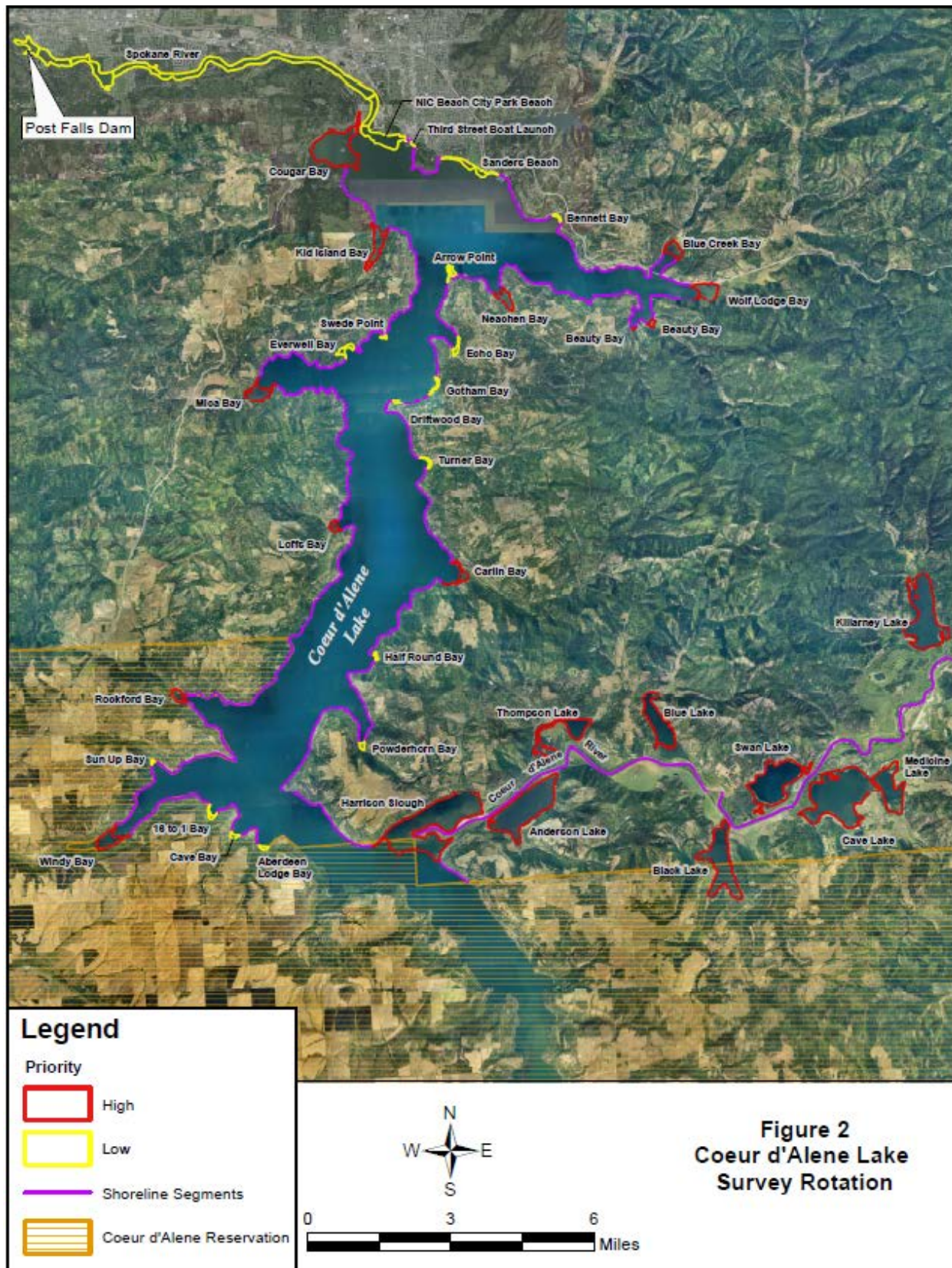


Figure 2. Coeur d'Alene Lake Survey Location.

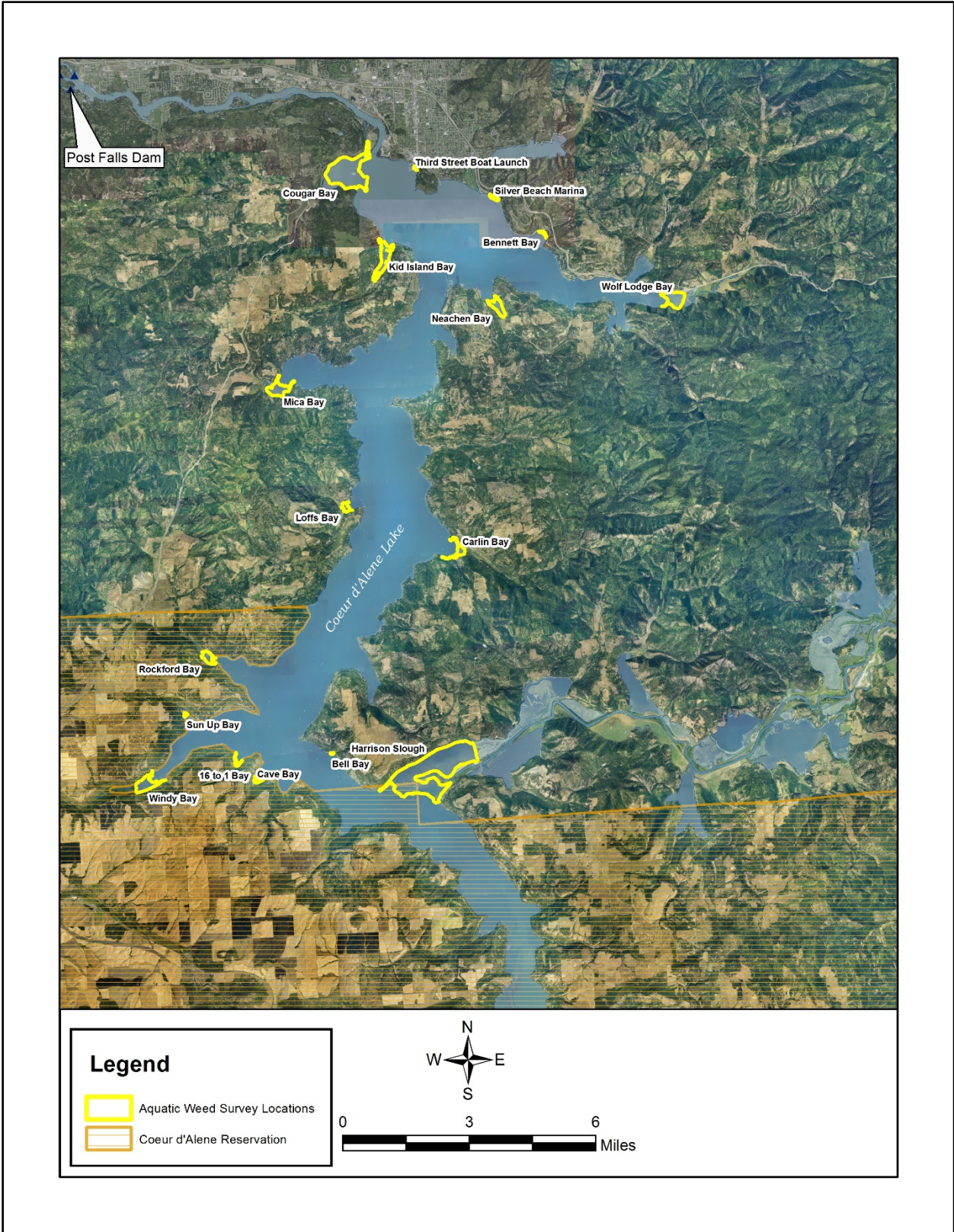


Figure 3. 2018 Aquatic Weed Survey Locations.

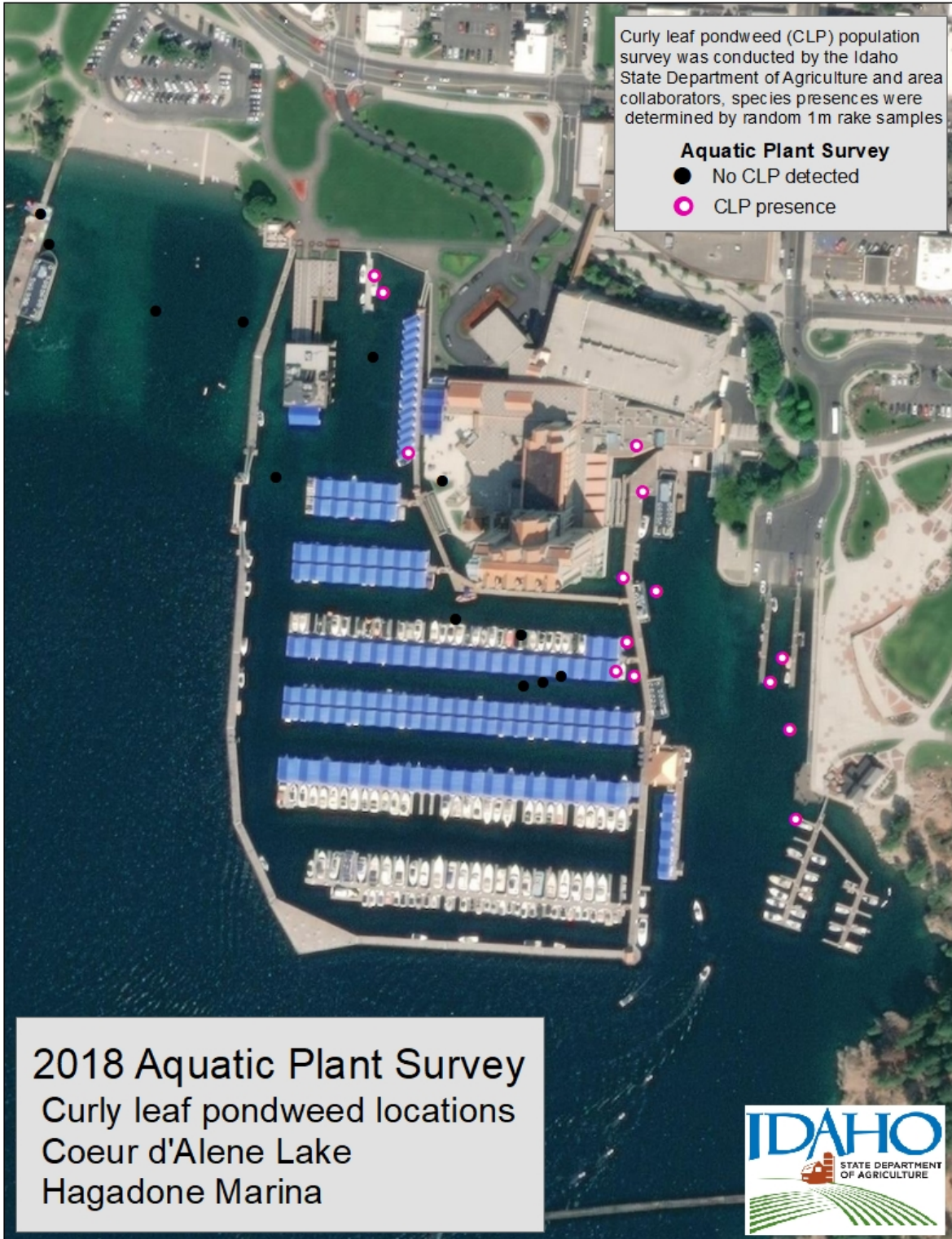


Figure 4. Survey of Curly Leaf Pondweed (*Potamogeton crispus*) Distribution at the Site of First Detection.\* Data Collected by IDEQ, ISDA and Clean Lakes Inc. Personnel. \*First Detection Occurred July 1, 2018.

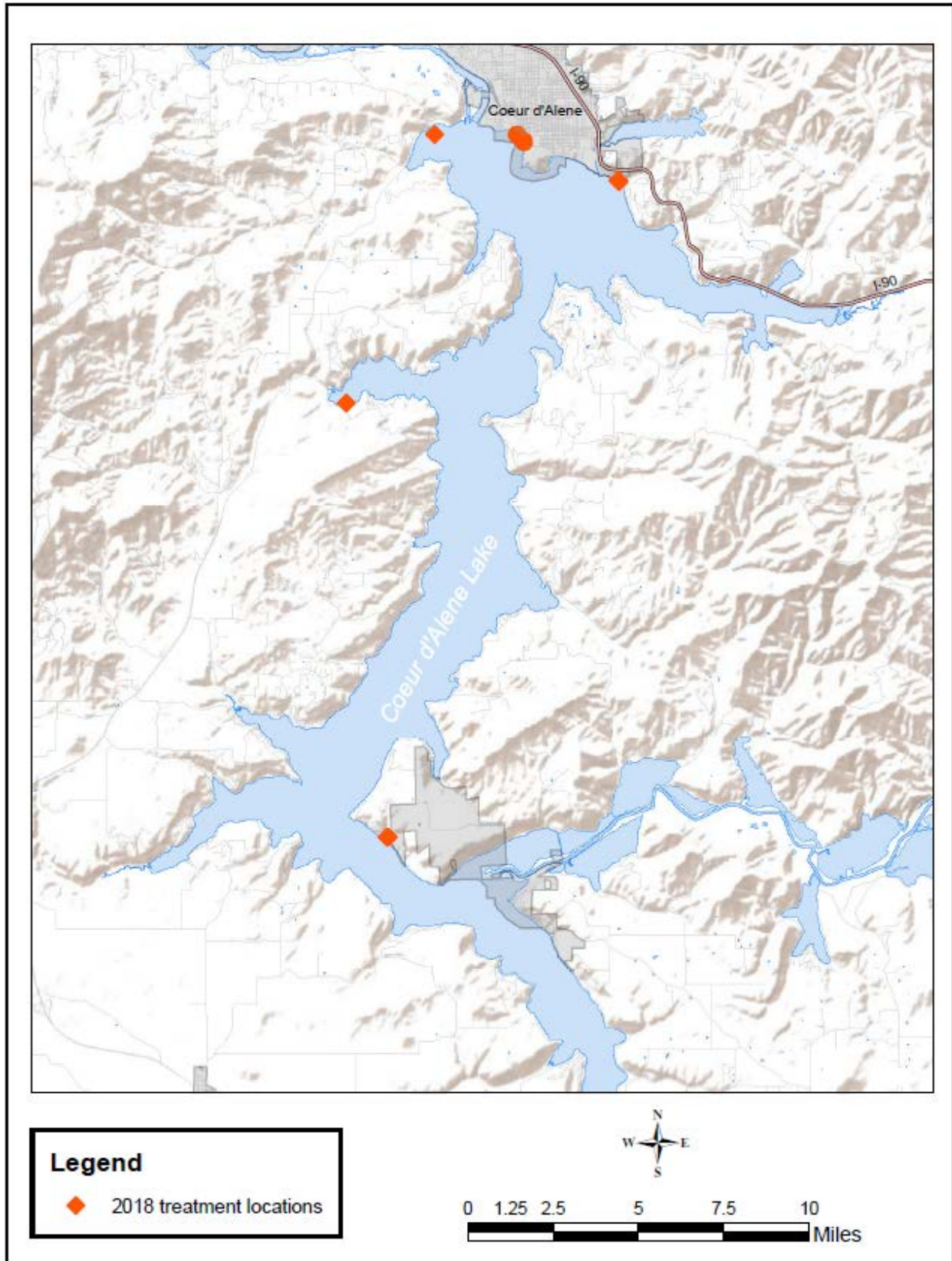


Figure 5. 2018 Milfoil Hand Pulling Treatment Locations on Coeur d'Alene Lake.



Figure 6. 2018 Milfoil and Curly Leaf Pondweed Hand Pulling Treatment Location at the Third Street Boat Launch and Hagadone Marina.

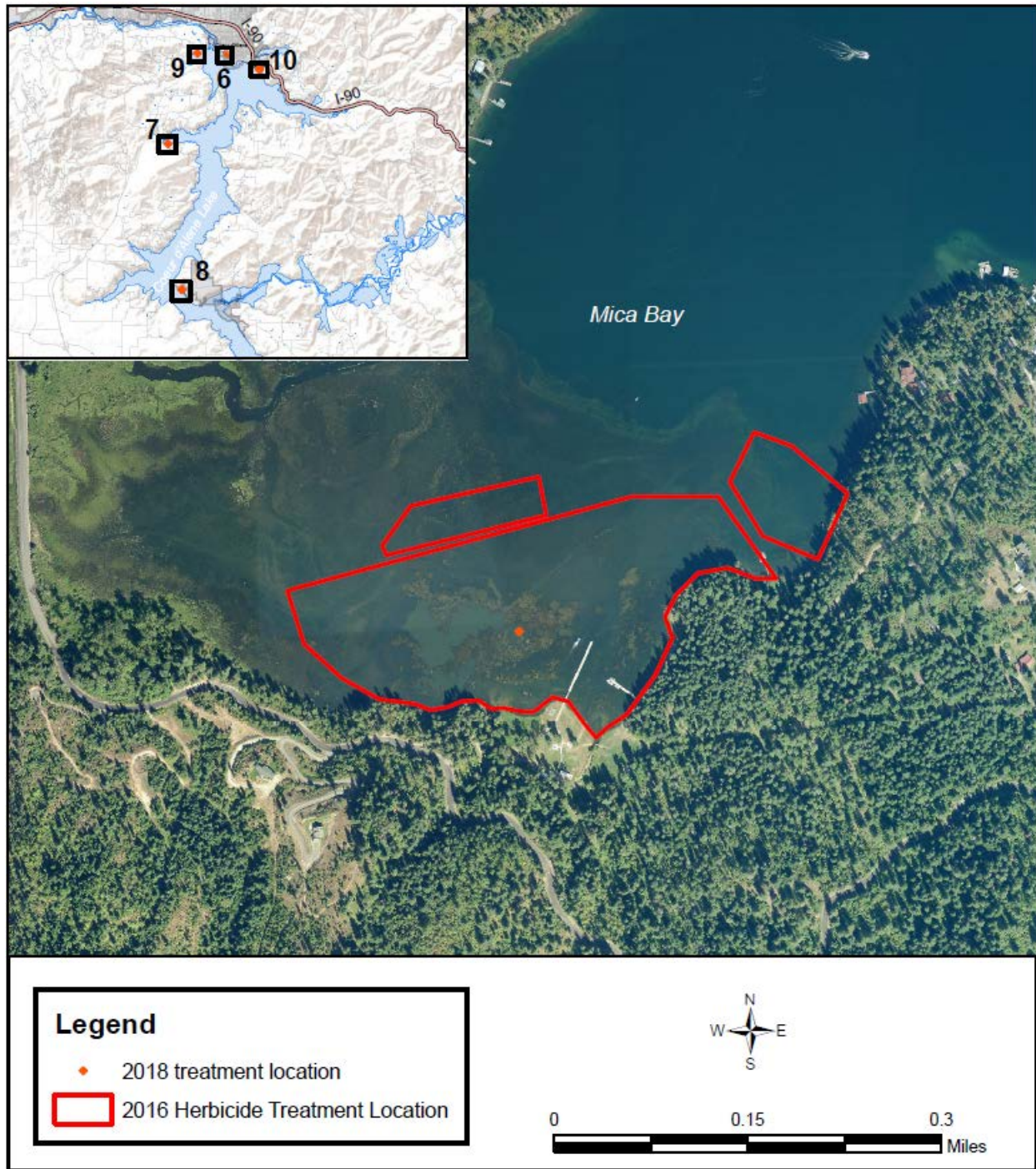


Figure 7. 2018 Milfoil Hand Pulling Treatment Location and 2016 Herbicide Treatment Location in Mica Bay.



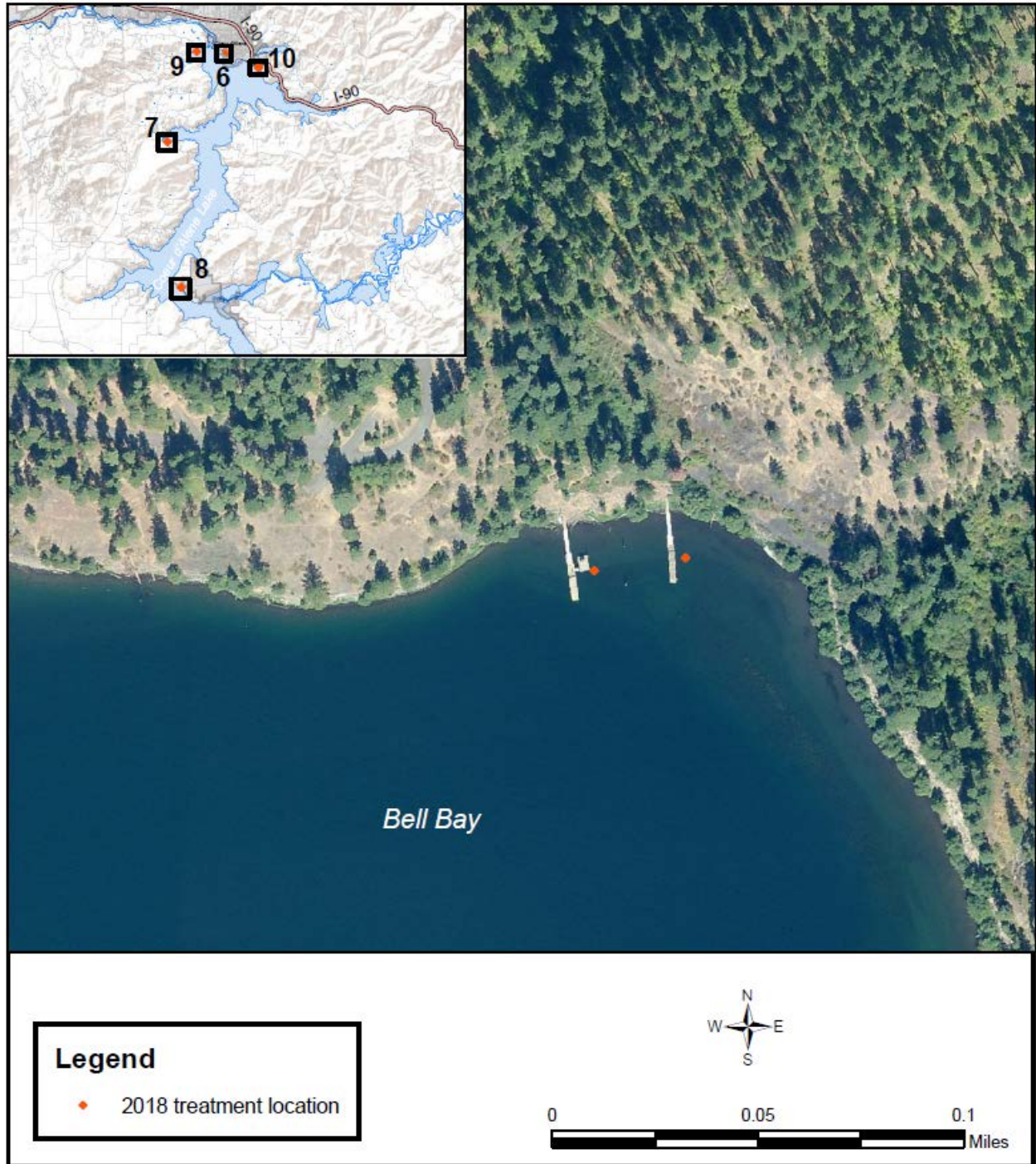


Figure 8. 2018 Milfoil Hand Pulling Treatment Location in Bell Bay.

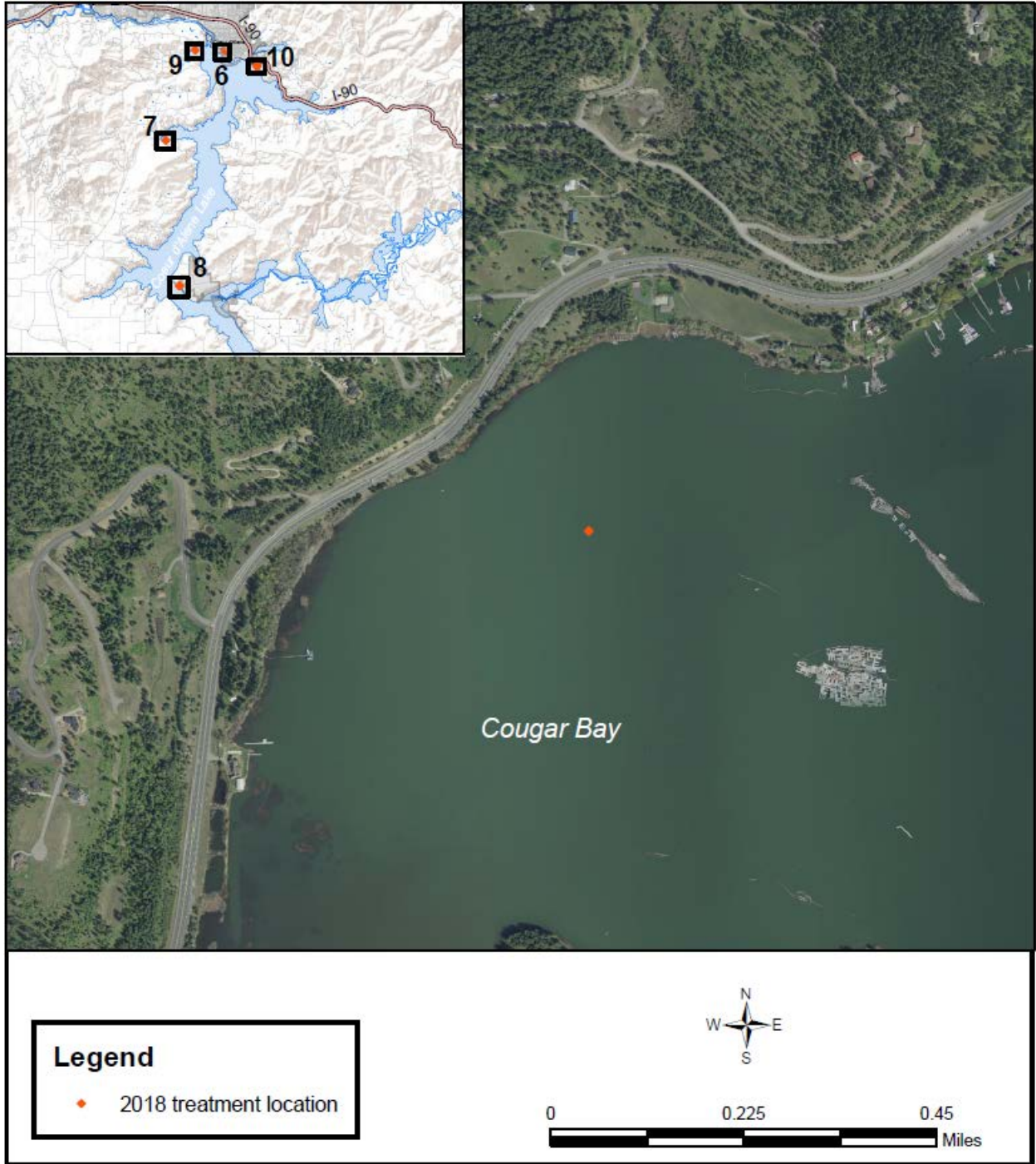


Figure 9. 2018 Milfoil Hand Pulling Treatment Location in Cougar Bay.

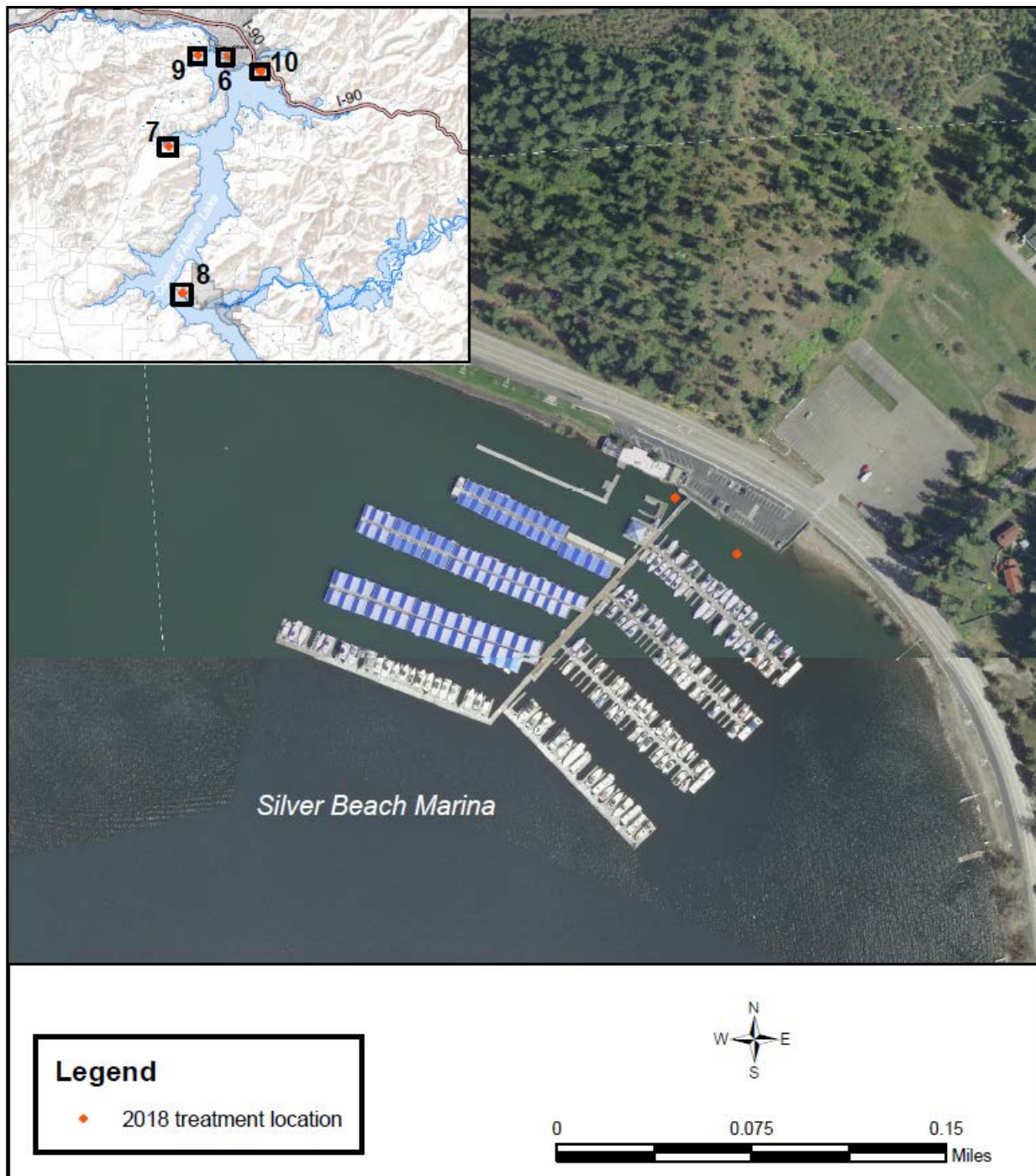


Figure 10. 2018 Milfoil Hand Pulling Treatment Location at Silver Beach Marina

**APPENDIX A**  
**2018 COEUR D'ALENE LAKE AQUATIC WEED MANAGEMENT FOR**  
**NON-TRIBAL WATERS MEETING MINUTES**

# 2018 ANNUAL MEETING MINUTES

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

*Meeting Place: IDEQ Office, Coeur d'Alene, ID*  
*Meeting Date & Time: 3/15/2018 1:30 PM-3:30 PM*

### **Attendees:**

Ben Scofield, Coeur d'Alene Tribe  
Glen Pettit, Idaho Department of Environmental Quality  
Bob Witherow, Idaho Department of Environmental Quality  
Jaime Brunner, Idaho Department of Environmental Quality  
Kim Holzer, Idaho State Department of Agriculture  
Shelby Heiderman, Kootenai County  
Dave Leptich, Idaho Department of Fish and Game  
David Armes, Avista

### **1. Review the Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters**

#### **2. 2017 Activities**

- Avista Activities
- Idaho State Department of Agriculture (ISDA) Activities
- Idaho Department of Environmental Quality (IDEQ) Activities
- Kootenai County Activities

### **3. Review Current Milfoil Distribution in Coeur d'Alene Lake**

#### **4. Proposed 2018 Activities**

- Surveys
- Workshop
- Management Actions
- Kootenai County Noxious Weeds Education Outreach funding needs

### **5. 2018 Funding**

- Avista budgeted \$40,000 for 2018 activities.

# 2018 ANNUAL MEETING MINUTES

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

*Meeting Place: IDEQ Office, Coeur d'Alene, ID*  
*Meeting Date & Time: 3/15/2018 1:30 PM-3:30 PM*

### **Meeting Notes:**

#### **Avista Update:**

- David Armes reviewed the 2017 surveys and management activities which included visual and point intercept surveys at Mica, Windy, Echo, Turner and Beauty bays, Harrison Slough, and Blue, Black and Thompson lakes and diver hand pulling in Windy, Mica and Wolf Lodge bays.
- Sparse milfoil was observed at Windy Bay, only a few plants were observed at Mica Bay.
- Three-four acres of milfoil was located by ACE diving in Wolf Lodge Bay. This could be EWM or northern watermilfoil or a hybrid. The species of this milfoil has not been determined.
- IDEQ and ISDA also overserved sparse milfoil in Wolf Lodge Bay.
- Diver pull options were discussed, which included utilizing ACE, ISDA or a combination of resources.
- Diver pull options were discussed, ISDA may be able to implement diver hand pulling if a spotter is available as a second person. ISDA may have a roving exploratory dredge for use, however modifications for EWM may be necessary.

#### **ISDA Update:**

- Point intercept surveys planned for 2018
- Can use canoe and paddleboat access if needed.
- Maintaining the internal aquatic weed database that tracks calls and actions.

David Armes mentioned some standardized and overlapping survey methods may be an option amongst the entities doing weed surveys.

#### **IDEQ Update:**

- Glen Pettit discussed the Avista/IDEQ database that includes treatments, surveys and known milfoil populations.
- Periphyton study included visual surveys in Blue Creek, Bennett, Neachen, Beauty, Kidd Island and Wolf Lodge bays. No milfoil was identified.
- ISDA found a suspected milfoil fragment in Echo Bay.

#### **Coeur d'Alene Tribe Update:**

- Avista and the Tribe hired "Clean Lakes" to complete herbicide treatments on approximately 42.5 acres of milfoil in the south end of Black Lake using Aquathol K (Endothol). Efficacy of the Black Lake treatment was rated as fair to excellent six weeks after treatment.
- The Tribe placed bottom barriers on approximately 4,000 square feet of milfoil and problematic aquatic weeds in Cottonwood Bay

## 2018 ANNUAL MEETING MINUTES

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

*Meeting Place: IDEQ Office, Coeur d'Alene, ID  
Meeting Date & Time: 3/15/2018 1:30 PM-3:30 PM*

- Other surveys conducted by the Tribe in 2017 included a 52 week after treatment survey of the 2016 herbicide treatment and a lake wide survey of the Southern Coeur d'Alene Lake system.

#### **Kootenai County**

- Surveys were completed in Harrison Slough and Wolf Lodge Bay. Milfoil was observed at both locations.

#### **Proposed 2018 Activities**

David Armes discussed the 2018 survey rotation. The list of locations to be surveyed will be sent out to the group.

ISDA mentioned to the group an invasive species workshop will take place in Pullman, WA on 4/3. This conference is put on by the same group that put on the flowering rush conference.

Jaime Brunner also mentioned conferences at CdA Waterfest and the CdA Chamber of commerce. Jaime will share any additional information.

Glen Pettit mentioned Bay Watchers occur every April and October. These meetings could be a good opportunity to recruit volunteer monitors for specific bays.

The group discussed that Cougar Bay is a priority for hand pulling. ISDA may be able to complete this task.

David Armes mentioned that Windy and Mica Bays will be monitored for possible hand pulling locations.

David Armes mentioned that Harrison Slough was a possible location for herbicide treatments in 2018. The Chain lake milfoil population is not a priority for treatments, however launches associated with the chain lakes could be a spot to prevent the spread of milfoil.

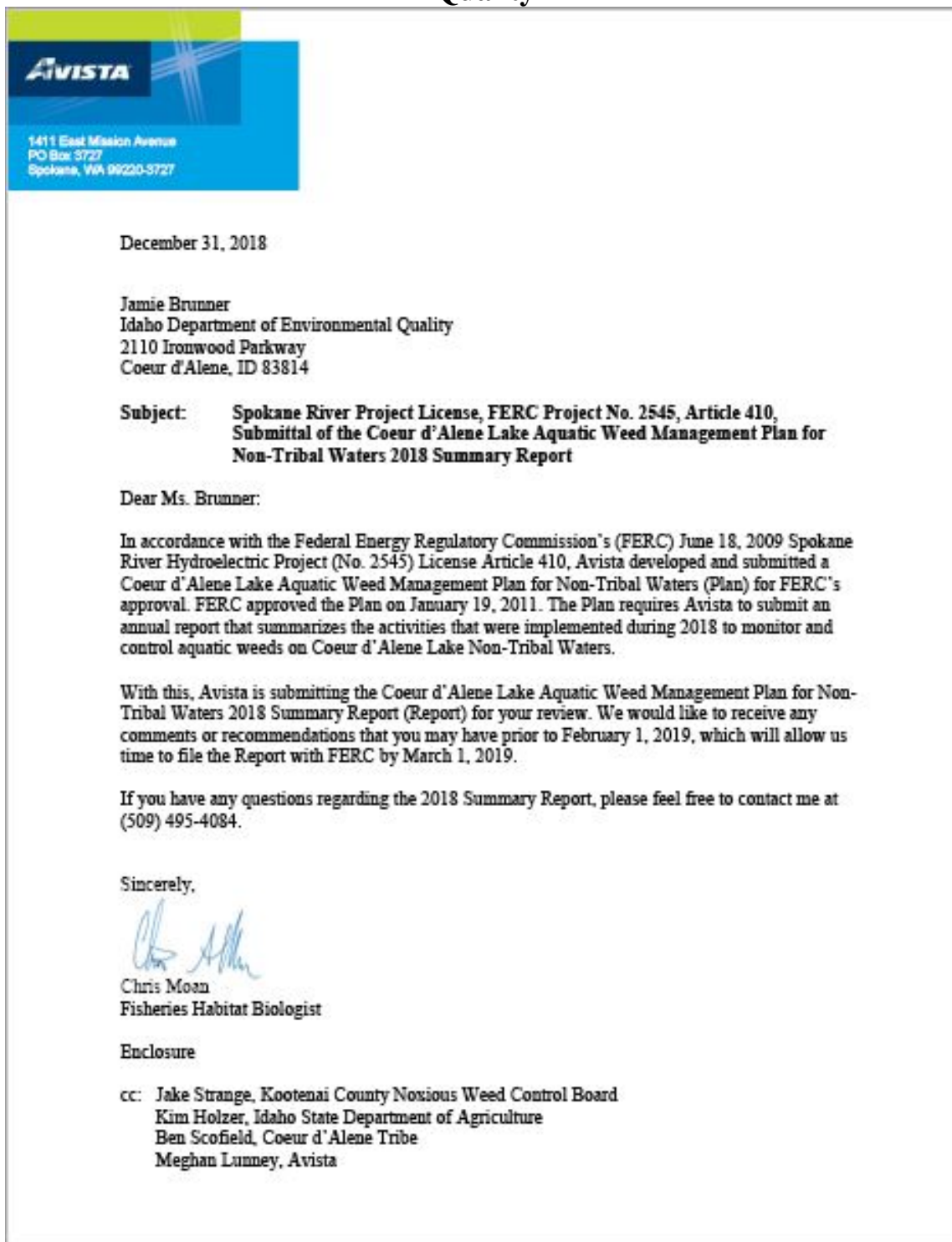
#### **CdA Tribe 2018 Activities**

- Ben discussed the Tribe is working with a grad student on a caddisfly life history project in Chatcolet Lake. Herbivory by this caddisfly is suspected to have significant impacts on aquatic plants in the study area and the work will help us better understand its impact on milfoil as well as other aquatic plants.
- The Tribe will implement harvesting in 2018 in high use areas south of the swing bridge. No permits are required for harvesting.
- An herbicide application will be completed in Benewah Lake.

**APPENDIX B**  
**CONSULTATION RECORD**



## Avista's December 31, 2018 Letter to the Idaho Department of Environmental Quality



## Idaho Department of Environmental Quality's Comments

**From:** Jamie.Brunner@deq.idaho.gov  
**To:** [Moan, Chris](#)  
**Subject:** [External] Fwd: 2018 Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters Summary Report  
**Date:** Friday, February 01, 2019 4:03:59 PM  
**Attachments:** [image001.png](#)

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Hi Chris,

Thank you for the reminder. Below are Glen's comments. I looked through the report and didn't have anything to add to these.

Cheers,  
Jamie

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**From:** Glen Pettit <[glen.pettit@deq.idaho.gov](mailto:glen.pettit@deq.idaho.gov)>  
**Sent:** Tuesday, January 15, 2019 9:31 AM  
**To:** Jamie Brunner  
**Subject:** RE: 2018 Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters Summary Report

Hi Jamie,

Below are a few things I think could be added to the summary report.

- 1) It would great to have the meeting notes as part of the document, like the 2011 report. It will help track the Record of Decision.
- 2) Page 5. Section 8 Planned Activities For 2019. Narrative should be added to address the large outcrop of milfoil in Wolf Lodge and Windy Bay that did not get treated this year due the lake water temperature bull trout concern.

Thanks,

EP

---

**From:** Moan, Chris [<mailto:Chris.Moan@avistacorp.com>]  
**Sent:** Monday, December 31, 2018 10:28 AM  
**To:** Jamie Brunner  
**Cc:** [jstrange@kcgov.us](mailto:jstrange@kcgov.us); Kim Holzer; Ben Scofield; Lunney, Meghan  
**Subject:** RE: 2018 Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters Summary Report

Hi Jamie,

Attached for your review is the 2018 Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters Summary Report and associated cover letter. Please provide any comments you may have prior to February 1, 2019, as we are required to submit this report to FERC prior to March 1, 2019.

Thank you.

**Chris Moan, Fisheries Habitat Biologist**

1411 E Mission Ave MSC-1, Spokane, WA, 99202

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## **Idaho Department of Environmental Quality's (IDEQ) Comments and Avista's Response**

### **IDEQ Comment #1**

It would be great to have the meeting notes as part of the document, like the 2011 report. It will help track the Record of Decision.

### ***Avista Response***

*The meeting minutes from the 2018 Coeur d'Alene Lake Aquatic Weed Management for Non-Tribal Waters annual meeting were incorporated into the report as Appendix A.*

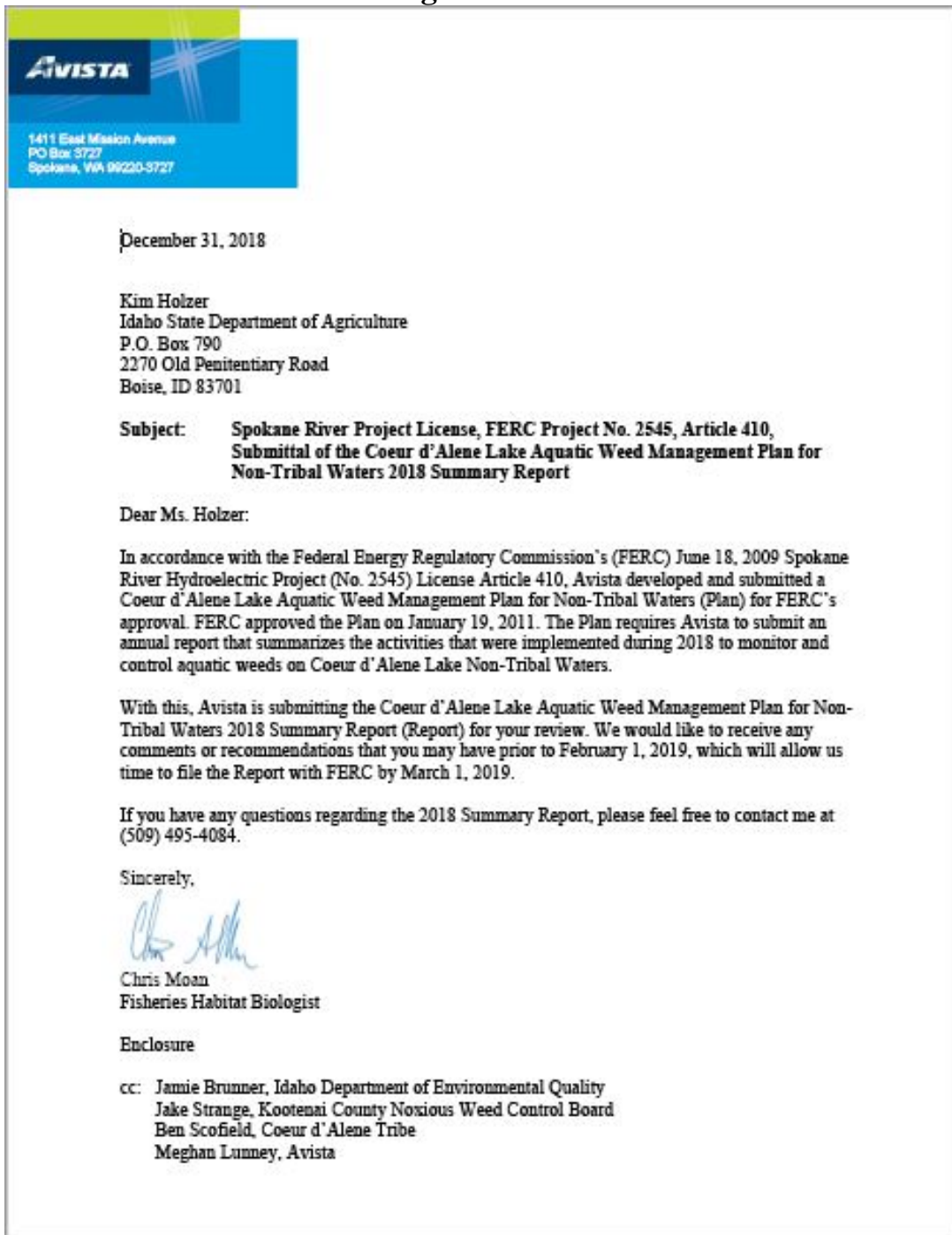
### **IDEQ Comment #2**

Page 5. Section 8 Planned Activities For 2019. Narrative should be added to address the large outcrop of milfoil in Wolf Lodge and Windy Bay that did not get treated this year due the lake water temperature bull trout concern.

### ***Avista Response***

*A statement was added to Section 8 addressing the planned 2019 actions pertaining to the treatment of milfoil in Wolf Lodge and Windy Bays.*

## Avista's December 31, 2018 Letter to the Idaho State Department of Agriculture



## Idaho State Department of Agriculture's Comments

**From:** Kim Holzer  
**To:** [Moan, Chris](#)  
**Cc:** [Paul Rhoades](#); [Jeremy Varley](#)  
**Subject:** [External] RE: (External)2018 Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters Summary Report  
**Date:** Tuesday, January 22, 2019 5:02:46 PM  
**Attachments:** [image001.png](#)

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Dear Chris,

Please see some suggestions below:

- P. 3, 4.0 Typo, "Hafadone" Marina should read "Hagadone" Marina
- P. 4, 5.0 Management actions in Tribal Waters are described with a qualitative efficacy rating (fair to excellent). What do these ratings mean? Do the management actions for Non-Tribal Waters also have an efficacy score? Consider removing the rating or defining and applying the rating scheme to all actions for consistency throughout.
- P. 5, 8.0 Do we have a list of locations for treatment consideration/prioritization in 2019? Also what about including sites that are due to be surveyed in 2019 to assure we define the workload early since surveys occur at prescribed intervals? I am also open to waiting and delineating these at the March meeting.
- P. 11, Fig 4 ISDA will provide a revised figure correcting the typo in the legend from Curley to Curly.
- P. 10, Fig 3 In the text you describe a survey in Rose Lake (P. 2), which is correct. However, Killarney Lake is outlined here. It appears that Rose Lake may actually be outside the HED project boundary.
- Fig 5 Consider replacing "treatment locations" with "management locations" for clarity.
- Fig 6 – 10 Consider specifying the management method/treatment (e.g. Herbicide, Mechanical Harvest, Hand Pull, Suction Dredge, Diver Removal) in the legend. I was a little confused at first when the diver removal was delineated by the single word "Treatment" while "Herbicide Treatment" was more specific.

I really appreciated the added figures (Fig 4, 6 – 10) detailing the management actions by site. Nice one!

Thank you for seeking our feedback. It's a pleasure to be part of this team.

Warm Regards,  
Kim

**Kim Holzer, Ph.D.**  
Agriculture Program Specialist — North Idaho

## **Idaho State Department of Agriculture’s (ISDA) Comments and Avista’s Response**

### **ISDA Comment #1**

On page 3, Section 4. There is a typo, “Haradone” Marina should read “Hagadone” Marina

### ***Avista Response***

*The name was corrected to read “Hagadone” Marina.*

### **ISDA Comment #2**

On page 4, Section 5. Management actions in Tribal Waters are described with a qualitative efficacy rating (fair to excellent). What do these ratings mean? Do the management actions for Non-Tribal Waters also have an efficacy score? Consider removing the rating or defining and applying the rating scheme to all actions for consistency throughout.

### ***Avista Response***

*The Coeur d’Alene Tribe uses the efficacy rating to rate the success of their weed control applications. Treatments are considered excellent when all to most of the milfoil is removed, a fair treatment will have a moderate level of milfoil removed, and a poor treatment will have little to no milfoil removed. This efficacy rating is not used on management actions in Non-Tribal Waters. An explanation of the rating scale definitions was added to Section 5 of the report.*

### **ISDA Comment #3**

On page 5, Section 8. Do we have a list of locations for treatment consideration/prioritization in 2019? Also what about including sites that are due to be surveyed in 2019 to assure we define the workload early since surveys occur at prescribed intervals? I am also open to waiting and delineating these at the March meeting.

### ***Avista Response***

*A sentence was added to Section 8 stating the number and general locations of surveys proposed in 2019. A more thorough discussion of the specific survey locations and the workload for the Cooperating Parties will be discussed at the 2019 Annual Meeting.*

### **ISDA Comment #4**

On page 11, figure 4. ISDA will provide a revised figure correcting the typo in the legend from Curley to Curly.

### ***Avista Response***

*The spelling of “Curly” was corrected in Figure 4.*

### **ISDA Comment #5**

On page 10, figure 3. In the text you describe a survey in Rose Lake (P. 2), which is correct. However, Killarney Lake is outlined here. It appears that Rose Lake may actually be outside the HED project boundary.

***Avista Response***

*Rose Lake is outside Avista’s Project boundary and was therefore eliminated from the text (Section 3). Additionally, Figure 3 was edited to remove the outline and label around Killarney Lake.*

**ISDA Comment #6**

Figure 5. Consider replacing “treatment locations” with “management locations” for clarity.

***Avista Response***

*The text “Treatment Locations” was replaced with “Hand Pulling Treatment Locations” in Figure 5 in order to clarify what type of treatment occurred at these locations.*

**ISDA Comment #7**

Figures 6-10. Consider specifying the management method/treatment (e.g. Herbicide, Mechanical Harvest, Hand Pull, Suction Dredge, Diver Removal) in the legend. I was a little confused at first when the diver removal was delineated by the single word “Treatment” while “Herbicide Treatment” was more specific.

I really appreciated the added figures (Fig 4, 6 – 10) detailing the management actions by site.

***Avista Response***

*The captions in Figures 6 through 10 were modified to incorporate the type of treatment conducted, per the suggestion. We are glad the added figures helped clarify the location and type of treatments conducted in 2018.*



## Avista's December 31, 2018 Letter to the Coeur d'Alene Tribe



December 31, 2018

Ben Scofield  
Coeur d'Alene Tribe  
P.O. Box 408 / 850 A Street  
Plummer, ID 83851

**Subject: Spokane River Project License, FERC Project No. 2545, Article 410,  
Submittal of the Coeur d'Alene Lake Aquatic Weed Management Plan for  
Non-Tribal Waters 2018 Summary Report**

Dear Mr. Scofield:

In accordance with the Federal Energy Regulatory Commission's (FERC) June 18, 2009 Spokane River Hydroelectric Project (No. 2545) License Article 410, Avista developed and submitted a Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters (Plan) for FERC's approval. FERC approved the Plan on January 19, 2011. The Plan requires Avista to submit an annual report that summarizes the activities that were implemented during 2018 to monitor and control aquatic weeds on Coeur d'Alene Lake Non-Tribal Waters.

With this, Avista is submitting the Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters 2018 Summary Report (Report) for your review. We would like to receive any comments or recommendations that you may have prior to February 1, 2019, which will allow us time to file the Report with FERC by March 1, 2019.

If you have any questions regarding the 2018 Summary Report, please feel free to contact me at (509) 495-4084.

Sincerely,

A handwritten signature in blue ink, appearing to read "Chris Moan".

Chris Moan  
Fisheries Habitat Biologist

Enclosure

cc: Jake Strange, Kootenai County Noxious Weed Control Board  
Kim Holzer, Idaho State Department of Agriculture  
Jamie Brunner, Idaho Department of Environmental Quality  
Meghan Lunney, Avista

## The Coeur d'Alene Tribe's Comments

**From:** Ben Scofield  
**To:** [Moan, Chris](#)  
**Cc:** [Scott Fields](#)  
**Subject:** [External] RE: 2018 Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters Summary Report  
**Date:** Wednesday, January 02, 2019 10:28:40 AM  
**Attachments:** [image001.png](#)  
[2018 Summary Report Lake CDA NonTribal Waters Aquatic Weeds123118 BDS coms.pdf](#)

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Hi Chris, here are my comments on the 2018 report. Looks good and thanks for the chance to review. Also, could I get an e-copy of any of the contractor reports you may have received from 2018 work that have survey results? Thanks!

Ben Scofield  
Water Resources Specialist  
Lake Management Dept.  
Coeur d'Alene Tribe  
Office #: 208-686-6206  
Fax #: 208-686-3021  
[bscofield@cdatribe-nsn.gov](mailto:bscofield@cdatribe-nsn.gov)

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**From:** Moan, Chris <[Chris.Moan@avistacorp.com](mailto:Chris.Moan@avistacorp.com)>  
**Sent:** Monday, December 31, 2018 10:26 AM  
**To:** Ben Scofield <[bscofield@cdatribe-nsn.gov](mailto:bscofield@cdatribe-nsn.gov)>  
**Cc:** Jamie Brunner ([jamie.brunner@deq.idaho.gov](mailto:jamie.brunner@deq.idaho.gov)) <[jamie.brunner@deq.idaho.gov](mailto:jamie.brunner@deq.idaho.gov)>; [jstrange@kcgov.us](mailto:jstrange@kcgov.us); Kim Holzer <[Kim.Holzer@ISDA.IDAHO.GOV](mailto:Kim.Holzer@ISDA.IDAHO.GOV)>; Lunney, Meghan <[Meghan.Lunney@avistacorp.com](mailto:Meghan.Lunney@avistacorp.com)>  
**Subject:** 2018 Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters Summary Report

Hi Ben,

Attached for your review is the 2018 Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters Summary Report and associated cover letter. Please provide any comments you may have prior to February 1, 2019, as we are required to submit this report to FERC prior to March 1, 2019.

Thank you.

**Chris Moan, Fisheries Habitat Biologist**

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## **The Coeur d'Alene Tribe's (CDA Tribe) Comments and Avista's Response**

### **CDA Tribe Comment #1**

I should have brought this up at our last meeting, but we should seriously consider sending in milfoil samples from N CDA Lake to Ryan Thum at Montana State University for genetics analyses in 2019. Different milfoils have different susceptibilities to herbicide. Knowing what milfoil we're dealing with in the North will help determine herbicide dosing and inform herbicide resistance strategies that should be implemented if herbicides are used. (Section 1.2, page 1, third paragraph).

### ***Avista Response***

*The topic of genetic testing for Coeur d'Alene milfoil will be discussed at the annual spring meeting with the Cooperating Parties in 2019.*

### **CDA Tribe Comment #2**

The Coeur d'Alene Reservation Aquatic Weed Management Plan was updated with FERC in 2017. (Section 1.2, page 2, first paragraph)

### ***Avista Response***

*The reference was updated.*

### **CDA Tribe Comment #3**

The use of the term "eradicate" is strong language, consider rewording. Our hope is to eradicate, but we need more information on CLP distribution to know if this is realistic. Based on work with Hydrilla and Alternanthera control, eradication may be possible if the initial infestation is under ~2.5 acres. (Section 1.2, page 2, second paragraph)

[http://issg.org/database/species/reference\\_files/cendif/Rejmanek.pdf](http://issg.org/database/species/reference_files/cendif/Rejmanek.pdf)

### ***Avista Response***

*A survey conducted by ISDA and IDEQ in July 2018 estimated the CLP distribution to be 4 patches totaling 1.2 acres. Because of this small density, the 2019 treatment plan has the intent of eradicating CLP. The feasibility of eradication will be reevaluated following an evaluation of the 2019 treatment.*

### **CDA Tribe Comment #4**

How was species composition determined with the biobase survey? Maybe visual? (Section 3, page 2, second paragraph)

### ***Avista Response***

*Visual and biobase surveys were conducted simultaneously during the September surveys. The visual surveys were used to identify and estimate milfoil density and the biobase survey was used to calculate the mean water column depth of the infested area. Section 3 was modified to*

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*incorporate the words “visual survey” to the description of the survey in the report to clarify the work conducted.*

**CDA Tribe Comment #5**

Consider using the term “treatment” instead of “survey.” (Section 4, page 3, second paragraph)

***Avista Response***

*The word “survey” in the second paragraph of Section 4 was changed to “hand pulling treatment.”*

**CDA Tribe Comment #6**

Add a space between the “x” and the “10 (The 10 foot x10 foot...)” (Section 5, second paragraph under Bottom Barriers, page 4)

***Avista Response***

*A space was added between the “x” and the “10” in Section 5.*

**CDA Tribe Comment #7**

There was the Aquatic Plant ID workshop at the CDA Harbor Center on July 24 as well.

***Avista Response***

*Section 6 was modified to incorporate the Aquatic Plant ID workshop into the list of educational outreach events conducted by the Cooperating Parties.*

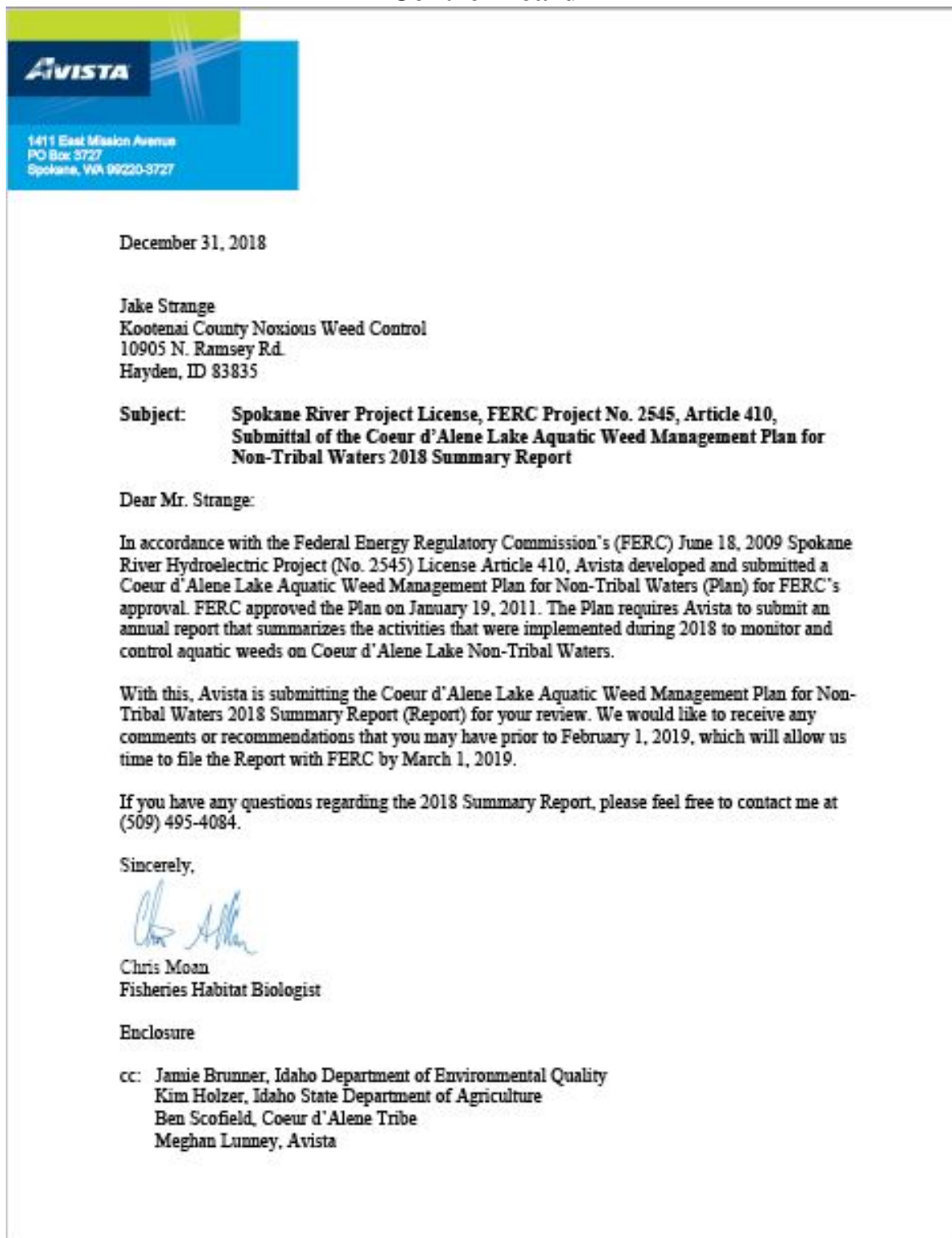
**CDA Tribe Comment #8**

Excellent. (Section 8, second paragraph, page 5)

***Avista Response***

*Avista appreciates the Coeur d’Alene Tribe’s support of treating CLP as the highest priority action in 2019.*

## Avista's December 31, 2018 Letter to the Kootenai County Noxious Weed Control Board



December 31, 2018

Jake Strange  
Kootenai County Noxious Weed Control  
10905 N. Ramsey Rd.  
Hayden, ID 83835

**Subject: Spokane River Project License, FERC Project No. 2545, Article 410,  
Submittal of the Coeur d'Alene Lake Aquatic Weed Management Plan for  
Non-Tribal Waters 2018 Summary Report**

Dear Mr. Strange:

In accordance with the Federal Energy Regulatory Commission's (FERC) June 18, 2009 Spokane River Hydroelectric Project (No. 2545) License Article 410, Avista developed and submitted a Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters (Plan) for FERC's approval. FERC approved the Plan on January 19, 2011. The Plan requires Avista to submit an annual report that summarizes the activities that were implemented during 2018 to monitor and control aquatic weeds on Coeur d'Alene Lake Non-Tribal Waters.

With this, Avista is submitting the Coeur d'Alene Lake Aquatic Weed Management Plan for Non-Tribal Waters 2018 Summary Report (Report) for your review. We would like to receive any comments or recommendations that you may have prior to February 1, 2019, which will allow us time to file the Report with FERC by March 1, 2019.

If you have any questions regarding the 2018 Summary Report, please feel free to contact me at (509) 495-4084.

Sincerely,

A handwritten signature in blue ink, appearing to read "Chris Moan".

Chris Moan  
Fisheries Habitat Biologist

Enclosure

cc: Jamie Brunner, Idaho Department of Environmental Quality  
Kim Holzer, Idaho State Department of Agriculture  
Ben Scofield, Coeur d'Alene Tribe  
Meghan Lunney, Avista

**The Kootenai County Noxious Weed Control Board did not provide comments on the 2018 Summary Report.**