16 June 2009 Note: Hydrilla was found rooted on each side of ramp and on some of the bottom grab samples during survey however mostly native submersed plants (SAV) was observed which included; baby tears, both macro-algae's (nitella and chara), and southern naiad. Native SAV is re-establishing post fluridone treatment and growing though the filamentous algae which continues to exist in large amounts on the bottom.

Additionally, native emergent grasses (such as maidencane) is expanding within the lake however exotic torpedo grass is preventing from further expansion in the inshore area. Recommend treatment plan for torpedo grass for Lake Tuskawilla.

On **March 25, 2009**, Gloria Eby and Dean G Barber (SC Consultant), surveyed the aquatic plants in Lake Tuskawilla. The submersed aquatic vegetation (SAV) continues to decline. Of the previous surveys SAV which included: hydrilla *(Hydrilla verticillata),* muskgrass *(Chara spp.),* southern naiad *(Najas guadalupensis),* baby tears *(Micranthemum glomeratum),* stonewort *(Nitella spp),* and road grass *(Eleocharis baldwinii),* hydrilla, muskgrass, baby tears and road grass were observed. These four species represent less than 2-4 percent of the bottom, whereas, Fish and Wildlife Commission, and SC would like to see 30-50 percent of the lake bottom covered with native SAV. As we advance into spring these native SAV and hopefully others will expand, and with the triploid grass carp, will keep the hydrilla in check. The hydrilla observed, mostly in the southern end of the lake, was stressed, but did have some new growth buds. The plant is still apparently impacted from the 2008 aquatic herbicide (Sonar) treatment.

Secchi reading (water clarity) was 5 feet in a depth of 6.5 feet, previous SC Watershed Atlas reading was 4.5 feet, August 2, 2008. Staff gauge was 53.28 feet with 53.9 feet observed January 30, 2009.

On **January 13, 2009**, Gloria Eby (Seminole County (SC) Senior Environmental Scientist), Dean G Barber (SC Consultant), Cindy Susi (Lake Tuskawilla resident) and Thomas Calhoun (SC intern) surveyed the aquatic plants in Lake Tuskawilla. All submersed aquatic vegetation (SAV) has been reduced. This includes: Hydrilla *(Hydrilla verticillata),* muskgrass *(Chara spp.),* southern naiad *(Najas guadalupensis),* baby tears *(Micranthemum glomeratum),* stonewort *(Nitella spp)* and hair grass *(Eleocharis baldwinii).* Most of the hydrilla observed was last years stems with few new growth buds and these buds were not very healthy. It was apparent that the July 7, 2008 herbicide (Sonar) treatment with the August 2008 follow up treatment is still impacting this submersed invasive aquatic plant. As we get into Spring, native SAV should expand and with the recent addition of mo re triploid grass carp, should continue to impact any hydrilla regrowth.

No additional Sonar damage on the lilies, Spatterdock *(Nuphar luteum)* and fragrant water lily *(Nymphaea odorata)* was apparent. These should expand in the Spring encompassing their previous habitat.

Remnants of a significant surface algal bloom was noted at several locations on the lake. It is unusually to see these blooms during colder months, as colder water can assimilate more nutrients, however, the herbicide treatment on the hydrilla has released nutrients that could cause such a bloom. It is anticipated that the bloom will disappear soon.

Several lake residents have observed jello (blobs) like masses submersed in the water or attached to vegetation, frequently adjacent to the shore. These are actually colonies of invertebrates, bryozoans. Here is a web site with more information:
http://www.magma.ca/~syatabe/water_brains/water_brains.html