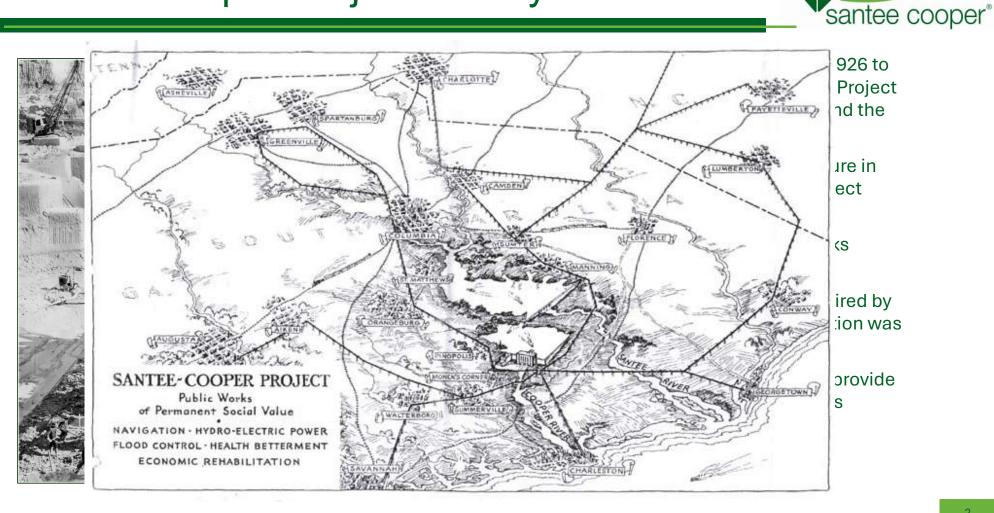


# Santee Cooper Project History & Operational Strategy March 11, 2025

#### Santee Cooper Project History



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### FERC Licensing Timeline



		FFFF	TTTTTT		autinum	
1926	1942		1979	20	23	
Issued 1 <sup>st</sup> License for 50 years	First Power Produced at Jefferies Hydro		Issued 2 <sup>nd</sup> License for 30 years	Licen	ed 3 <sup>rd</sup> ise for rears	
19	934	1976		2006	2073	
forme	e Cooper d by SC slature	1 <sup>st</sup> License Expires		2 <sup>nd</sup> License Expires	3 <sup>rd</sup> License Expires	3

## Santee Cooper Project Key Facts

- Jefferies Generating Station
  - 5 units totaling 143 MW
  - Integrated with Pinopolis Navigation Lock
- Santee Spillway & Generating Station
  - Single 2 MW minimum flow unit
  - 62-gate spillway for flood control
- USACE St. Stephen Hydroelectric Generating Station (84 MW) also located on Project
- Nearly 40 linear miles of embankment dams and dikes
- Project is main surface water source for entire Charleston, SC region
  - 2 Santee Cooper owned-and-operated plants totaling 48 MGD
  - 1 downstream plant (Charleston Water System's Hanahan WTP) on Cooper River at Bushy Park rated at 115 MGD

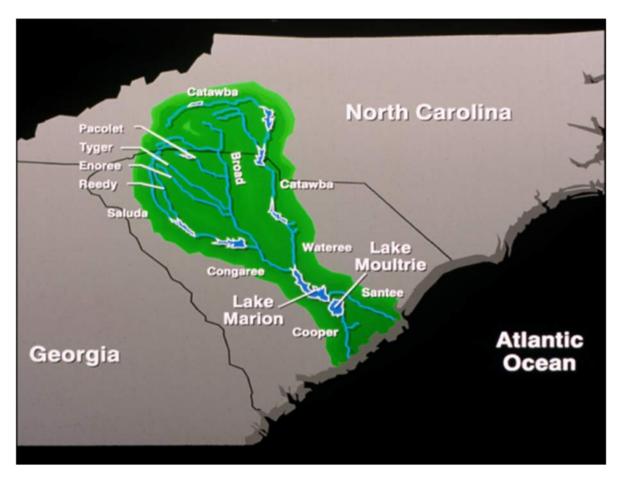






#### Santee River Basin





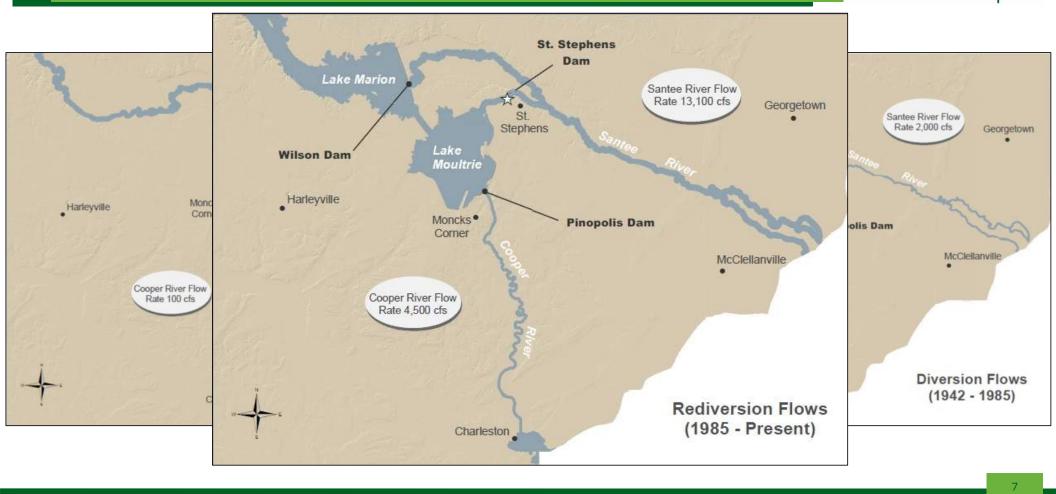
#### Santee Cooper Project





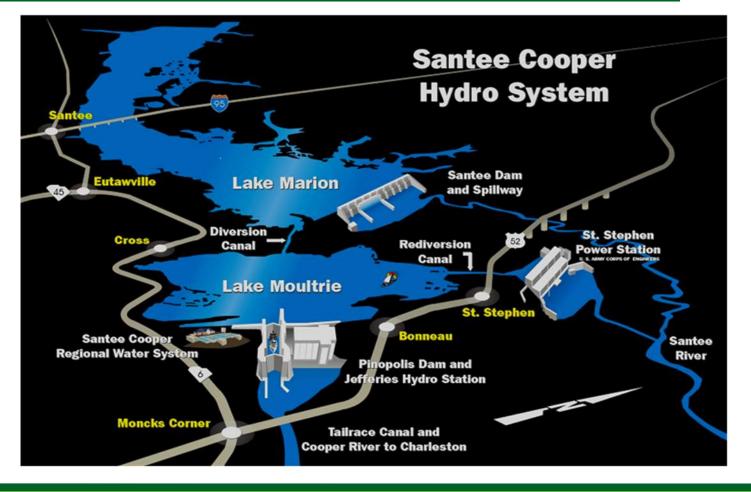


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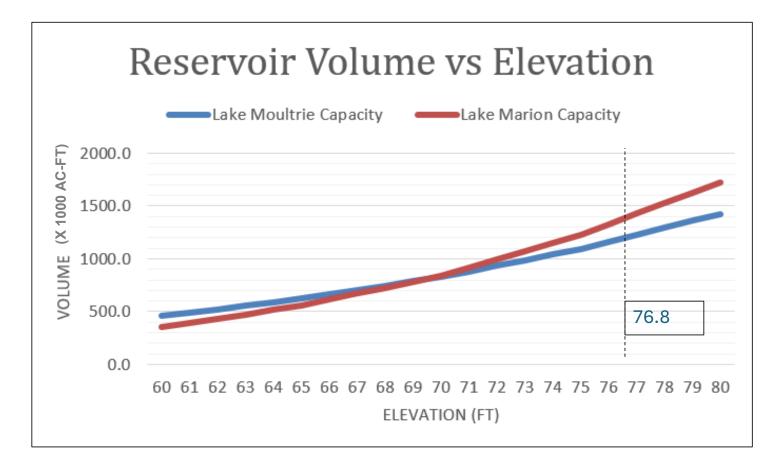
#### Lake System Schematic





#### **Reservoir Volume Curves**

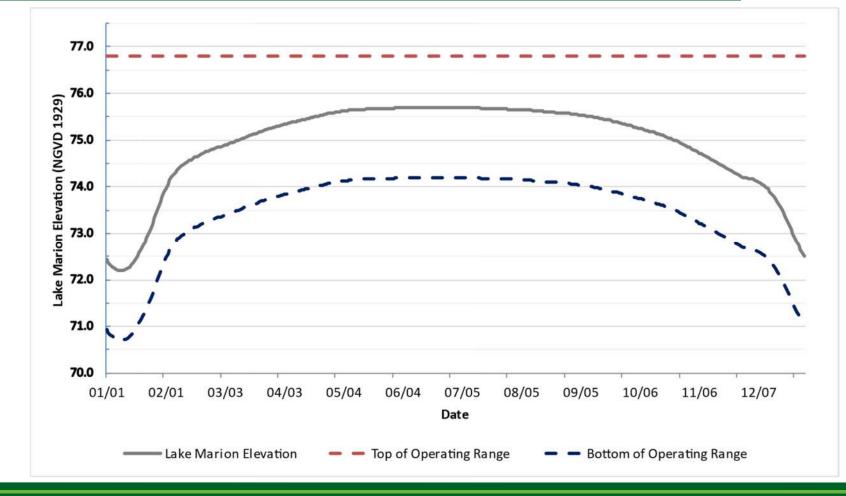




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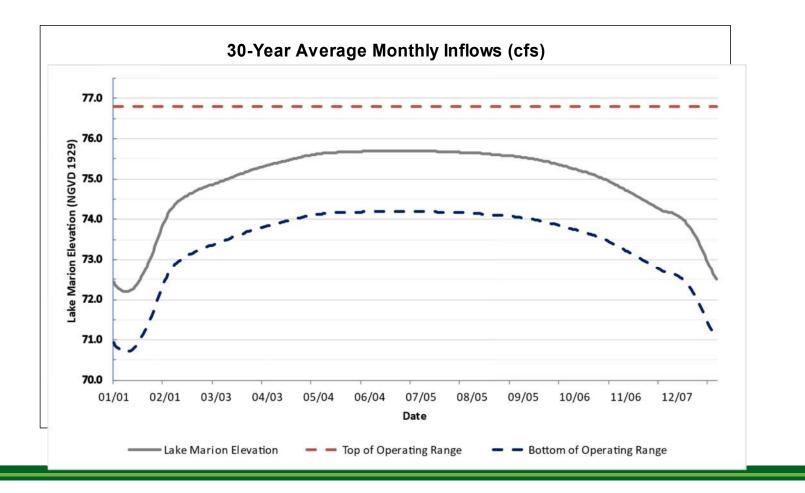
#### Lake Marion Rule Curve





#### **Average Monthly Inflows**





11

## **Minimum Flows/Discharge**



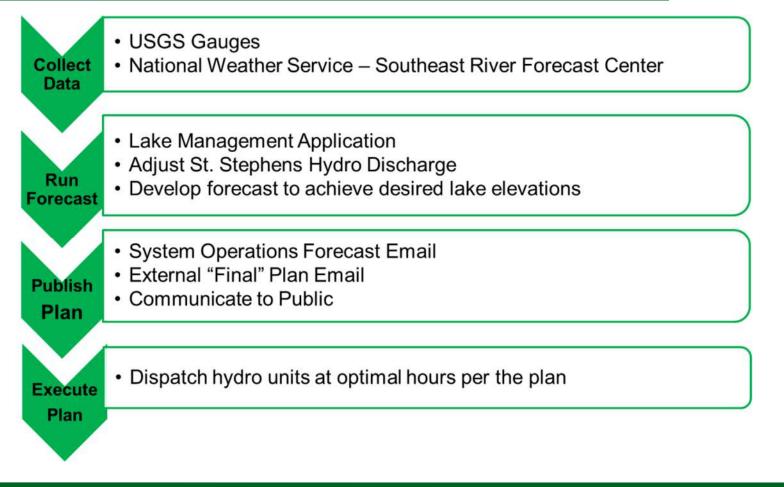
#### **Seasonal Flows - Santee Dam**

Time of Year	Prior License	New License (Effective January 2026)
May – November	500 cfs	1200 cfs
December – April	500 cfs	2400 cfs

- Jefferies Hydroelectric Generating Station: 4500 cfs minimum weekly flow to protect against salinity intrusion into Durham Canal/Bushy Park
  - USGS gage at Durham Canal provides alarms to Santee Cooper System Control during high salinity events, flows at Jefferies are increased in response in accordance with terms and conditions of Santee Cooper's contract with the USACE
- St. Stephen Hydroelectric Generating Station: 5600 cfs seasonal goal to provide attraction flow for fish lift operations (February 1 April 15 annually)
  - No minimum flow goals or requirement outside of spring spawning season

## **Daily Hydro Operations**





#### Lake Forecasting

JOHNSON GRY 0 52 19 15761 Greensboro Latest observ Manhattar Bur C1 12:00 PM EST 3 Project 0 Flood Stage is 27 17 13155 Historical Fark Action: 16 ft Ashevi)!a 15 11021 0 North Carolina the otte 13 9025 Chattanooga Faye Snishville. \* Stage (FT) Flow (CFS) 7069 76 5155 05 7 3305 Galimiona Athens 1530 5 Atlanta South Irclin. Đa, Augusta 278 12 am 12 am Jan 22 Feb 7 Georgia abama. 21 m 4 Zoom 1d 2d - Feb 7, 2025 Viewer | General NW

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## Hydroelectric Dispatch

- Jefferies Generating Station
  - Discharges minimum of 4,500 cfs on a weekly average basis (sometimes more for Bushy Park salinity abatement in accordance with USACE Rediversion Contract terms and conditions)
  - Instantaneous discharge ranges from 0 cfs to approximately 28,000 cfs (very rarely)
- Santee Spillway & Generating Station
  - 600 cfs continuous minimum flow from hydro unit
  - 62-gate spillway with approx. 800,000 cfs capacity
- USACE St. Stephen Hydroelectric Generating Station
  - Instantaneous discharge ranges from 0 cfs to approximately 22,000 cfs, depending on power system needs and inflows





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## Santee Spillway





## **Public Communication**

- Santee Cooper Lake Line

   1-800-92-LAKES
- Website:
  - <u>https://www.santeecooper.com/Community/Lakes/lak</u>
     <u>e-data/</u>
- System Operation Planning Line – x5857
- Spill Notification





# Questions?