

Roanoke River Lake Gaston Roanoke Rapids Lake



October 5, 2022

Safety

- Last drowning on the lake occurred March 2021
- Continue to have injuries due to boat/pwc accidents

Be aware of strong currents in the underpasses.

New engine cutoff switch law took effect this past April



5 Year Review Shoreline Management Plan



Meetings

One for the Public – September 15, 2022

One for the Working Group – October 13, 2022

Notifications

- Advertised in the Lake Gaston Gazette/Observer
- LGA web site for approximately 1 month
- Chamber of Commerce web site for approximately 1 month

Working Group

Consisted of:

- Virginia and North Carolina Wildlife Agencies
- NC DEQ
- Army Corps of Engineers
- County representatives
- Local Realtors
- Lake Gaston Chamber
- Lake Gaston Association
- NC State University
- Lake Gaston Weed Control Council
- Striper Club
- Interested citizens

Highlights of Discussions

- Water Willow
- Loss of Environmentally Important Shoreline

Land Use Changes

Special Management Areas – Sensitive Areas

No docks or trails across sensitive areas

Any land Dominion owns that is 150' deep is considered sensitive*

Supported by all participants

Are we considering redoing the SMA maps and designations?

No. Trying to redesignate properties which are already developed would be problematic

*always has been

Water Willow

- Debated changes to water willow rules such as;
 - Allowing water willow to be removed, either in total or a portion of shoreline
 - Wildlife agencies reiterated the importance of water willow
 - The idea of weakening protections might be appropriate
 - Working group decided that trying to police or enforce a partial clearing allowance would be difficult
 - Decided to retain current rules but left open for further evaluation and revision prior to next 5 year review.

Other Topics Raised

- Buoys
- Beaches
- Shoreline access
- No wake zones
- High water mark vs. property lines
- Setbacks from Dominion ownership

Station Operations



Lake Levels at the dams

- Lake Gaston
 - Normal: 199.0 – 200.0
 - 2021 Range 199.1 – 200.9
 - 2022 Range 199.2 – 200.9
- Roanoke Rapids Lake
 - Normal 127-132
 - 2021 Range 127.0 – 132.3
 - 2022 Range 127.2 – 131.8

Lake Gaston Levels

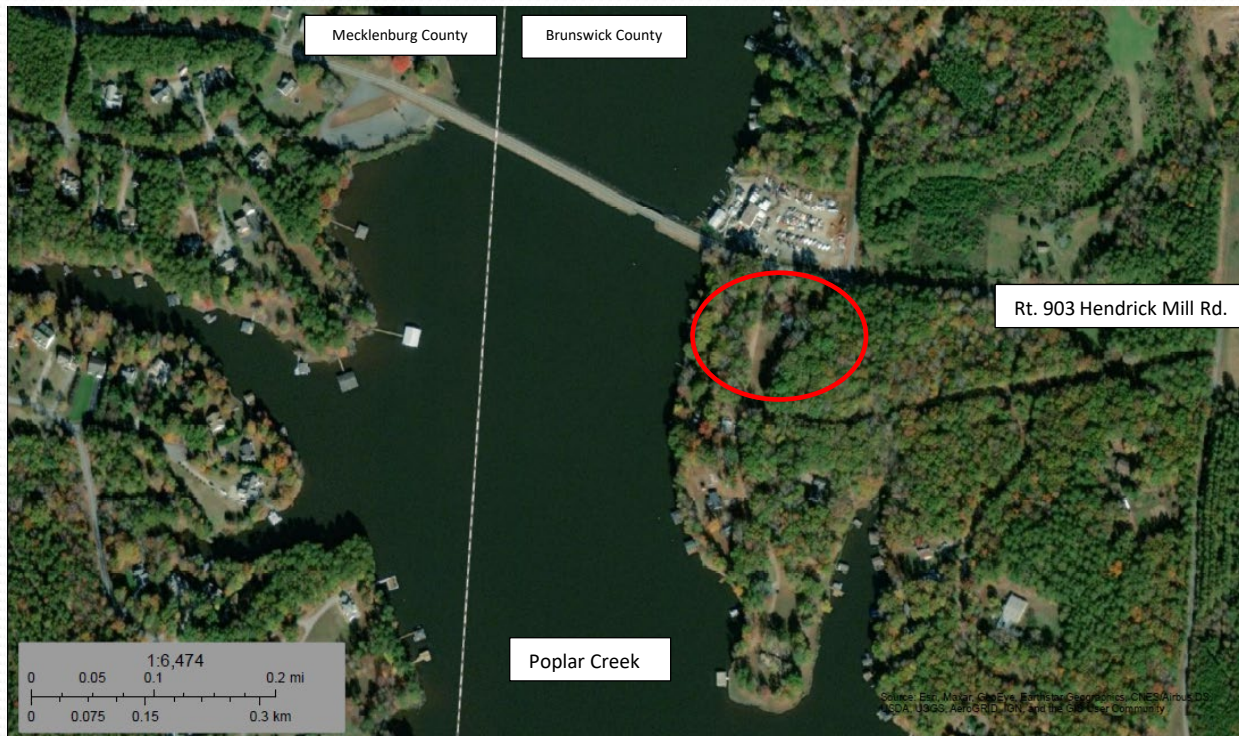
- During 2022, the Lake Gaston Dam gauge indicated:
 - Peak level 200.9 ft (May Spawning)
 - No declaration of Flood Operations since April 2021
 - Level is measured at the dam.

River Flows

- 1990-2022 average: 8,276 cubic feet per second (cfs)
- 2020
 - Average of 15,220 cfs
- 2021
 - Average of 9,147 cfs
 - Low daily average on Oct 2nd: 1,790 cfs
 - High daily average on Feb 13th: 35,200 cfs or 23.5 billion gallons/day
- 2022 to date
 - Average of 6169 cfs
 - Low daily average on Sep 27th: 1,800 cfs or 808,000 gallons/minute
 - High daily average on Mar 28th: 14,300 cfs

Virginia Day Use Area

- Land purchased by Brunswick County in 2020.
- Currently in design and funding phase
- Plans for fishing pier, kayak launch, land-based recreation, walking trails, picnic area, bathrooms.



Eels

- Passing eels up stream into historic range is a requirement of the license
- Since 2009 over 2.2 million eels have been passed up into Roanoke Rapids Lake.
- Since 2018 over 7500 have been released into Lake Gaston



Eels

- In 2022, construction was completed on permanent passage traps at Gaston
- Monitoring in Lake Gaston indicates that the eels are surviving.





Photo courtesy of Duane
Raver - USFWS

WANTED – AMERICAN EELS FROM THE ROANOKE RIVER BASIN, UPSTREAM OF ROANOKE RAPIDS DAM

Dominion Energy (Virginia/North Carolina Power) in cooperation with state and federal resource agencies is investigating the movements of American Eels in the Roanoke River system upstream of Roanoke Rapids and Gaston Dams, North Carolina. The study is being conducted as part of a program to provide passage for American Eels upstream of dams owned and operated by Dominion. Dominion Energy has provided passage upstream of Roanoke Rapids Dam since 2009 and will begin upstream passage efforts above Gaston Dam in 2020. Any eels caught by anglers from the Roanoke (Staunton) River or its tributary streams (including the Hyco, Pigg, and Dan Rivers), or from Roanoke Rapids Lake, Lake Gaston, Kerr Reservoir, Leesville Reservoir or Smith Mountain Lake are of interest.

If you catch an American Eel from the Roanoke River drainage basin, it would benefit the study if you could document the eel with a picture, location, and approximate length. Contact:

RoanokeRiverEels@dominionenergy.com

as soon as possible after observing or collecting the eel. If the eel is retained, please bag and freeze the eel as soon as possible. Your cooperation is greatly appreciated and will benefit efforts to restore American Eels to their historic range. Thank you!



**North Carolina & Virginia
American Eel
Size and Harvest Limit:**
Minimum: 9 Inch Total Length
Harvest Limit: 25 per day



Eels

- Downstream passage is next milestone for Roanoke Rapids
- First confirmed Silver eel was caught in Roanoke Rapids Lake in 2016
- Currently investigating installation of a new turbine design at Rapids
- Ongoing adult eel tagging study started in Roanoke Rapids Lake in 2019. Have tracked acoustic tagged eels down the river and more than one exiting Oregon Inlet to the ocean.



Generation

- The two dams generated 661,380 megawatt hours of electricity in 2021
- 15% reduction over the 2020
- Enough to power over 37,000 homes

Questions

- Questions or comments about the lakes or Roanoke River?

Send an email to lakeinfo@dominionenergy.com

The account is monitored weekly and questions are distributed to the Dominion staff most knowledgeable about the subject.