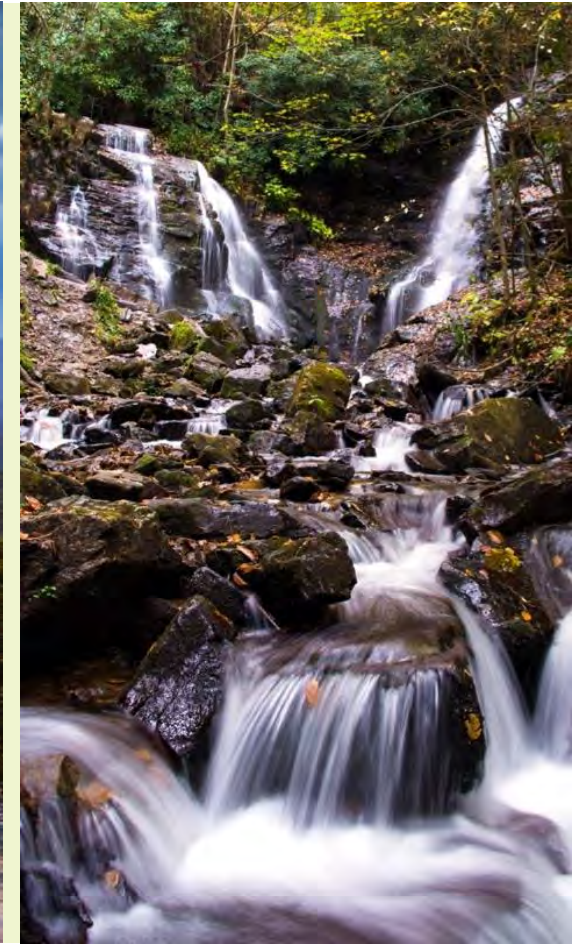


Great Falls Recreation Trails

Water Strategy & Hydro Licensing Presentation for the Carolina Thread Trail Forum– December 5, 2023
Christy Churchill, RLA – Brian Couture, PE

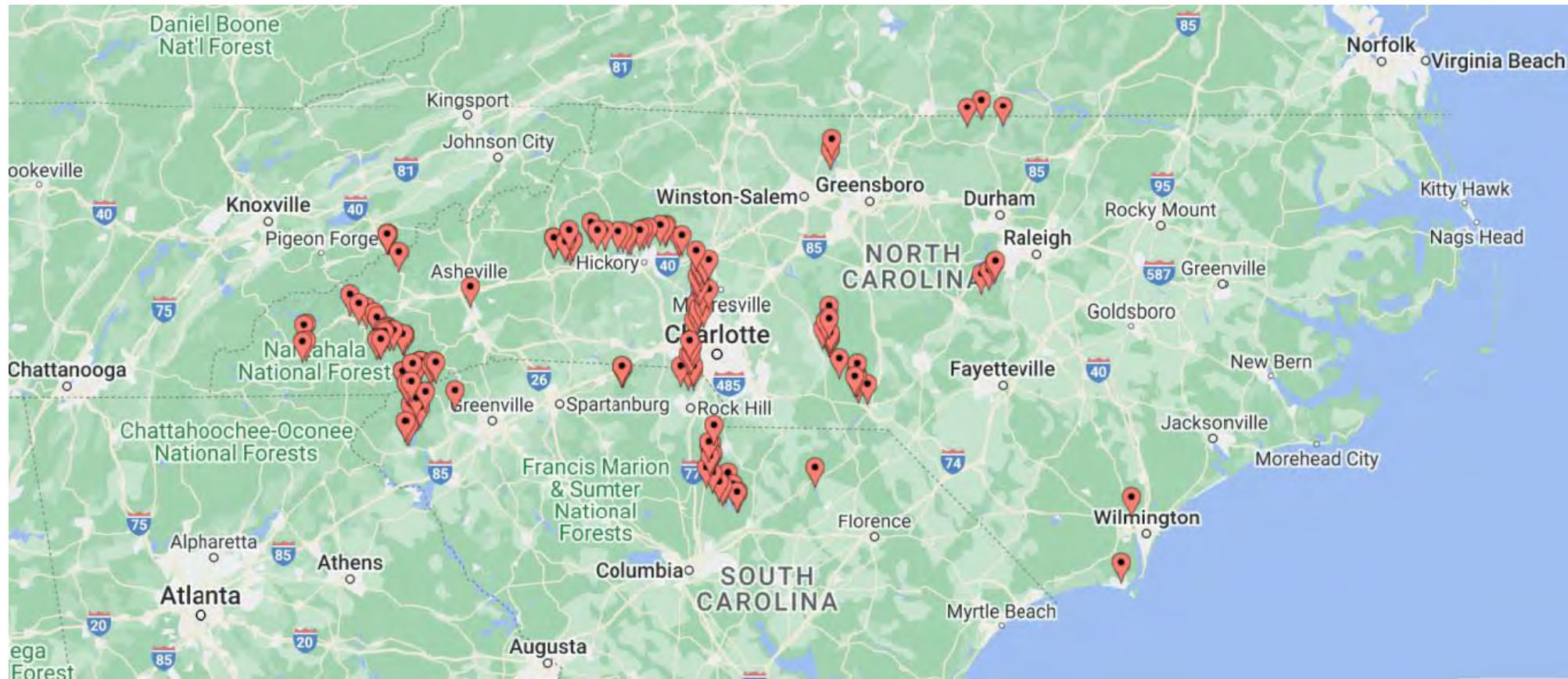




FERC and Hydroelectric Project Recreational Development

- 1935 – Section 10(a) of the Federal 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

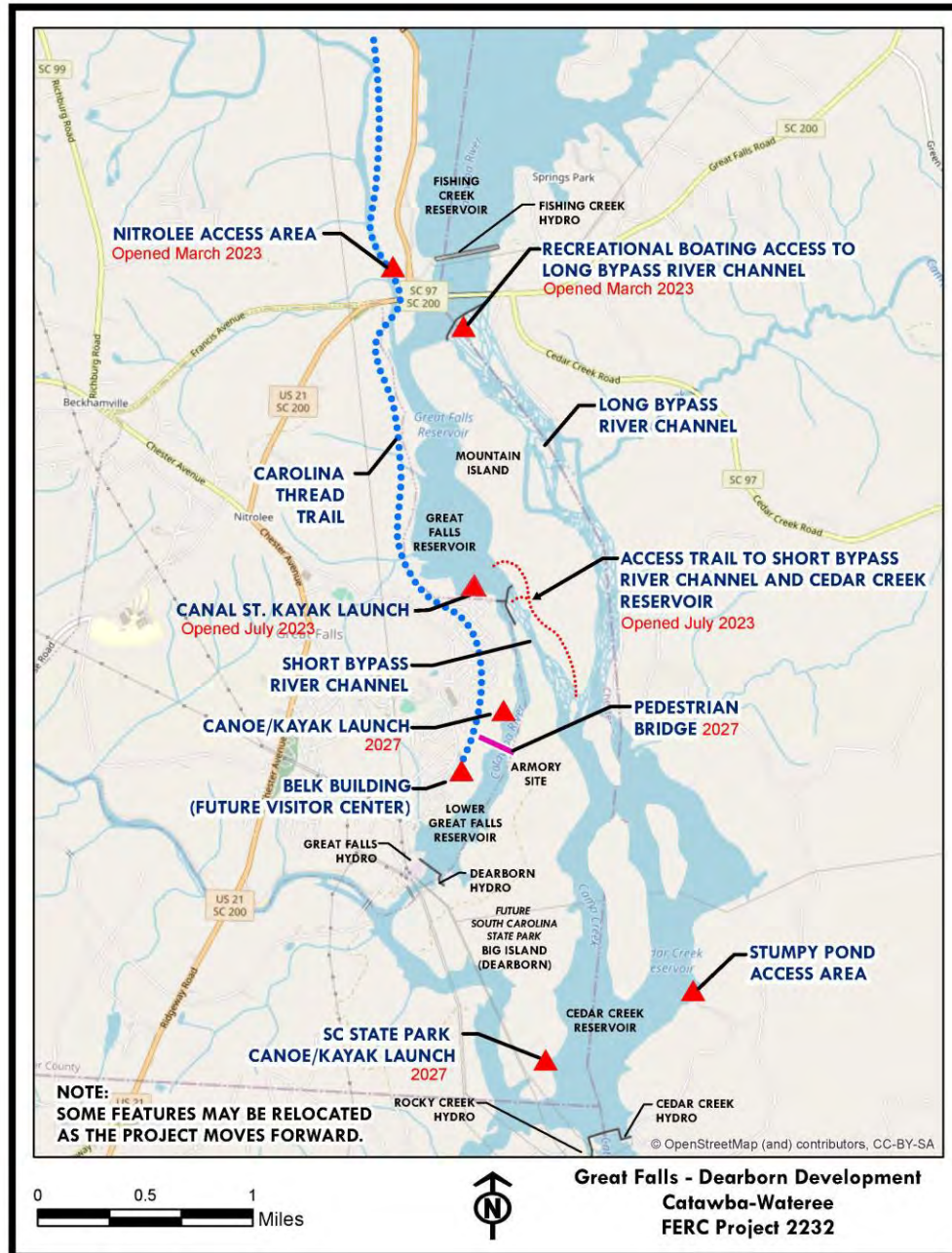
Duke Energy's Public Recreation Territories



- 12 Hydroelectric Licenses
- 29 Hydro Stations
- 140 Sites – 123 FERC License Required, 17 Non-FERC

Overview of Great Falls Recreation Enhancement Projects

- Nitrolee Access Area- Primary Canoe/Kayak Launch Site and Historic Interpretive Center
- Long Bypass River Channel – Class II-III Rapids
- Canal St Kayak Access for Short Bypass River Channel
- Mountain Island Portage and Access Trails
- Short Bypass River Channel- Class III-IV Rapids
- Dearborn Island State Park
- Lower Great Falls Canoe/Kayak Access and Pedestrian Bridge to State Park
- Stumpy Pond Access Area – existing site to be used for primary take out
- All amenities connected by the Carolina Thread Trail



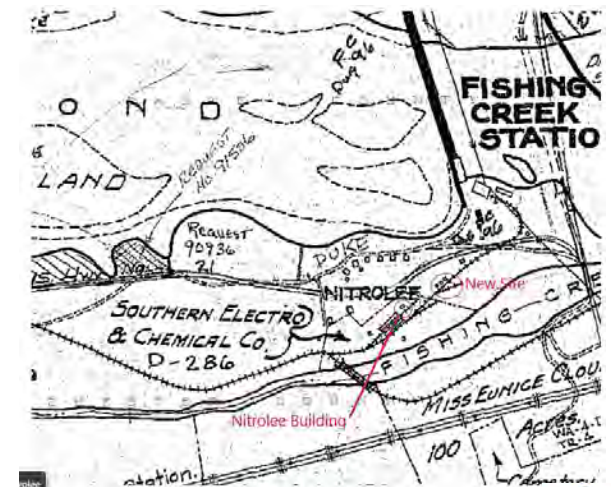


NITROLEE ACCESS AREA



NITROLEE ACCESS AREA

- FERC required public access area
- Primary Canoe/Kayak Launch Site for the LBR recreation flows
- 100+ parking spaces
- Restroom facilities
- Historic Nitrolee Arc Building interpretive site
- Site of early Duke Energy nitrogen production experiment



Great Falls - Dearborn Diversion Project

Long Bypass Reach - Orientation



- Nitrolee Access Area
- Fishing Creek Hydroelectric Station and Dam
- Highway 21
- SC 200 Bridge Over Catawba River
- LBR Project Site

Great Falls - Dearborn Diversion Project Long Bypass Reach - Dam Modifications



Great Falls - Dearborn Diversion Project

Short Bypass Reach - Orientation



- Fishing Creek Hydroelectric Station
- Long Bypass Reach Project Site – 2 mile paddle II-III
- Mountain Island
- Short Bypass Reach Project Site - .75 mile paddle III-IV
- Town of Great Falls

Great Falls - Dearborn Diversion Project Short Bypass Reach – Dam Modifications

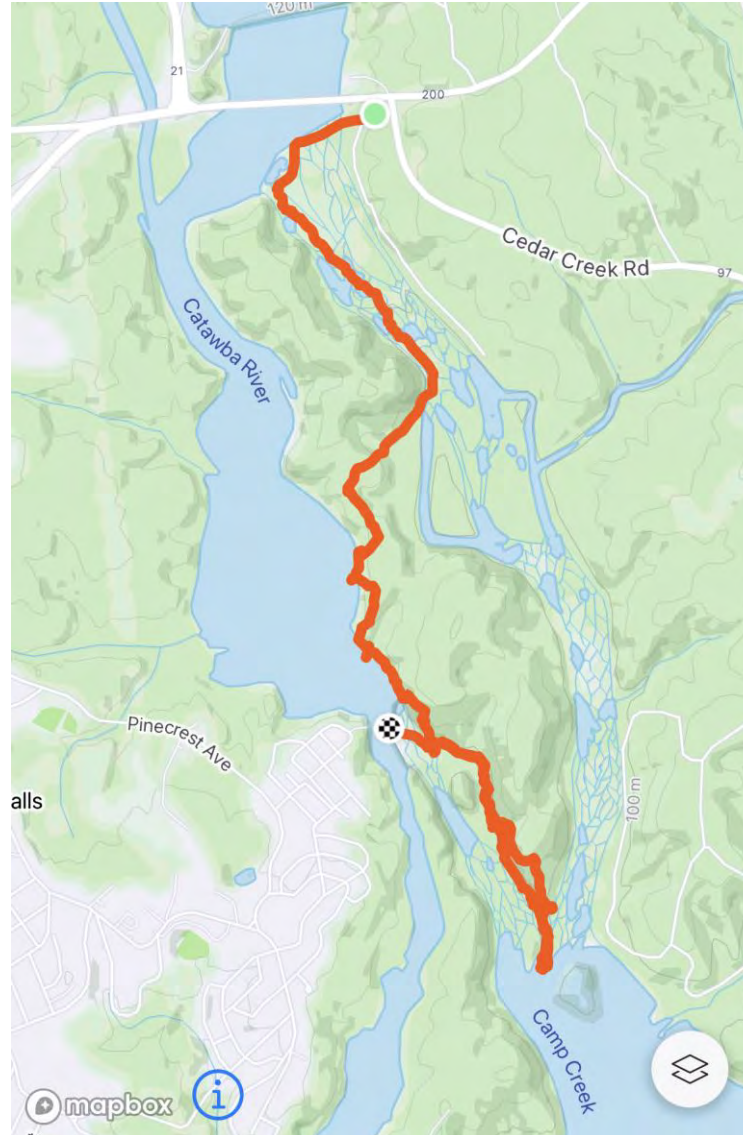


Portage and Access Trails for Short Bypass Access

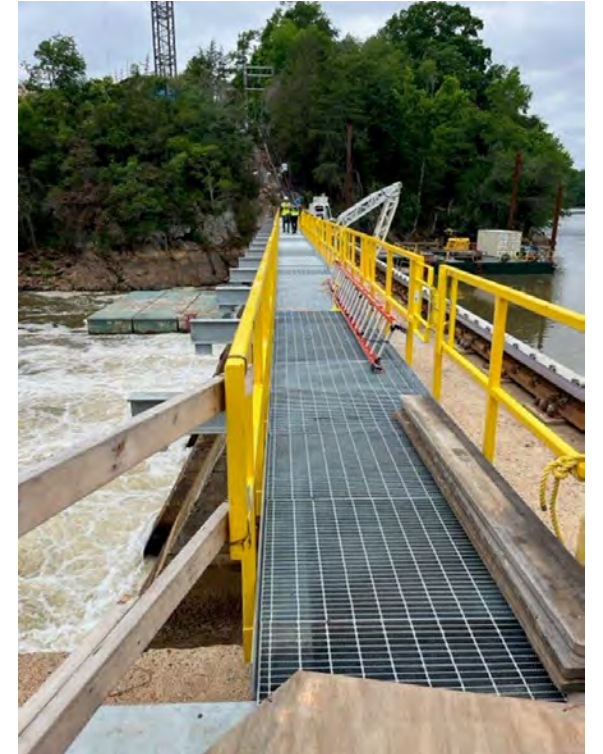


DESIGN AND CONSTRUCTION PROCESS

Trail Design and Layout



Initial Construction Site Access



Initial Construction Site Access



Trail Construction



Low Cobble Area



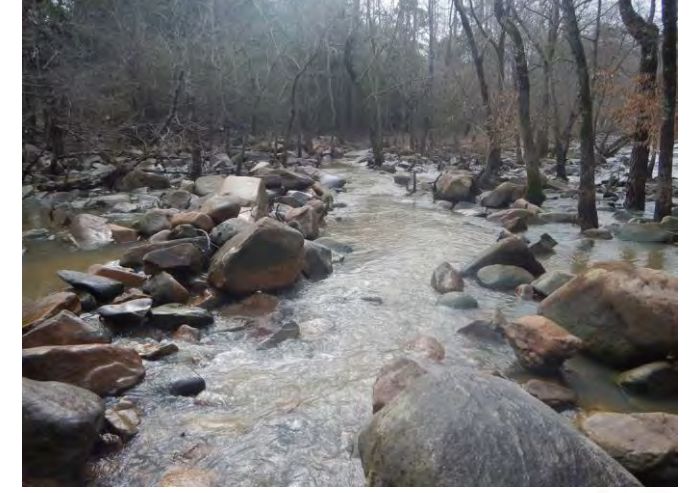
Before



After



w/Rec Flow



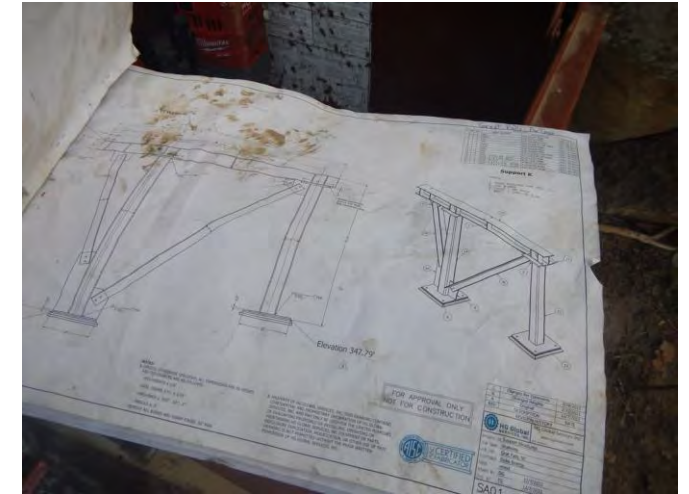
Alternate Take Out & Trail Railing



Short Bypass Access Stairs



Short Bypass Access Stairs



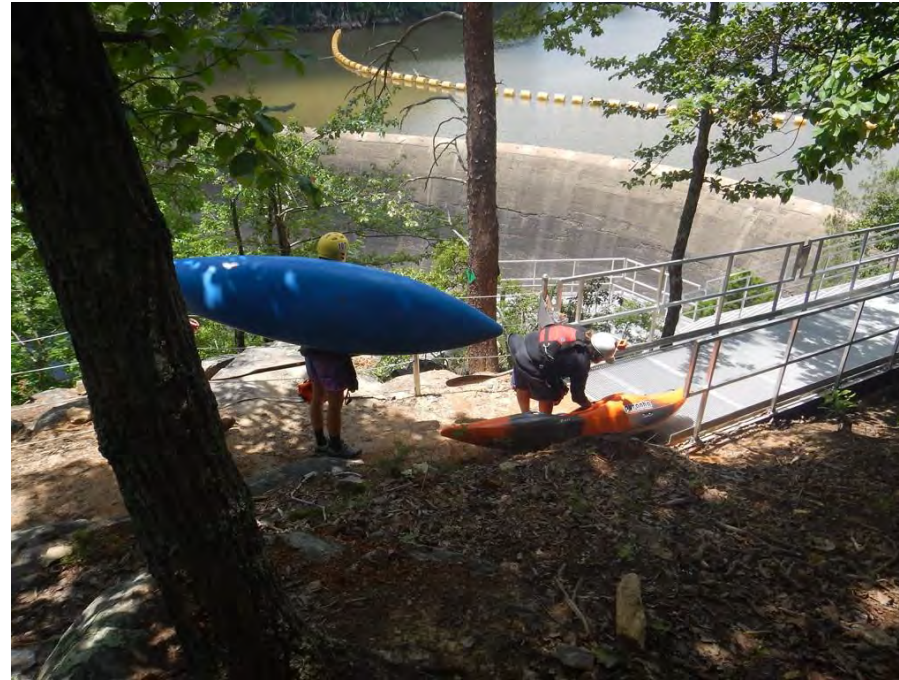
Short Bypass Access Stairs



Short Bypass Access Stairs



Short Bypass Access Stairs



Short Bypass Access Stairs



Mountain
and





Short Bypass Access Stairs

Short Bypass Access Stairs



Short Bypass Canoe / Kayak Steps



Great Falls Recreation Trails Map



Legend

- LBR Connector Trail (0.11 Mile)
- Point Trail (0.06 Mile)
- Staircase Trail (0.08 Mile)
- Main Trail (0.97 Mile)
- Mountain Top Trail (0.65 Mile)
- Canal Street Trail (0.11 Mile)
- ▲ Water Access
- ◆ Emergency Location Marker

Legend

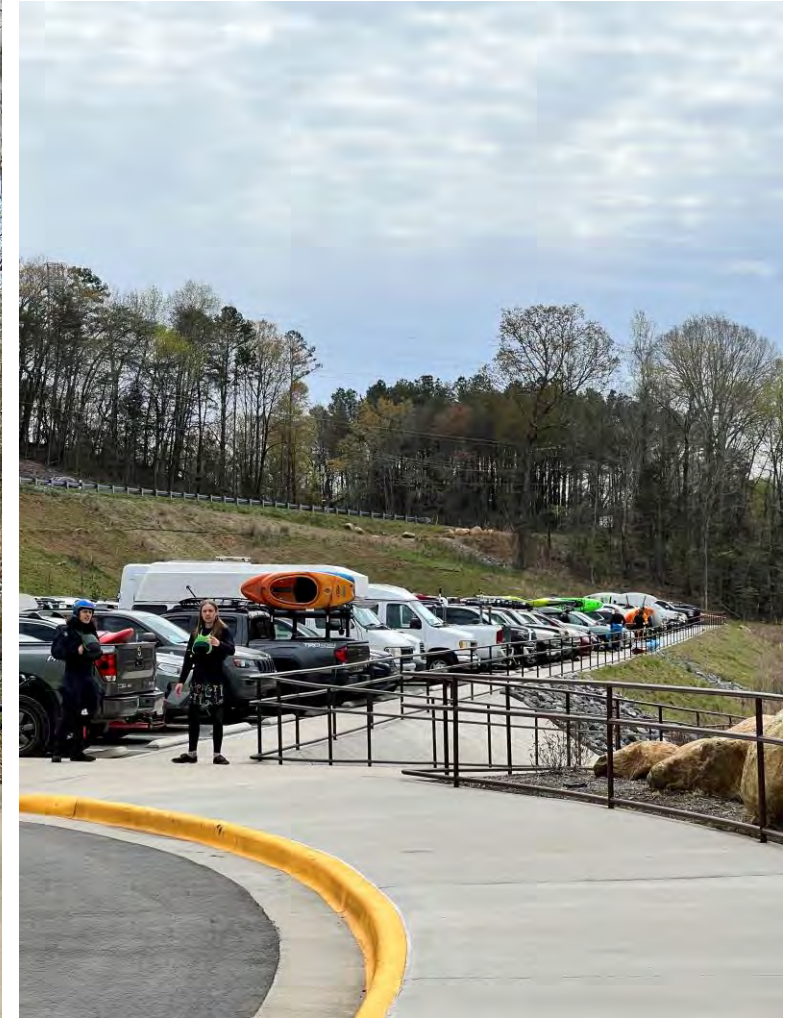
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- Point Trail (0.06 Mile)
- Staircase Trail (0.08 Mile)
- Main Trail (0.97 Mile)
- Mountain Top Trail (0.65 Mile)
- Canal Street Trail (0.11 Mile)
- ▲ Water Access
- ◆ Emergency Location Marker



Signs



Opening Day March 18, 2023

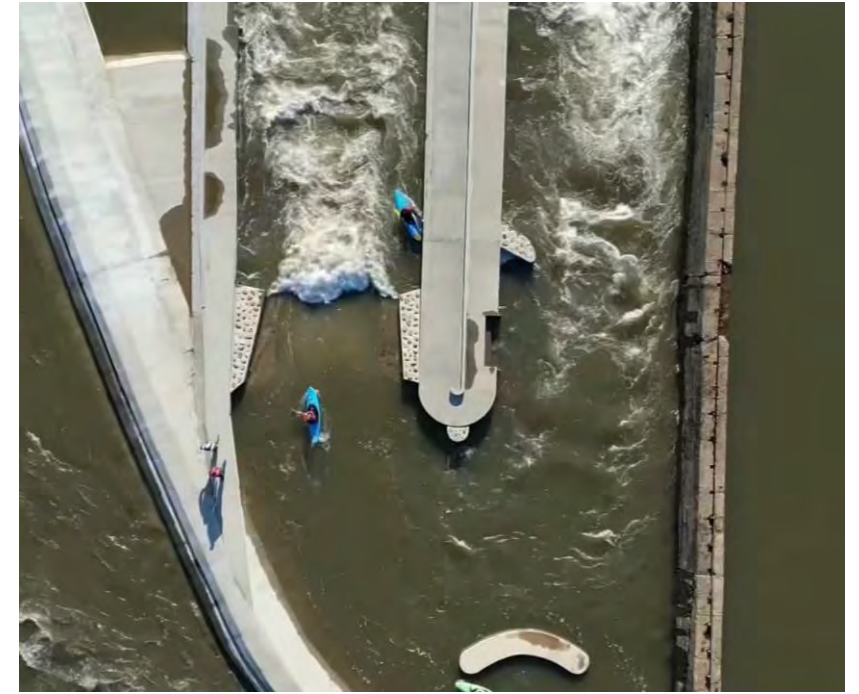


Great Falls - Dearborn Diversion Project Long Bypass Reach – Recreation Use



Opening Day March 18, 2023





LONG BYPASS RECREATION FLOW

Great Falls - Dearborn Diversion Project Short Bypass Reach – Recreation Use



Portage Trail for Short Bypass Access





SHORT BYPASS RECREATION FLOW

2023 Recreation Flow Release Calendar for Great Falls

Catawba-Wateree Recreation Flow Schedule

Great Falls Development – Recreation Flow Schedule 2023 Calendar

January						
Su	Mo	Tu	We	Th	Fr	Sa
01	02	03	04	05	06	07
08	09	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

April						
Su	Mo	Tu	We	Th	Fr	Sa
						01
02	03	04	05	06	07	08
09	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

July						
Su	Mo	Tu	We	Th	Fr	Sa
						01
02	03	04	05	06	07	08
09	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

October						
Su	Mo	Tu	We	Th	Fr	Sa
01	02	03	04	05	06	07
08	09	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

February						
Su	Mo	Tu	We	Th	Fr	Sa
			01	02	03	04
05	06	07	08	09	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28				

May						
Su	Mo	Tu	We	Th	Fr	Sa
	01	02	03	04	05	06
07	08	09	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

August						
Su	Mo	Tu	We	Th	Fr	Sa
		01	02	03	04	05
06	07	08	09	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

November						
Su	Mo	Tu	We	Th	Fr	Sa
			01	02	03	04
05	06	07	08	09	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

March						
Su	Mo	Tu	We	Th	Fr	Sa
			01	02	03	04
05	06	07	08	09	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

June						
Su	Mo	Tu	We	Th	Fr	Sa
				01	02	03
04	05	06	07	08	09	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	

September						
Su	Mo	Tu	We	Th	Fr	Sa
					01	02
03	04	05	06	07	08	09
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

December						
Su	Mo	Tu	We	Th	Fr	Sa
					01	02
03	04	05	06	07	08	09
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

White – No Scheduled Releases

Orange – Short Bypass Reach
(SBR) 2860 cfs; 10:00AM -
3:00PM

Red – Long Bypass Reach (LBR)
2940 cfs; 10:00AM - 3:00PM

Purple - Combined LBR and
SBR Releases 10:00AM -
3:00PM

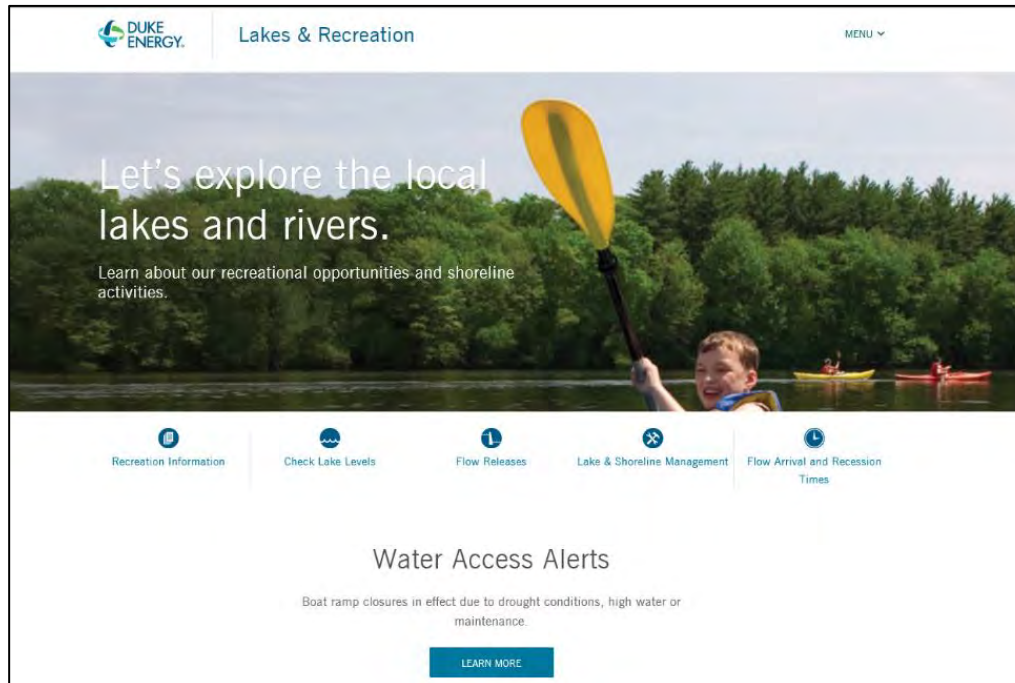
Note: Make up dates for delayed SBR opening: 7/15, 7/29, 8/12, and 10/28

Lake Levels, Access Alerts, and Flow Release Information

Duke Energy Lake Services Information Line
800-829-5253

lakeservices@duke-energy.com
publicrecreation@duke-energy.com

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



An advertisement for the Duke Energy Lake View app. It features a hand holding a smartphone displaying the app's interface, which includes icons for lake levels, flow release info, alerts, and settings. The background is a blurred image of water. The text "Duke Energy's Lake View app" is prominently displayed. Below the app image, there is a section titled "Real-time lake levels, flow releases, alerts and more." with a description of the app's features. To the right, there is a call to action "Download the app today!" with buttons for the App Store and Google Play. At the bottom, there is a list of Duke Energy lakes and river basins, including Catawba-Wataree, Keowee-Toxaway, Pigeon River, Yadkin-Pee Dee, and Nantahala Area. The Duke Energy logo and tagline "BUILDING A SMARTER ENERGY FUTURE" are at the bottom right.

