

AQUATIC PLANT MANAGEMENT PLAN
FOR
U.S. ARMY CORPS OF ENGINEERS, SAVANNAH DISTRICT
WATER RESOURCES PROJECTS
SOUTH CAROLINA AND GEORGIA

Appendix A

CY 2006 Update

Annual Aquatic Plant Treatment Plan

and

Summary of Previous Year's
Management Program

**Aquatic Plant Treatment Plan
CY 2006**

New Savannah Bluff Lock and Dam

Periodic observations will be conducted to determine plant species, abundance, and distribution during the summer of 2006. Aquatic plants (primarily waterhyacinth and elodea) will be treated in the vicinity of the New Savannah Bluff Lock and Dam using an appropriate plant specific herbicide whenever plant abundance has the potential to impact the operations of this facility.

J. Strom Thurmond Lake

Current funding will not permit herbicide application to all public use areas where hydrilla may cause user conflicts. Therefore, treatment priorities have been established based on the criteria in the Aquatic Plant Management Plan. Listed below in priority order are the areas where herbicide application is anticipated. Present funding will only accomplish treatment of Priority 1, 2, and 3 areas. Anticipated treatments are contingent upon funds currently programmed for aquatic plant management remaining available during the last quarter of this fiscal year. Relative plant abundance, the availability of additional funds, and the lake level during mid to late summer may also result in changes to proposed treatment areas.

Area Priority	Area	Size (ac)	County & State
1	Major Corps Ramp Areas		
	Lake Springs Recreation Area	4	Columbia Co., GA
	Cherokee Recreation Area	2.5	Lincoln Co., GA
	Amity Recreation Area	3	Lincoln Co., GA
	Parksville Recreation Area	3	McCormick Co., SC
	Clarks Hill Park	1	McCormick Co., SC
	Petersburg Campground	1	Columbia Co., GA
	Ridge Road Campground	2	Columbia Co., GA
	Winfield Campground	1	Columbia Co., GA
	Clay Hill Campground	1	Lincoln Co, GA
	Raysville Campground	1	McDuffie Co, GA
	Scott Ferry Ramp	1	McCormick Co., SC
	Modoc Campground	2	McCormick Co., SC
	Subtotal Priority 1	22.5	
2	Corps Beach Areas		
	West Dam Recreation Area	8	Columbia Co., GA
	Lake Springs Recreation Area	20	Columbia Co., GA
	Amity Recreation Area	15	Lincoln Co., GA
	Petersburg Campground	4	Columbia Co., GA
	Ridge Road Campground	2	Columbia Co., GA
	Cherokee Recreation Area	2	Lincoln Co., GA

Area Priority	Area	Size (ac)	County & State
2 (con't)	Clarks Hill Park	2	McCormick Co., SC
	Parksville Recreation Area	4	McCormick Co., SC
	Modoc Campground	2	McCormick Co., SC
	Subtotal Priority 2	59	
3	Marina Basins		
	Tradewinds Marina	6	Columbia Co., GA
	Little River Marina	6	Columbia Co., GA
	Plum Branch Yacht Club	5	McCormick Co., SC
	Raysville Marina	6	McDuffie Co, GA
	Subtotal Priority 3	23	
4	Major State & County Ramps (1 ramp/area)		
	Wildwood Park (Columbia Co. Recreation Department)	1.5	Columbia Co., GA
	Hamilton Branch State Park, SC	4	McCormick Co., SC
	Elijah Clark State Park, GA	2	Lincoln Co., GA
	Mistletoe State Park, GA	2	Columbia Co., GA
	Subtotal Priority 4	9.5	
5	Other Corps Ramps		
	Keg Creek Ramp	1	Columbia Co., GA
	Rousseau Creek Ramp	1	McDuffie Co, GA
	Leathersville Ramp	1	Lincoln Co., GA
	Double Branches Ramp	1.5	Lincoln Co., GA
	Mosley Cr./ Bussey Pt. Ramp	1.5	Lincoln Co., GA
	Parkway Ramp	1	Lincoln Co., GA
	Soap Cr. Subdivision Ramp	1	Lincoln Co., GA
	Dordon Creek	1	McCormick Co., SC
	Modoc Ramp	1	McCormick Co., SC
	Subtotal Priority 5	10	
	6	Other Areas	
Ft. Gordon Rec. Marina & Ramps		10	Columbia Co., GA
Wildwood Park Beach & Ramp		3	Columbia Co., GA
Winfield Ramps A&B		4	Columbia Co., GA
Woodlawn Ramp		2	Lincoln Co., GA
Holloway Ramp		2	Lincoln Co., GA
Modoc Shores Ramp		1	McCormick Co., SC
Catfish Sub. Ramp		3	McCormick Co., SC
Columbia Co. Water Intake		3	Columbia Co., GA
Subtotal Priority 6		28	
	Grand Total	152	

In CY 05, hydrilla was present in the vicinity of the Columbia County water intake structure, however it did not effect operation of the intake. If treatment around the intake structure is warranted, it will be closely coordinated with the County.

Either Reward with K-TEA or Komeen, will be applied dependant upon site location, desired level of control, and cost per acre. It is anticipated that only one herbicide application per area will be made in CY 06. The timing of such applications will be dependent upon the rate of plant growth, lake levels, and impacts to authorized uses. Changes in the proposed treatment program will be coordinated with the GADNR, SCDNR, and affected outgrantees prior to implementation.

Adjoining property owners and other agencies in accordance with the APMP may treat additional hydrilla infestations.

The Thurmond Project staff will continue to monitor the abundance and migration of hydrilla in the reservoir. The prolonged drought from mid 1998 through the summer of 2002 significantly reduced the abundance of aquatic vegetation in the lake. High inflows, high lake levels and turbidity throughout most of the 2004 and 2005 growing season appears to have slowed the migration of hydrilla back into the drawdown zone in many locations. By mid November 2005, hydrilla was topped out at the lake surface in less than 1/4 of the known areas of infestation. The effects of these abnormal lake conditions on aquatic vegetation will continue to be monitored.

Richard B. Russell Lake

Hydrilla was discovered in Richard B. Russell Lake during summer 2002 but has not reoccurred since this time. Approximately 20 acres of Brazilian Elodea (*Egeria densa*) was present in 2005 with an increase in distribution and abundance from 2004. Boat surveys will be conducted periodically throughout the summer and fall of 2006 to determine plant distribution and abundance. Most rangers at the Richard B. Russell Project have been trained to identify and report aquatic plants of concern that would be expected to occur in this area. No treatment is currently planned for 2006.

Hartwell Lake

Aquatic plants have not become abundant in Hartwell Lake. Therefore, no treatment program is planned for CY 06. However, there is concern that hydrilla will be moved from J. Strom Thurmond Lake or Keowee Lake into Hartwell Lake. In an effort to identify the spread of hydrilla as early as possible, boat surveys will be conducted periodically throughout the summer and fall. Most rangers at the Hartwell Project have been trained to identify and report aquatic plants of concern that would be expected to occur in this area. Additionally, the Lake Hartwell Association membership has agreed to report any aquatic vegetation observed.

If hydrilla is located in Hartwell Lake, it is the intent of the Corps of Engineers to treat all known hydrilla infestations during CY 06 using herbicides to minimize the spread of hydrilla within the impoundment. However, if significant infestations are located before scheduled treatment, all treatment areas will be prioritized based on criteria established in the APMP.

Aquatic Plant Management Activity Summary CY 2005

New Savannah Bluff Lock and Dam

Aquatic plant populations in the upstream embayment were monitored periodically throughout the growing season. The following aquatic plants were identified: waterhyacinth, elodea, fanwort, pickerelweed, water paspalum, and cattail. None appeared to pose any problems to operation of the structure or uses of the area.

J. Strom Thurmond Project

The growth rate and distribution of hydrilla was monitored from May through November. Through most of the growing season, the lake level was 1 to 2 feet above normal summer pool. The abundance of hydrilla varied greatly from area to area. Many areas that were previously heavily infested showed minimal re-growth. In other areas, hydrilla was topped out in 6 to 10 feet of water.

Hydrilla adjacent to the following boat ramps and beaches and within the following marina basin was treated in order to minimize user impacts:

Treatment Area	Acres	Herbicide and Application Rate
Cherokee Boat Ramp	1.5	Komeen: 16 gallons per acre
Clarks Hill Park Boat Ramp	0.5	Komeen: 16 gallons per acre
Clay Hill Campground Boat Ramp	1.0	Komeen: 16 gallons per acre
Double Branches Boat Ramp	1.0	Komeen: 16 gallons per acre
Parksville Boat Ramp (Treated Twice)	2.5	Komeen: 16 gallons per acre
Parksville Beach No. 1	1.1	Komeen: 16 gallons per acre
Little River Marina (1/2 basin)	3.2	Komeen: 16 gallons per acre
Forest Lake Estates Boat Ramp	1.2	Komeen: 16 gallons per acre
Catfish Subdivision Boat Ramp	3.0	Komeen: 16 gallons per acre
Holloway Boat Ramp	0.8	Komeen: 16 gallons per acre

Five permits were issued to adjoining property owners to treat hydrilla around their docks. A total of 5 acres were treated. All herbicide applications were made by a licensed applicator using herbicides approved for the treatment of hydrilla.

During October and November, inspections of the shoreline areas were made in areas where hydrilla had not been previously found. The only new infestation of hydrilla found in 2005 was in Claitt Creek (approximately 58 acres) adjacent to Mistletoe State Park, Columbia County, GA. It is assumed that the hydrilla will return to those areas previously infested once lake levels and inflows return to normal. Hydrilla is present along approximately 5,173 acres of shoreline, including approximately 318 miles of shoreline in Georgia (3,875 ac.) and 107 miles of shoreline in South Carolina (1,298 ac.). These estimates are based on the amount of shoreline that will most likely be impacted once the lake returns to normal level.

Hydrilla is present in areas of suitable substrate throughout Little River, GA from the confluence of the Savannah River to upstream of Raysville Campground including most tributaries. Along the Savannah River portion of the lake, hydrilla is present from the dam to Elijah Clark State Park in Georgia and from the dam to Benningsfield Creek in South Carolina. A small amount of hydrilla was present in front of the Savannah Lakes Motel near the Highway 378 bridge in South Carolina in 2002, however, it was not found in 2005. Hydrilla was not found near Hickory Knob State Park or the Dorn Ramp in 2005. Maps showing the known locations of hydrilla infestations are on file at the Thurmond Lake Operations Project Manager's Office.

Richard B. Russell Project

Periodic boat surveys of the lake were performed throughout the growing season. Brazilian Elodea (*Egeria densa*) was found at locations where it was in 2004 and a few new areas contiguous to the previous infestations. The Brazilian Elodea appeared to be healthy in July and August 2005, but was not present during a survey conducted in October 2005. No known occurrences of hydrilla were present in Richard B. Russell Lake in 2005. Aquatic plant growth has not reached nuisance levels requiring treatment.

Hartwell Project

Periodic boat surveys of the lake were performed throughout the growing season. The distribution and abundance of water primrose in Eighteen Mile Creek does not appear to have increased relative to previous years. Aquatic plant growth has not reached nuisance levels requiring treatment.