# Roanoke River Lake Gaston Roanoke Rapids Lake



March 10, 2021

# Safety

- 1 drowning in May 2020
- No reported injuries
- One boat accident reported on Songbird Creek at Ebony Rd bridge

Be aware of strong currents in the underpasses.

# Lake Levels at the dams

- Lake Gaston
  - Normal: 199.0 200.0
  - 2019 Range 198.9 201.4
  - 2020 Range 199.2 201.2
- Roanoke Rapids Lake
  - Normal 127-132
  - 2019 Range 126.3 132.3
  - 2020 Range 126.8 132.0

#### Lake Gaston Levels

- During 2020, the Lake Gaston Dam gauge indicated:
  - Peak level 201.2 ft (June)
  - >o hours over 201.5 ft
  - >26 hours over 201.0 ft
  - >20 Weeks in Flood Control, 0.7% of that above 201.0 ft

#### River Flows

- 1990-2020 average: 8,316 cfs
- 2019
  - > Average of 10,880 cfs
  - ➤ Low daily average on Sep 10<sup>th</sup>: 2,250 cfs
  - ➤ High daily average on Mar 10<sup>th</sup>: 35,192 cfs
- 2020
  - > Average of 15,220 cfs or 6.8 million gallons per minute
  - ➤ Low daily average on Oct 11th: 2,260 cfs
  - ➤ High daily average on Feb 13<sup>th</sup>: 36,200 cfs: 23.4 billion gallons per day
- 2021 to date
  - > Average of 22,080 cfs
  - ➤ Low daily average on Jan. 28<sup>th</sup>: 7,930
  - ➤ High daily average on Feb 25<sup>th</sup>: 35,170 cfs

# Virginia Day Use Area

- Land purchased by Brunswick County in 2020.
- Currently in design and funding phase



### 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
- Starting in June of 2018 the eels caught at the base of Gaston Dam were released into Lake Gaston. Total of 4,538 have been released.



# Eels

- In 2020, construction started on permanent passage traps at Gaston based on experiences at Rapids and Gaston along with data from other dams
- Once complete, eels that are trapped will be released into Gaston.







#### 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!





#### Eels

- Downstream passage is next milestone for Roanoke Rapids
- First confirmed Silver eel was caught in Roanoke Rapids Lake in 2016
- Currently studying methods for downstream passage
- Ongoing adult eel tagging study started in Roanoke Rapids Lake in 2019. Have tracked acoustic tagged eels down the river and one exiting Oregon Inlet to the ocean.



#### Water Willow

- Provides fish habitat and shoreline protection as well as stabilizing sediments in the shallows
- Protection is required by the Shoreline Management Plan
- Clearance to maintain access to boat slips is allowed
- Changes would require approval of state and federal agencies.



# Generation

- The two dams generated 776,500 megawatt hours of electricity in 2020
- 34% increase over the average year
- Enough to power approximately 44,000 homes

## Questions

 Questions or comments about the lakes or Roanoke River?

Send an email to <a href="mailto:lakeinfo@dominionenergy.com">lakeinfo@dominionenergy.com</a>

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