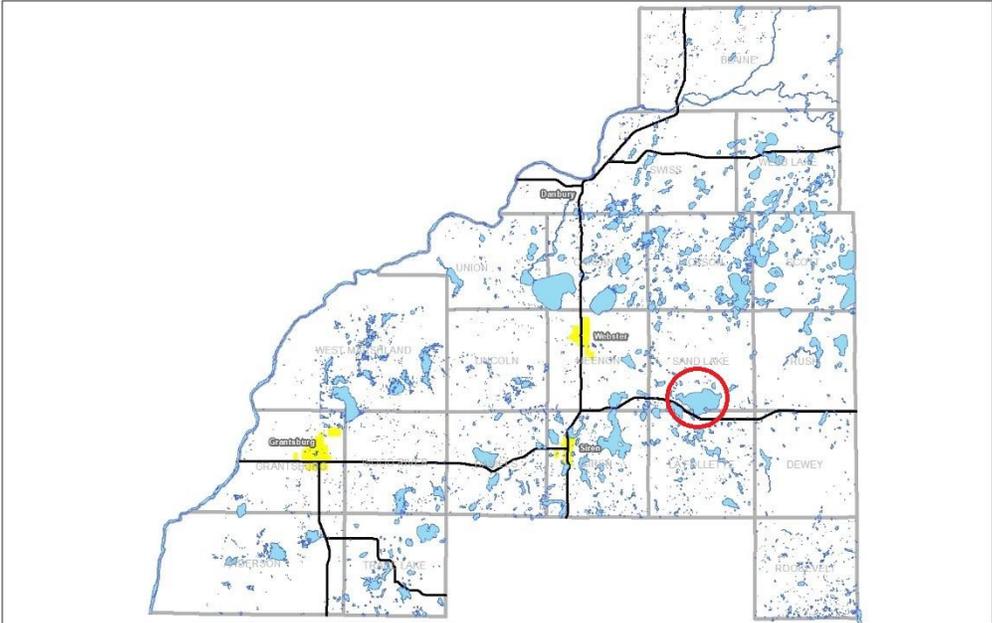




Big Sand Lake AIS Lake Surveys

May 28 & 30, 2025
July 28, 2025



Map 1 – Map of Burnett County with Big Sand Lake circled

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BIG SAND LAKE AIS EARLY DETECTION REPORT

Water Body Identification Code (WBIC): 2676800

Previous AIS Findings: Chinese Mystery Snail

New AIS Findings: Purple Loosestrife

Field Crew: Emily Moore and Brad Morris, AIS Consultant

Field Date: July 28, 2025

Report By: Emily Moore

Big Sand Lake is in Burnett County, WI and has one public boat landing found on Olsen Road, off Highway 70, in Webster, WI. Big Sand Lake is 1434 acres with an average depth of 9 feet, and the Wisconsin Department of Natural Resources (WDNR) classifies this waterbody as mesotrophic. Mesotrophic lakes generally have a moderate level of fertility, usually giving way to abundant plant growth, but growth does not become excessive or limited. Big Sand Lake also supports a healthy fishery comprised of panfish, largemouth and smallmouth bass, northern pike, and walleye.

An Aquatic invasive species (AIS) point intercept survey was conducted on May 28th & 30th by utilizing a sampling grid developed by Michelle Nault with the WDNR. This type of sampling grid is generally utilized for aquatic plant management plants; however, these grids can provide a thorough and systematic approach when used for AIS monitoring. Each point is sampled with a throw rake, and the contents are examined upon retrieval. Examples of invasive plants that could be found during a sampling grid are: Starry stonewort (*Nitellopsis obtusa*), Eurasian water-milfoil (*Myriophyllum spicatum*), and curly leaf pondweed (*Potamogeton crispus*). The sampling grid utilized on Big Sand Lake can be viewed below (Map 3).

In total, 762 sampling points were generated for Big Sand Lake. Once the littoral zone was established, points that were too deep or unnavigable were not sampled. The only area of the lake that was not sampled was the northwestern bay as it was inundated with suspected hybrid cattail bogs and could not be navigated with equipment. In 2021, Burnett County staff detected hybrid cattails at the public boat launch (45.8217, -92.23915) occupying roughly 20 sq ft. An AIS Incident Report was filed with the Wisconsin DNR on 6/11/2021. No new aquatic invasive plants were found during the survey.

We also conducted an early detection survey on July 28th to survey Purple Loosestrife by utilizing a visual meander and targeted site survey following WDNR protocols for lakes. Surveyors moved between shallow and deeper waters at a slow cruising speed visually inspecting the littoral and shoreland areas. GPS points were taken at location(s) surveyed for AIS detections. If presence of a new AIS to the waterbody was found, an AIS Incident Report was completed and sent to the Regional AIS Coordinator for a second verification measure. Locations can be found in Table 1 and Map 2.

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Beyond using the visual meander and targeted site survey, staff also took three (3) zebra mussel and spiny waterflea samples. Samples were collected following the WDNR veliger and spiny waterflea sampling and storing procedures. This activity was sponsored by the Wild Rivers Conservancy and National Park Service zebra mussel veliger and spiny waterflea sampling project. Locations can be found in Table 2.

While on Big Sand Lake very few areas were non-navigable by boat, and a thorough survey was completed. The only non-navigable area on the lake was the northwestern bay, which is inundated with cattail stands. Overall, Big Sand Lake appeared to be healthy. Chinese Mystery Snails was found during the survey and was already present in the lake. Purple Loosestrife was also detected and was not reported in previous years. A map of geolocated points was created that represents the locations Purple Loosestrife was found and was given to the lake association for information. Landowners were notified of the Purple Loosestrife present on the waterbody and all participated in a manual removal effort to remove the species from their shoreline. A survey will be completed in 2026 to determine the success of the removal and document the presence again.

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Findings:

Aquatic Invasive Species:

Purple Loosestrife – New Detection

Chinese Mystery Snail – Existing

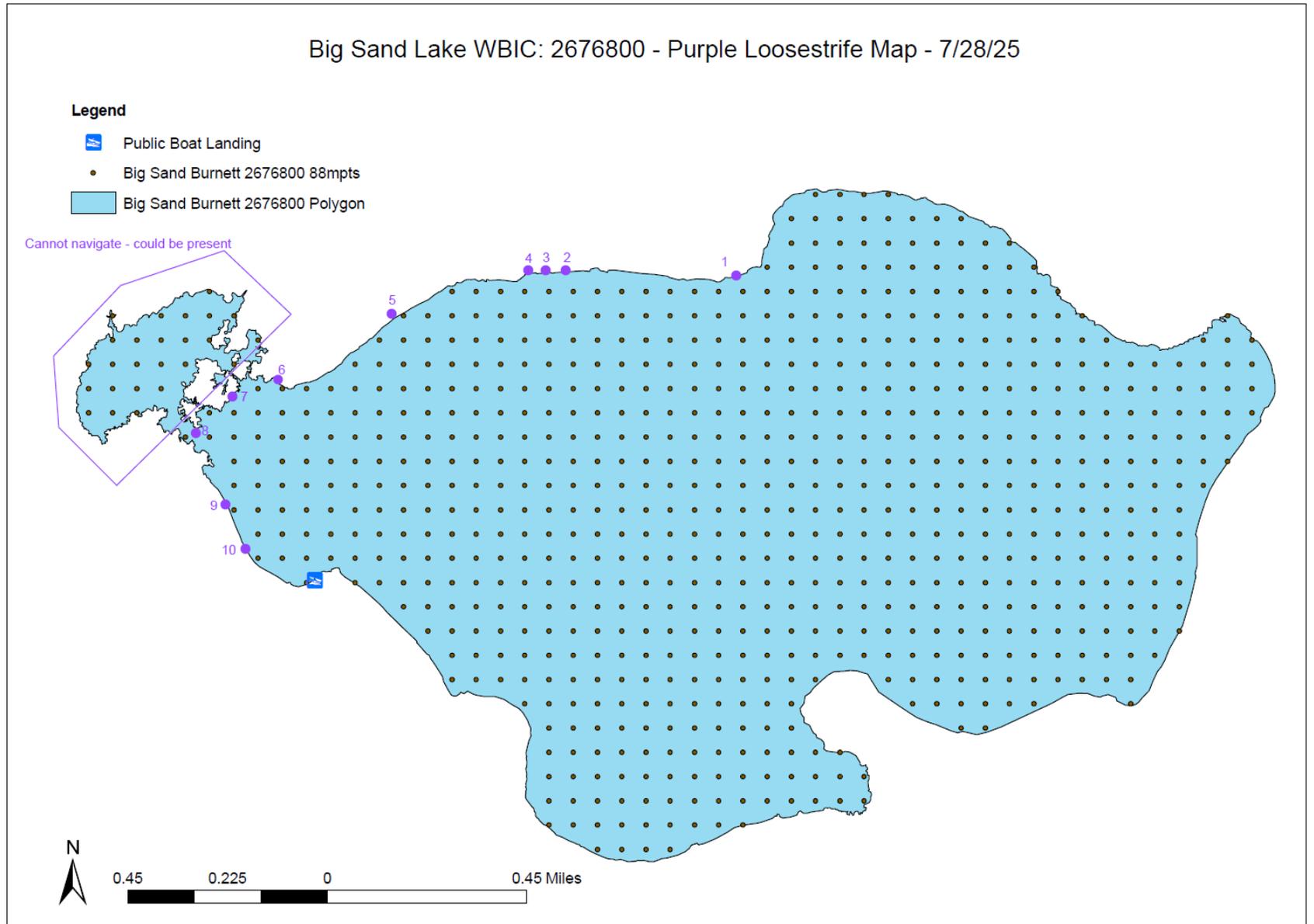
Table 1: GPS locations of Purple Loosestrife detections.

Species	Latitude	Longitude	Notes
Purple Loosestrife - 1	45.8318764	-92.2200423	Near pt 48
Purple Loosestrife - 2	45.8315674	-92.2297874	Near pt 41
Purple Loosestrife - 3	45.8319035	-92.2319035	Near pt 39
Purple Loosestrife - 4	45.8317856	-92.2291792	Near pt 40
Purple Loosestrife - 4	45.8315129	-92.2305636	Near pt 40
Purple Loosestrife - 5	45.830564	-92.234556	Near pt 67
Purple Loosestrife - 6	45.8279692	-92.2401582	Near pt 185
Purple Loosestrife - 7	45.8270929	-92.2270929	unnavigable near pt 231
Purple Loosestrife - 8	45.82547	-92.2447853	Near pt 274
Purple Loosestrife - 9	45.8245469	-92.243759	
Purple Loosestrife - 10	45.8241084	-92.2433192	Near pt 401

Table 2: GPS locations of Zebra Mussel Veliger and Spiny Waterflea Tows

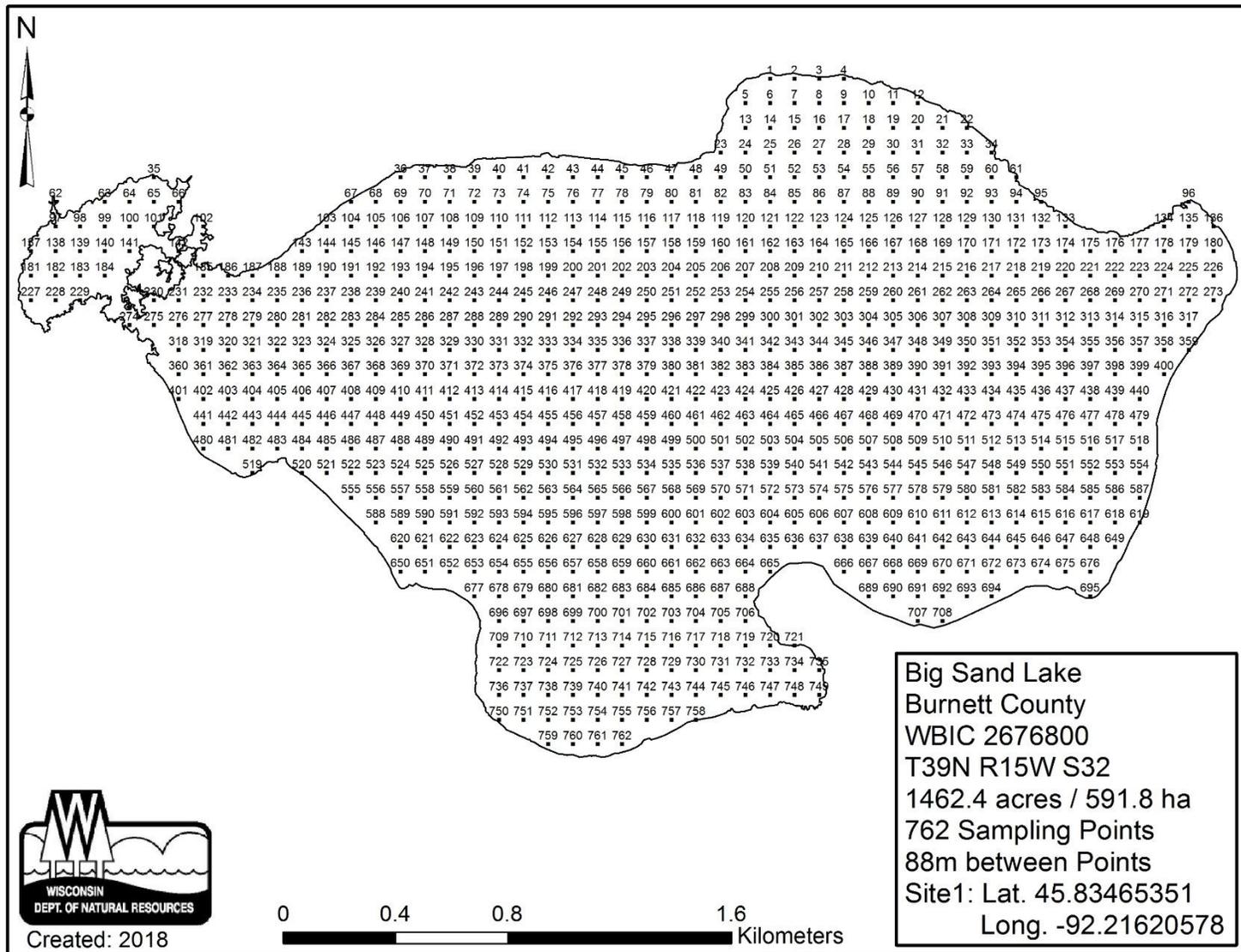
Depth	Latitude	Longitude
32 feet	45.8223063	-92.2322299
39.6 feet	45.8199188	-92.2290991
17.5 feet	45.8204184	-92.2288305

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Map 2 – Locations of Purple Loosestrife detections on Big Sand Lake.

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Map 3 – Big Sand Lake Sampling Grid used for the AIS PI Survey