

Planned recreation development over the next 10 years

# Great Falls

By Glinda Price Coleman - Executive Director -Great Falls Home Town Association

“Nothing in South Carolina is equal to the (Great) Catawba falls...

The wildness of the steep and rugged rocks ... the waterfalls which are heard pouring down in different places of the precipice, with sounds various in proportion to their respective distances and descents – the hoarse hollow murmuring of the river running far below the summit of the rocks and of the adjacent surface of the earth, are objects well calculated to excite emotions of wonder and admiration in the mind of spectators. The scenery is sufficiently grand and curious to attract the visits of the most distant inhabitants of Carolina.”

–From *The History of South Carolina*,  
by David Ramsay, M.D. 1809



VIEW OF THE GREAT FALLS OF THE CATAWBA.<sup>2</sup>



# Components of Nature Based Tourism



- Whitewater areas
- Carolina Thread Trail
- Nitrolee Interpretive Center
- State Park
- Visitor's Center
- Supporting business downtown-outfitters, coffee bars, restaurants, bars, etc.

# Duke Energy Comprehensive Relicensing Agreement

- Work on CRA began in 2003 and was signed in 2006.
- FERC issued the license nine years later in 2015.
- Because of the need to update the Recreation Management Plan, the construction schedule did not start until 2017.
- Many of the recreation amenities will be completed by Dec. 2022.



# Whitewater

---

In August 2021, construction began on the whitewater areas along the bypass reaches of the Catawba.

---

There are two areas in which whitewater will be available for recreation, the Long Channel and the Short Channel.

---

Higher recreation flows will be available from March through October on the weekends

---

However, there will be continuous flows in both channels. The Long channel may be available for recreation year-round.





# Great Falls Dearborn Diversion Long Bypass Reach - Boater Bypass

► S2o Design and Engineering





**Great Falls Diversion Dam, Great Falls, SC**



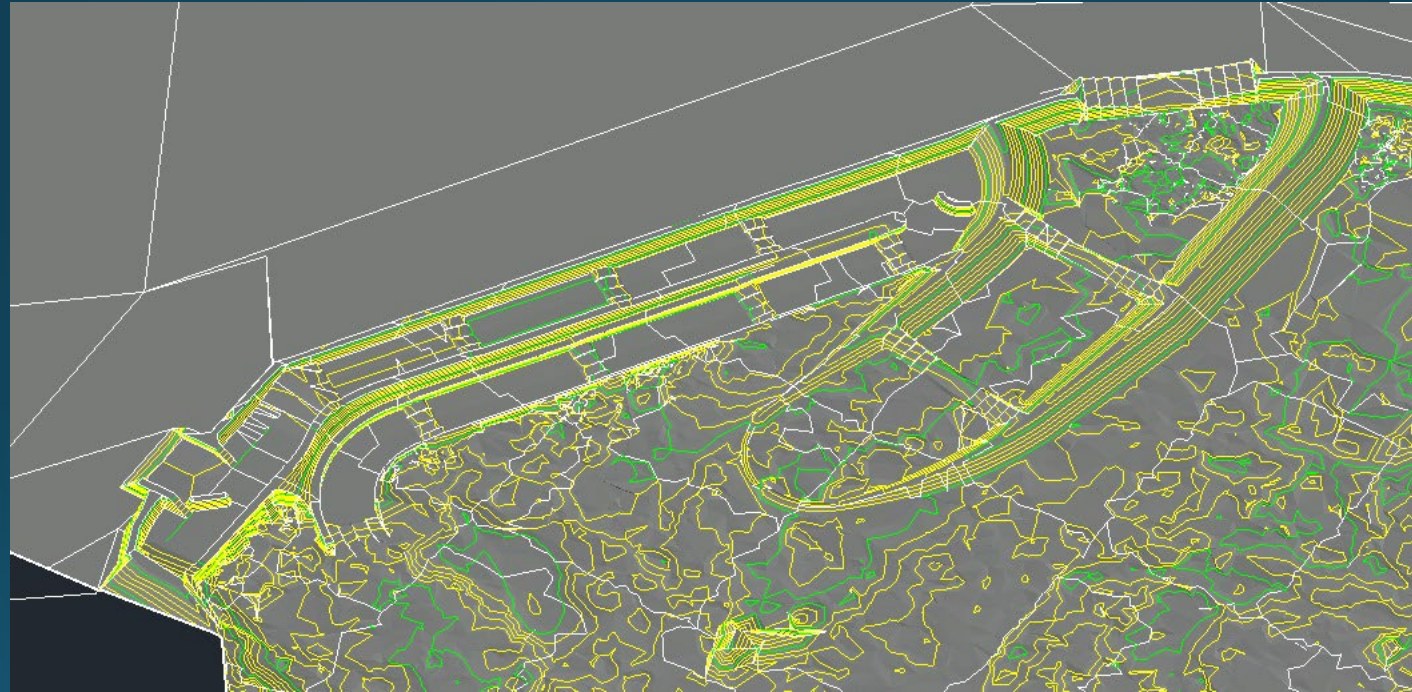
Duke will create  
two notches within  
this channel

The large  
notch will have  
water for all  
flows.

The bypass  
channel will  
pass recreation  
flow releases.  
Its primary  
purpose is to  
allow safe  
passage.



# Design Overview









Boater Bypass Channel

Main Flow Channel

Long Bypassed Reach with Recreation Flow



Minimum Flow Release Point

Safe Boater Access Point

# Whitewater

















# Great Falls Diversion Short Bypass Reach (SBR)





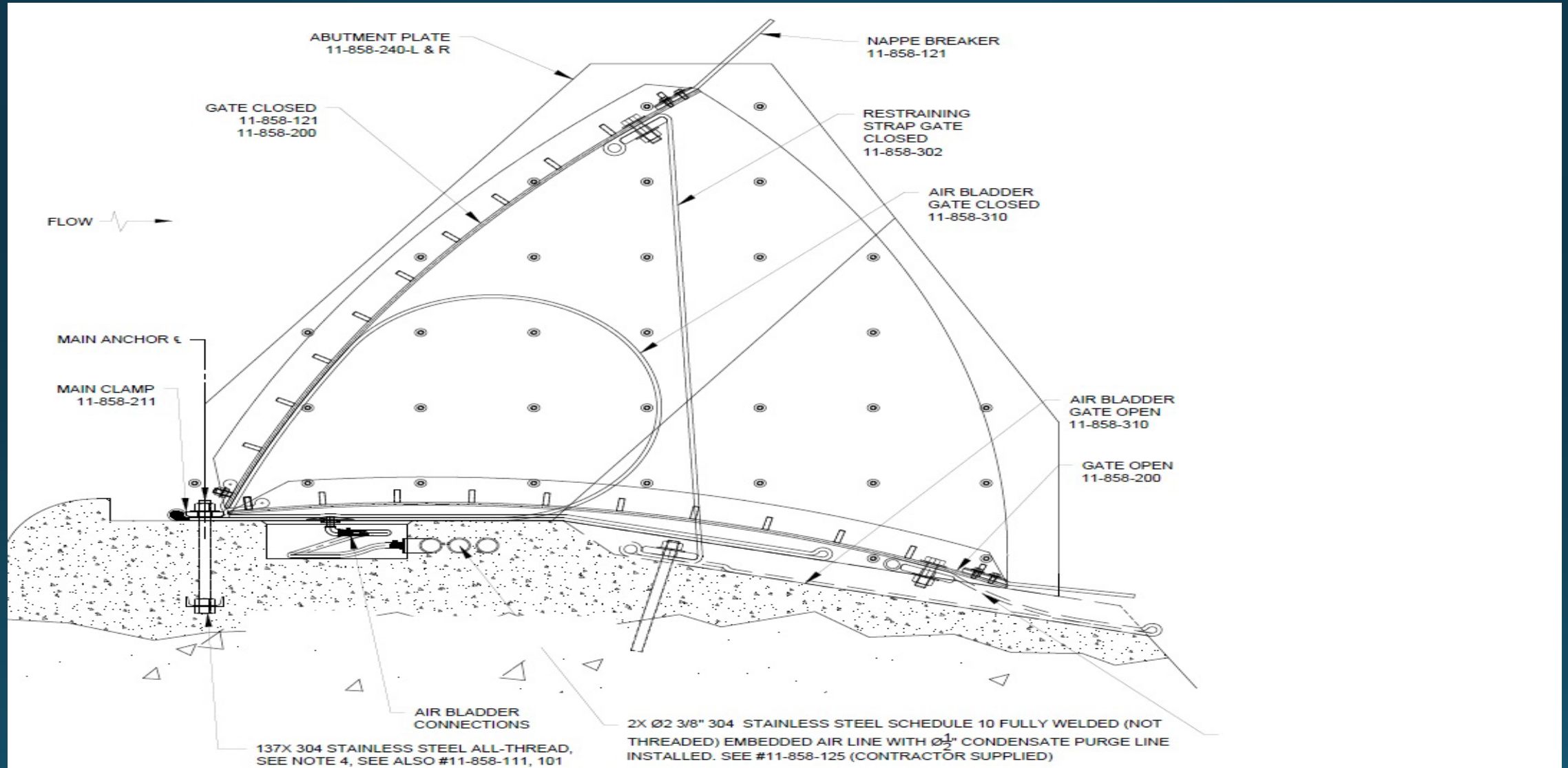
**Great Falls-Dearborn Headworks Spillway, Great Falls, SC**



# Great Falls Diversion Short Bypass Reach (SBR)

## Obermeyer Gate

Steel pivoting gate, reinforced, pneumatically operated

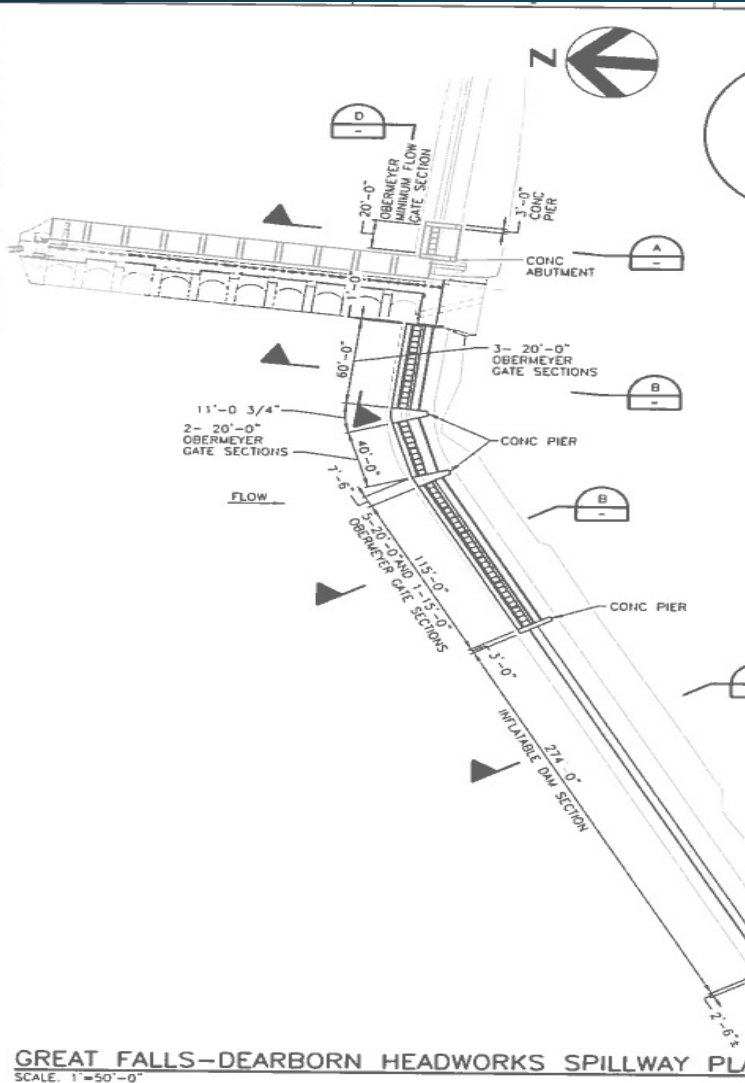




Great Falls Diversion  
Short Bypass Reach (SBR)

## Layout of Solution

- 20-foot gate above Headworks for min flow
- 200 feet of gates below headworks for recreational releases
- 300 (ish) feet of gates on remainder for flood control releases
- Control house upslope
- Dam tie-downs
- Construct after LBR for enhanced water level management
- Build from barges & platforms



# Short Bypass Reach (SBR) – Before Construction







Additional Inflatable Gates

Continuous Flow Release Gate

Recreation Flow Release Gate



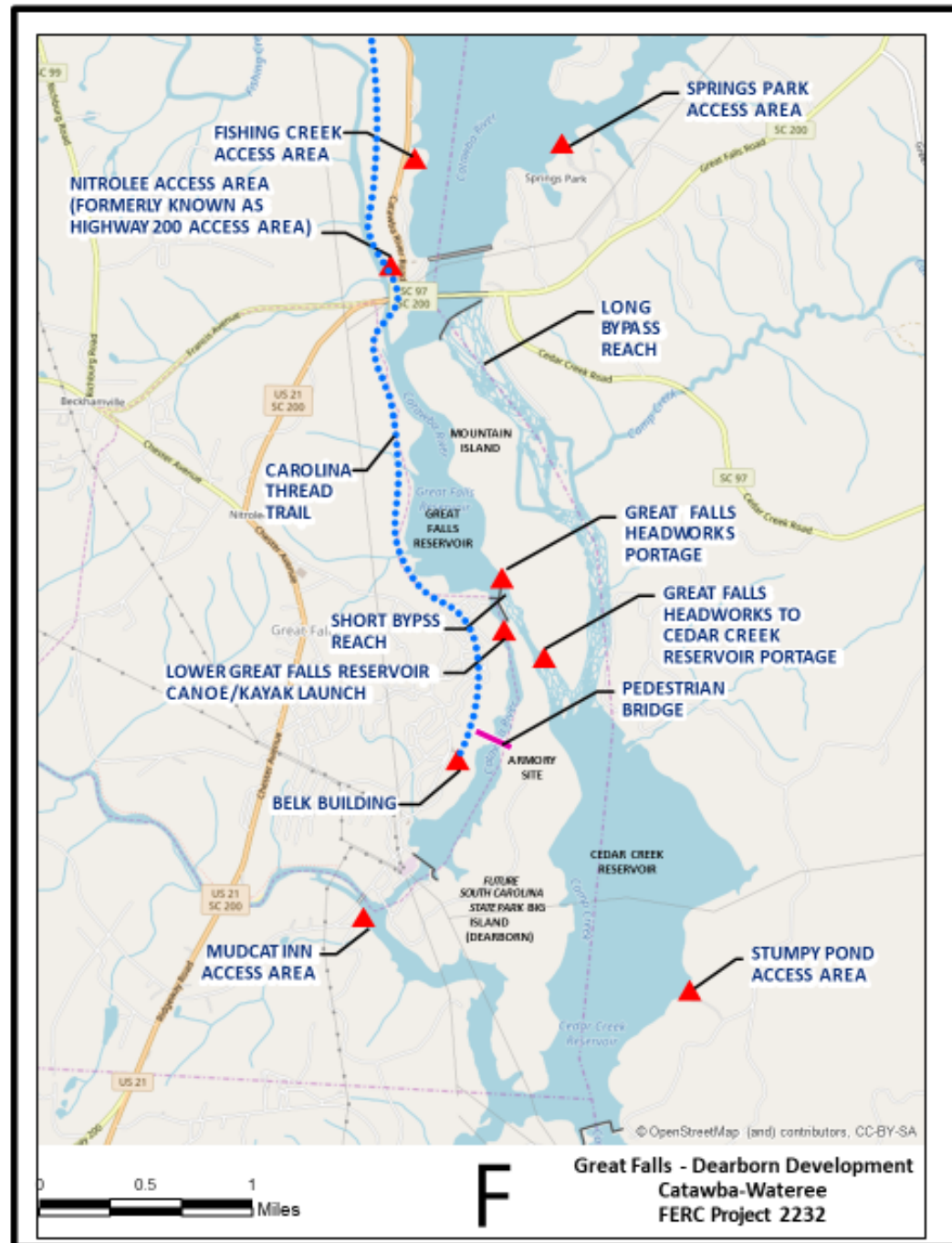
## Overview of Regulatory Requirements

- Recreation Management Plan (RMP) update filed and approved
- Great Falls Boating Safety Plan (BSP) in the process of being updated, filed and approved
- Bypass modifications and all BSP provisions implemented before any recreation flow releases

Great Falls-Dearborn Development Recreational Flow Schedule*					
Channel	Dates (Inclusive)	Days / Description	Flow (at or above) (cfs)	Start	End
Long Bypassed Reach	Mar 1 - Oct 31	Two Saturdays per Month	2,940	10:00 AM	3:00 PM
		A Total of four Sundays	2,940		
Short Bypassed Reach	Mar 1- Apr 30	One Saturday per month to correspond with Long Bypass releases	2,860	10:00 AM	3:00 PM
	May 1 - Oct 31	Two weekends (Saturday and Sunday) per month	2,860		

\* Provision for up to 10 additional hours of flows per year, as agreed upon at Annual Recreational Flow Schedule Planning Meeting.

Layout of  
**Great Falls-  
Dearborn**  
Recreational  
Development















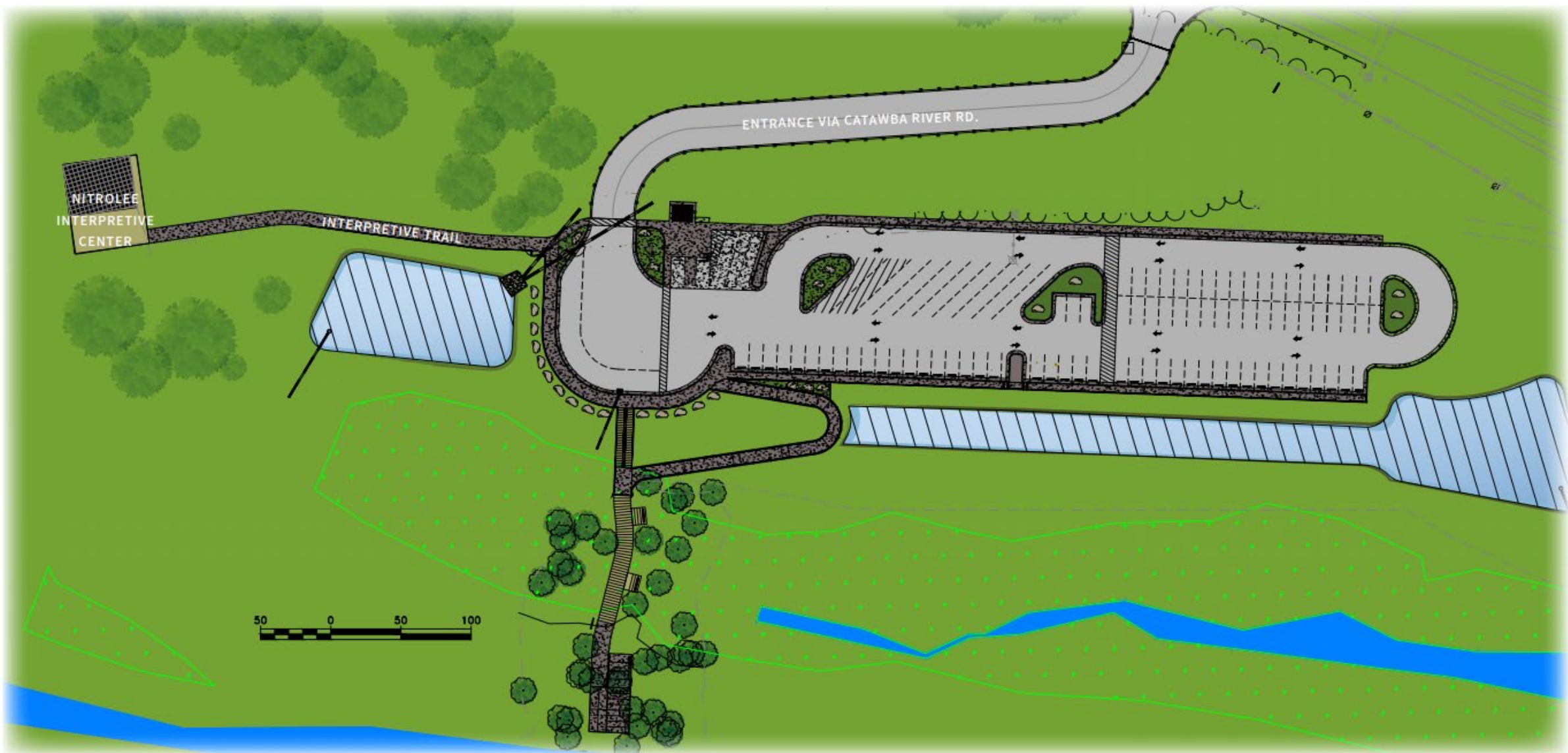
# Nitrolee Interpretive Center











**SITE PLAN**



In 2014, 22 million Americans were involved in paddling.

The number grew by 4 percent each year from 2010 to 2014.



# Carolina Thread Trail

- The Carolina Thread Trail is a regional network of trails that connect 2.9 million people in 15 counties in North and South Carolina.
- Great Falls will be the southern terminus/trail head of the CTT.
- CTT has made Great Falls a priority.
- Small towns, such as Cramerton, NC, have seen significant impacts on their economy since having CTT open in their area. Their trail includes a blue way which provides water recreation. Other small towns have reported positive impacts of CTT.





Great Falls will become the southern terminus/trailhead for the north/south spine of the trail.

### Our Mission

Creating a legacy of conservation and connectivity through a regional network of trails.



**170**

miles of blueway

**300**

miles of trails

**1,300+**

miles to be built

**2.9**

million people connected

# Abandoned Railbed

- In July 2021, the Town of Great Falls, with support from Chester County, CTT and the Arras Foundation purchased 3.5 miles of the abandoned railbed from CSX.
- This process actually began about 20 years ago.
- The Town with the help of the Great Falls Home Town Association and CTT, was successful in getting a RTP grant from SCPRT for \$100,000 with the goal of making the trail walkable by early 2023.
- A \$30,000 grant from CTT was recently awarded to the Town for planning and to connect the existing trail to the rail bed as well as for the rail trail.





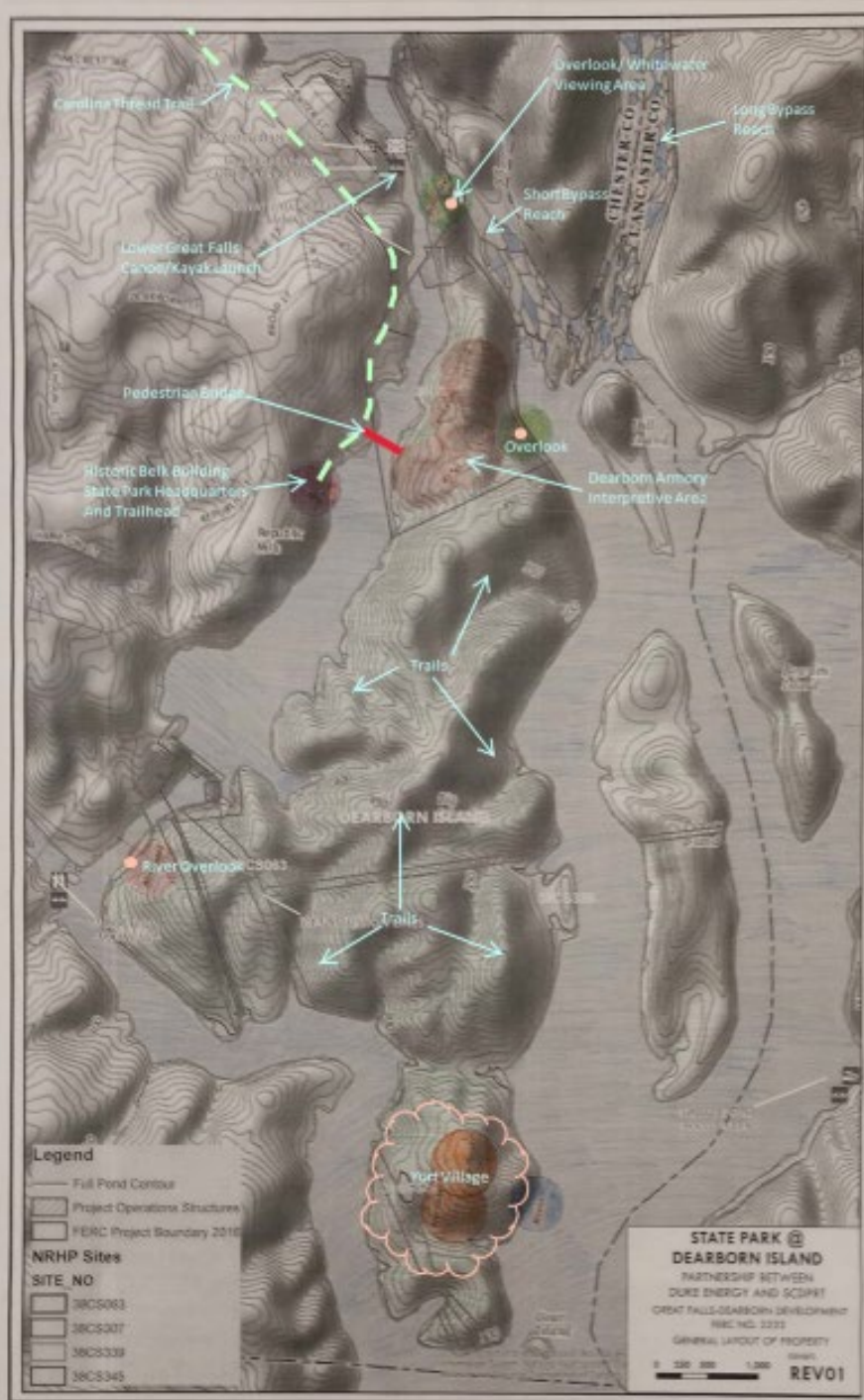


# State Park

- As part of the CRA, a state park will be built on the islands in the Cedar Creek Reservoir (Stumpy Pond). Initially only Dearborn Island will be developed.
- Duke Energy has money set aside in the CRA to plan and build the state park.
- Retired SCPRT director Phil Gains has worked on a Master Plan for the park and work continues. Plans are to open the park in 2024.
- It will center on the historic interpretation of Mt. Dearborn Armory and Arsenal, trails, unique camping opportunities as well as other recreational opportunities.



# State Park at Dearborn Island Preliminary Plan

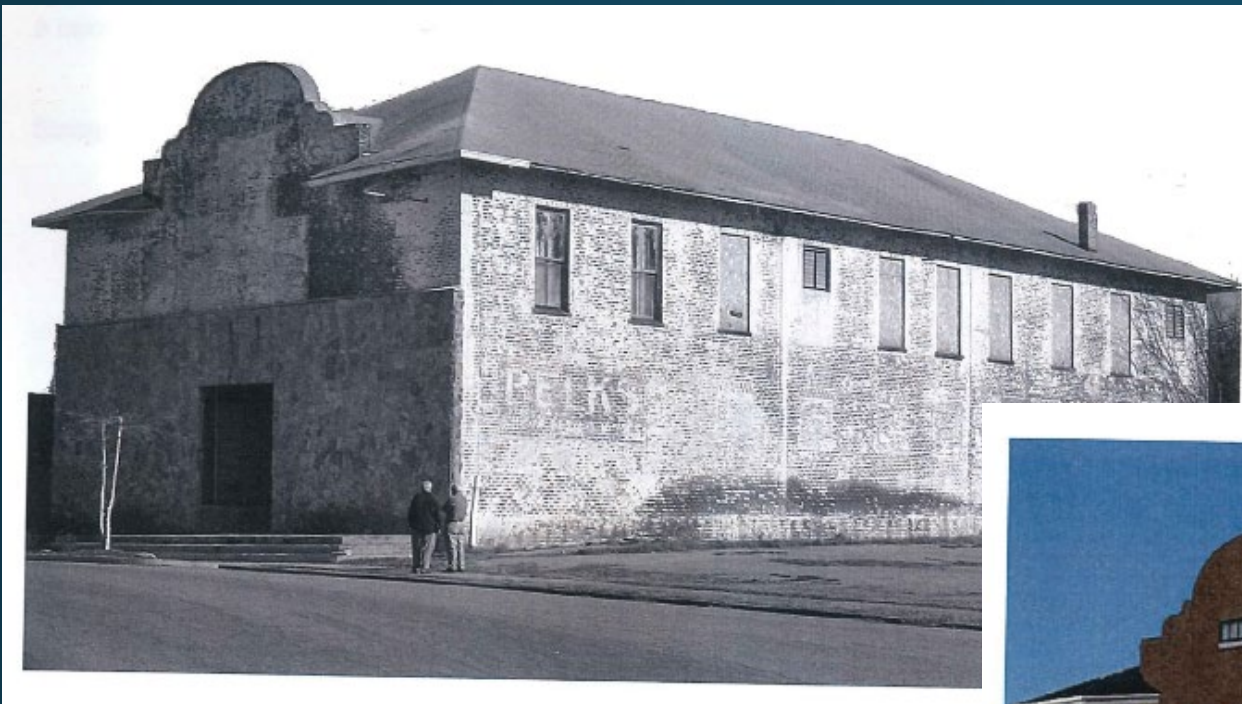




## Visitor's Center

- \$2.67 million approved in Chester County Capital Improvement Sales Tax referendum in 2020
- State Park office, exhibit space, retail space to be housed there
- Committee seeking architect to begin design of building
- Goal to have completed by Spring 2023





Company Store now



Concept Company  
Store as  
Visitor's Center















## **Catawba-Wateree Hydroelectric Project**

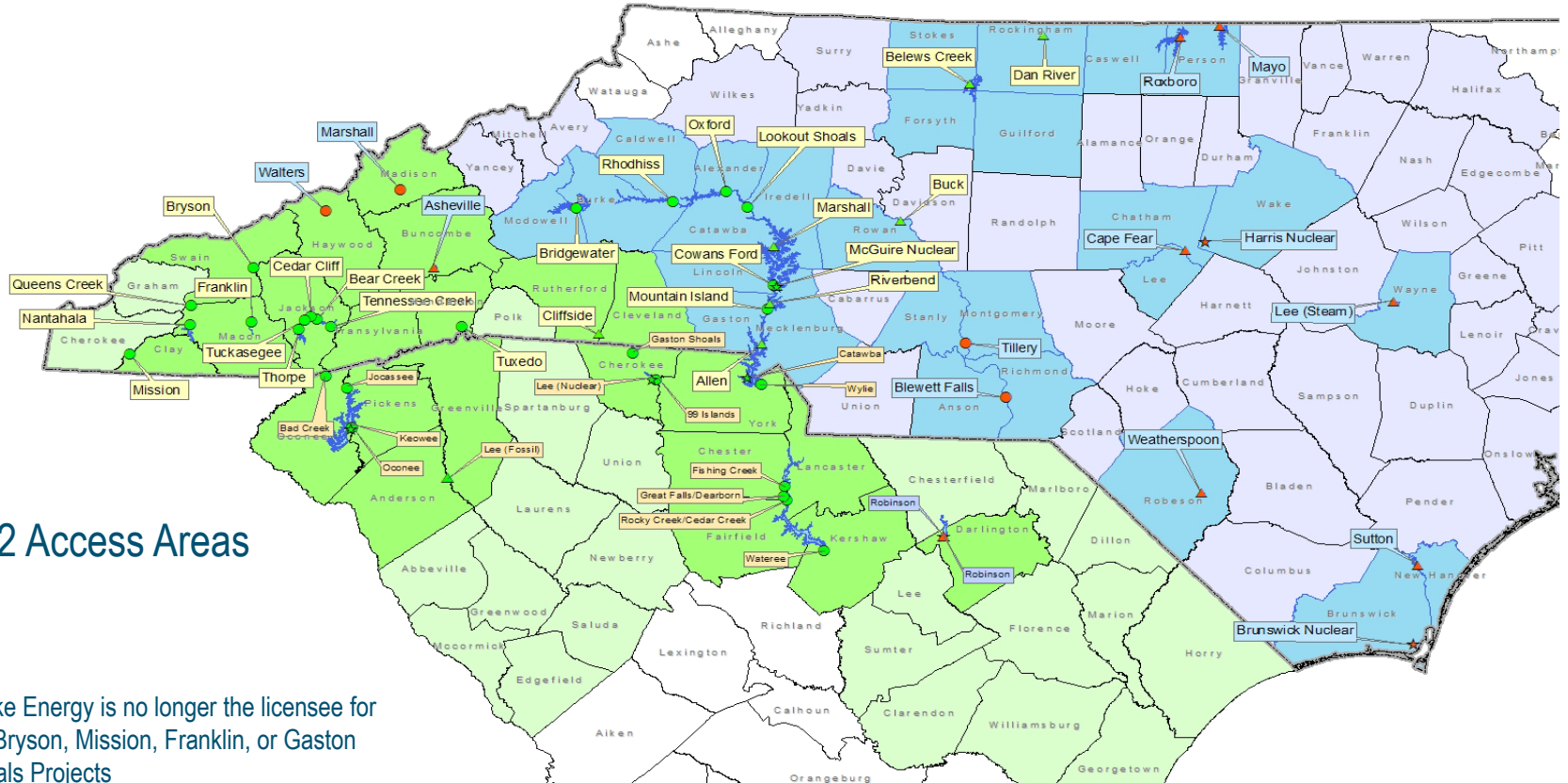
Public Recreation Planning and Management

Presenter: Jennifer Bennett





# Duke Energy's Public Recreation Access Areas



132 Access Areas

\*Duke Energy is no longer the licensee for the Bryson, Mission, Franklin, or Gaston Shoals Projects

## FERC and Hydroelectric Project Recreational Development

- 1935 - Section 10(a) of the Federal Water Power Act was amended to require the consideration of public recreational use into project licensing
- 1963 – Order issued requiring the filing of a recreation resource plan for all major license applications filed after June 1, 1963.
- 1965 – Order No. 313 issued ensuring license related recreational development is consistent with area needs





# FERC and Hydroelectric Project Recreational Development

- Under FERC Order No. 313 the Licensee assumes responsibilities related to recreational development:
  - acquire and include within the project boundary enough land to assure optimum development of the recreational resources afforded by the project
  - develop and make provisions for access to public recreational facilities on project lands and waters
  - include consideration of the needs of persons with disabilities in the design and construction of such facilities
  - encourage and cooperate with appropriate agencies and other interested entities in the determination of public recreation needs and cooperate in the preparation of plans to meet these needs
  - encourage governmental agencies and private interests, such as operators of user-fee facilities, to assist in carrying out plans for recreation
  - cooperate with local, State, and Federal government agencies in providing facilities for recreational use of public lands adjacent to the project
  - comply with regulations for health, sanitation, and public safety, and to cooperate with law enforcement authorities in the development of additional necessary regulations for such purposes
  - provide for facilities to process all wastes from recreation facilities
  - ensure public access and recreational use of project lands and waters without regard to race, color, sex, religious creed or national origin
  - inform the public of the opportunities for recreation at licensed projects, as well as of rules governing the accessibility and use of recreational facilities

## Duke Energy's Catawba-Wateree Recreation Facilities

- Catawba-Wateree Hydro Project encompasses 11 reservoirs with over 1,795 miles of shoreline and 79,895 surface acres in the Carolinas.
- Duke Energy currently has 58 recreation access areas on the Catawba-Wateree lakes / river in the Carolinas.
- Over 16 million visitors per year visit the Catawba-Wateree lakes making Duke Energy one of the largest recreation providers in the Carolinas.





## Catawba-Wateree Hydro Project—Recreation Management Plan Overview

- Submitted license application to FERC in 2006 which included Stakeholder Comprehensive Relicensing Agreement conditions.
- FERC issued the 40-year license in November 2015 which required Duke Energy to file a Recreation Management Plan (RMP) within one year.
- RMP was submitted in November 2016 and subsequently approved by FERC in December 2017.
  - 89 planned recreation enhancements over 20-year period with majority planned in first 10 years.
  - Includes enhancements to 32 existing recreation sites and adding 26 new sites
  - Total investment of approximately \$45M in first 10 years
  - Disburse more than \$4M in funding to partners to develop public recreation projects.



## Recreation Access Area Enhancement Schedule

- Phased build-out of planned recreation access area upgrades and new recreation enhancements in five-year increments for term of 20 years
  - 31 projects in first 5 years
  - 16 projects in second 5 years
  - 8 projects in third 5 years
  - 3 projects in fourth 5 years
- Fourteen recreation projects completed since 2017.





## Planned Recreation Facilities

- Boat ramps and courtesy docks
- Canoe/kayak launches
- Picnic facilities
- Fishing/wildlife viewing platforms
- Swim beaches
- Campgrounds
- Trails
- Restrooms
- Trash cans
- Information kiosks
- Parking

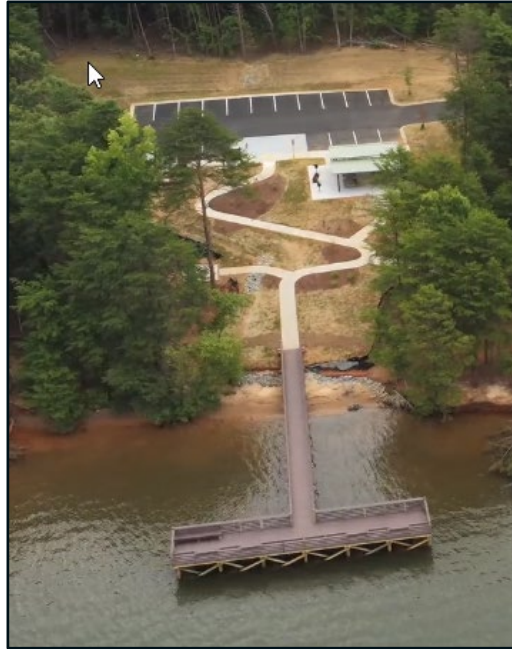


*Restrooms and Picnic Facilities*

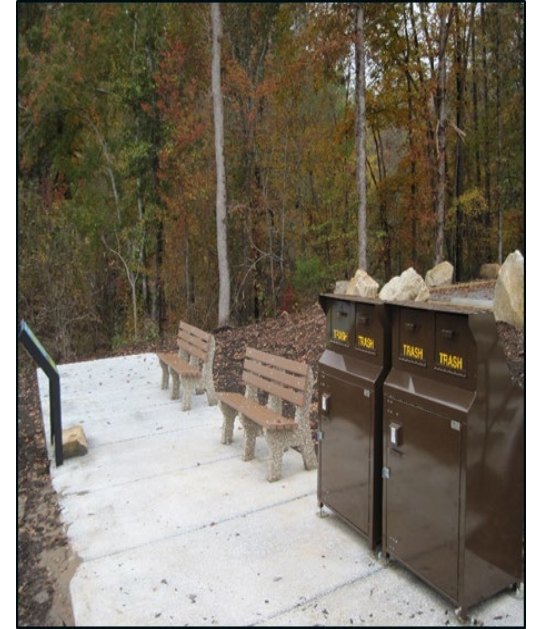
## Examples of Recreation Amenities



*Swim Beach*



*Fishing  
Pier*



*Wildlife Viewing Area and  
Trashcans*



## Recently Completed Access Area Projects



*Corpening Bridge Access Area  
Johns River*

*Molly Creek Access Area  
Lake Wateree*



## Stakeholder Partnerships

- Access Area Improvement Initiative (AAIL) Leases
  - Stakeholder partnerships to manage access areas over term of FERC license.
    - Provide no-cost AAIL leases or fee-based maintenance agreements for governmental agencies to manage facilities with option to invest additional capital dollars to build additional recreation amenities.
      - “No land cost” leasing feature allows lessees to leverage their funding sources to build additional recreational amenities and operate the facility.
      - Enables local governments to enhance local and regional recreation tourism.
      - Local governments are eligible for grant funding.
    - Offer to renew 10 existing and 23 new AAIL leases over New License term.



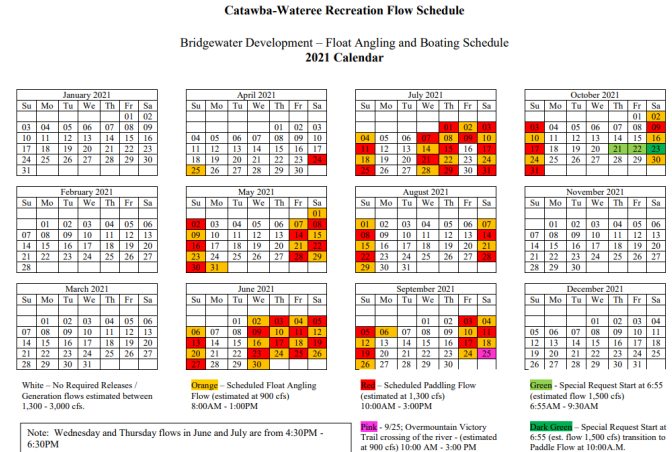
## Duke Energy Partnerships for Managing Recreation Facilities

- Municipalities
- County Governments
- N.C. Wildlife Resources Commission
- S.C. Department of Natural Resources
- N.C. Division of Parks & Recreation
- S.C. Department of Parks, Recreation & Tourism
- Non-governmental Organizations
- Commercial Operators



# Recreation Flow Release Programs

- Actively manage four Catawba-Wateree recreation flow release programs—Bridgewater (James), Oxford (Hickory), Wylie and Wateree and future plans for the Great Falls-Dearborn program.
  - Focus on providing stable and reliably scheduled flows to river tailwaters and bypassed reaches.
- Scheduling Flows for Recreational Diversity
  - Releases are made on specified schedules to support reliable paddling and angling conditions.
  - Annual stakeholder meetings to discuss flow release calendars and any emerging safety/use issues.
- Flow Regimes Accommodate a Variety of Recreational Uses:
  - Kayaking, canoeing, and rafting
  - Wade anglers, drift boat anglers
- Whitewater recreation contributes significantly to tourism economy.





# Lake Level and Scheduled Flow Release Information

Duke Energy Lake Information Line  
800-829-5253

Duke Energy Lakes and Recreation Website  
<https://www.duke-energy.com/lakes>

DUKE ENERGY | Lakes & Recreation | MENU

Let's explore the local lakes and rivers.

Learn about our recreational opportunities and shoreline activities.

Recreation Information | Check Lake Levels | Flow Releases | Lake & Shoreline Management | Flow Arrival and Recession Times

Water Access Alerts

Boat ramp closures in effect due to drought conditions, high water or maintenance.

LEARN MORE

Duke Energy's Lake View app

Download the app today!

Download on the App Store

GET IT ON Google Play

Real-time lake levels, flow releases, alerts and more.

Look into our lakes with the Lake View app. Whether you're boating, fishing or maintaining property along Duke Energy's waterways, Lake View can help keep you safe and informed.

- Lake levels
- Flow release info
- Alerts and special messages
- Duke Energy lakes and river basins, including:
  - Catawba-Waterlee
  - Keowee-Toxaway
  - Pigeon River
  - Yadkin-Pee Dee
  - Nantahala Area

DUKE ENERGY  
BUILDING A SMARTER ENERGY FUTURE

©2019 Duke Energy Corporation 101020 5/19

## Free Lake View Mobile App

## Challenges

- Rainy Weather – construction delays; recreational flow impacts
- Real or Perceived Conflicts with Neighbors – traffic, noise, crowding
- Growth in Recreation Demand – recreational use monitoring, revisions to the RMP, land availability
- Changing Recreational Preferences over Time – we may not know what is needed 20+ years from now



## Catawba-Wateree Recreation Management Plan

For further information on planned Catawba-Wateree recreation projects:

[www.duke-energy.com/community/lakes/recreation-information/cw-recreation-enhancements](http://www.duke-energy.com/community/lakes/recreation-information/cw-recreation-enhancements)



*BUILDING A SMARTER ENERGY FUTURE<sup>SM</sup>*