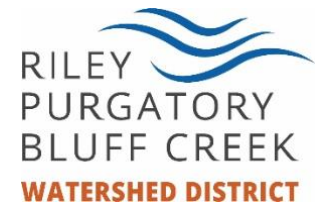


# Lake Ann Zebra Mussel Assessment

Lake ID: 10001200 Hennepin County Chanhassen, MN

Initial Report - July 12, 2023

Updated - July 19, 2023



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**Rapid Response Surveyors:** Carver County – Andrew Dickhart, AIS Coordinator  
- 2 Interns

RPBCWD – Joshua Maxwell, Water Resources Coordinator  
- 2 Interns

MN DNR – April Londo, Invasive Species Specialist  
- 1 Intern

## **ASSESSMENT DETAILS AND HISTORY**

The surveys have been conducted once a year on Lake Ann since 9/21/20. The first zebra mussel was observed on September 21, 2020. On this date, Chanhassen City Staff found a single large adult zebra mussel on the swimming buoy that was being pulled for the season. Monitoring activities that have occurred on Lake Ann in the past includes:

- annual zebra mussel veliger sampling
- semi-monthly boat launch scans
- eDNA testing
- public access adult zebra mussel monitoring plates
- Carver County invasive species searching transects

Following the initial finding of the mussel and review of the available data, the MNDNR did not list Lake Ann for being infested with zebra mussels. It was advised to monitor in 2021 which included additional veliger and eDNA analysis. If more zebra mussel occurrences or evidence of zebra mussel reproduction were found, then it would be listed. RPBCWD staff added the intensive surveys and an additional zebra mussel veliger survey (totaling 2/year) after the finding and carried this through this year. No veligers or eDNA have ever been found and only the single adult mussel had been found until 7/12/23.

On July 12th, 2023, RPBCWD staff conducted an intensive zebra mussel scans on Lake Ann. Two scans varying in distance, one around the beach area at Greenwood Shores in the NE part of the lake (145m) and one from the boat launch area through the beach area on the South end of the lake (305m) were conducted. These areas were selected since they were the most likely areas of introduction of mussels and the beach area is where the single mussel had been previously located. Scans were conducted from shore out to waste deep water, with most of the searching occurring between one to three feet of water. Staff utilized a handheld GPS device to mark points where zebra mussels were found. Structures and items checked for mussels included mostly woody debris, but limited rocks and aquatic vegetation was also scanned. Survey conditions were excellent with a air temperature of 76F and a calm 3mph NW wind. The secchi disk depth from the previous week was 2.2m in depth so clarity for a visual scan was not an issue. Lake Ann aquatic vegetation is/was thick and diverse, making scanning difficult in deeper water areas.

## **INITIAL SURVEY FINDINGS**

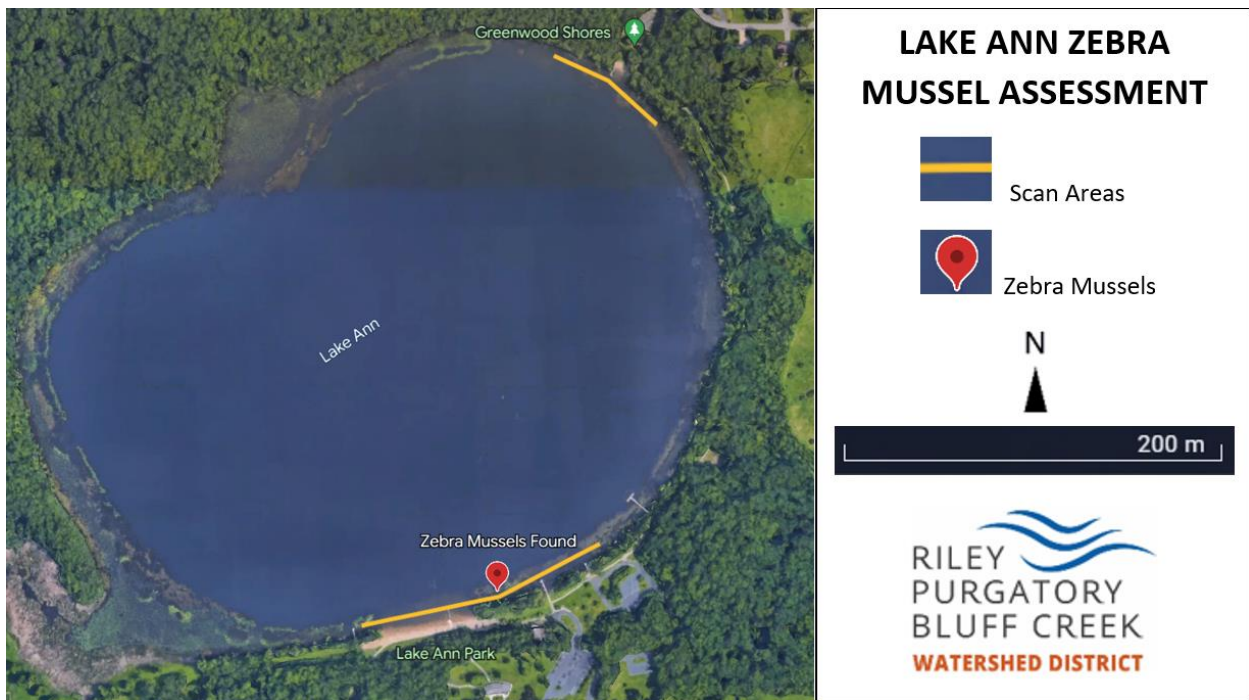
Staff began the survey at the area around Glenwood Shores to the NE and searched for 30 minutes (1-search hour). No zebra mussels were found. Staff then began just North of the boat launch and searched south for an hour (2-man hours). About halfway through the survey staff found 4 zebra mussels across three different tree branches which were all around three inches in diameter. The depth of water where they were found was about 1.5 feet. The mussels were all large adults ranging in size from 15mm to 18mm (Figure 1). Staff extensively searched the immediate area again, but no other mussels were found. Staff then continued to the other end of the beach and no mussels were found. A map of the search area can be seen in Figure 2.

**Latitude: 44.8686039997**

**Longitude: -93.5580371**



**Figure 1 : Lake Ann Adult Zebra Mussels Found.**



**Figure 2 : Lake Ann Zebra Mussel Survey Map.**

**RAPID RESPONSE SURVEY**

An additional shoreline, snorkel, and diving search was conducted by RPBCWD and Carver County, and April Londo of the MN DNR on July 14 (Figure 3). Three sites were selected:

- Site 1 : Directly across from the boat launch on the NW point - 5.25 man hours
- Site 2 : Beach area at Greenwood Shores in the NE part of the lake - 6.25 man hours
- Site 3 : Fishing pier south to south side of beach area. 2.75 man hours

Staff spent time checking submersed plants, limited rocks, and woody debris in 0-10 feet of water. SCUBA efforts were concentrated at sites 1 and 2 and focused in 10-18 feet of water. A total of 14.25 search hours which covered approximately 5.9 acres were searched on Lake Ann for this survey. Five

additional adult zebra mussels were found attached to woody debris in the exact location as the initial mussels were found. In no other area were zebra mussels found. Lake Ann will be listed on the infested waters list for zebra mussels.

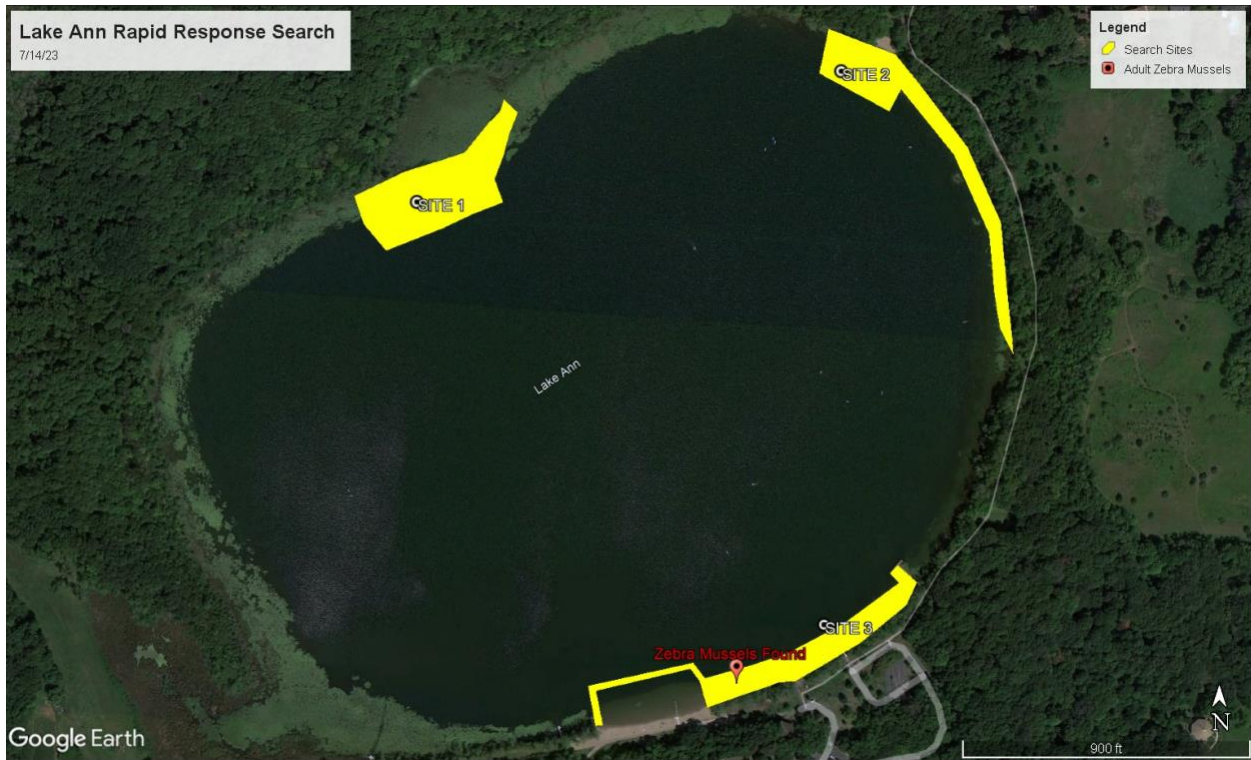


Figure 3 : Lake Ann Rapid Response Zebra Mussel Survey Map.



Figure 4 : Survey Team Prepping for Site 2 Scan