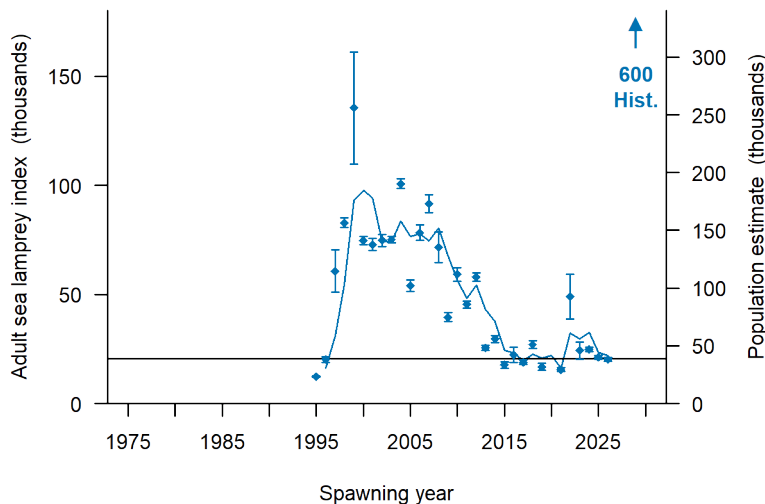


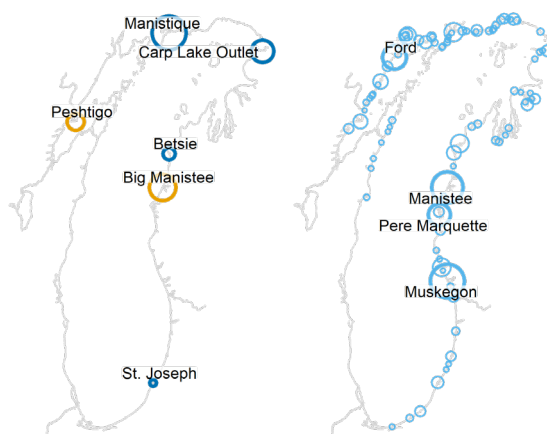


## STATUS OF SEA LAMPREY CONTROL IN LAKE MICHIGAN

### Adult Sea Lamprey:



**Figure 1.** Index estimates with 95% confidence intervals (vertical bars) of adult sea lampreys, including historic pre-control abundance (as a population estimate) and the three-year moving average (line). The population estimate scale (right vertical axis) is based on the index-to-PE conversion factor of 1.89. The adult index in 2026 was 20,000 with 95% confidence interval (19,000-21,000). The three-year (2024-2026) average of 22,000 was above the target of 21,000. The index target was estimated as the mean of indices during a period with acceptable marking rates (2015-2019).

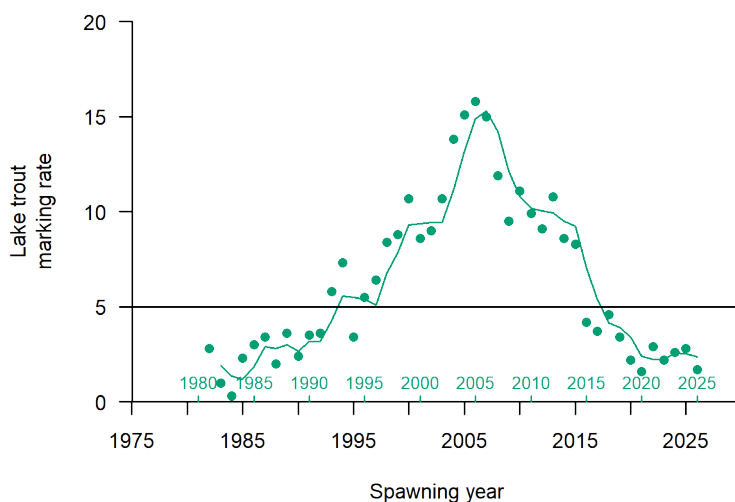


**Figure 2.** LEFT: Estimated index of adult sea lampreys during the spring spawning migration, 2026. Circle size corresponds to estimated number of adults from mark-recapture studies (blue) and model predictions (orange). All index streams are labelled. RIGHT: Maximum estimated number of larval sea lampreys in each stream surveyed during 1995-2012. Tributaries composing over half of the estimated maximum lake-wide larval population are identified (Muskegon 4,500,000; Manistee 3,600,000; Ford 1,800,000; Pere Marquette 1,400,000).

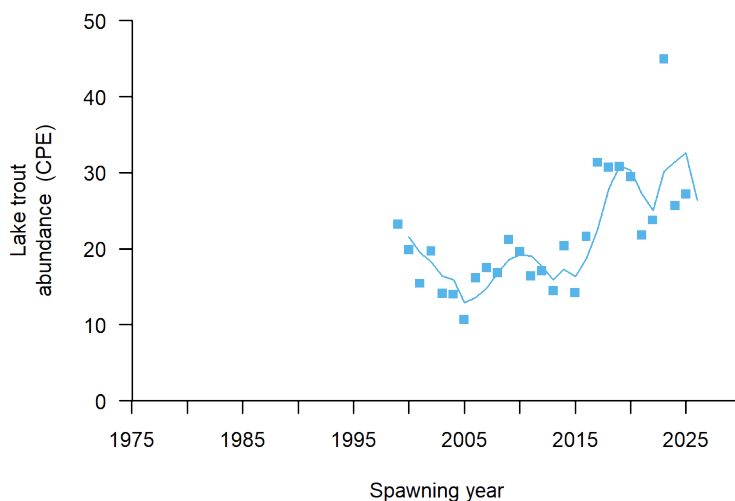
- Index estimates were generated for 4 of 6 index streams for Lake Michigan using mark-recapture data. The Peshtigo and Big Manistee Rivers were not assessed in 2026, resulting in modeled estimates for these streams.
- The stream specific estimates for the Manistique and Big Manistee (model estimate) Rivers contributed most to the lake-wide index estimate in 2026 (37% and 22% respectively).



### Lake Trout Marking and Relative Abundance:



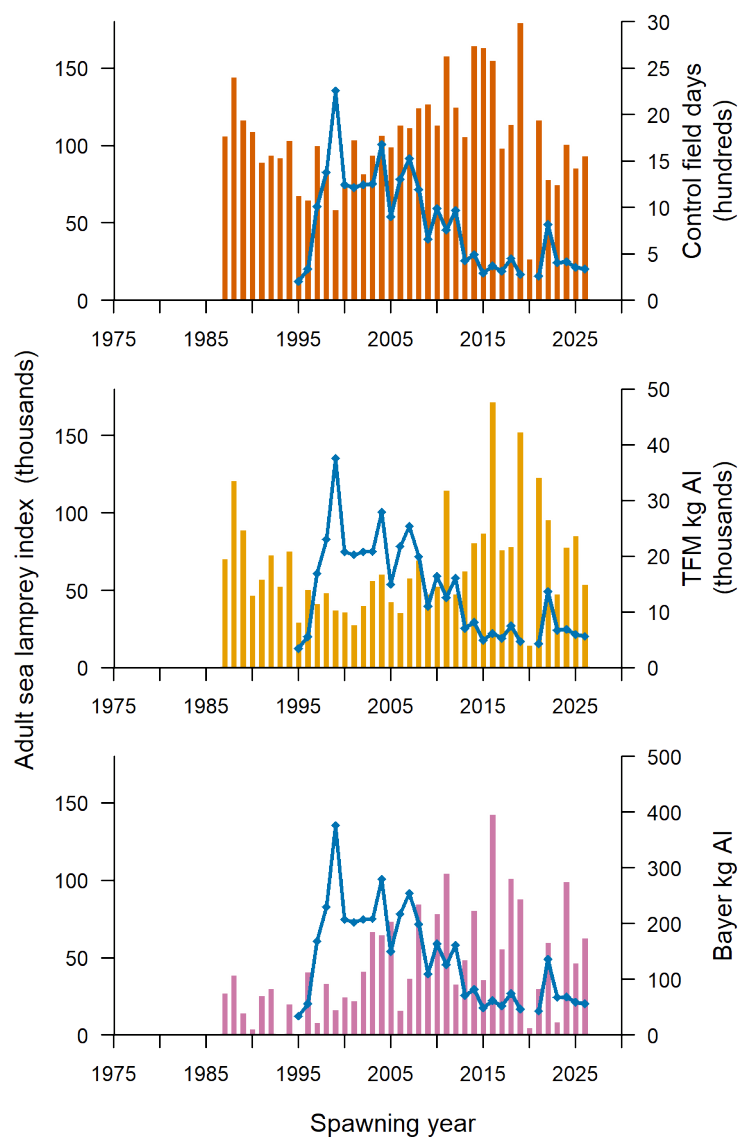
**Figure 3.** Number of A1-A3 marks per 100 lake trout > 532 mm from standardized assessments during August-November plotted against the sea lamprey spawning year, including the three-year moving average (line). The three-year (spawning years 2024-2026) average marking rate of 2.4 met the target of 5 A1-A3 marks per 100 lake trout > 532 mm (horizontal line). A second x-axis shows the year the lake trout were surveyed.



**Figure 4.** Lake trout relative abundance plotted against sea lamprey spawning year, including the three-year moving average (line). CPE = fish/1000'/net night of lean lake trout > 532 mm (21") total length caught in the Lake Wide Assessment Plan nets (the plan began in the late 1990s).



### Lampricide Control - Adults vs. Field Days, TFM, and Bayluscide:



**Figure 5.** Index of adult sea lampreys (blue lines) and number of control field days (salmon colored bars), TFM used (kg active ingredient; orange bars), and Bayluscide used (kg active ingredient; purple bars). Field days, TFM, and Bayluscide are offset by 2 years (e.g., field days, TFM, and Bayluscide applied during 1985 is plotted on the 1987 spawning year, when the treatment effect would first be observed in adult sea lamprey populations).