

**2013 Bundick Lake Vegetation Control Plan**  
LDWF, Inland Fisheries

**Past Control Measures:**

***Biological:***

Common salvinia weevils were stocked in August 2008. Localized (<1km<sup>2</sup>) control was observed from this stocking through spring 2009. No long term control was observed after this period.

***Chemical:***

During the 1960's and 1970's, 2,4-D was used regularly to control infestations of water hyacinth. In recent years, common salvinia, alligator weed, and Peruvian water grass have been the problematic plants treated most frequently by LDWF crews (Table 3).

Table 1. Historical treatment measures on Bundick Lake.

Target Plants	Herbicide	Rate (gal/acre)	Treatments* per year
Water Hyacinth Alligator Weed/Primrose Fragrant Water Lily Pennywort	2,4-D	0.5	6
Common Salvinia Giant Salvinia Sedge Peruvian Water Grass	Imazapyr	0.5	7
	Diquat	0.75	
	Glyphosate	0.75	
	Imazamox	0.5	

Table 2. 2012 Application details for Bundick Lake

Total # of Treatments*	Herbicide	Rate (gal/acre)
8	Glyphosate/Diquat	0.9
	Imazapyr/Glyphosate	0.75
	Imazamox/Glyphosate	0.75
	Imazapyr	0.5

Table 3. Acres treated by vegetation Bundick Lake in 2012.

<b>Vegetation</b>	<b>Acres Treated</b>
Salvinia Common	75.75
Peruvian Water Grass	59
Alligatorweed	28.35
Primrose	28
Water Hyacinth	16.2
Sedge	2.7
<b>Total</b>	<b>210</b>

\*For reporting purposes, a treatment is defined as one crew for one day.

***Physical:***

The drawdown in the fall of 2004 was initiated because common salvinia coverage reached >70% of the lake surface by August of that summer. A successful drawdown complemented by aggressive herbicide spraying has kept this noxious plant below the 5% level in the last eight years

**Aquatic Vegetation Status:**

Fall 2012

Common salvinia (50 acres)  
 Alligator weed (100 acres)  
 Water Hyacinth (50 acres)  
 Peruvian Water Grass (20 acres)

Estimated for fall 2013

Common salvinia (50 acres)  
 Alligator weed (100 acres)  
 Water Hyacinth (50 acres)  
 Peruvian Water Grass (20 acres)

**Limitations:**

- Beaver ponds and low lying areas on private property upstream of the lake provide refuge for common salvinia.

## **Recommendations:**

### ***Biological Control***

None

### ***Chemical Control***

Conduct treatments monthly using imazapyr (0.5 gal/acre) alternated with imazamox (0.5 gal/acre) with appropriate surfactant for control of alligator weed, Peruvian watergrass, and water hyacinth. This treatment regime has provided excellent control of problem plants over the past several years and has led to us successfully reducing overall biomass of nuisance aquatic vegetation. If infestations consist primarily of common salvinia, a glyphosate (0.75 gal/acre)/diquat (0.25 gal/acre) mix including Aqua King Plus (0.25 gal/acre) and Thoroughbred (8 oz./acre) surfactants will be used. All treatments will cease one month prior to the planned 2013 drawdown.

### ***Physical Control***

Conduct approved 2013 drawdown (Appendix I) for shoreline maintenance. This will also provide control of common salvinia.

## **APPENDIX I**

### **DRAWDOWN SCHEDULE FOR BUNDICK LAKE**

- 1) Work to be accomplished prior to gate opening (Spring/Summer 2013)
  - a. Conduct two public hearings on proposed drawdown plans.
  - b. Meet with BPPJ to discuss plans with them and get their written approval
  - c. Contact local DOTD personnel to discuss work needs.
  - d. Add official 5 year drawdown schedule and relevant documentation to Bundick Lake management plan.
- 2) Gate opening September 10, 2013
  - a. Work with local DOTD personnel to maintain 91' MSL lake elevation
  - b. Work with BPPJ and DOTD to repair spillway launch and conduct any other feasible maintenance items from (1c) above.
- 3) Gate closure January 15, 2014