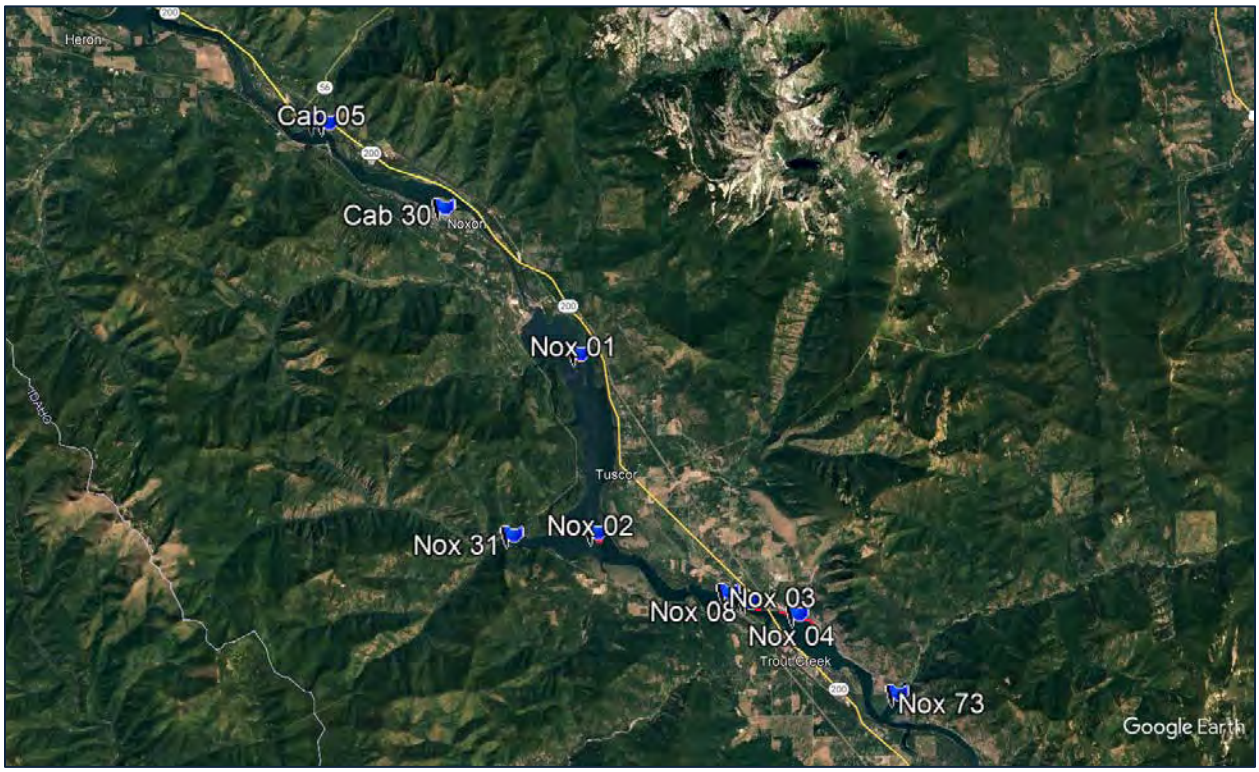
CLEAN LAKES INC.

NOXON RAPIDS AND CABINET GORGE RESERVOIRS
SANDERS COUNTY, MONTANA

2023 Aquatic Invasive Species (AIS)
Aquatic Pesticide Application Report (APAR)



Prepared By:

CLEAN LAKES INC.

www.cleanlake.com
P. O. Box 3548
Coeur d'Alene, Idaho 83814

Prepared For:
Sanders County
1111 Main Street
Thompson Falls, MT 59873

October 2023

BACKGROUND INFORMATION: Clean Lakes, Inc. (CLI) was contracted by Sanders County, Montana to provide aquatic herbicide applications for the control of Aquatic Invasive Species (AIS) within discrete areas of Noxon Rapids and Cabinet Gorge Reservoirs in August 2023. Aquatic herbicide applications were conducted in compliance with the Montana Department of Environmental Quality, Montana Pollutant Discharge Elimination System (NPDES) Pesticide General Permit (PGP) for Pesticide Application (NOI Permit # MTG870011), as well as the Pesticide Discharge Management Plan (PDMP) developed as part of the PGP. The Permit related information is included in the Noxon Rapids Reservoir, Sanders County, Montana 2023 Aquatic Invasive Species Aquatic Pesticide Application Plan (APAP)[1].

SCOPE OF WORK: The scope of work was for the application of aquatic herbicides for the control of Eurasian watermilfoil (EWM) in a total of 108.98 acres within previously identified and delineated areas of Noxon Rapids and Cabinet Gorge Reservoirs.

PRE-TREATMENT SURVEYS: In July 2023 Craig McLane (Montana Fish, Wildlife and Parks (MTFWP)) carried out visual and point intercept surveys in areas where nuisance growths of aquatic invasive species (AIS) were identified in previous surveys. On July 19, 2023, CLI received the 2023 treatment GIS polygons and survey points from Craig McLane. CLI developed a budgetary plan on July 19, 2023 with a final plan approved on July 20, 2023. A treatment was scheduled for the week of August 14, with treatments ultimately carried out on August 14 and 21, 2023.

SUMMARY OF ACRES TREATED: The final plan consisted of treating 108.98 acres of EWM in Noxon Rapids and Cabinet Gorge Reservoirs. Treatment plots were identified through GIS shapefiles and treatment plans at the direction of the county. The aquatic herbicides Littora® /Tribune® (diquat) and Flumigard® (flumioxazin) were used for the treatment.

[1] NOXON RAPIDS RESERVOIR, SANDERS COUNTY, MONTANA, 2023 AIS Aquatic Pesticide Application Plan (APAP)

TREATMENT SCHEDULE: The aquatic herbicide applications were performed on Mondays, August 14 and 21, 2023, by CLI staff Thomas McNabb and staff as outlined in Table 1 below:

Table 1: Treatment Plots, Dates and Times

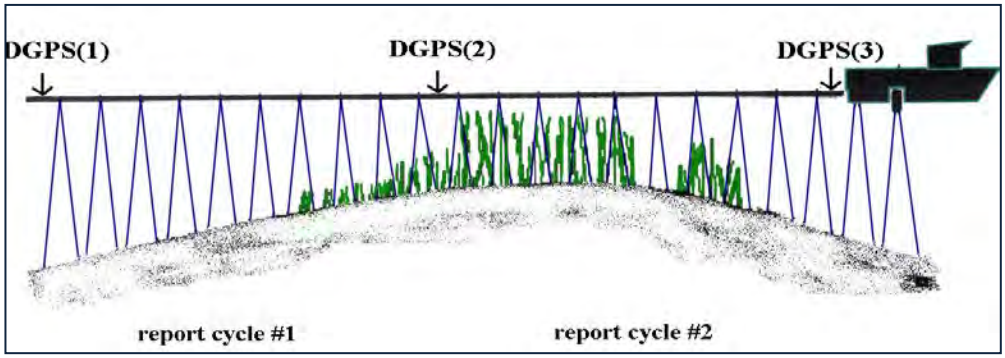
2023 Noxon-Cabinet Reservoirs Treatment Plan													
Plot Number	Acreage (Ac)	Sanders County Mean Depth (ft)	Volume (AF)	Product	Date	Start	Stop	Applicator	Applicator Number	Wind (mph)	Wind from Direction	Sky	Water Temp (F)
Nox73	1.37	5.4	7.40	Diq/Flumi	8/14/2023	3:45 PM	3:55 PM	Thomas McNabb	103231-12	>1	SW	Clear	79.90
Nox08	13.26	4.7	62.32	Diq/Flumi	8/14/2023	2:50 PM	3:28 PM	Thomas McNabb	103231-12	2.0	SW	Clear	78.50
Nox04	6.01	6.1	36.66	Diq/Flumi	8/14/2023	2:25 PM	2:43 PM	Thomas McNabb	103231-12	2.0	SW	Clear	78.50
Nox03	3.95	8	31.60	Diq/Flumi	8/14/2023	2:25 PM	3:28 PM	Thomas McNabb	103231-12	2.0	SW	Clear	79.90
Nox31	3.26	8	26.08	Diq/Flumi	8/14/2023	1:22 PM	1:30 PM	Thomas McNabb	103231-12	3.1	SW	Clear	76.00
Nox02	37.53	7.1	266.46	Diq/Flumi	8/14/2023	10:16 AM	10:57 AM	Thomas McNabb	103231-12	2.8	SW	Clear	76.00
Nox01	27.25	5.5	149.88	Diq/Flumi	8/14/2023	12:23 PM	12:59 PM	Thomas McNabb	103231-12	2.5	SW	Clear	76.30
Subotal	92.63												
Cab30	6.27	4.0	25.08	Diq/Flumi	8/21/2023	12:18 PM	12:45 PM	Thomas McNabb	103231-12	2.0	NW	Overcast	71.00
Cab05	4.39	4.3	18.88	Diq/Flumi	8/21/2023	11:44 AM	12:06 PM	Thomas McNabb	103231-12	3.6	NW	Overcast	70.50
Cab06	5.69	3.3	18.78	Diq/Flumi	8/21/2023	11:25 AM	11:40 AM	Thomas McNabb	103231-12	3.6	NW	Overcast	70.20
Subtotal	16.35												
Total	108.98												

EQUIPMENT USED: A CLI Littoral Zone Treatment vessel (LittLine®) was used to perform the aquatic herbicide applications on August 14 and 21, 2023. 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 the target species. The application vessel was inspected on August 13 and August 21, 2023 at the Clark Fork, Idaho Aquatic Invasive Species inspection station prior to entering Montana.

The AIS treatment area GIS shapefiles were loaded into the LittLine® GPS system for vessel guidance and herbicide application data recording. 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 the use of the LittLine® application system when compared to conventional subsurface applications. The herbicide application in all of the plots was within the bottom portion of the water column.

The LittLine system's computerized rate controllers regulate the aquatic herbicide applications through preset treatment rates.

A Digital Echosounder System with a Structure Scan Module (Lowrance model) was used to record data of the submerged aquatic vegetation (SAV) profile in the control plots during treatment and during the post treatment survey. Data was collected in both the .SLG (traditional sonar on HDS line) and the .SL2 (multi-channel structure scan) formats.



The sonar data collected was processed and analyzed for At Time of Treatment Submerged Aquatic Vegetation (SAV) in the treatment plots (August 14, 2023 in Noxon Rapids Reservoir and August 21, 2023 in Cabinet Gorge Reservoir), and at six (6) Weeks Post Treatment (September 29, 2023). However, all management areas were not recorded on Noxon Rapids Reservoir during the treatment. Where available data was collected to compare At Time of

Treatment to six (6) Week Post Treatment SAV coverage, height in the water column, and bio-volume to support post-treatment efficacy evaluations. An example of SAV conditions At Time of Treatment for CAB-05, Cabinet Gorge Reservoir, is pictured at right.

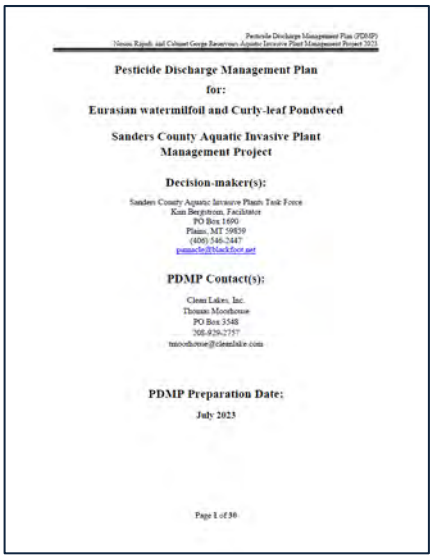
AQUATIC HERBICIDES CLI provided the aquatic herbicides for the project. CLI provided the required support equipment for material handling (herbicide transfer) as well as support vehicles for the vessels assigned to the project. The aquatic herbicides were applied to the specified areas of Noxon Rapids and Cabinet Gorge Reservoirs for the control of Eurasian watermilfoil and Curly-leaf pondweed, as outlined in the Site Data Tables below (Herbicide Label's and Material Safety Data Sheets (MSDS's) are included in the Aquatic Pesticide Application Plan (APAP), provided previously). Provided in Table 2 is the Treatment Site Data outlining treatment information for each plot. Kim McMahon (Pinnacle Research) was on site the day of treatment.

TREATMENT SITE DATA

Table 2: Noxon Rapids and Cabinet Gorge Reservoirs
Reservoir, Plot Treatment Site Data, Aquatic Herbicides Used:

2023 Noxon-Cabinet Reservoirs Treatment Plan					Littora (Diquat)			Flumigaurd (Flumioxazin)		
Plot Number	Acreage (Ac)	Sanders County Mean Depth (ft)	Volume (AF)	Product	Rate ppm	Gal/Ac ft	Gal Total Site	Rate bbp	Lbs/ac	Lbs Total Site
Nox73	1.37	5.4	7.40	Diq/Flumi	0.37	0.5	3.7	200.0	2.00	2.7
Nox08	13.26	4.7	62.32	Diq/Flumi	0.37	0.5	31.1	200.0	2.00	26.5
Nox04	6.01	6.1	36.66	Diq/Flumi	0.37	0.5	18.3	200.0	2.00	12.0
Nox03	3.95	8	31.60	Diq/Flumi	0.37	0.5	15.8	200.0	2.00	7.9
Nox31	3.26	8	26.08	Diq/Flumi	0.37	0.5	13.0	200.0	2.00	6.5
Nox02	37.53	7.1	266.46	Diq/Flumi	0.37	0.5	133.7	200.0	2.00	75.1
Nox01	27.25	5.5	149.88	Diq/Flumi	0.37	0.5	75.2	200.0	2.00	54.5
Subotal	92.63						290.8			185.3
Cab30	6.27	4.0	25.08	Diq/Flumi	0.37	0.5	12.5	200.0	2.00	12.5
Cab05	4.39	4.3	18.88	Diq/Flumi	0.37	0.5	9.4	200.0	2.00	37.8
Cab06	5.69	3.3	18.78	Diq/Flumi	0.37	0.5	9.4	200.0	2.00	37.6
Subtotal	16.35						31.3			87.8
Total	108.98						322.1			273.1

PERMIT COMPLIANCE: CLI developed the Aquatic Pesticide Application Plan on August 9, 2023, as well as the Pesticide Discharge Management Plan (PDMP) required for the new NPDES Permit cycle. Sanders County provided the required permits and approvals for the herbicide treatments from the Montana Department of Environmental Quality. There were no adverse incidents to report. Herbicide equipment calibration occurred on August 8, 2023.



Pesticide Discharge Management Plan

for:

Eurasian watermilfoil and Curly-leaf Pondweed

Sanders County Aquatic Invasive Plant Management Project

Decision-maker(s):

PDMP Contact(s):

PDMP Preparation Date:

July 2023

SERVICES PROVIDED BY CLI: All manpower, materials, insurance, equipment and technical advice required to perform aquatic herbicide applications in the project areas.

SERVICES PROVIDED BY SANDERS COUNTY: Sanders County provided the required permits, published legal notices in newspapers, provided notification to property owners, posting at public boat launch facilities, and provided the project area GIS shapefiles from the 2023 Pre-Treatment Surveys that were used to generate the final 2023 Treatment Plan.

POST TREATMENT SURVEY: The Post Treatment survey was carried out by CLI (Tom Moorhouse, Tom Benney, Terry Hightower and Sean Moran) on a vessel provided by CLI at Noxon Rapids Reservoir on September 28, 2023, approximately six weeks after treatment. Cabinet Gorge Reservoir was surveyed by CLI staff on September 27, 2023. Surveys were conducted through a combination of techniques, including visual estimates of injury/control, through rake tosses, and via the use of a Lowrance HDS-9 where depth allowed. Sonar logs were processed as described above. Table 3 provides information related to efficacy in each plot compared to At-Time of Treatment and Post Treatment Control. In Noxon Rapids Reservoir the change in SAV Biovolume (BV) shows a reduction range of 48% to 65%, while Post Treatment EWM Injury ranged from 90% to 98%. In Cabinet Gorge Reservoir the change in SAV Biovolume (BV) shows a reduction range of 60% to 73%, while Post Treatment EWM Injury was greater than 95%. Due to the shallowness of Plot Cab30 this site was only visited from the shoreline.

Table 3: Plot Percent Submersed Aquatic Vegetation (SAV) Cover and SAV Bio-Volume Present At Time of Application and Six (6) Weeks Post Treatment

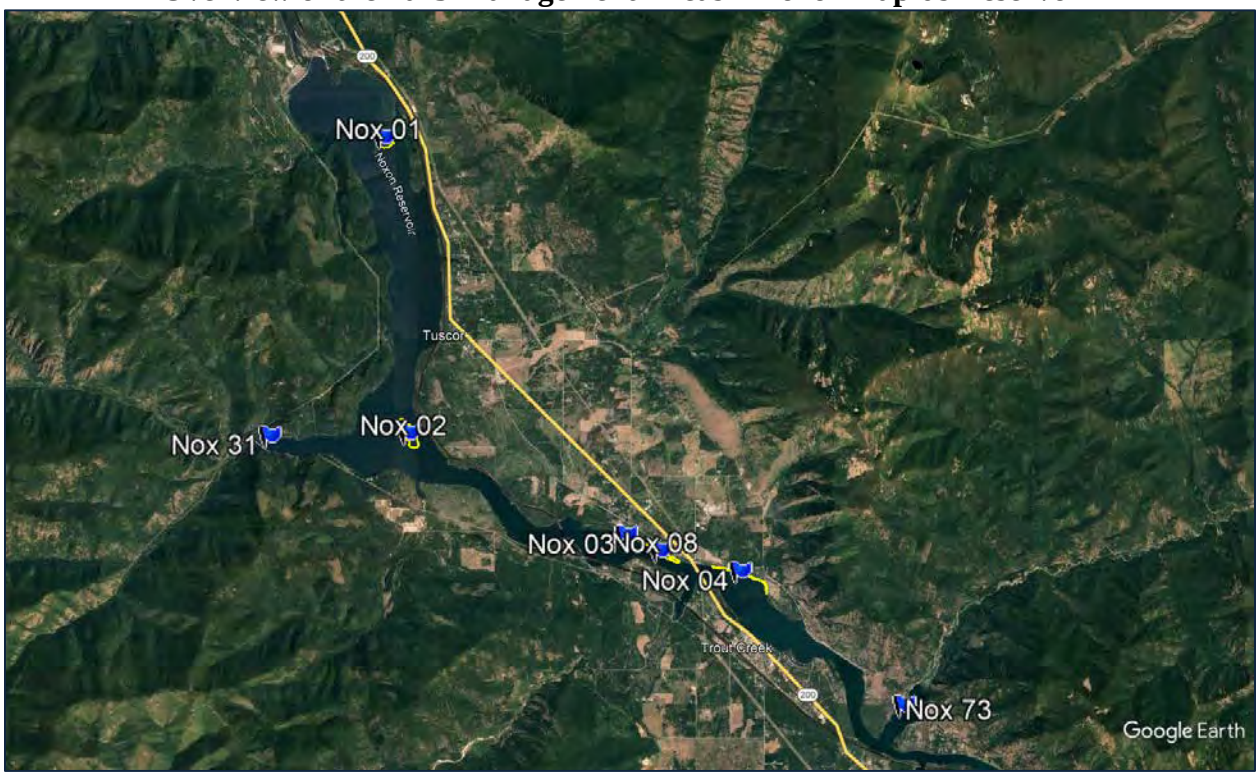
2023 Noxon Rapids Reservoir AIS Treatment Plots:									
Plot Number	Date Data Collected Pre Treatment	SAV % Cover	SAV % Bio-Volume	Date Data Collected-Post Treatment	SAV % Cover	SAV % Bio-Volume	SAV % BV Change	Post Treatment EWM Injury Rank	Herbicides Used (Littora or Tribune and Flumigard)
Noxon Rapids									
Nox73	N/A	N/A	N/A	9/29/2023	77.4	12.1	N/A	98%+	Diquat/Flumi
Nox08	8/14/2023	87.8	32.6	9/29/2023	26.1	11.5	-65%	95%+	Diquat/Flumi
Nox04	8/14/2023	87.8	32.6	9/29/2023	89.1	17.0	-48%	90%+	Diquat/Flumi
Nox03	8/14/2023	87.8	32.6	9/29/2023	79.8	10.9	-67%	95%+	Diquat/Flumi
Nox31	N/A	N/A	N/A	9/29/2023	84.6	14.2	N/A	95%+	Diquat/Flumi
Nox02	N/A	N/A	N/A	9/29/2023	51.9	14.5	N/A	98%+	Diquat/Flumi
Nox01	N/A	N/A	N/A	9/29/2023	71.1	10.5	N/A	95%+	Diquat/Flumi
2023 Cabinet Gorge Reservoir AIS Treatment Plots:									
Plot Number	Date Data Collected Pre Treatment	SAV % Cover	SAV % Bio-Volume	Date Data Collected-Post Treatment	SAV % Cover	SAV % Bio-Volume	SAV % BV Change	Post Treatment EWM Injury Rank	Herbicides Used (Littora or Tribune and Flumigard)
Cabinet Gorge Reservoir									
Cab30	8/21/2023	100	42.1	9/28/2023	N/A	N/A	N/A	Too Shallow	Diquat/Flumi
Cab05	8/21/2023	100	35.8	9/28/2023	29.1	9.7	-73%	95% +	Diquat/Flumi
Cab06	8/21/2023	83.2	33.6	9/28/2023	32.0	13.5	-60%	95% +	Diquat/Flumi

Note: Herbicides used Diquat/Flumi = Combination of Littora and/or Tribune (Diquat) and Flumigard (Flumioxazin). Post Treatment Injury Rank of herbicide injury to EWM on September 28, 2023, approximately 6 weeks post treatment, were estimated during a survey as outlined above.

The observations contained in this report (see below) are general six (6) week Post Treatment observations and should not be used for control efficacy evaluations. In addition, it should be noted that a Post Treatment change in Submerged Aquatic Vegetation (SAV) Percent Area Coverage, height in the water column, and bio-volume can many times be attributed to a recovery or increase in native vegetation in response to selectively controlling the target species. Management Areas NOX 03, 04, and 08 were collected as one sonar file, thus the percent Submersed Aquatic Vegetation (SAV) and SAV Biovolume (BV) outlined in the table above represent conditions for all three sites collectively and not necessarily the conditions in each management area separately.

TREATMENT AREA PLOT MAPS

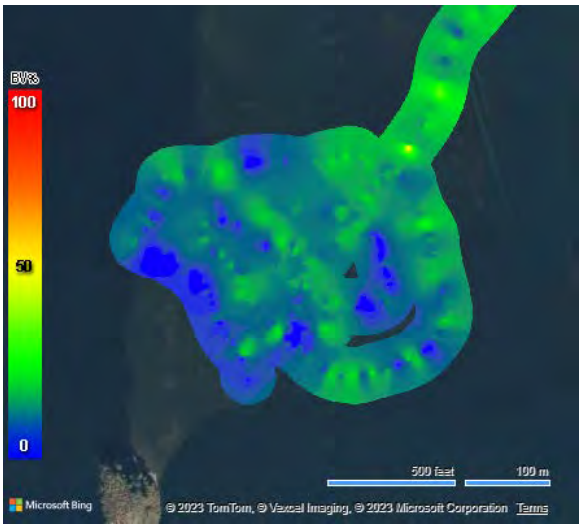
Overview of the 2023 Management Areas – Noxon Rapids Reservoir



PRE AND POST TREATMENT SUBMERSED AQUATIC VEGETATION (SAV) DATA, SAV PERCENT COVER, AND BIO-VOLUME DATA SETS

NOXON RAPIDS RESERVOIR

Plot NOX-01: At Time of Treatment (August 14, 2023 – not available), ~ Six (6) Weeks Post (September 29, 2023 - Right)



2023 Noxon Rapids Reservoir AIS Treatment Plots: At Time of and ~ Six (6) Week Post Plot SAV % Cover and SAV BioVolume Data (Grid Data)									
Plot Number	Date Data Collected Pre Treatment	SAV % Cover	SAV % Bio-Volume	Date Data Collected-Post Treatment	SAV % Cover	SAV % Bio-Volume	SAV % BV Change	Post Treatment EWM Injury Rank	Herbicides Used (Littora or Tribune and Flumigard)
Noxon Rapids									
Nox01	N/A	N/A	N/A	9/29/2023	71.1	10.5	N/A	95%+	Diquat/Flumi

Observations/Notes NOX-01: Treated with combination of diquat and flumioxazin, control visually estimated at +/- 95%. Control excellent throughout plot. Chara abundant and Richardson's Pondweed present.

Plot NOX-01: At Time of Treatment (August 14, 2023)

Vegetation Analayis Report not available

Plot NOX-01: ~ Six (6) Weeks Post (September 29, 2023)

BIOBASE — VEGETATION ANALYSIS REPORT

Noxon Reservoir, Sanders Montana — Report Time Stamp: 2023 October 28 - 18:16 (UTC) ... REPORT LINK

Survey Metadata

Data Collector:	Tom Moorhouse
Survey Time Stamp (UTC):	2023 September 29 - 17:16
Starting Location:	47.943666, -115.710751
Ending Location:	47.946063, -115.708282
Distance	1.086 miles

Survey Statistics

Average Water Temperature:	66.2 °F
Survey Area:	28.170 acres
Survey Volume:	231.112 acre ft
Percent of Waterbody Surveyed:	0.4%
Waterbody Area:	8023.683 acres

Survey Settings

Includes Edited Data:	Yes
Track Buffer:	35 m
BV Grid Cell Size:	5 m
BV Minimum Detection - Percent:	5.0%
BV Minimum Detection - Depth:	2.400 ft
BV Maximum Detection - Depth:	20.000 ft
BV Sonar Channel:	Primary

Quality Control

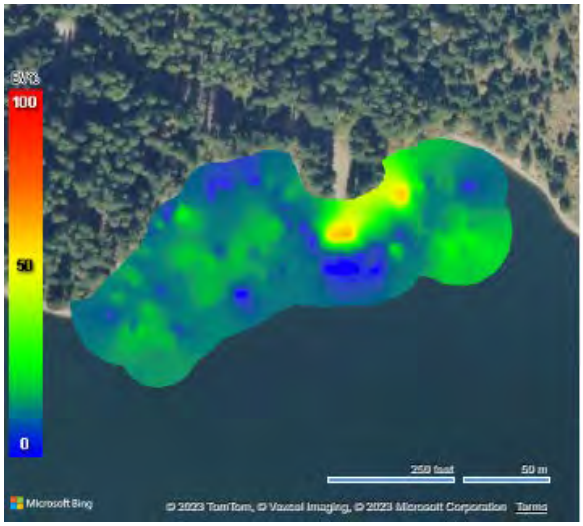
Reviewer:	Ian McCormack
Comments:	We have reviewed this trip. Please use the "ASK THE EXPERTS" button for this trip if you have any questions.

Survey Summary

Type	PAC	Avg BVp	SD BVp	Avg BVw	SD BVw	Depth Range	Depth Avg	No. Depth Records
Point	75.3%	15.2%	± 12.6%	11.4%	± 12.0%	3.51 - 22.78 ft	8.252 ft	1225
Grid	71.1%	10.5%	± 4.1%	7.4%	± 5.9%	3.64 - 22.12 ft	8.204 ft	10088

Bathymetric Contour Map — Vegetation Biovolume Heat Map

Plot NOX-31: At Time of Treatment (August 14, 2023 – not available), ~ Six (6) Weeks Post (September 29, 2023 - Right)



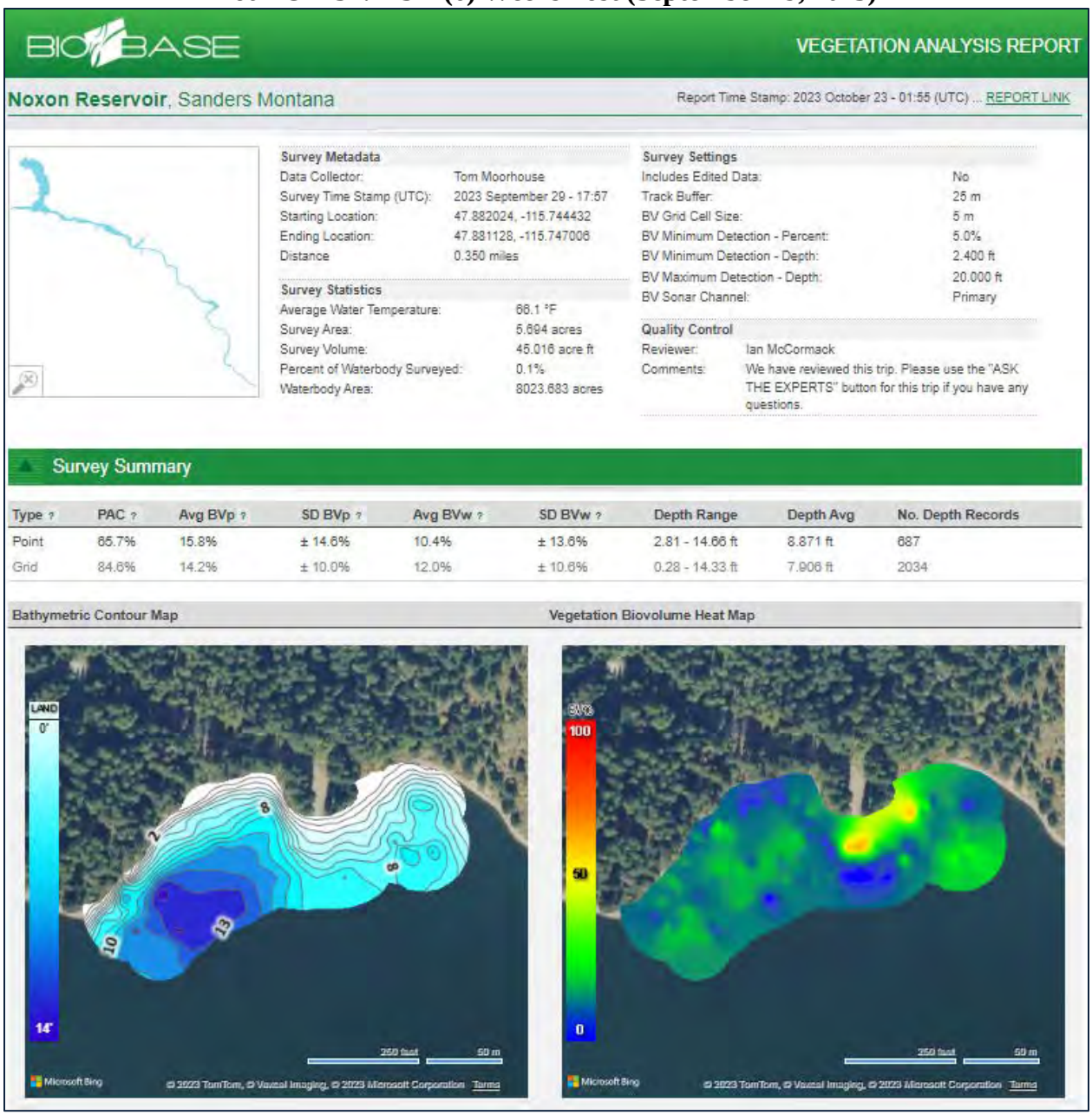
2023 Noxon Rapids Reservoir AIS Treatment Plots: At Time of and ~ Six (6) Week Post Plot SAV % Cover and SAV BioVolume Data (Grid Data)									
Plot Number	Date Data Collected Pre Treatment	SAV % Cover	SAV % Bio-Volume	Date Data Collected-Post Treatment	SAV % Cover	SAV % Bio-Volume	SAV % BV Change	Post Treatment EWM Injury Rank	Herbicides Used (Littora or Tribune and Flumigard)
Noxon Rapids									
Nox31	N/A	N/A	N/A	9/29/2023	84.6	14.2	N/A	95%+	Diquat/Flumi

Observations/Notes NOX-31: Treated with combination of diquat and flumioxazin, control visually estimated at +/- 95%. Control excellent throughout plot. May have observed some light EWM regrowth. Abundant Coontail and some Richardson's Pondweed present.

Plot NOX-31: At Time of Treatment (August 14, 2023)

Vegetation Analayis Report not available

Plot NOX-31: ~ Six (6) Weeks Post (September 29, 2023)



BIOBASE

VEGETATION ANALYSIS REPORT

Noxon Reservoir, Sanders Montana

Report Time Stamp: 2023 October 23 - 01:55 (UTC) ... REPORT LINK

Survey Metadata

Data Collector:	Tom Moorhouse
Survey Time Stamp (UTC):	2023 September 29 - 17:57
Starting Location:	47.882024, -115.744432
Ending Location:	47.881128, -115.747006
Distance	0.350 miles

Survey Statistics

Average Water Temperature:	66.1 °F
Survey Area:	5.694 acres
Survey Volume:	45.016 acre ft
Percent of Waterbody Surveyed:	0.1%
Waterbody Area:	8023.683 acres

Survey Settings

Includes Edited Data:	No
Track Buffer:	25 m
BV Grid Cell Size:	5 m
BV Minimum Detection - Percent:	5.0%
BV Minimum Detection - Depth:	2.400 ft
BV Maximum Detection - Depth:	20.000 ft
BV Sonar Channel:	Primary

Quality Control

Reviewer:	Ian McCormack
Comments:	We have reviewed this trip. Please use the "ASK THE EXPERTS" button for this trip if you have any questions.

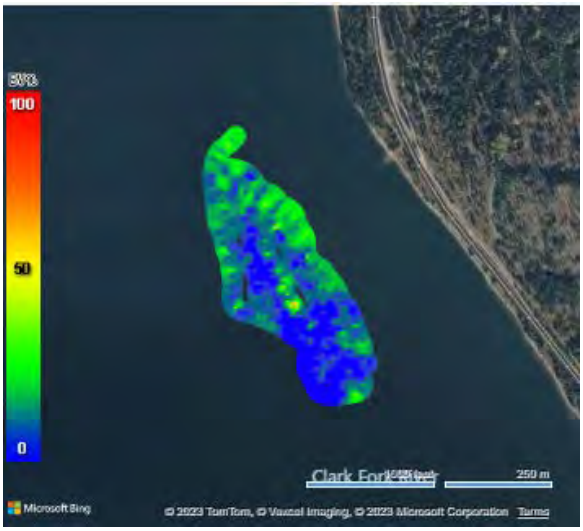
Survey Summary

Type	PAC	Avg BVp	SD BVp	Avg BVw	SD BVw	Depth Range	Depth Avg	No. Depth Records
Point	65.7%	15.8%	± 14.6%	10.4%	± 13.6%	2.81 - 14.66 ft	8.871 ft	687
Grid	84.6%	14.2%	± 10.0%	12.0%	± 10.6%	0.28 - 14.33 ft	7.906 ft	2034

Bathymetric Contour Map

Vegetation Biovolume Heat Map

Plot NOX-02: At Time of Treatment (August 14, 2023 – not available), ~ Six (6) Weeks Post (September 29, 2023 - Right)



2023 Noxon Rapids Reservoir AIS Treatment Plots: At Time of and ~ Six (6) Week Post Plot SAV % Cover and SAV BioVolume Data (Grid Data)									
Plot Number	Date Data Collected Pre Treatment	SAV % Cover	SAV % Bio-Volume	Date Data Collected-Post Treatment	SAV % Cover	SAV % Bio-Volume	SAV % BV Change	Post Treatment EWM Injury Rank	Herbicides Used (Littora or Tribune and Flumigard)
Noxon Rapids									
Nox03	8/14/2023	87.8	32.6	9/29/2023	79.8	10.9	-67%	95%+	Diquat/Flumi

Observations/Notes NOX-02: Treated with combination of diquat and flumioxazin, control visually estimated at +/- 98%. Control excellent throughout plot, very limited submersed aquatic vegetation present. Some Richardson's Pondweed and Coontail present, very little elodea.

Plot NOX-02: At Time of Treatment (August 14, 2023)

Vegetation Analayis Report not available

Plot NOX-02: ~ Six (6) Weeks Post (September 29, 2023)

BIOBASE

VEGETATION ANALYSIS REPORT

Noxon Reservoir, Sanders Montana

Report Time Stamp: 2023 October 26 - 22:59 (UTC) ... REPORT LINK

Survey Metadata

Data Collector:	Tom Moorhouse
Survey Time Stamp (UTC):	2023 September 29 - 16:38
Starting Location:	47.880651, -115.699482
Ending Location:	47.885667, -115.703846
Distance	2.198 miles

Survey Statistics

Average Water Temperature:	68.1 °F
Survey Area:	35.055 acres
Survey Volume:	360.202 acre ft
Percent of Waterbody Surveyed:	0.4%
Waterbody Area:	8023.683 acres

Survey Settings

Includes Edited Data:	No
Track Buffer:	25 m
BV Grid Cell Size:	5 m
BV Minimum Detection - Percent:	5.0%
BV Minimum Detection - Depth:	2.400 ft
BV Maximum Detection - Depth:	20.000 ft
BV Sonar Channel:	Primary

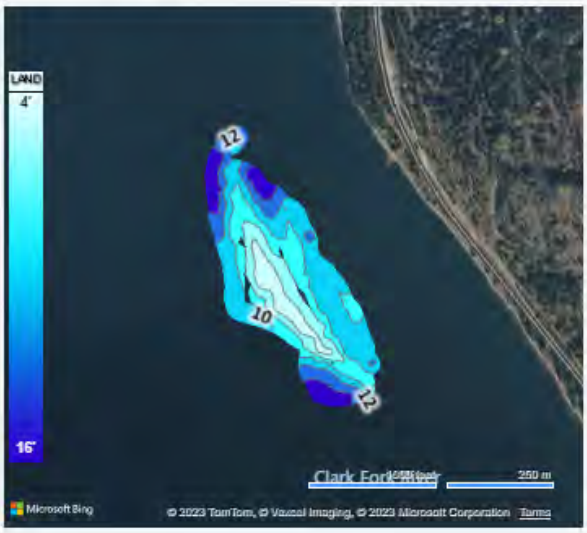
Quality Control

Reviewer:	Ian McCormack
Comments:	We have reviewed this trip. Please use the "ASK THE EXPERTS" button for this trip if you have any questions.

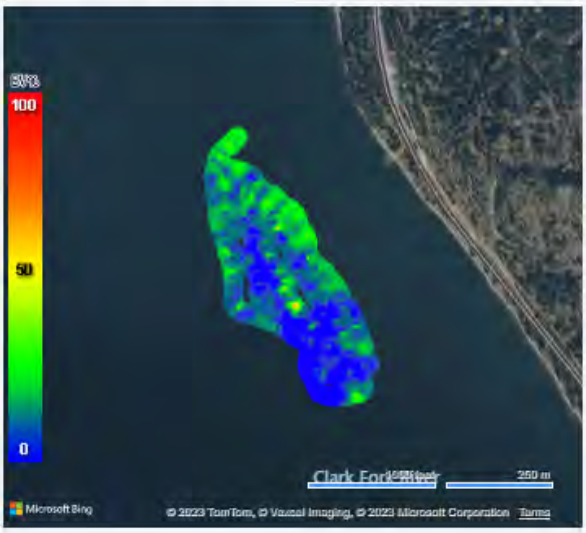
Survey Summary

Type	PAC	Avg BVp	SD BVp	Avg BVw	SD BVw	Depth Range	Depth Avg	No. Depth Records
Point	45.9%	17.7%	± 16.3%	8.1%	± 13.2%	4.13 - 15.87 ft	10.207 ft	1814
Grid	51.9%	14.5%	± 8.1%	7.5%	± 9.3%	4.22 - 15.82 ft	10.275 ft	12524

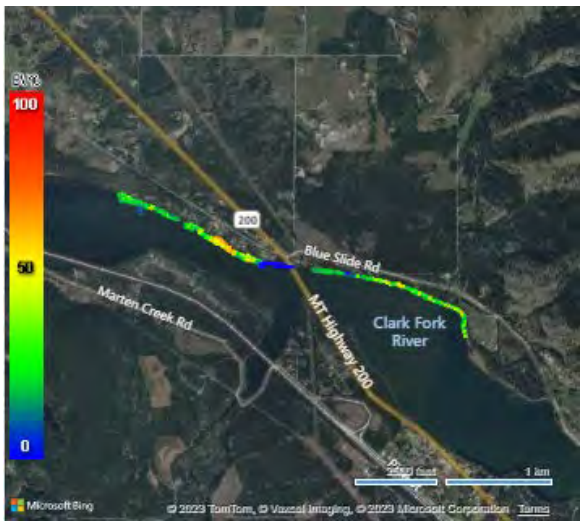
Bathymetric Contour Map

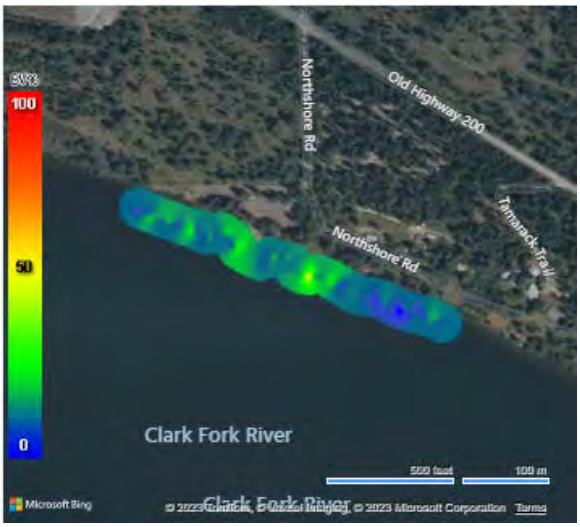


Vegetation Biovolume Heat Map



Plot NOX-03: At Time of Treatment (August 14, 2023 – Left), ~ Six (6) Weeks Post (September 29, 2023 - Right)





2023 Noxon Rapids Reservoir AIS Treatment Plots: At Time of and ~ Six (6) Week Post Plot SAV % Cover and SAV BioVolume Data (Grid Data)									
Plot Number	Date Data Collected Pre Treatment	SAV % Cover	SAV % Bio-Volume	Date Data Collected-Post Treatment	SAV % Cover	SAV % Bio-Volume	SAV % BV Change	Post Treatment EWM Injury Rank	Herbicides Used (Littora or Tribune and Flumigard)
Noxon Rapids									
Nox03	8/14/2023	87.8	32.6	9/29/2023	79.8	10.9	-67%	95%+	Diquat/Flumi

Observations/Notes NOX-03: Treated with combination of diquat and flumioxazin, control visually estimated at +/- 95%. Control excellent throughout plot, very limited submersed aquatic vegetation. Some Richardson's Pondweed and Coontail present.

Plot NOX-03: At Time of Treatment (August 14, 2023)

Noxon Reservoir, Sanders Montana

Report Time Stamp: 2023 October 26 - 22:51 (UTC) ... REPORT LINK

Survey Metadata	
Data Collector:	Tom Moorhouse
Survey Time Stamp (UTC):	2023 August 14 - 20:31
Starting Location:	47.848581, -115.588556
Ending Location:	47.859498, -115.631665
Distance	4.194 miles

Survey Statistics	
Average Water Temperature:	80.4 °F
Survey Area:	49.373 acres
Survey Volume:	399.891 acre ft
Percent of Waterbody Surveyed:	0.6%
Waterbody Area:	8023.683 acres

Survey Settings	
Includes Edited Data:	No
Track Buffer:	25 m
BV Grid Cell Size:	5 m
BV Minimum Detection - Percent:	5.0%
BV Minimum Detection - Depth:	2.400 ft
BV Maximum Detection - Depth:	20.000 ft
BV Sonar Channel:	Primary

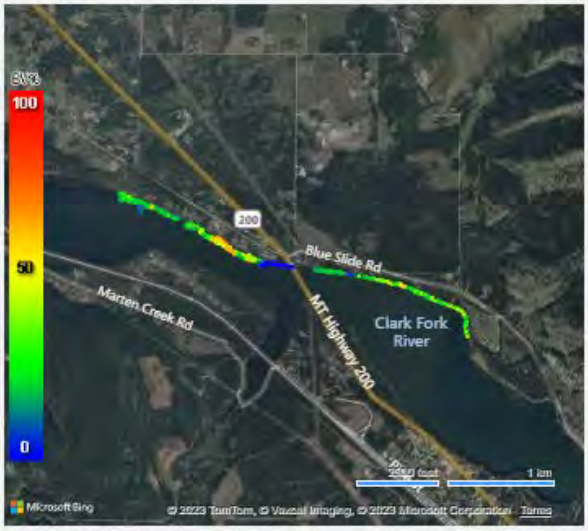
Quality Control	
Reviewer:	Ian McCormack
Comments:	Inconsistent bottom tracking due to dense vegetation

Survey Summary

Type	PAC	Avg BVp	SD BVp	Avg BVw	SD BVw	Depth Range	Depth Avg	No. Depth Records
Point	79.0%	31.5%	± 24.2%	24.9%	± 23.3%	2.95 - 87.99 ft	8.864 ft	1454
Grid	87.8%	32.6%	± 15.4%	28.6%	± 17.9%	0.30 - 84.65 ft	8.099 ft	17621

Bathymetric Contour Map

Vegetation Biovolume Heat Map



Plot NOX-03 ~ Six (6) Weeks Post (September 29, 2023)

BIOBASE — VEGETATION ANALYSIS REPORT

Noxon Reservoir, Sanders Montana — Report Time Stamp: 2023 October 26 - 22:48 (UTC) ... REPORT LINK

Survey Metadata

Data Collector:	Tom Moorhouse
Survey Time Stamp (UTC):	2023 September 29 - 16:25
Starting Location:	47.859816, -115.629525
Ending Location:	47.861109, -115.634564
Distance	0.214 miles

Survey Statistics

Average Water Temperature:	65.9 °F
Survey Area:	5.645 acres
Survey Volume:	45.061 acre ft
Percent of Waterbody Surveyed:	0.1%
Waterbody Area:	8023.683 acres

Survey Settings

Includes Edited Data:	No
Track Buffer:	25 m
BV Grid Cell Size:	5 m
BV Minimum Detection - Percent:	5.0%
BV Minimum Detection - Depth:	2.400 ft
BV Maximum Detection - Depth:	20.000 ft
BV Sonar Channel:	Primary

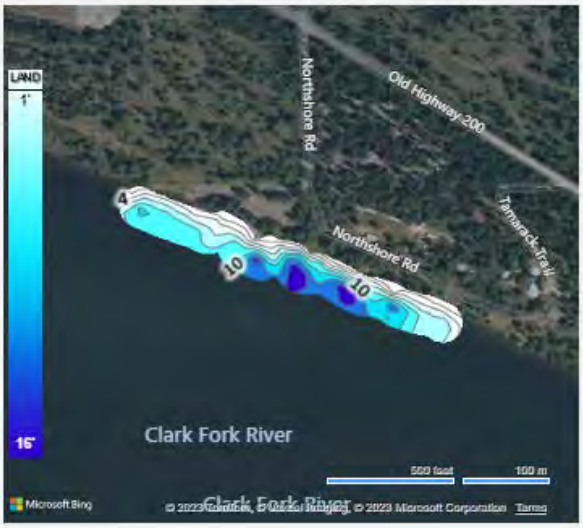
Quality Control

Reviewer:	Ian McCormack
Comments:	We have reviewed this trip. Please use the "ASK THE EXPERTS" button for this trip if you have any questions.

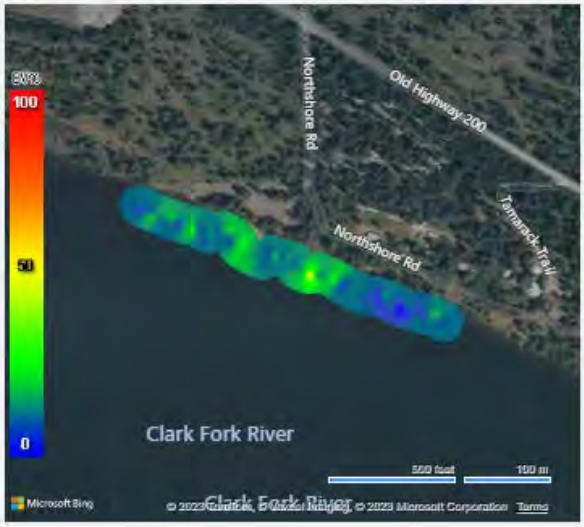
Survey Summary

Type	PAC	Avg BVp	SD BVp	Avg BVw	SD BVw	Depth Range	Depth Avg	No. Depth Records
Point	65.1%	14.4%	± 12.7%	9.4%	± 11.7%	5.25 - 15.90 ft	10.381 ft	401
Grid	79.8%	10.9%	± 6.0%	8.7%	± 6.9%	0.53 - 15.53 ft	7.982 ft	2015

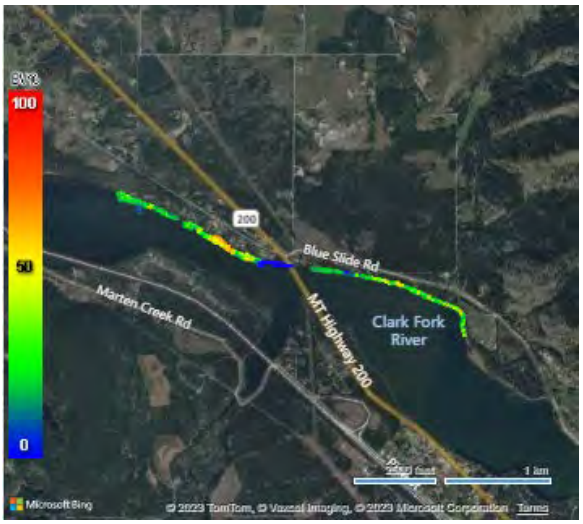
Bathymetric Contour Map



Vegetation Biovolume Heat Map



Plot NOX-08: At Time of Treatment (August 14, 2023 – Left), ~ Six (6) Weeks Post (September 29, 2023 - Right)



2023 Noxon Rapids Reservoir AIS Treatment Plots: At Time of and ~ Six (6) Week Post Plot SAV % Cover and SAV BioVolume Data (Grid Data)									
Plot Number	Date Data Collected Pre Treatment	SAV % Cover	SAV % Bio-Volume	Date Data Collected-Post Treatment	SAV % Cover	SAV % Bio-Volume	SAV % BV Change	Post Treatment EWM Injury Rank	Herbicides Used (Littora or Tribune and Flumigard)
Noxon Rapids									
Nox08	8/14/2023	87.8	32.6	9/29/2023	26.1	11.5	-65%	95%+	Diquat/Flumi

Observations/Notes NOX-08: Treated with combination of diquat and flumioxazin, control visually estimated at +/- 95%. Control excellent throughout plot, very limited submersed aquatic vegetation. Some Richardson's Pondweed and Coontail present.

Plot NOX-08: At Time of Treatment (August 14, 2023)

Noxon Reservoir, Sanders Montana

Report Time Stamp: 2023 October 26 - 22:51 (UTC) ... REPORT LINK

Survey Metadata	
Data Collector:	Tom Moorhouse
Survey Time Stamp (UTC):	2023 August 14 - 20:31
Starting Location:	47.848581, -115.588556
Ending Location:	47.859498, -115.631665
Distance	4.194 miles

Survey Statistics	
Average Water Temperature:	80.4 °F
Survey Area:	49.373 acres
Survey Volume:	399.891 acre ft
Percent of Waterbody Surveyed:	0.6%
Waterbody Area:	8023.683 acres

Survey Settings	
Includes Edited Data:	No
Track Buffer:	25 m
BV Grid Cell Size:	5 m
BV Minimum Detection - Percent:	5.0%
BV Minimum Detection - Depth:	2.400 ft
BV Maximum Detection - Depth:	20.000 ft
BV Sonar Channel:	Primary

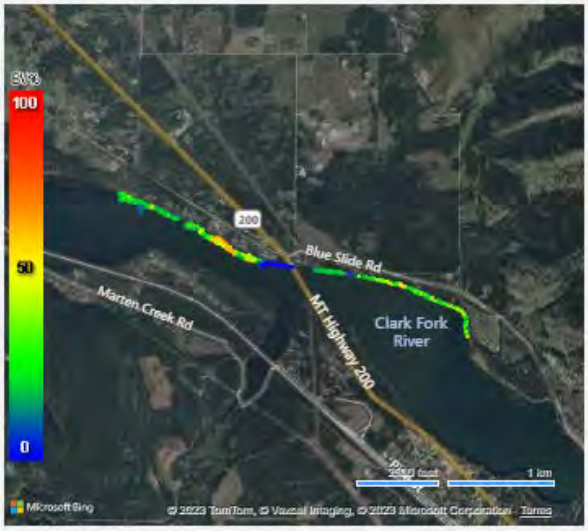
Quality Control	
Reviewer:	Ian McCormack
Comments:	Inconsistent bottom tracking due to dense vegetation

Survey Summary

Type	PAC	Avg BVp	SD BVp	Avg BVw	SD BVw	Depth Range	Depth Avg	No. Depth Records
Point	79.0%	31.5%	± 24.2%	24.9%	± 23.3%	2.95 - 87.99 ft	8.864 ft	1454
Grid	87.8%	32.6%	± 15.4%	28.6%	± 17.9%	0.30 - 84.65 ft	8.099 ft	17621

Bathymetric Contour Map

Vegetation Biovolume Heat Map



Plot NOX-08: ~ Six (6) Weeks Post (September 29, 2023)

BIOBASE — VEGETATION ANALYSIS REPORT

Noxon Reservoir, Sanders Montana — Report Time Stamp: 2023 October 26 - 23:09 (UTC) ... REPORT LINK

Survey Metadata

Data Collector:	Tom Moorhouse
Survey Time Stamp (UTC):	2023 September 29 - 16:04
Starting Location:	47.855191, -115.616239
Ending Location:	47.859637, -115.628994
Distance	0.654 miles

Survey Statistics

Average Water Temperature:	65.4 °F
Survey Area:	13.961 acres
Survey Volume:	69.340 acre ft
Percent of Waterbody Surveyed:	0.2%
Waterbody Area:	8023.683 acres

Survey Settings

Includes Edited Data:	No
Track Buffer:	25 m
BV Grid Cell Size:	5 m
BV Minimum Detection - Percent:	5.0%
BV Minimum Detection - Depth:	2.400 ft
BV Maximum Detection - Depth:	20.000 ft
BV Sonar Channel:	Primary

Quality Control

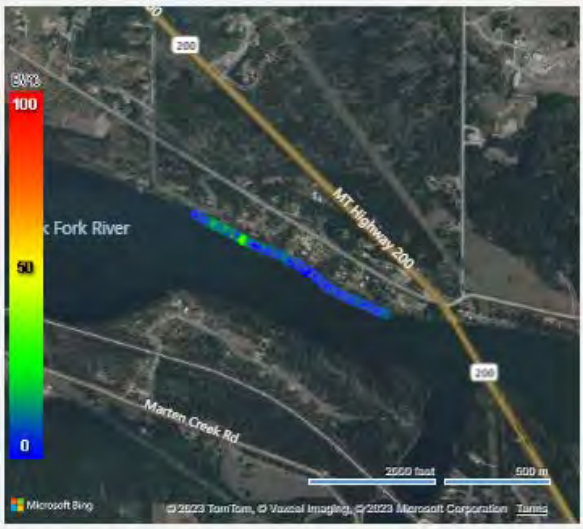
Reviewer:	Ian McCormack
Comments:	We have reviewed this trip. Please use the "ASK THE EXPERTS" button for this trip if you have any questions.

Survey Summary

Type	PAC	Avg BVp	SD BVp	Avg BVw	SD BVw	Depth Range	Depth Avg	No. Depth Records
Point	46.9%	10.7%	± 10.8%	5.0%	± 9.1%	3.84 - 13.70 ft	6.157 ft	854
Grid	26.1%	11.5%	± 8.0%	3.0%	± 6.5%	0.39 - 11.79 ft	4.967 ft	4983

Bathymetric Contour Map

Vegetation Biovolume Heat Map



Plot NOX-04: At Time of Treatment (August 14, 2023 - Left), ~ Six (6) Weeks Post (September 29, 2023 - Right)

2023 Noxon Rapids Reservoir AIS Treatment Plots: At Time of and ~ Six (6) Week Post Plot SAV % Cover and SAV BioVolume Data (Grid Data)									
Plot Number	Date Data Collected Pre Treatment	SAV % Cover	SAV % Bio-Volume	Date Data Collected-Post Treatment	SAV % Cover	SAV % Bio-Volume	SAV % BV Change	Post Treatment EWM Injury Rank	Herbicides Used (Littora or Tribune and Flumigard)
Noxon Rapids									
Nox04	8/14/2023	87.8	32.6	9/29/2023	89.1	17.0	-48%	90%+	Diquat/Flumi

Observations/Notes NOX-04: Treated with combination of diquat and flumioxazin, control visually estimated at +/- 90%. Scattered individual EWM plants more visible at upstream portion of plot then decreasing downstream. Some Elodea and Coontail present.

Plot NOX-04: At Time of Treatment (August 14, 2023)

Noxon Reservoir, Sanders Montana — Report Time Stamp: 2023 October 26 - 22:51 (UTC) ... REPORT LINK

Survey Metadata

Data Collector:	Tom Moorhouse
Survey Time Stamp (UTC):	2023 August 14 - 20:31
Starting Location:	47.848581, -115.588566
Ending Location:	47.859498, -115.631665
Distance	4.194 miles

Survey Statistics

Average Water Temperature:	80.4 °F
Survey Area:	49.373 acres
Survey Volume:	399.891 acre ft
Percent of Waterbody Surveyed:	0.6%
Waterbody Area:	8023.683 acres

Survey Settings

Includes Edited Data:	No
Track Buffer:	25 m
BV Grid Cell Size:	5 m
BV Minimum Detection - Percent:	5.0%
BV Minimum Detection - Depth:	2.400 ft
BV Maximum Detection - Depth:	20.000 ft
BV Sonar Channel:	Primary

Quality Control

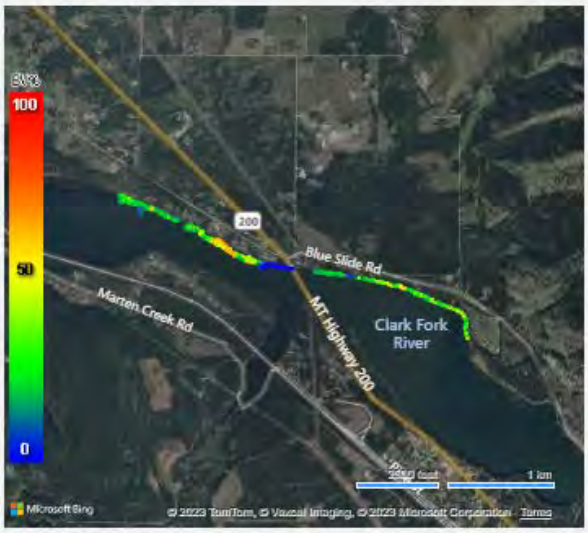
Reviewer:	Ian McCormack
Comments:	Inconsistent bottom tracking due to dense vegetation

Survey Summary

Type	PAC	Avg BVp	SD BVp	Avg BVw	SD BVw	Depth Range	Depth Avg	No. Depth Records
Point	79.0%	31.5%	± 24.2%	24.9%	± 23.3%	2.95 - 87.99 ft	8.864 ft	1454
Grid	87.8%	32.6%	± 15.4%	28.6%	± 17.9%	0.30 - 84.65 ft	8.099 ft	17621

Bathymetric Contour Map

Vegetation Biovolume Heat Map



Plot NOX-04 ~ Six (6) Weeks Post (September 29, 2023)

BIOBASE — VEGETATION ANALYSIS REPORT

Noxon Reservoir, Sanders Montana — Report Time Stamp: 2023 October 26 - 23:11 (UTC) ... REPORT LINK

Survey Metadata

Data Collector:	Tom Moorhouse
Survey Time Stamp (UTC):	2023 September 29 - 15:34
Starting Location:	47.848440, -115.588702
Ending Location:	47.854229, -115.606047
Distance	0.952 miles

Survey Statistics

Average Water Temperature:	64.7 °F
Survey Area:	19.370 acres
Survey Volume:	129.559 acre ft
Percent of Waterbody Surveyed:	0.2%
Waterbody Area:	8023.683 acres

Survey Settings

Includes Edited Data:	No
Track Buffer:	25 m
BV Grid Cell Size:	5 m
BV Minimum Detection - Percent:	5.0%
BV Minimum Detection - Depth:	2.400 ft
BV Maximum Detection - Depth:	20.000 ft
BV Sonar Channel:	Primary

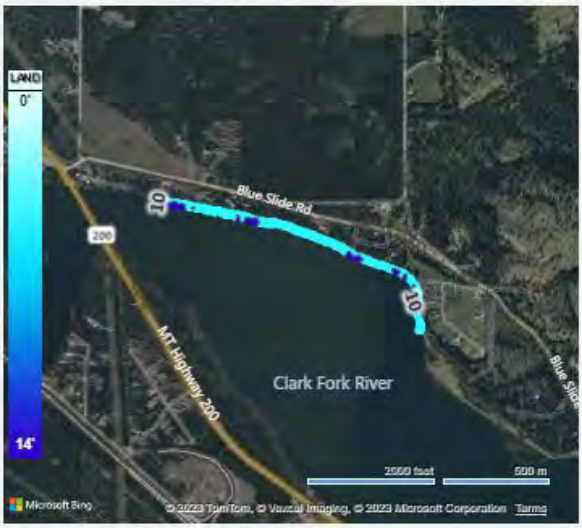
Quality Control

Reviewer:	Ian McCormack
Comments:	We have reviewed this trip. Please use the "ASK THE EXPERTS" button for this trip if you have any questions.

Survey Summary

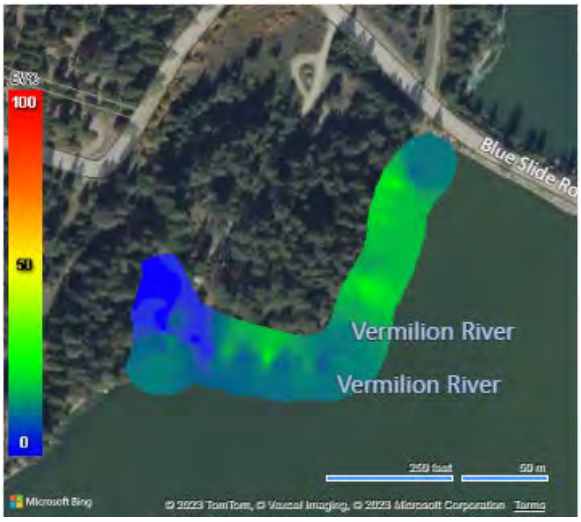
Type	PAC	Avg BVp	SD BVp	Avg BVw	SD BVw	Depth Range	Depth Avg	No. Depth Records
Point	84.4%	18.4%	± 12.9%	15.5%	± 12.6%	3.46 - 16.02 ft	8.765 ft	1288
Grid	89.1%	17.0%	± 7.0%	15.1%	± 8.5%	0.35 - 14.15 ft	6.689 ft	6912

Bathymetric Contour Map



Vegetation Biovolume Heat Map

Plot NOX-73: At Time of Treatment (August 14, 2023 – not available), ~ Six (6) Weeks Post (September 29, 2023 - Right)



2023 Noxon Rapids Reservoir AIS Treatment Plots: At Time of and ~ Six (6) Week Post Plot SAV % Cover and SAV BioVolume Data (Grid Data)									
Plot Number	Date Data Collected Pre Treatment	SAV % Cover	SAV % Bio-Volume	Date Data Collected-Post Treatment	SAV % Cover	SAV % Bio-Volume	SAV % BV Change	Post Treatment EWM Injury Rank	Herbicides Used (Littora or Tribune and Flumigard)
Noxon Rapids									
Nox73	N/A	N/A	N/A	9/29/2023	77.4	12.1	N/A	98%+	Diquat/Flumi

Observations/Notes NOX-73: Treated with combination of diquat and flumioxazin, control visually estimated at +/- 95%. No EWM visible. Some Elodea and Coontail present.

Plot NOX-73: At Time of Treatment (August 14, 2023)

Vegetation Analayis Report not available

Plot NOX-73 ~ Six (6) Weeks Post (September 29, 2023)

BIOBASE

VEGETATION ANALYSIS REPORT

Noxon Reservoir, Sanders Montana

Report Time Stamp: 2023 October 26 - 22:44 (UTC) ... REPORT LINK

Survey Metadata

Data Collector:	Tom Moorhouse
Survey Time Stamp (UTC):	2023 September 29 - 15:11
Starting Location:	47.824388, -115.546127
Ending Location:	47.825489, -115.544006
Distance	0.140 miles

Survey Statistics

Average Water Temperature:	63.8 °F
Survey Area:	3.223 acres
Survey Volume:	21.237 acre ft
Percent of Waterbody Surveyed:	0.0%
Waterbody Area:	8023.683 acres

Survey Settings

Includes Edited Data:	No
Track Buffer:	25 m
BV Grid Cell Size:	5 m
BV Minimum Detection - Percent:	5.0%
BV Minimum Detection - Depth:	2.400 ft
BV Maximum Detection - Depth:	20.000 ft
BV Sonar Channel:	Primary

Quality Control

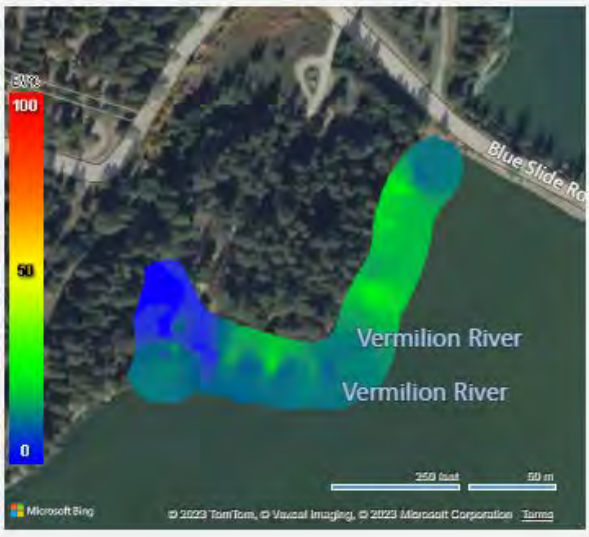
Reviewer:	Ian McCormack
Comments:	We have reviewed this trip. Please use the "ASK THE EXPERTS" button for this trip if you have any questions.

Survey Summary

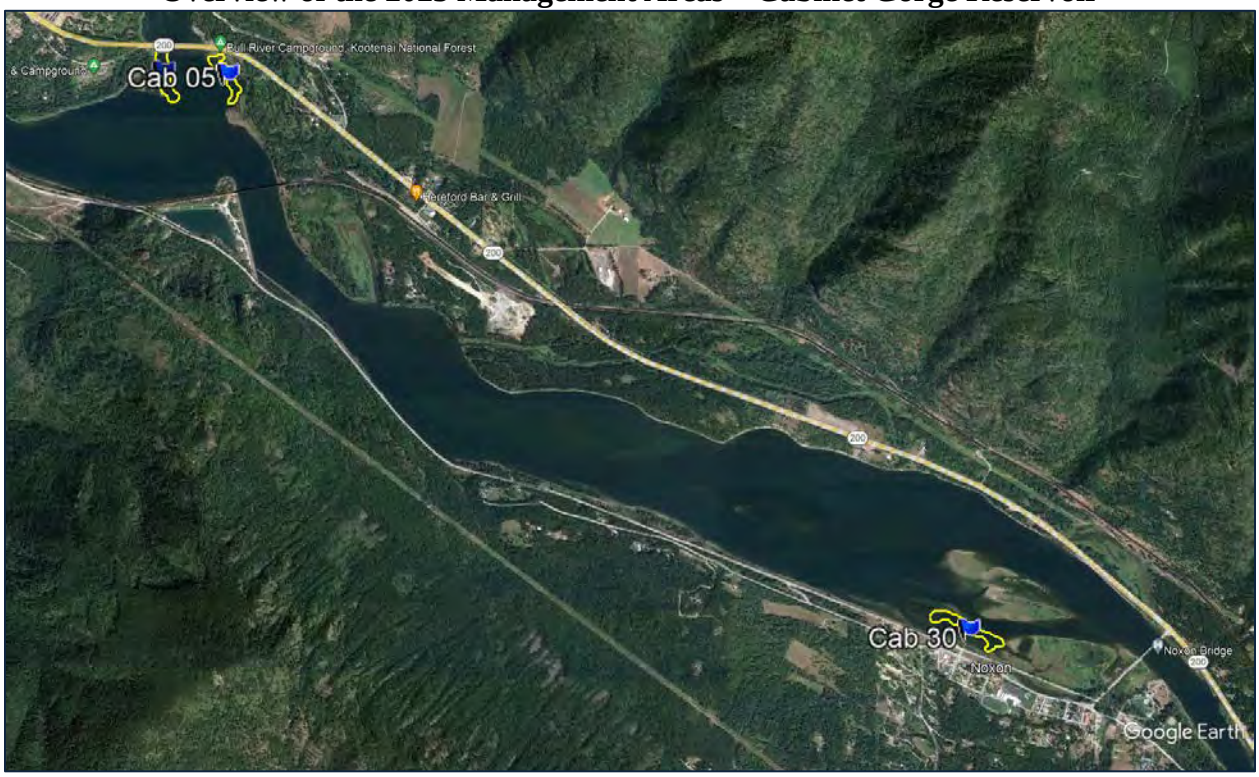
Type	PAC	Avg BVp	SD BVp	Avg BVw	SD BVw	Depth Range	Depth Avg	No. Depth Records
Point	68.3%	14.3%	± 10.7%	9.8%	± 9.7%	4.36 - 19.43 ft	9.102 ft	296
Grid	77.4%	12.1%	± 5.2%	9.3%	± 6.8%	0.44 - 18.27 ft	6.589 ft	1149

Bathymetric Contour Map

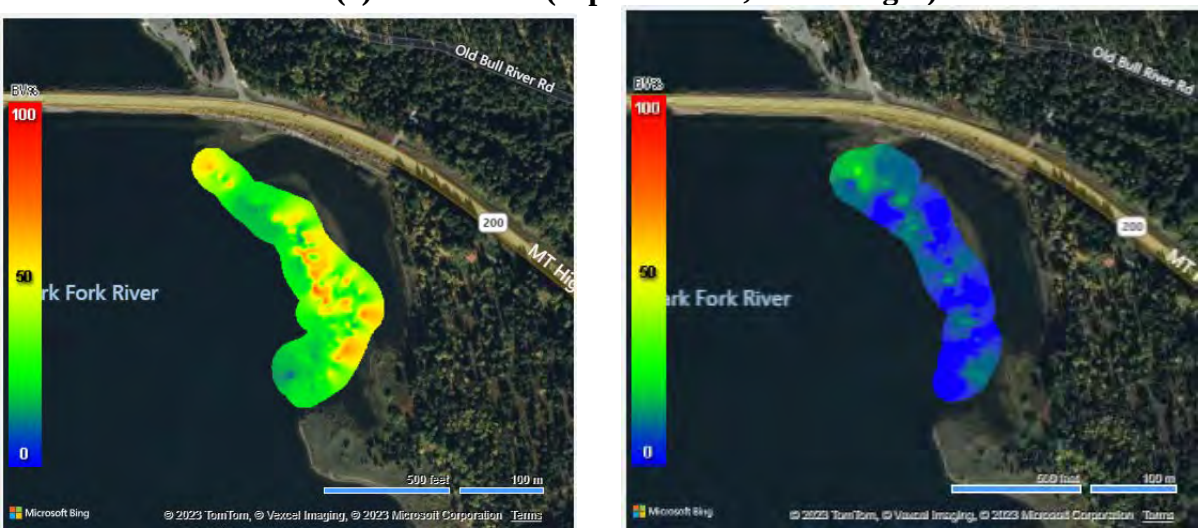
Vegetation Biovolume Heat Map



Overview of the 2023 Management Areas – Cabinet Gorge Reservoir



Plot CAB-05: At Time of Treatment (August 21, 2023 – Left), ~ Six (6) Weeks Post (September 28, 2023 - Right)



2023 Cabinet Gorge Reservoir AIS Treatment Plots: At Time of and ~ Six (6) Week Post Plot SAV % Cover and SAV BioVolume Data (Grid Data)									
Plot Number	Date Data Collected Pre Treatment	SAV % Cover	SAV % Bio-Volume	Date Data Collected-Post Treatment	SAV % Cover	SAV % Bio-Volume	SAV % BV Change	Post Treatment EWM Injury Rank	Herbicides Used (Littora or Tribune and Flumigard)
Cabinet Gorge Reservoir									
Cab05	8/21/2023	100	35.8	9/28/2023	29.1	9.7	-73%	95% +	Diquat/Flumi

Observations/Notes CAB-05: Treated with combination of diquat and flumioxazin, control visually estimated at +/- 95%. Dead EWM stems, couple EWM fragments floating. Coontail present.

Plot CAB-05: At Time of Treatment (August 21, 2023)

BIOBASE — VEGETATION ANALYSIS REPORT

Cabinet Gorge Reservoir, Sanders Montana

Report Time Stamp: 2023 October 26 - 23:28 (UTC) ... REPORT LINK

Survey Metadata	
Data Collector:	Tom Moorhouse
Survey Time Stamp (UTC):	2023 August 21 - 17:44
Starting Location:	48.025635, -115.840829
Ending Location:	48.026483, -115.840649
Distance	0.675 miles

Survey Statistics	
Average Water Temperature:	70.4 °F
Survey Area:	7.759 acres
Survey Volume:	36.681 acre ft
Percent of Waterbody Surveyed:	0.3%
Waterbody Area:	3004.952 acres

Survey Settings	
Includes Edited Data:	No
Track Buffer:	25 m
BV Grid Cell Size:	5 m
BV Minimum Detection - Percent:	5.0%
BV Minimum Detection - Depth:	2.400 ft
BV Maximum Detection - Depth:	20.000 ft
BV Sonar Channel:	Primary

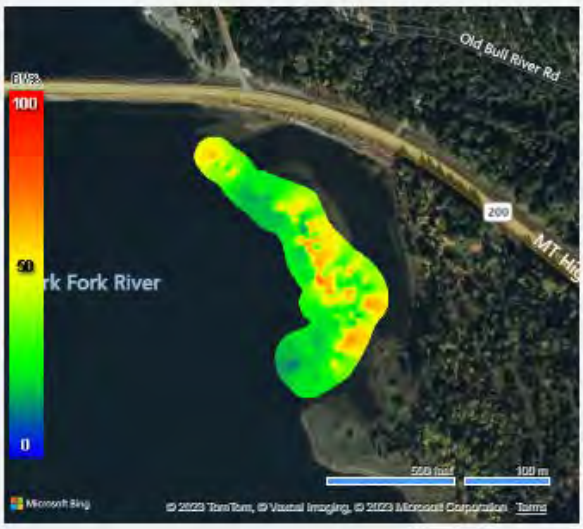
Quality Control	
Reviewer:	Ian McCormack
Comments:	We have reviewed this trip. Please use the "ASK THE EXPERTS" button for this trip if you have any questions.

Survey Summary

Type	PAC	Avg BVp	SD BVp	Avg BVw	SD BVw	Depth Range	Depth Avg	No. Depth Records
Point	97.2%	37.3%	± 24.1%	36.3%	± 24.1%	2.94 - 11.09 ft	5.189 ft	828
Grid	100.0%	35.8%	± 13.4%	35.8%	± 13.4%	0.85 - 10.04 ft	4.754 ft	2787

Bathymetric Contour Map

Vegetation Biovolume Heat Map



Plot CAB-05 ~ Six (6) Weeks Post (September 28, 2023)

BIOBASE — VEGETATION ANALYSIS REPORT

Cabinet Gorge Reservoir, Sanders Montana

Report Time Stamp: 2023 October 26 - 23:21 (UTC) ... REPORT LINK

Survey Metadata

Data Collector:	Tom Moorhouse
Survey Time Stamp (UTC):	2023 September 28 - 21:58
Starting Location:	48.025778, -115.840616
Ending Location:	48.025995, -115.840538
Distance	0.362 miles

Survey Statistics

Average Water Temperature:	65.2 °F
Survey Area:	6.640 acres
Survey Volume:	39.284 acre ft
Percent of Waterbody Surveyed:	0.2%
Waterbody Area:	3004.952 acres

Survey Settings

Includes Edited Data:	No
Track Buffer:	25 m
BV Grid Cell Size:	5 m
BV Minimum Detection - Percent:	5.0%
BV Minimum Detection - Depth:	2.400 ft
BV Maximum Detection - Depth:	20.000 ft
BV Sonar Channel:	Primary

Quality Control

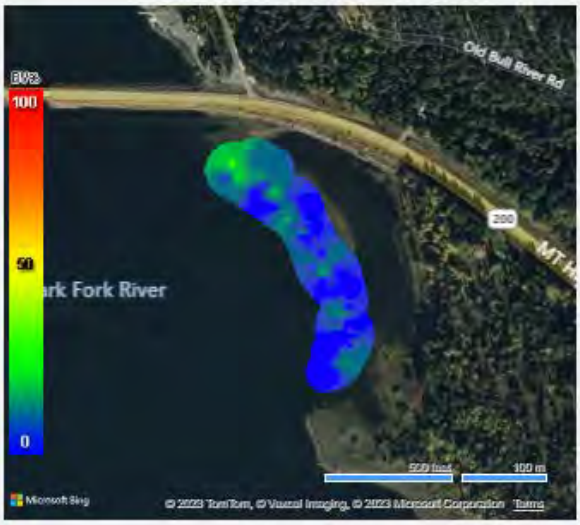
Reviewer:	Ian McCormack
Comments:	We have reviewed this trip. Please use the "ASK THE EXPERTS" button for this trip if you have any questions.

Survey Summary

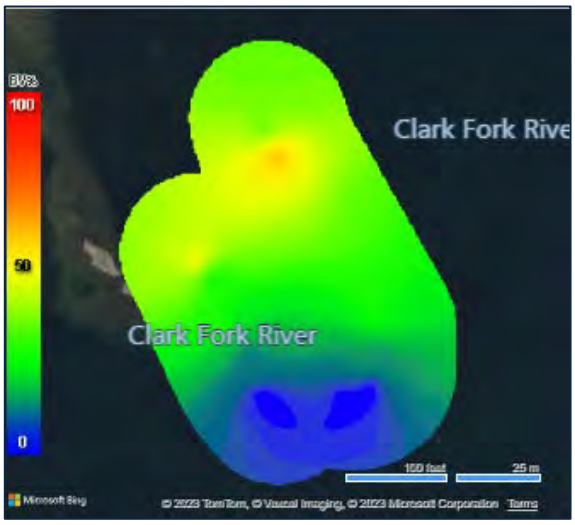
Type	PAC	Avg BVp	SD BVp	Avg BVw	SD BVw	Depth Range	Depth Avg	No. Depth Records
Point	33.8%	11.2%	± 10.4%	3.8%	± 7.4%	3.54 - 11.29 ft	6.466 ft	646
Grid	29.1%	9.7%	± 5.0%	2.8%	± 5.2%	0.35 - 11.15 ft	5.917 ft	2385

Bathymetric Contour Map

Vegetation Biovolume Heat Map



Plot CAB-06: At Time of Treatment (August 21, 2023 – Left), ~ Six (6) Weeks Post (September 28, 2023 - Right)



2023 Cabinet Gorge Reservoir AIS Treatment Plots: At Time of and ~ Six (6) Week Post Plot SAV % Cover and SAV BioVolume Data (Grid Data)									
Plot Number	Date Data Collected Pre Treatment	SAV % Cover	SAV % Bio-Volume	Date Data Collected-Post Treatment	SAV % Cover	SAV % Bio-Volume	SAV % BV Change	Post Treatment EWM Injury Rank	Herbicides Used (Littora or Tribune and Flumigard)
Cabinet Gorge Reservoir									
Cab06	8/21/2023	83.2	33.6	9/28/2023	32.0	13.5	-60%	95% +	Diquat/Flumi

Observations/Notes CAB-06: Treated with combination of diquat and flumioxazin, control visually estimated at +/- 95%. Dead EWM standing at southern edge of area. Filamentous algae growing on dead plants and large branch at south end. Some Elodea and Coontail present.

Plot CAB-06: At Time of Treatment (August 21, 2023)

BIOBASE — VEGETATION ANALYSIS REPORT

Cabinet Gorge Reservoir, Sanders Montana

Report Time Stamp: 2023 October 26 - 23:13 (UTC) ... REPORT LINK

Survey Metadata

Data Collector:	Tom Moorhouse
Survey Time Stamp (UTC):	2023 August 21 - 17:29
Starting Location:	48.025879, -115.845486
Ending Location:	48.026892, -115.845536
Distance	0.012 miles

Survey Statistics

Average Water Temperature:	70.4 °F
Survey Area:	2.558 acres
Survey Volume:	19.649 acre ft
Percent of Waterbody Surveyed:	0.1%
Waterbody Area:	3004.952 acres

Survey Settings

Includes Edited Data:	No
Track Buffer:	25 m
BV Grid Cell Size:	5 m
BV Minimum Detection - Percent:	5.0%
BV Minimum Detection - Depth:	2.400 ft
BV Maximum Detection - Depth:	20.000 ft
BV Sonar Channel:	Primary

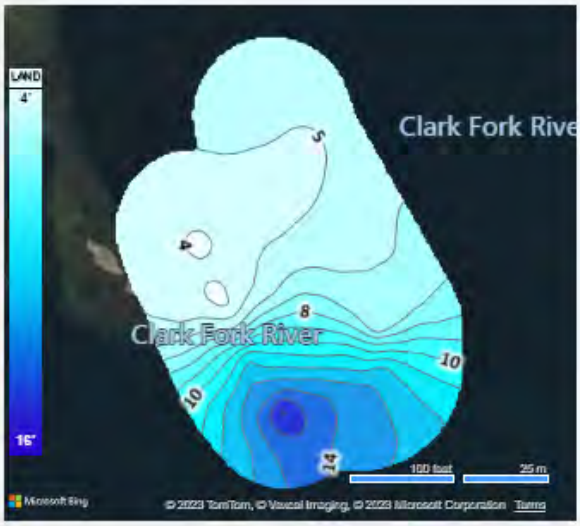
Quality Control

Reviewer:	Ian McCormack
Comments:	We have reviewed this trip. Please use the "ASK THE EXPERTS" button for this trip if you have any questions.

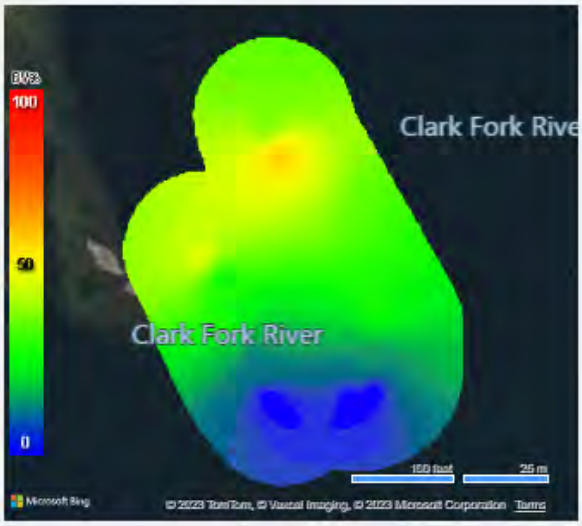
Survey Summary

Type	PAC	Avg BVp	SD BVp	Avg BVw	SD BVw	Depth Range	Depth Avg	No. Depth Records
Point	65.8%	22.9%	± 19.3%	15.1%	± 17.6%	3.19 - 17.26 ft	9.576 ft	87
Grid	83.2%	33.6%	± 12.9%	28.0%	± 17.2%	3.65 - 16.03 ft	7.680 ft	919

Bathymetric Contour Map



Vegetation Biovolume Heat Map



Plot CAB-06 ~ Six (6) Weeks Post (September 28, 2023)

BIOBASE — VEGETATION ANALYSIS REPORT

Cabinet Gorge Reservoir, Sanders Montana — Report Time Stamp: 2023 October 26 - 23:24 (UTC) ... REPORT LINK

Survey Metadata

Data Collector:	Tom Moorhouse
Survey Time Stamp (UTC):	2023 September 28 - 21:34
Starting Location:	48.028571, -115.846013
Ending Location:	48.028323, -115.846080
Distance	0.361 miles

Survey Statistics

Average Water Temperature:	64.5 °F
Survey Area:	6.650 acres
Survey Volume:	32.585 acre ft
Percent of Waterbody Surveyed:	0.2%
Waterbody Area:	3004.952 acres

Survey Settings

Includes Edited Data:	No
Track Buffer:	25 m
BV Grid Cell Size:	5 m
BV Minimum Detection - Percent:	5.0%
BV Minimum Detection - Depth:	2.400 ft
BV Maximum Detection - Depth:	20.000 ft
BV Sonar Channel:	Primary

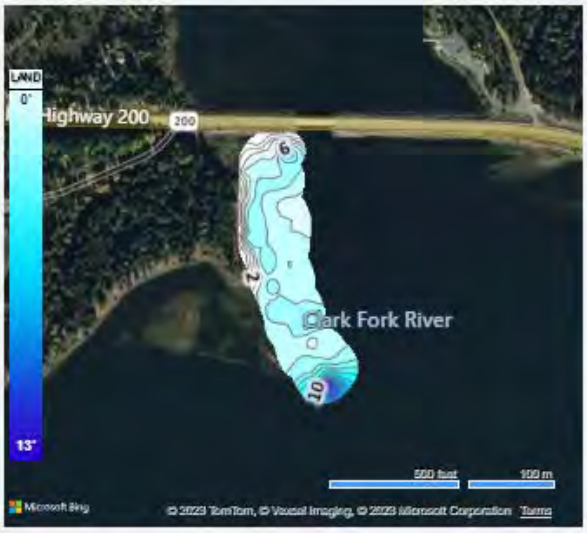
Quality Control

Reviewer:	Ian McCormack
Comments:	We have reviewed this trip. Please use the "ASK THE EXPERTS" button for this trip if you have any questions.

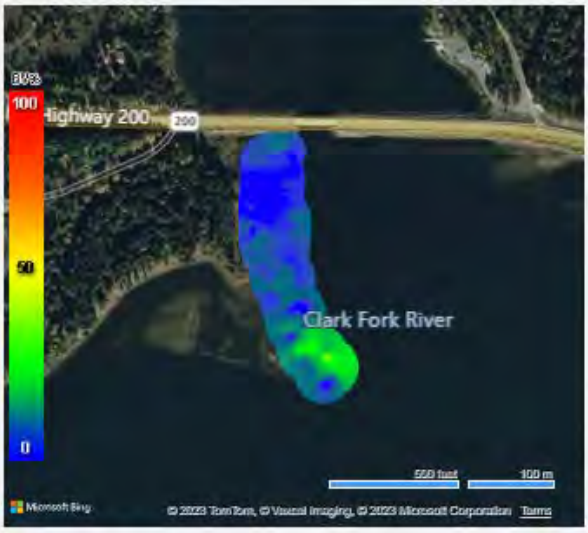
Survey Summary

Type	PAC	Avg BVp	SD BVp	Avg BVw	SD BVw	Depth Range	Depth Avg	No. Depth Records
Point	47.3%	12.3%	± 11.6%	5.8%	± 9.6%	3.20 - 13.46 ft	5.317 ft	577
Grid	32.0%	13.5%	± 8.0%	4.3%	± 7.8%	0.32 - 13.09 ft	4.900 ft	2389

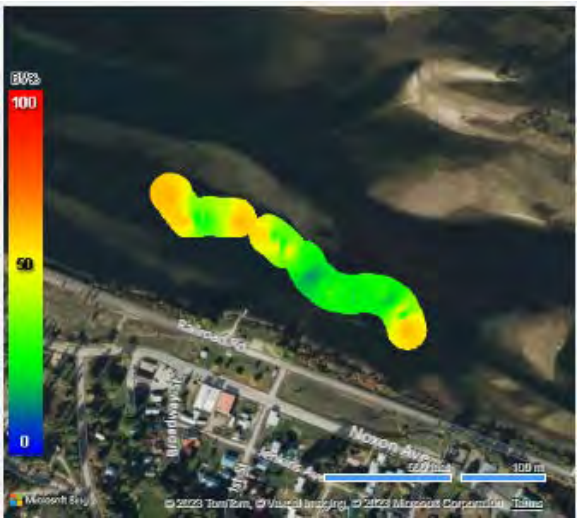
Bathymetric Contour Map



Vegetation Biovolume Heat Map



Plot CAB-30: At Time of Treatment (August 21, 2023 – Left), ~ Six (6) Weeks Post (September 28, 2023 – Not Available)



2023 Cabinet Gorge Reservoir AIS Treatment Plots: At Time of and ~ Six (6) Week Post Plot SAV % Cover and SAV BioVolume Data (Grid Data)									
Plot Number	Date Data Collected Pre Treatment	SAV % Cover	SAV % Bio-Volume	Date Data Collected-Post Treatment	SAV % Cover	SAV % Bio-Volume	SAV % BV Change	Post Treatment EWM Injury Rank	Herbicides Used (Littora or Tribune and Flumigard)
Cabinet Gorge Reservoir									
Cab30	8/21/2023	100	42.1	9/28/2023	N/A	N/A	N/A	Too Shallow	Diquat/Flumi

Observations/Notes CAB-30: Treated with combination of diquat and flumioxazin, control visually estimated at +/- 95%. Observed plot from shore due to shallowness. No EWM visible.

Plot CAB-30: At Time of Treatment (August 21, 2023)

BIOBASE — VEGETATION ANALYSIS REPORT

Cabinet Gorge Reservoir, Sanders Montana

Report Time Stamp: 2023 October 26 - 23:26 (UTC) ... REPORT LINK

Survey Metadata

Data Collector:	Tom Moorhouse
Survey Time Stamp (UTC):	2023 August 21 - 16:34
Starting Location:	47.997273, -115.780669
Ending Location:	47.996339, -115.778634
Distance	0.270 miles

Survey Statistics

Average Water Temperature:	70.7 °F
Survey Area:	5.411 acres
Survey Volume:	28.563 acre ft
Percent of Waterbody Surveyed:	0.2%
Waterbody Area:	3004.952 acres

Survey Settings

Includes Edited Data:	No
Track Buffer:	25 m
BV Grid Cell Size:	5 m
BV Minimum Detection - Percent:	5.0%
BV Minimum Detection - Depth:	2.400 ft
BV Maximum Detection - Depth:	20.000 ft
BV Sonar Channel:	Primary

Quality Control

Reviewer:	Ian McCormack
Comments:	We have reviewed this trip. Please use the "ASK THE EXPERTS" button for this trip if you have any questions.

Survey Summary

Type	PAC	Avg BVp	SD BVp	Avg BVw	SD BVw	Depth Range	Depth Avg	No. Depth Records
Point	96.9%	33.2%	± 17.2%	32.2%	± 17.1%	3.09 - 10.72 ft	6.040 ft	222
Grid	100%	42.1%	± 12.1%	42.1%	± 12.1%	2.29 - 10.47 ft	5.279 ft	1942

Bathymetric Contour Map — Vegetation Biovolume Heat Map

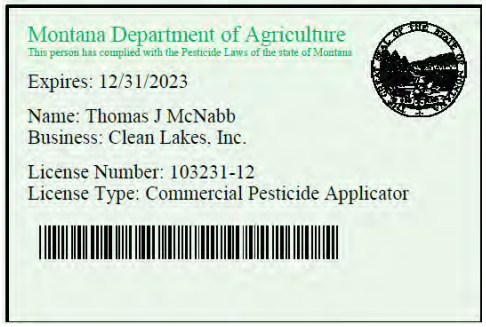
Plot CAB-30 ~ Six (6) Weeks Post (September 28, 2023)

Vegetation Analayis Report not available

CLEAN LAKES INC.

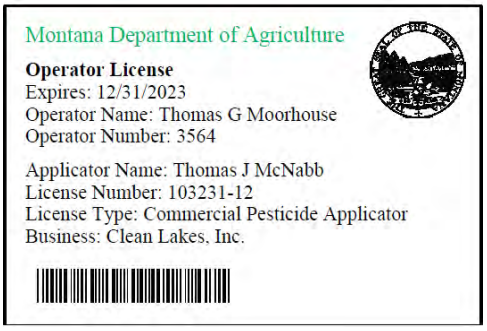
LIST OF PROJECT PERSONNEL

PROJECT DIRECTOR:


Montana Department of Agriculture
This person has complied with the Pesticide Laws of the state of Montana
Expires: 12/31/2023
Name: Thomas J McNabb
Business: Clean Lakes, Inc.
License Number: 103231-12
License Type: Commercial Pesticide Applicator

Thomas J. McNabb
Montana Licensed Applicator
Applicators License No. 103231-12
Cell Phone: 208-929-2748
Email: tmcnabb@cleanlake.com

PROJECT MANAGER:


Montana Department of Agriculture
Operator License
Expires: 12/31/2023
Operator Name: Thomas G Moorhouse
Operator Number: 3564
Applicator Name: Thomas J McNabb
License Number: 103231-12
License Type: Commercial Pesticide Applicator
Business: Clean Lakes, Inc.

Thomas G. Moorhouse
Montana Licensed Applicator
Applicators License No. 103230-12
Cell Phone: 208-929-2757
Email: tmoorhouse@cleanlake.com

SITE SAFETY AND HEALTH OFFICER: Thomas Moorhouse
Cell Phone: 208-929-2757

ALTERNATE SITE SAFETY OFFICER: Thomas Benney
Cell Phone: 925-766-8863

EMERGENCY RESPONSE COORDINATOR: Thomas Benney
Cell Phone: 925-766-8863

ALTERNATE EMERGENCY COORDINATOR: Thomas McNabb
Cell Phone: 208-929-2748

SANDERS COUNTY AIP TASK FORCE COORDINATOR

Kim Bergstrom
Phone: 406-826-2374
Email: pinnacle@blackfoot.net

END OF AQUATIC PESTICIDE APPLICATION REPORT