

APPENDIX E

AQUATIC WEED CONTROL

Revision 6

2021

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ROANOKE RAPIDS AND GASTON
SHORELINE MANAGEMENT PLAN
APPENDIX E - AQUATIC WEED CONTROL
October 2021

1.0 Overview

The accidental introduction of exotic vegetation has resulted in the proliferation of several nuisance aquatic weeds in Lake Gaston and Roanoke Rapids Lake. Although there are some ancillary aquatic habitat benefits to these species, over-abundance of the weeds can result in significant reduction in the recreational quality of some portions of the lakes. Of greatest concern are the areas in and around public and private swimming areas, docks, boat landings and channels that provide ingress and egress to these structures.

2.0 State Regulation

Since portions of Lake Gaston fall within the boundaries of both North Carolina and Virginia, the regulations of both states for application of aquatic herbicides have been reviewed. The following are conclusions of the regulations:

2.1 In both states, the water in the lakes is considered to be “state property” by the state. As a result, the states are responsible for ensuring water quality and co-managing the fishery.

2.2 The bottom of the lake and the shoreline within the project boundary are owned by Dominion. Dominion is responsible to FERC to ensure proper management of aquatic and terrestrial resources within the project boundary.

2.3 Neither state allows for herbicide treatment in its waters unless the treatment is performed by a licensed applicator.

3.0 Lake Gaston Weed Control Council

In 1985 the Lake Gaston Weed Control Council was formed for the primary purposes of research, education, control and/or eradication of undesirable aquatic weeds in Lake Gaston. The Council is comprised of 3 persons from each of the 5 counties surrounding the lake. Funding for the council comes from both the public and private sectors. The Weed Control Council is responsible for contracting and overseeing aquatic weed herbicide applications and various other methods of weed control in the Lake. Typically, the Weed Control Council will contract an applicator from one to five-year contracts to treat nuisance aquatic vegetation.

4.0 Guidelines for Private Weed Control Application

4.1 Only registered and licensed individuals may apply aquatic weed control chemicals within the Lake Gaston or Roanoke Rapids Lake project boundaries.

4.2 Any individual applying aquatic weed control chemicals within the Lake Gaston or Roanoke Rapids Lake project boundaries shall submit an annual report of any applications to Dominion Energy. The report shall provide the following; latitude/longitude of area treated, acreage of treated area, chemical applied and species treated. Such report shall be submitted no later than January 30th of the following year.

5.0 Native Aquatic Vegetation Control

5.1 Background

Native plants provide many benefits to the Lake Gaston ecosystem and surrounding areas. They protect shorelines from erosion, stabilize deposited sediments, clean and clear lake water, provide valuable fish and wildlife habitat, and deter excessive growth of algae and weedy, non-native plants such as hydrilla. While these benefits are important, certain aggressive native species can occasionally grow to excess in Lake Gaston, causing concerns for boaters, swimmers, and lake front users. There may be instances where a property owner might wish to control the growth of these aggressive native plants.

5.2 Limits, non-fee removal of native species.

While efforts should be made to protect native aquatic, wetland, and riparian plant species, it is recognized that adjacent property owners require access to the open waters of Lake Gaston. In this regard, property owners are allowed, to clear plants that could obstruct access to the lake from a 10-ft wide boat lane without mitigation.

Table 1: List of native aquatic, wetland, and riparian plant species that can be removed from Dominion shoreline property and on and within the waters of Lake Gaston.

Species Name	Common Name	Growth habit	Replace with
<i>Typha</i> spp.	Cattails	Emergent	Emergent
<i>Nelumbo lutea</i>	American lotus	Floating-leaved / emergent	Submersed
<i>Nuphar lutea</i>	Yellow water-lily	Floating-leaved	Submersed
<i>Nymphaea odorata</i>	American waterlily	Floating-leaved	Submersed
<i>Zizaniopsis miliacea</i>	Giant cutgrass	Emergent	Emergent
<i>Brasenia schreberi</i>	Watershield	Floating-leaved	Submersed

NOTE: Removal of water willow is not allowed.

Table 2 lists native aquatic, wetland and riparian plant species approved for planting on Dominion shoreline property or within or on the waters of Lake Gaston. These plants represent common species that are native to North Carolina/Virginia and provide important, often vital benefits to the lake ecosystem.

Table 2: Beneficial native aquatic, wetland, and riparian plant species approved for restoration programs on Dominion shoreline property and on and within the waters of Lake Gaston.

Common name	Scientific name	Growth habit
American bur-reed	<i>Sparganium americanum</i>	Emergent/submersed
American frog's-bit	<i>Limnobiium spongia</i>	Floating
American pondweed	<i>Potamogeton nodosus</i>	Floating-leaved/submersed
Arrow arum	<i>Peltandra virginica</i>	Emergent
Arrowhead	<i>Sagittaria latifolia</i>	Emergent
Blue waterhyssop	<i>Bacopa caroliniana</i>	Emergent
Common spikerush	<i>Eleocharis palustris</i>	Emergent
Coontail	<i>Ceratophyllum demersum</i>	Submersed
Creeping burhead	<i>Echinodorus cordifolius</i>	Emergent
Crimsoneyed rosemallow	<i>Hibiscus moscheutos</i>	Emergent
Delta arrowhead	<i>Sagittaria platyphylla</i>	Emergent/submersed
Illinois pondweed	<i>Potamogeton illinoensis</i>	Submersed
Leafy pondweed	<i>Potamogeton foliosus</i>	Submersed
Lizard's tail	<i>Saururus cernuus</i>	Emergent
Pickerelweed	<i>Pontederia cordata</i>	Emergent
Sago pondweed	<i>Stuckenia pectinatus</i>	Submersed
Scouringrush horsetail	<i>Equisetum hyemale</i>	Emergent
Small pondweed	<i>Potamogeton pusillus</i>	Submersed
Soft rush	<i>Juncus effusus</i>	Emergent
Softstem bulrush	<i>Schoenoplectus tabernaemontani</i>	Emergent
Southern naiad	<i>Najas guadalupensis</i>	Submersed
Squarestem spikerush	<i>Eleocharis quadrangulata</i>	Emergent
Swamp smartweed	<i>Polygonum hydropiperiodes</i>	Emergent
Water willow	<i>Justicia americana</i>	Emergent
Waterthread pondweed	<i>Potamogeton diversifolius</i>	Submersed/floating-leaved
Wild celery	<i>Vallisneria americana</i>	Submersed