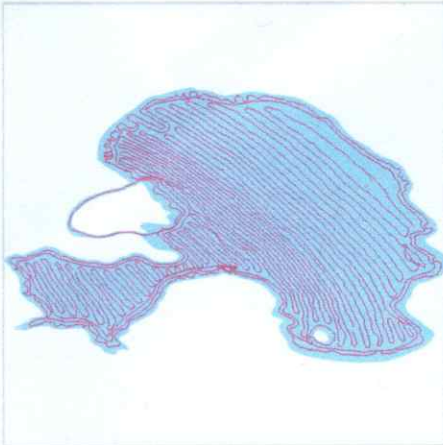


Lake Lawrence, Thurston Washington

Report Time Stamp: 2024 June 14 - 19:43 (UTC) ... [REPORT LINK \(https://s3-nox-prd-processing-snr-rpt-use1.s3.amazonaws.com/72120527-a60c-47f3-a136-25c65cb7931b/Report.html\)](https://s3-nox-prd-processing-snr-rpt-use1.s3.amazonaws.com/72120527-a60c-47f3-a136-25c65cb7931b/Report.html)



**Survey Metadata**

Data Kyle Langan  
 Collector:  
 Survey Time 2024 May 23 -  
 Stamp 16:05  
 (UTC):  
 Starting 46.850162,  
 Location: -122.571820  
 Ending 46.852206,  
 Location: -122.563302  
 Distance 34.512 miles

**Survey Settings**

Includes Edited Data: No  
 Track Buffer: 40 m  
 BV Grid Cell Size: 5 m  
 BV Minimum 5.0%  
 Detection - Percent:  
 BV Minimum 2.400 ft  
 Detection - Depth:  
 BV Maximum 20.000  
 Detection - Depth: ft  
 BV Sonar Channel: NA

**Survey Statistics**

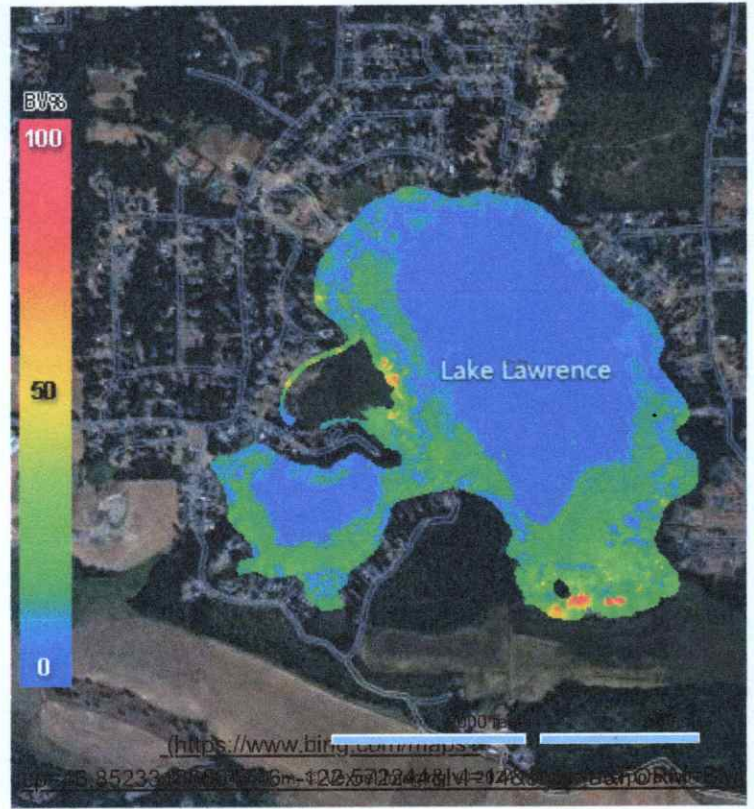
Average Water  
 Temperature:  
 Survey Area: 332.094  
 acres  
 Survey Volume: 4032.405  
 acre ft  
 Percent of  
 Waterbody 99.8%  
 Surveyed:  
 Waterbody Area: 332.686  
 acres  
 Estimated  
 Waterbody 4039.593  
 Volume acre ft

**Survey Summary**

Type	PAC	Avg BVp	SD BVp	Avg BVw	SD BVw	Depth Range	Depth Avg	No. Depth Records
Point	46.5%	14.9%	± 12.7%	6.9%	± 9.8%	1.55 - 24.23 ft	12.466 ft	21385
Grid	48.0%	15.6%	± 9.2%	7.5%	± 10.1%	0.16 - 23.56 ft	12.142 ft	114123

Bathymetric Contour Map

Vegetation Biovolume Heat Map



## Manual Data

None

## Biovolume Analysis by Quintiles

Type	0 - 20%	20 - 40%	40 - 60%	60 - 80%	80 - 100%
Point	93.2%	5.9%	0.5%	0.2%	0.2%
Grid	90.8%	7.9%	1.0%	0.3%	0.0%

## Biovolume Analysis by Depth

Type	Depth	Count	PAC	Avg BVp	SD BVp	Avg BVw	SD BVw
Point	0 - 1 m	410	93.4%	22.0%	± 22.2%	20.5%	± 22.2%
	1 - 2 m	3047	79.3%	15.7%	± 13.3%	12.4%	± 12.9%
	→ 2 - 3 m	2726	76.2%	15.1%	± 8.9%	11.5%	± 8.2%
	3 - 4 m	1670	83.8%	13.0%	± 5.9%	10.9%	± 5.5%
	4 - 5 m	1027	45.8%	12.2%	± 9.2%	5.6%	± 6.4%
	5 - 6 m	484	10.4%	14.5%	± 13.8%	1.5%	± 4.7%
	6 - 7 m	41	1.2%	15.3%	± 15.2%	0.2%	± 1.7%
	7 - 8 m	0	0%	0%	± 0%	0%	± 0%
	8 - 9 m	0	0%	0%	± 0%	0%	± 0%
	9 m +	0	0%	0%	± 0%	0%	± 0%



Grid	0 - 1 m	16430	91.2%	20.2%	± 13.6%	18.4%	± 14.2%
	1 - 2 m	16783	79.5%	15.3%	± 8.4%	12.2%	± 9.7%
	2 - 3 m	14057	75.6%	14.6%	± 4.8%	11.1%	± 7.5%
	3 - 4 m	9878	76.5%	12.7%	± 2.6%	9.7%	± 5.8%
	4 - 5 m	11103	45.7%	11.5%	± 2.9%	5.3%	± 6.1%
	5 - 6 m	24569	12.1%	12.3%	± 4.0%	1.5%	± 4.2%
	6 - 7 m	21283	0.8%	11.1%	± 3.3%	0.1%	± 1.0%
	7 - 8 m	21	0%	0%	± 0%	0%	± 0%
	8 - 9 m	0	0%	0%	± 0%	0%	± 0%
	9 m +	0	0%	0%	± 0%	0%	± 0%

## Glossary

### AOI

**Area of Interest:** Defines the individual transects or contiguous data samples as depicted by the color coding of each trip line. Separate areas of interest can be generated through merging of multiple trips, appending data to a single sonar log or lapses in time (greater than five minutes) within a sonar log.

### BVp

**Biovolume (Plant):** Refers to the percentage of the water column taken up by vegetation when vegetation exists. Areas that do not have any vegetation are not taken into consideration for this calculation.

### BVw

**Biovolume (All water):** Refers to the average percentage of the water column taken up by vegetation regardless of whether vegetation exists. In areas where no vegetation exists, a zero value is entered into the calculation, thus reducing the overall biovolume of the entire area covered by the survey.

### PAC

**Percent Area Covered:** Refers to the overall surface area that has vegetation growing.

### Grid

**Geostatistical Interpolated Grid:** Interpolated and evenly spaced values representing kriged (smoothed) output of aggregated data points. The gridded data is most accurate summary of individual survey areas.

### Point

**Individual Coordinate Point:** A single point represents a summary of sonar pings and the derived bottom and canopy depths. Individual point data create an irregularly spaced dataset that may have overlaps and/or gaps in the data resulting in an increased potential for error.