

2015 Lake Gaston Weed Treatment Plan

The largest factor affecting the 2015 treatment plan is the significant reduction in hydrilla acreage, from 671A in 2013 to 335A in 2014. The long term management plan is also working as anticipated, reducing hydrilla densities to less than nuisance levels. Of the 7 long term treatment areas designated only two sites and a partial of a third are being designated for treatment in 2015, based on tuber densities. The reduced hydrilla acreages will also mean no grass will need to be stocked in 2015.

Long Term Treatment Area (LTTA) Success

The long term management plan was revised in early 2013 and put the focus on managing the hydrilla tuber bank instead of the vegetation. This fundamental shift in management strategy meant we would move from being reactive to proactive in how hydrilla is managed on Lake Gaston. As can be seen in Table 1 this management plan has been successful at reducing tuber densities.

Site Selection-2015

With the substantial reduction seen in the tuber densities in the LTTA areas it was decided to drop the following areas from long term treatment: Sledge, Woodland Hurst, Jimmies, Timberline Shores and the western fork of Poplar. This in turn left Pretty Creek and Big Stonehouse remaining on the treatment list. After analysis of the 2014 survey data (Figure 1) it was clear Lizards Creek would need to be added to the 2015 treatment list. The narrow culvert leading into the creek coupled with the high boat traffic due to the wake board school likely meant little to no grass carp had migrated into the creek and none had ever been stocked. These factors leave only herbicides as a viable option to deal with the spreading hydrilla problem in the cove. In addition to these sites the revegetation cages in the Flats are becoming sanctuaries for hydrilla and need to be addressed before the hydrilla outcompetes the native species. The areas selected for treatment and associated acreages can be found in Table 2 (Figures 2-6)

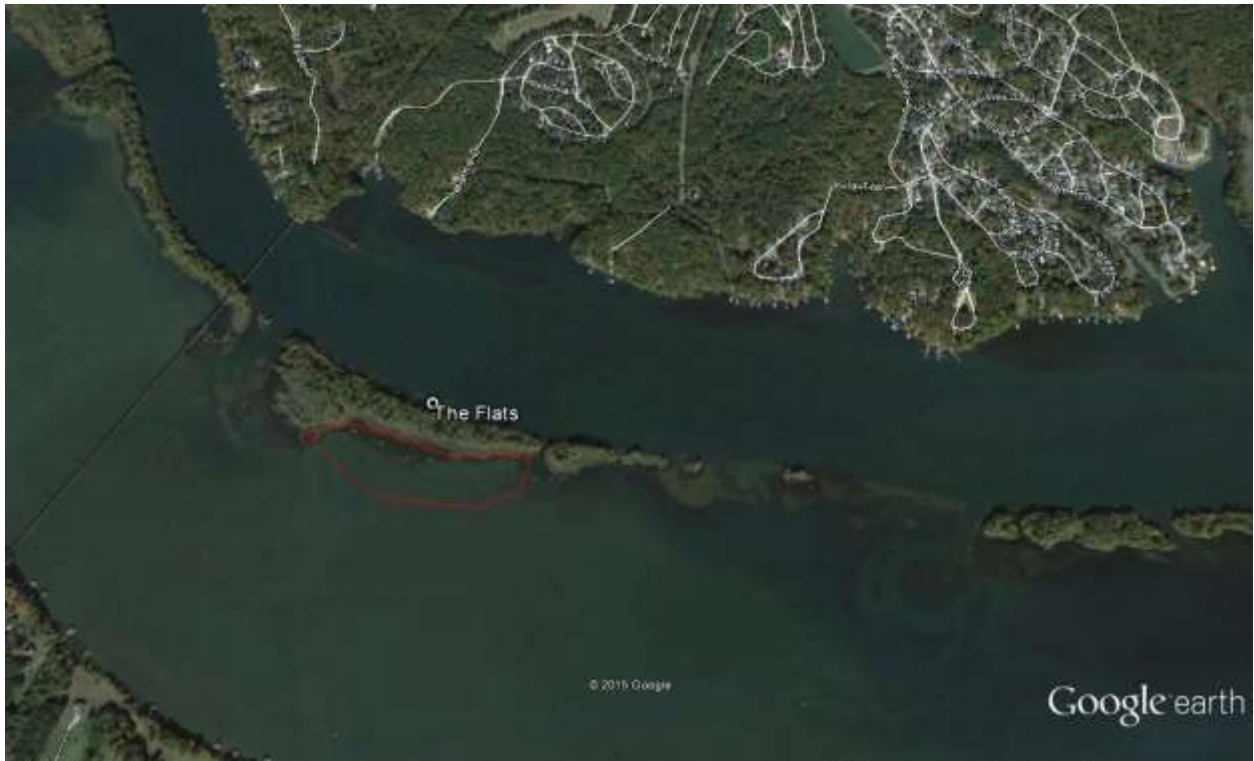


Figure 5: The Flats treatment area.

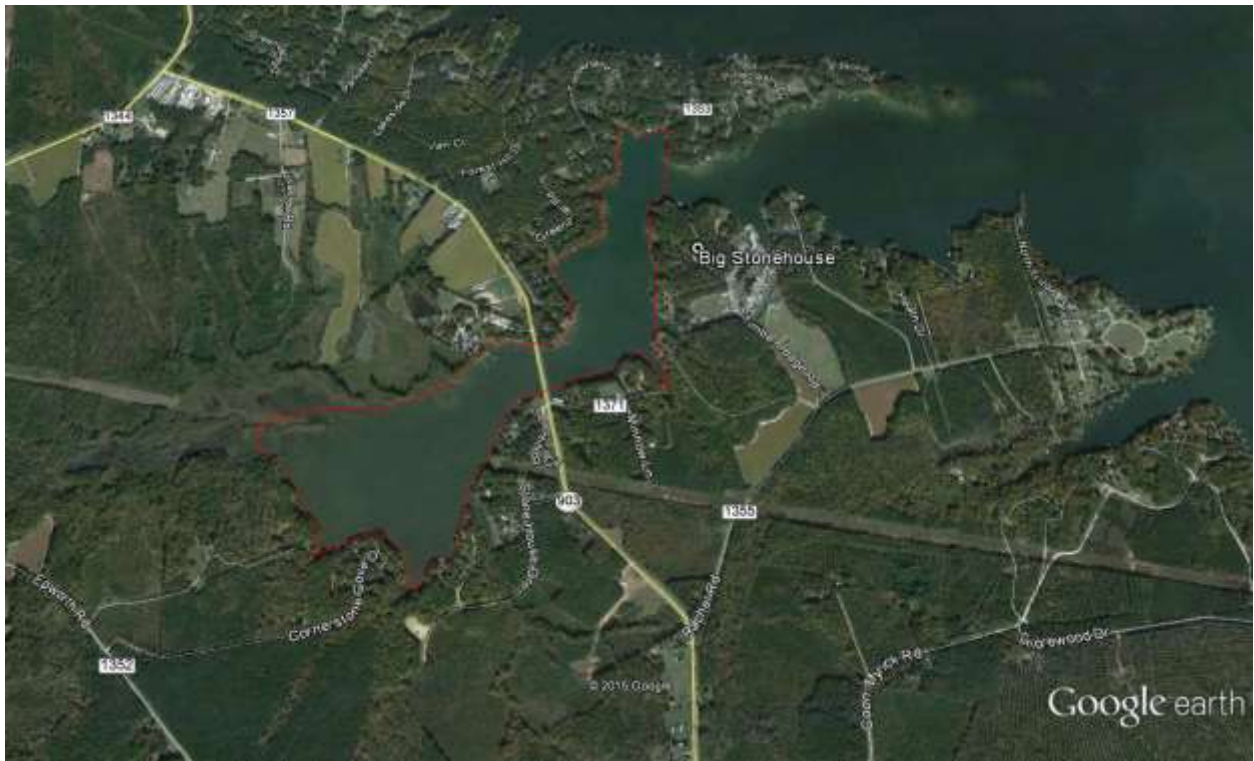


Figure 6: Big Stonehouse treatment area.

TABLE 1: Tuber sampling results, all vales are given in tubers/m².

LTTA Site	Spring 13	Fall 13	Fall 14
Sledge	86	64	0
Woodland Hurst	140	34	1
Pretty	58	46	3
Jimmies	36	12	0
Timberline Shores	2	0	0
Big Stonehouse	31	22	7
Poplar	75	25	20
*Hamlin	446	336	67

**Untreated control*

TABLE 2: 2015 hydrilla treatment areas and acreages.

Site	County	Treatment Size (A)
Pretty Creek	Halifax	85
Big Stonehouse West	Warren	98
Big Stonehouse East	Warren	68
Poplar Creek	Brunswick/Mecklenburg	80
Flats	Mecklenburg	10
Lizards Creek	Brunswick/Warren	163
	Total	504