

Santee Cooper Lakes- Triploid Grass Carp Stocking Recommendation

The 2024 multispectral imagery and boat surveys confirmed the expansion and increased acreage of hydrilla on Lake Marion and Lake Moultrie. As a result, the 2025 grass carp stocking recommendation for Lake Marion and Lake Moultrie is 22,796 fish. This stocking would bring the total grass carp population to 50,000, resulting in a 1 to 3.20 fish-to-surface acre ratio.

The Goal: Gradually increase the grass carp population to curtail the expansion of hydrilla and intentionally avoid large-scale stockings to protect native submersed aquatic plant species.

Considerations

- Hydrilla acreage has continued to increase since 2019. The estimated triploid grass carp population was 35,000 – 41,000 from 2019 to 2024. This grass carp population has not been sufficient to curtail the expansion of hydrilla.
- The largest spill event in Project history (2024) resulted in a maximum spill of 140,000 cfs and spill gates were open for 13 days. Triploid grass carp are known to emigrate during times of high flow, and it is reasonable to assume that some triploid grass carp exited the lakes during this spill event.
- Utilizing integrated pest management is an environmentally responsible approach to managing invasive species.
- Consider a conservative approach compared to stocking recommendations published by state agencies in SC, GA, and FL. A common stocking recommendation for controlling hydrilla in ponds and small impoundments is 10-20 triploid grass carp/surface acre. Based on bathymetry surveys there are ~88,000 surface acres of the Santee Cooper Lakes that are suitable for hydrilla growth. An estimated grass carp population of 50,000 fish would result in 0.57 fish/acres suitable for hydrilla, which is still well below the recommended 10-20 triploid grass carp/surface acre.
- Incremental increases will help determine the appropriate grass carp population to manage hydrilla on the Santee Cooper Lake System.