



May 7, 2025

Lake Ramsey Homeowner Association,

Dear Charlotte King,

The following report is from our electrofishing assessment that was completed on April 30, 2025. We captured bass, bluegill, shellcracker, longear, gizzard shad, and catfish. There are crappie in the lake but we did not see them in this assessment. Due to water temperatures, they have already spawned and moved back into deeper waters. Given the amount of aquatic vegetation throughout the lake, the overall sample amounts were lower than we usually see. This is because most of the fish are getting hung up in the grass on the way to the surface.

The goal for the lake is to maintain a balanced fish population in order to produce quality fishing opportunities for bass, crappie, and bluegill. In order to achieve this goal, you must provide adequate forage to all species of fish, and at the proper sizes. Predators need to be harvested in a controlled way to limit their numbers. This will allow remaining fish to exhibit better growth, condition, and size. You have 3 top predators in the lake: largemouth bass, crappie, and catfish. They are competing for the same food items. In order for the condition and size of bass to increase, some of the competition needs to be reduced, vegetation needs to be controlled, and structure/brush piles need to be added. With the lake being a multiuse lake for fishing, pleasure boating, water skiing, jet skiing, kayaking, etc. as well as the lake being the main focal point for the development, we will base our recommendations on managing for fish population balance, while also not interfering with the lake's other uses.

Please let us know if you have any questions about this report, our recommendations, or the lake.

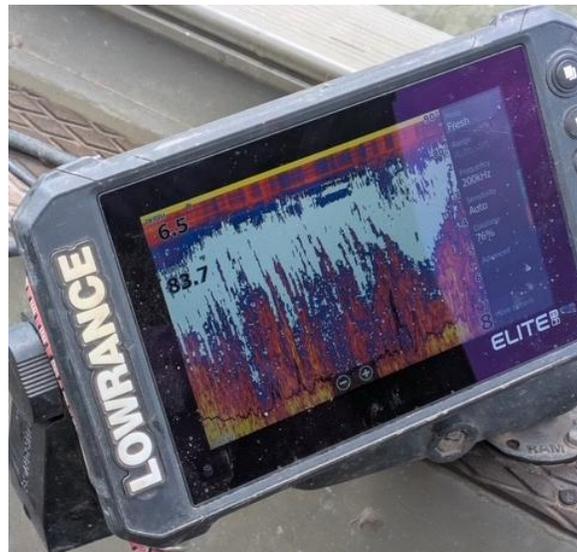
Sincerely,

Ginger Stuckey  
Fisheries Biologist  
334.804.3254

Shawn McNulty  
Co-Owner/Fisheries Biologist  
334.759.0023

## Aquatic Vegetation

There were a few different aquatic vegetations present in the lake at the time of this assessment. Those species are eel grass, and naiad. When ASF shocked the lake in 2020, there was no vegetation. It is incredible that a lake can go from nothing to the state it is in now. While vegetation in a large reservoir is great fish habitat and is extremely desirable, it is extremely problematic in small impoundments. In the larger reservoirs, depth and water flow can manage the vegetation and prevent it from taking over the entire lake. That is not the case for Lake Ramsey. It is early in the year and we are already seeing the submerged vegetation in 6-8 ft of water. If a plan is not put in place soon, the lake will be unusable by this spring.



You can see in the picture above that vegetation growing from 8 feet and is now just 2 feet below the water surface. I strongly recommend changing the focus on invasive vegetation as habitat and installing structure piles throughout the lake. In the meantime, I recommend stocking an additional 250 grass carp. If the additional stocking does not have the desired effect, stock an additional 250 this summer. The additional benefit of reducing the level of submerged vegetation is that the nutrients that they are utilizing will be shifted to the algal bloom, which is the base of the food chain.

## Additional Structure

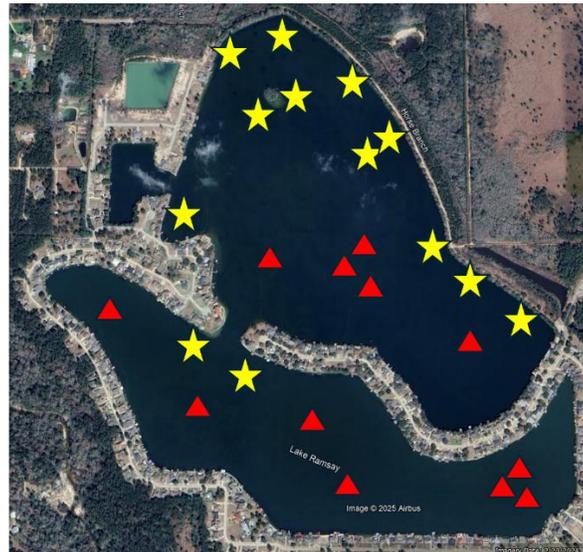
Structure should be installed around the lake to improve bluegill survival and concentrate bass. Installing structure will need to be done every few years because the material breaks down over time. The committee should consider budgeting for some artificial structures each year. They are expensive but will last forever. We have found that a combination of both natural and artificial structures provide the best results.

As the lake is also used for boating and swimming, all structure piles will be marked and placed so that they do not pose a threat. Structures will be placed at several different depths. The map below is a simplistic representation of where we would place structure. The goal is to get them in appropriate depths but ensure that they do not interfere with boating. If the committee decides to move in this direction, we can work with the sonar maps and provide a map with better details.

- Shallow water structure
  - Christmas trees, tree tops or small artificial structures.



- Deep water structure
  - Cedar trees, bamboo structures, large artificial structures.

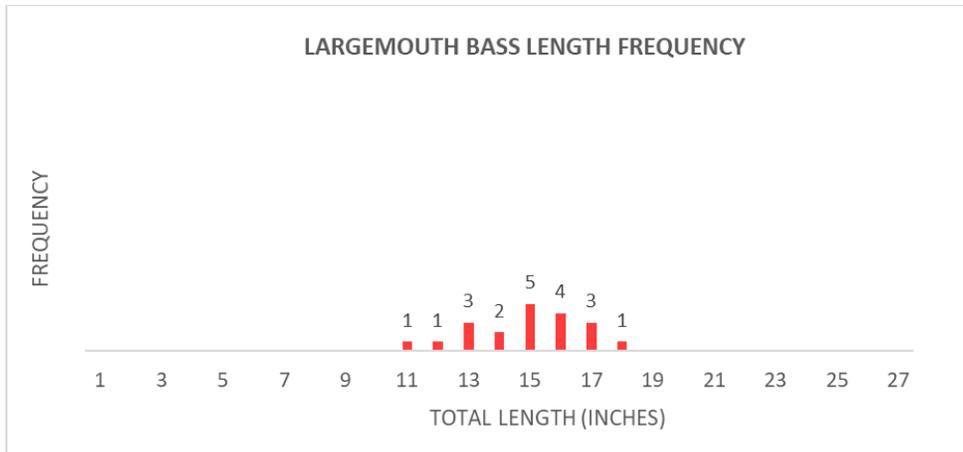


### **Water Quality**

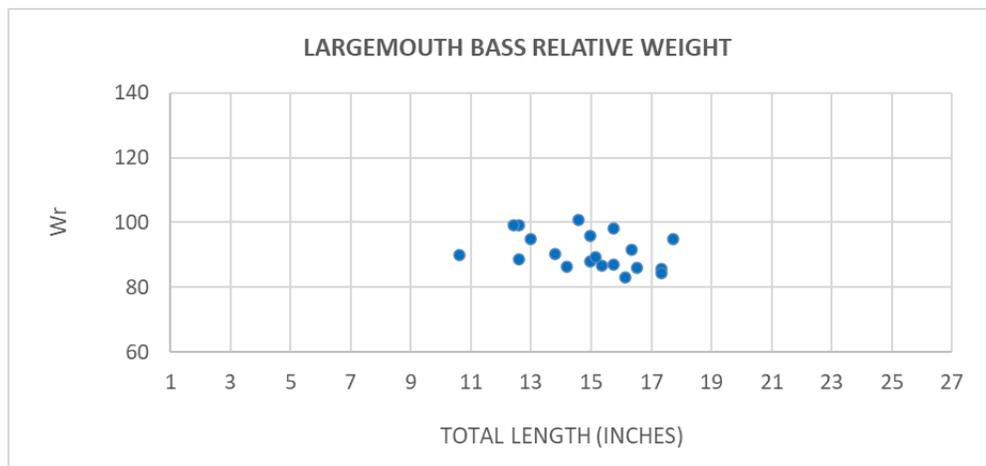
The visibility of the lake was approximately 24 inches at the time of our visit. In fertilized systems, we want the visibility to be around 18-24 inches and the water green in color. This indicates a moderate phytoplankton bloom. The phytoplankton is the base of the food chain and therefore improves the amount of food available to the fish. There is a natural fertility here, which is beneficial to fish production. The total alkalinity of the lake water was 64 ppm. The minimum recommended value of total alkalinity that maintains a healthy pH is 20 ppm. Therefore, conditions should be good for fish growth and reproduction.

### **Fish Population**

The first graph, which is Bass Length Frequency, illustrates the distribution of the various sizes of bass that we collected. We captured fish ranging from 11 to 18 inches in length. The most abundant size fish in the sample was at 15 inches, which is good. In a balanced fish population, we want to see the most abundant size at 15 inches or greater.

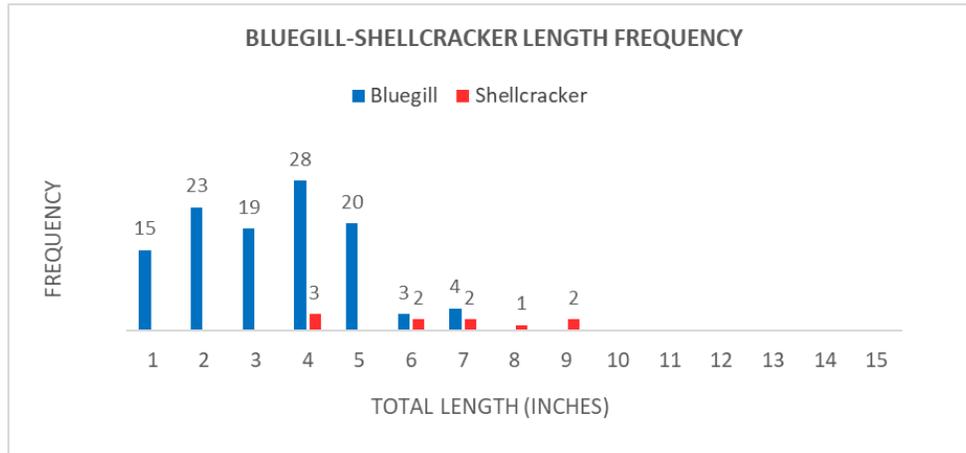


The second graph illustrates the relative weights of the bass in the lake. Relative weight ( $W_r$ ) is a comparison of the bass in your lake to an ideal size bass of the same length.  $W_r$ 's of 100 or above indicate excellent condition, while those around 90 are considered good.  $W_r$ 's around 80 indicate thin or poor condition. The current average relative weight is 91. It appears the  $W_r$  from 2024's assessment was 87 so the bass are doing better but we would like to see an increase in their overall numbers and sizes through eradication of vegetation and structures or brush pile addition. These structure piles will be beneficial for the bluegill as well as give target areas for the bass. These piles are much easier to control than the natural vegetation since the lake is a multiuse lake. We can advise structure areas to keep them out of the way for boaters and swimmers.



The size distribution of the bluegill and shellcracker is shown in the attached Bluegill-Shellcracker Length Frequency graph. You can see that the fish we captured were between 1 and 9 inches in length. The most abundant size fish were in the intermediate (3-5") size range which is ideal. These sizes are critical for maintaining good bass growth and condition. As it currently stands, there is so much vegetation that can interfere with spawning areas and while it does provide cover for the bluegill, the bass are having a hard time searching and chasing the bluegill, which is why their overall condition isn't where it should be, however, by eliminating the vegetation and adding some structure piles, this problem can be solved. As the vegetation amounts decrease, brush piles will greatly be needed for the bluegill population. We

would like to see more bluegill in the 6-10" plus sizes to feed larger bass as they continue to build in number.



### **Recommendations**

1. Allow the harvest of bass that are 12" or smaller, at a rate of 5 fish per person per day. This will help reduce some of the smaller mouths to feed, improving the growth and size of the remaining bass. This is a light harvest rate that can be adjusted later, with the next assessment.
2. Limit the harvest of the bluegill and shellcracker by setting a limit. We need them to remain in the lake to contribute to the spawning activity and would like to see them reach the larger sizes.
3. Harvest all crappie and catfish, regardless of size. These fish are both competing with your bass for the forage fish.
4. Encourage homeowners to either feed by hand or by automatic feeders to promote the bluegill production. Providing supplemental feed helps to improve bluegill condition, which helps increase spawning activity. Fish in better condition have better egg quality, which gives their young a better start when hatching. This will lead to more food for the bass and crappie over time.
5. Add structure to the lake for fish habitat. We recommend cedar trees, Christmas trees, brush, or artificial structure. Place the structure along the shoreline, in deep water, or under docks behind homes so that the structure does not interfere with boating or swimming. We will be adding a structure map to this report as well.
6. Electrofish the lake in spring of 2026 to evaluate the success of any stockings or harvest changes you make and to follow up on vegetation and structure issues.