

From: [Kim Holzer](#)
To: [Amidy Fuson](#)
Subject: RE: REVISED Application for Commercial Application on Lake Coeur d'Alene ERL95S1378B
Date: Thursday, May 14, 2020 4:12:42 PM
Attachments: [2019_09 Lake CDA APAR EWM.pdf](#)

Thank you Amidy. I did not notice any language related to strategies for preventing Eurasian watermilfoil spread (EWM) through their commercial operations, since Wolf Lodge is an active EWM treatment area (report with map attached). The language could be simple, such as "applicant shall consult the County Weed Superintendent, Idaho State Department of Agriculture or regional aquatic natural resource management designee (i.e. Avista Utilities) on the distribution of aquatic invasive species (AIS) and noxious weeds in travel lanes. Areas with known noxious weed infestations shall be avoided or treated prior to disturbance through commuting from the business to other project sites within the Lake."

I hope these comments prove constructive.
Best Regards,
Kim

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From: Amidy Fuson <AFuson@idl.idaho.gov>
Sent: Tuesday, April 28, 2020 9:35 AM
To: Aaron Golart <Aaron.Golart@idwr.idaho.gov>; Adam Frederick <adam.frederick@idwr.idaho.gov>; Bill Roberson <william.roberson@itd.idaho.gov>; Chantilly Higbee <Chantilly.Higbee@deq.idaho.gov>; Doug Jones <Doug.Jones@idwr.idaho.gov>; Eric <eric@lakeshighwaydistrict.com>; Jason Peppin <Jpeppin@phd1.idaho.gov>; Jeremy Varley <Jeremy.Varley@isda.idaho.gov>; Kim Holzer <Kim.Holzer@ISDA.IDAHO.GOV>; lisa jones <ljones@kcgov.us>; Matt Nykiel <mnykiel@idahoconservation.org>; Merritt <merritt.horsmon@idfg.idaho.gov>; Nick Snyder (nsnyder@kcgov.us) <nsnyder@kcgov.us>; Sgt Klinkefus <wklinkefus@kcgov.us>; Shane Slate <Shane.P.Slate@usace.army.mil>; Tammy Alleman <Tammy.Alleman@idwr.idaho.gov>; Terry Harris at KEA <kea@kealliance.org>; Todd Higen <Todd.Higen@idwr.idaho.gov>
Subject: {External}REVISED Application for Commercial Application on Lake Coeur d'Alene ERL95S1378B

Good morning,

Please review the attached REVISED application for a commercial dock and working area on Lake Coeur d'Alene. There has been additional information provided to this application and IDL wanted to make sure it was supplied to the agencies.

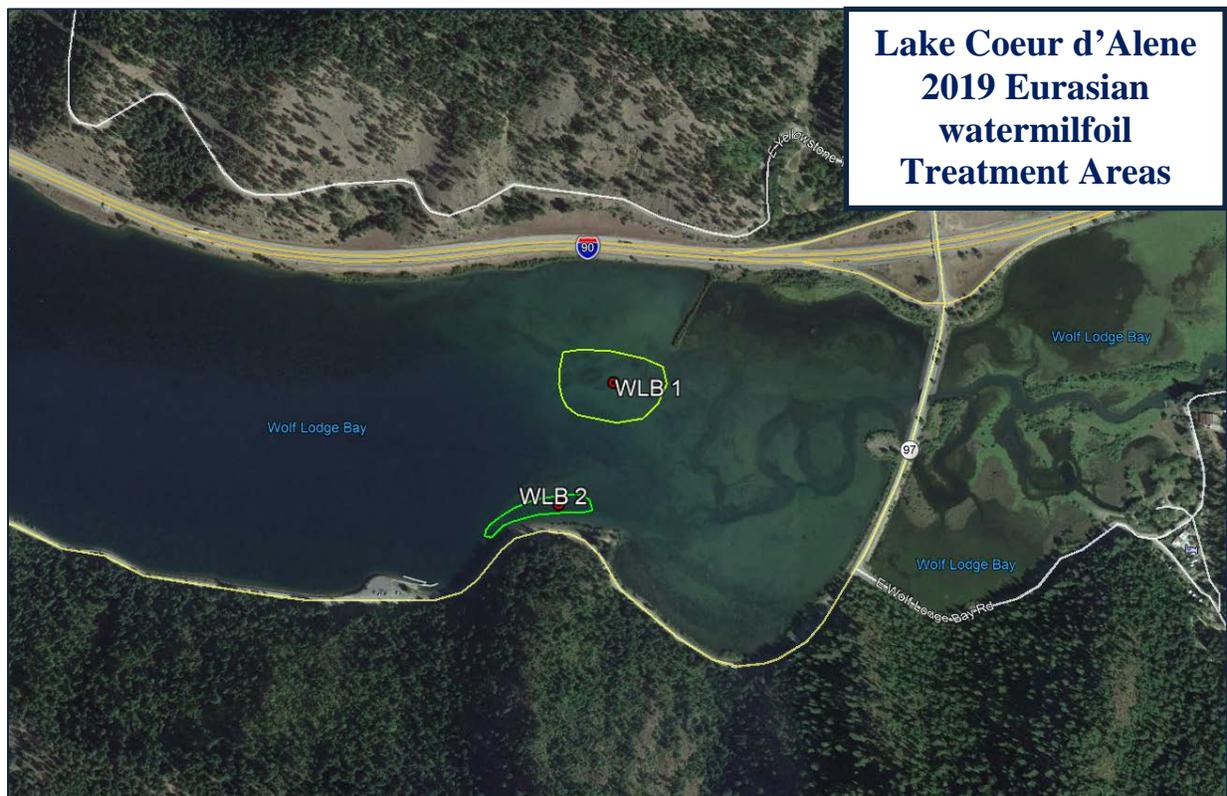
Please have all questions and comments in by May 28, 2020.

Thanks,

Amidy Fuson
Resource Specialist Sr
Lands & Waterway - Public Trust
Mica Supervisory Area
3258 W Industrial Loop
Coeur d'Alene ID 83815
(208)769-1577

**2019 Aquatic Invasive Species
Aquatic Pesticide Application Report (APAR)**

**Lake Coeur d'Alene
Avista Corporation
Kootenai County, Idaho**



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CLEAN LAKES INC.
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Prepared For:
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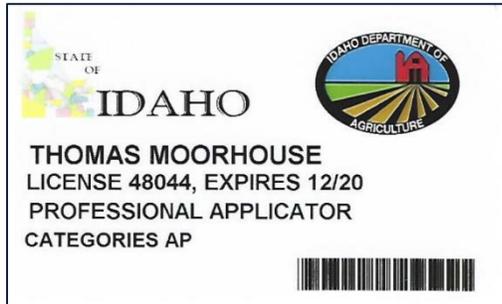
September 2019

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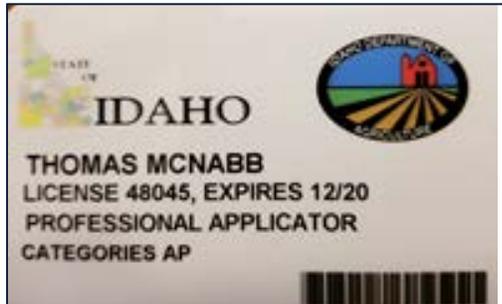
1: LIST OF LEAD PROJECT PERSONNEL

PROJECT DIRECTOR:



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PROJECT MANAGER



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HERBICIDE MIXER/LOADERS:

Thomas McNabb

AVISTA CORPORATION:

Robert Stephens
Cell Phone: 509-570-2590
Email: Rob.Stephens@avistacorp.com

2: WORK PERFORMED

AQUATIC PESTICIDE APPLICATIONS: Clean Lakes, Inc. (CLI) performed aquatic herbicide applications for the control of infestations of Eurasian watermilfoil (*Myriophyllum spicatum*) (EWM) in the northern part of the Coeur d'Alene Lake system as outlined in the Treatment Map and Tables below. Aquatic herbicide applications were performed on September 10, 2019 in compliance with the May 6, 2019 "Pesticide Discharge Management Plan for the 2019 Idaho Eurasian watermilfoil Management Project".

CLI kept appropriate logs of the work performed and mapped the locations of aquatic invasive species (AIS) colonies treated. The information provided constitutes a final report for the project.

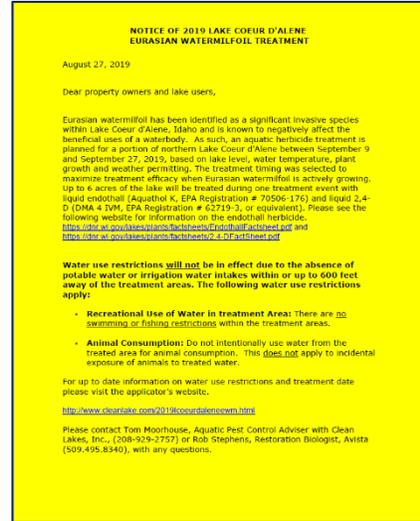
CLI followed the Implementation Plan outlined below that details actions required and taken per the tasks outlined in the Scope of Work, and the timeframes for completion of the tasks based on the scheduled treatment date and herbicides to be used:

The approach and timeline to complete the project is outlined as follows:

- **Pre-Treatment Planning**
 - September 5, 2018: GIS files for the 2019 treatment plots were developed by CLI after a visual and hydroacoustic surveys after which sonar logs were processed via cloud-based computing software (BioBase), maps were refined to support volumetric calculations for the plots to assist in treatment planning. Through a series of phone calls and e-mails between CLI staff (Moorhouse) and Avista (Moan) the treatment plots were reviewed and a treatment plan developed. Treatment timing, project permits, public notification requirements, among other issues were effectively coordinated over the ensuing year. During discussions, the following items were performed, discussed, reviewed, and/or agreed upon:
 - Follow up surveys and water temperature readings would be carried out in 2019 after treatment approvals from Avista related to a target a treatment date. Avista Corporation (Moan) consultation with the United States Fish and Wildlife Service (USFWS) indicated that water temperatures should be greater than 18C (64F) for the protection of Bull Trout. Based on these future surveys, treatment areas would be finalized as would any water use restriction areas.
 - Avista would provide CLI with the required Permits including the NPDES PGP eNOI.
 - The required public notifications would be the responsibility of CLI and include notification to the public about planned treatments and the associated water use restrictions within the treatment areas (potable, irrigation, recreation).

- CLI would create a website to support public awareness with additional information about the aquatic herbicide application.
- A review of herbicide options and rates were discussed and would be finalized based on further surveys, reviews and discussions.
- September 12, 2018: A Draft Treatment Plan was developed by CLI and submitted to Avista. Several weeks of discussions concluded that sufficient time did not exist to attempt a fall 2018 EWM treatment as coordination with lake management partners and agencies required additional time.
- August 14, 2019: Discussion began to determine treatment timing for the late summer treatment while meeting treatment temperature thresholds above 18C (64F). CLI coordinated with DEQ to access historical temperature data that determined that a treatment would have to take place by mid-September in order to comply with the threshold. Robert Stephens worked with Avista staff to review internal air temperature data with predicted water temperature to refine a target treatment window.
- August 14, 2019: Wolf Bay treatment plots were inspected and were found to contain mature EWM easily visible at the lake surface.
- August 23, 2019: A final treatment plan was finalized with Avista for a late summer EWM treatment.
- August 26, 2019: CLI developed and published a website to inform the public and agencies about upcoming treatment plans. The website included the Treatment Notice, the Label and Material Safety Data Sheet for the Aquatic Herbicide to be used, as well as site aerial images for the specific treatment sites. This website was created to coincide with the Treatment Notice published by the CLI in the Coeur d'Alene Press. That website feature was visible at <http://www.cleanlake.com/2019lcoeurdaleneewm.html>

- o August 27, 2019: CLI developed a final Treatment Notice that was submitted to the Coeur d'Alene Press newspaper for release on August 29, 2019. CLI also informed the Regional Administrator, Idaho State Department of Environmental Quality (DEQ), as well as staff of ISDA, the City of Coeur d'Alene, Hagadone Marine, and Avista.
- o August 27, 2019: CLI posted high visibility yellow laminated Treatment Notices at various locations within the treatment plot. An example is shown at right and below.



- o September 4, 2019: Aquatic herbicide were ordered and all other project related requirements were finalized during the period leading up to treatment day.
- o September 6, 2019: Water temperature measurements on September 6, 2019 measured 72 F.

- o On September 9, 2019: Shoreline postings were revisited and reposted as necessary.



- o September 9, 2019: CLI developed the National Pollutant Discharge Elimination System (NPDES) Pesticide General Permit (PGP) Pesticide Discharge Management Plan (PDMP) for the EWM treatment. The Electronic Notice of Intent (eNOI) with coverage under the permit was in an active state from January 2017. This PDMP was valid for the planned treatment in Lake Coeur d'Alene in 2019. Some modifications were necessary due to staff changes at Avista.
- o September 10, 2019: Favorable weather conditions allowed for the aquatic herbicide treatment to be performed successfully.

AQUATIC HERBICIDES USED:

Eurasian watermilfoil was identified for control due to its invasive nature and sensitive location within Lake Coeur d'Alene. Based on the results from operational projects in both Idaho and Montana, previous independent research and the herbicide label, the Aquatic Herbicides selected was Aquathol K, liquid endothall (EPA Registration Number 70506-176) and Weedar 64, liquid 2,4-D (EPA Registration Number 71368-1) in combination. The Aquatic Herbicide Labels and MSDS were included as part of the Aquatic Pesticide Application Plan (APAP). The aquatic herbicide was delivered by CLI pre-loaded in the vessel prior to launch.



TREATMENT SCHEDULE: The aquatic herbicide application to the selected sites was performed September 10, 2019 between the hours of 2:04 PM and 2:38 PM. Prior to carrying out treatments CLI (McNabb) reviewed the site including wind direction and speed. Weather was mostly sunny with no winds. Water temperature was 69.6 F.

TRANSMITTAL OF SPATIAL DATA: CLI performed the 2019 growing season survey of Lake Coeur d'Alene, and CLI generated the final herbicide treatment area shapefiles based on surveys completed the year before by ISDA and DEQ. (See Treatment Site Layout (Lake Coeur d'Alene 2019 Final EWM Treatment Area outlined below). The proposed treatment sites were surveyed by CLI staff in August 2019 and again on September 10, 2019 to review plant growth and distribution.

EQUIPMENT USED: One (1) of CLI's Littoral Zone Treatment vessels was used to perform the aquatic herbicide application. The herbicide applications were made to the lower portion of the water column to increase herbicide concentration and exposure time (CET) relationships for the control of EWM.

The aquatic vegetation treatment area shapefiles were loaded into the LittLine® GPS system for vessel guidance and herbicide application data recording. The treatment tracks were recorded for the production of the final treatment area maps to document the treatment areas. Treatment area maps as well as the digital data files are provided below or are accompanying this report as an e-mail attachment.

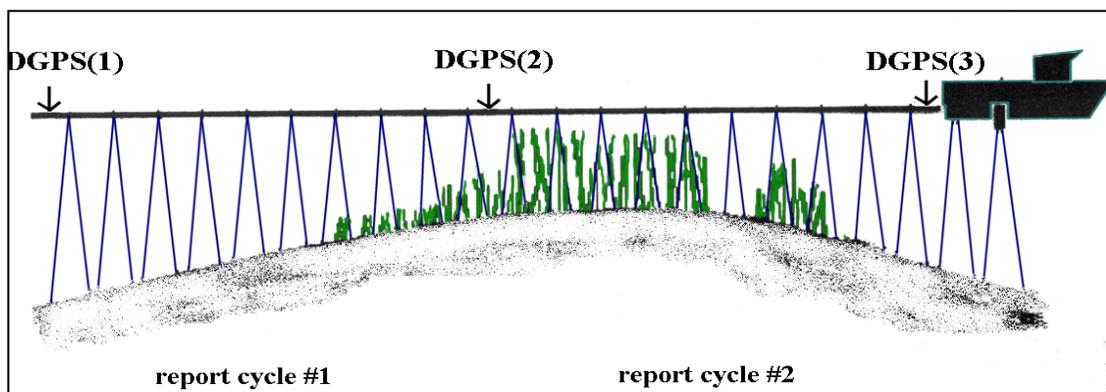
The LittLine® can place herbicides at any depth within the water column (2 - 30 feet), as well as within the bottom 2 foot of the water column. Impacts from currents, wind and wave action are reduced in deep water applications through LittLine® applications compared to conventional subsurface application systems. The LittLine® hoses are electronically reeled in or reeled out based on the varying depths of the treatment locations. Deeper depths can be achieved as required.

The LittLine® system's computerized rate controllers regulate the aquatic herbicide applications through preset treatment rates. When the vessel speeds up and or slows down, the rate controllers adjust the herbicide application rate to match the preset rate in gallons of product per acre.



CLI provided the required support equipment for material handling (unloading trucks, loading boats) as well as support trucks for the vessels assigned to the project. The aquatic herbicides were delivered by CLI pre-loaded in the application vessel.

Submerged Aquatic Vegetation (SAV) Mapping: A Lowrance HDS Digital Echosounder System with a Structure Scan Module was used to record data of the EWM and other submersed aquatic vegetation (SAV) profile in the control plots during treatment. Data was collected in both the .SLG (traditional sonar on HDS line) and the .SL2 (multi-channel structure scan) formats. Data was collected to evaluate at time of treatment SAV coverage, height in the water column, and bio-volume to support post-treatment efficacy evaluations. Due to a technical issue, data quality was not acceptable during the at time of treatment survey.



PERMIT COMPLIANCE: Avista Corporation provided the required permits and approvals for the herbicide treatments. CLI developed the Aquatic Pesticide Application Plan and Pesticide Discharge Management Plan that included the Site-Specific Safety Plan for the project.

SERVICES PROVIDED BY CLI: All manpower, materials, insurance, equipment and technical advice required to perform aquatic herbicide applications in the project areas identified for control. In addition, CLI hosted a webpage at

<http://www.cleanlake.com/2019lcoeurdaleneewm.html> that provided information on the project to the public.

SERVICES PROVIDED BY AVISTA: Avista provided the required permits, approved notices, and approved the final 2019 Treatment Area Maps and Plan.

3: TREATMENT SITE LAYOUT:

2019 Lake Coeur d’Alene Eurasian watermilfoil Treatment Area



4. TREATMENT SITE DATA & HERBICIDE APPLICATION RATE SCHEDULE

| 2019 Lake Coeur d’Alene Treatment Rate Data - Eurasian watermilfoil | | | | | Weedar 64 (liquid 2, 4-D) | | | Aquathol K (Endothall) | | |
|---|---------|--------------------------------|--------|---------|---------------------------|---------|----------------|------------------------|---------|----------------|
| Plot Number | Acreage | Mean Depth Biobase Data 9/6/18 | Volume | Product | Rate ppm | Qty /ac | Qty Total Site | Rate ppm | Qty/ ac | Qty Total Site |
| WLB 1 | 4.3 | 8.9 | 38 | End/DMA | 1.00 | 6.352 | 27 | 2.0 | 11.41 | 49 |
| WLB 2 | 1.1 | 8.9 | 10 | End/DMA | 1.00 | 6.352 | 7 | 2.0 | 11.41 | 13 |

5: APPLICATION RECORD (ISDA FORMAT)

2019 Lake Coeur d’Alene Treatment Record

| 2019 Lake Coeur d’Alene Treatment Rate Data - EWM | | Application Data | | | | | | | | |
|---|---------|------------------|------------|-----------|-------------------|---------------|-----------|----------------|------------------------|-----------|
| Plot Number | Acreage | Date | Start Time | Stop Time | Commodity Treated | Applicator | License # | Property Owner | Wind (MPH) & Direction | Weather |
| WLB 1 | 4.3 | 9/10/2019 | 2:22 PM | 2:38 PM | EWM | Thomas McNabb | 48045 | State | 0 | Pt Cloudy |
| WLB 2 | 1.1 | 9/10/2019 | 2:04 PM | 2:15 PM | EWM | Thomas McNabb | 48045 | State | 0 | Pt Cloudy |

6: PROJECT AREA MAP, TREATMENT TRACKS & SUBMERSED AQUATIC VEGETATION MAP IMAGE

Plots 1 & 2



7: POST TREATMENT SITE SURVEYS AND PLANS:

CLI carried out a post treatment survey on October 9, 2019. EWM was found mostly controlled within Plot WLB 1, but was found in several locations around the edges of the plot and at one location near the plot center that was injured but still viable. Coontail and Elodea were also found to be present. Provided in the BioBase report below is data that shows that in Plot WLB 1 there was 27.7% Area Coverage by Submersed Aquatic Vegetation (SAV) and the Average Biovolume was 17.6%.

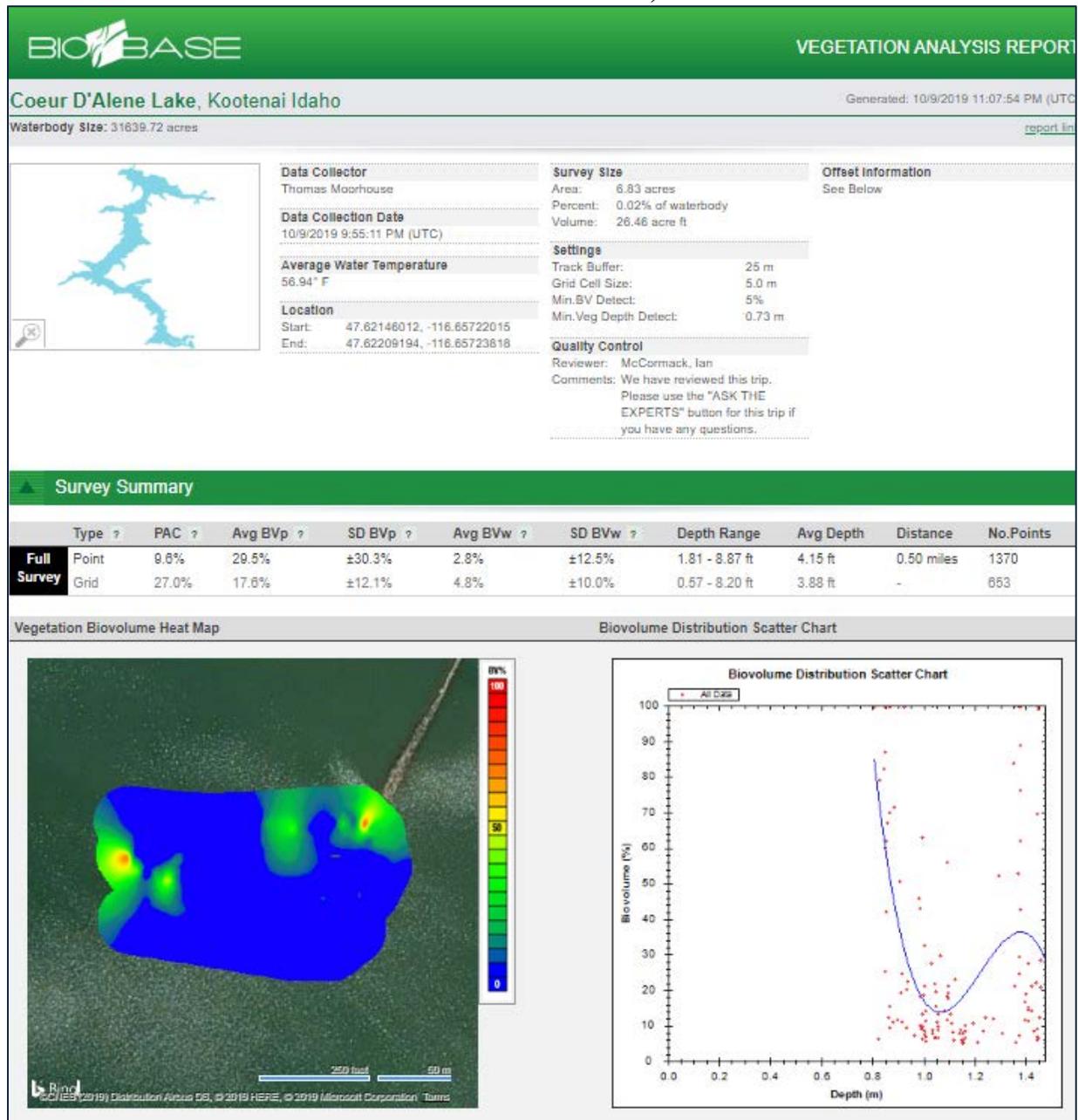
Provided in the BioBase report below is data that shows that in Plot WLB 2 that there was 23.4% Area Coverage by Submersed Aquatic Vegetation (SAV) and the Average Biovolume was 12.1%. This plot also contained Coontail and Elodea with little EWM observed. (See image at right). Due to an electronic technical difficulty with the transducer/depth finder equipment, no data is available to compare against at time of treatment (9/10/19).



A comparison with a survey conducted in September 5, 2018 is possible, though data collected during that survey combined both plots into a single survey. In 2018 Plots WLB 1 & 2 reveal that there was 86.2% Area Coverage of Submersed Aquatic Vegetation (SAV) and the Average Biovolume was 21.6%. Comparing 2018 to post treatment 2019 results indicated that there was approximately a 58.5% reduction in Area Coverage and a 4% reduction in Biovolume in WLB 1 post treatment, and approximately a 62.4% reduction in Area Coverage and a 9.5% reduction in Biovolume in WLB 2 post-treatment.

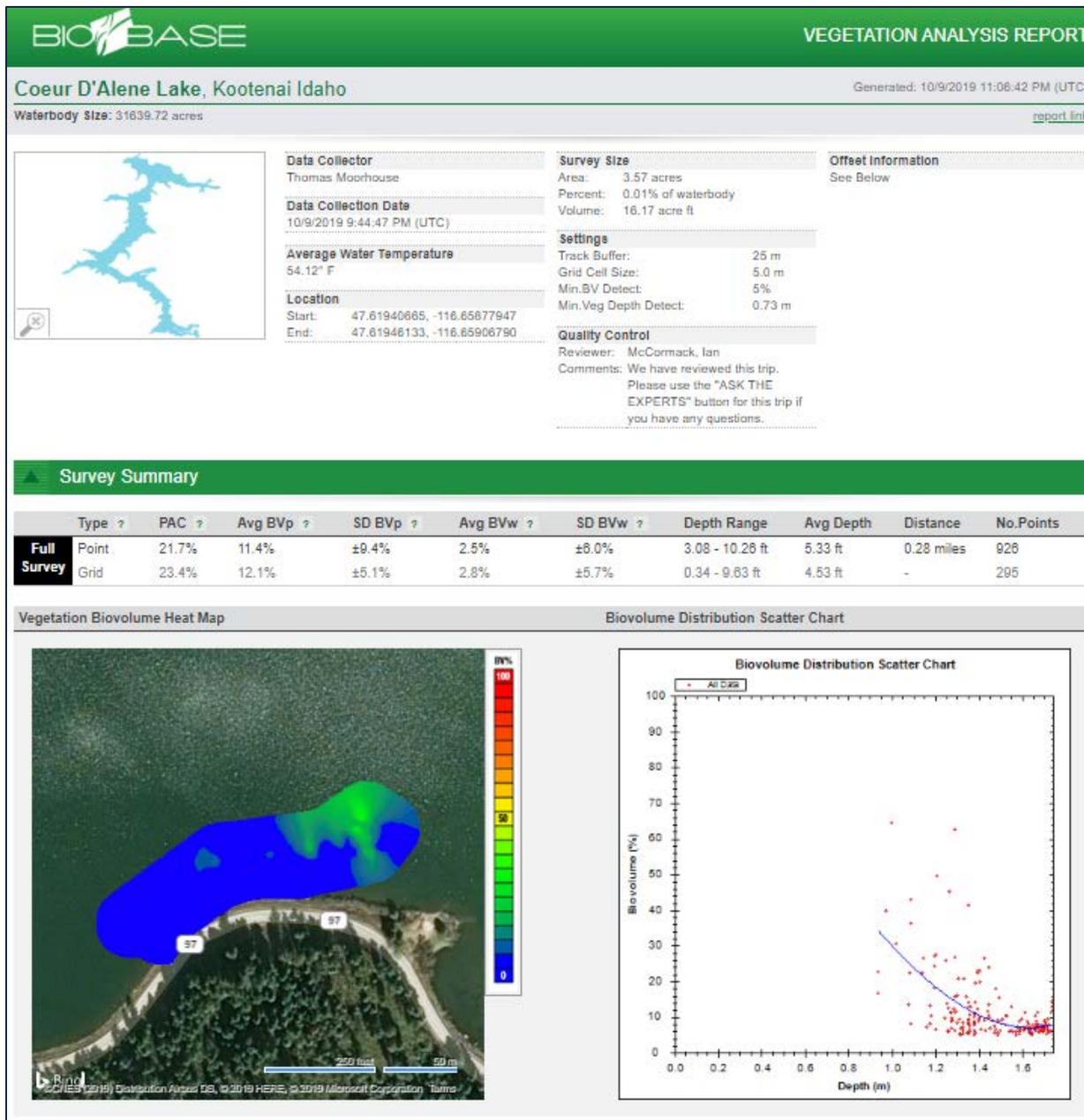
SAV PERCENT COVER AND BIOVOLUME DATA SETS

Plot WLB 1 – October 9, 2019



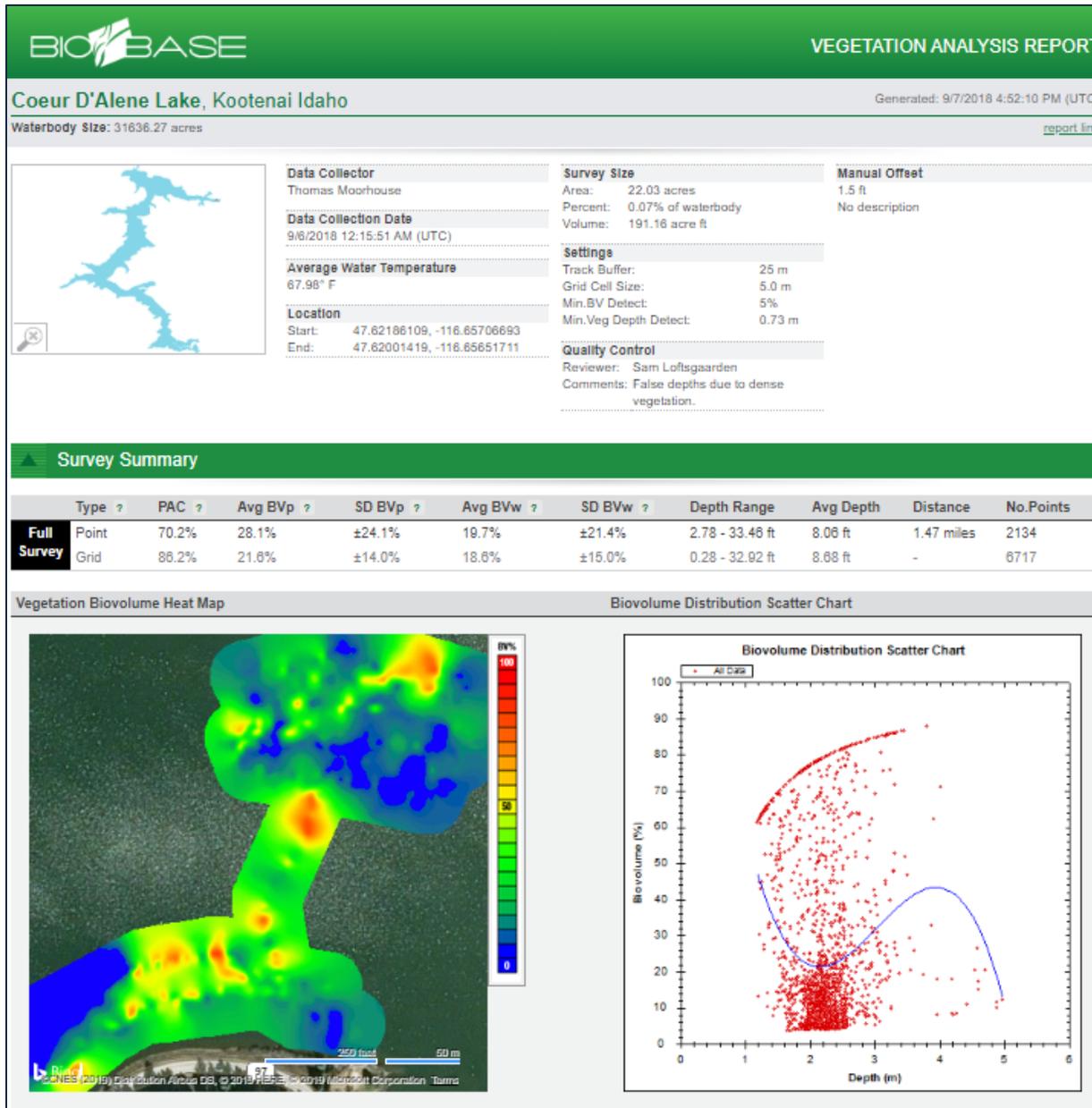
SAV PERCENT COVER AND BIOVOLUME DATA SETS

Plot WLB 2 – October 9, 2019



SAV PERCENT COVER AND BIOVOLUME DATA SETS

Plots WLB 1 and 2 – September 5, 2018



END OF AQUATIC PESTICIDE APPLICATION REPORT