



Welcome Everyone!

The agenda the stakeholder meeting follows:

- **1:00 - 1:05 PM: Welcome! Refuge staffing changes, contacts and introductions.**
- **1:05-1:20 PM: Brief Review of the Grassy Ridge Hydrology Hydraulic Study- Kris Bass and Simon Greg**
- **1:20-2:00 PM: Economic Analysis Report for 2-Stage Ditch - Dr. Eric Edwards**
- **2:00-2:30 PM: Pocosin Lakes NWR Water Management Plan - Wendy Stanton**
- **2:30 - 2:45 PM: Other refuge project updates**
 - Hurricane season - ongoing monitoring of on the ground conditions, reminders to reach out ahead of storms with any needs or questions.
 - IRA funding
 - Other topics?
- **2:45 - 3:00 PM: Questions and refreshments**

Thank you!



POCOSIN LAKES NWR



Final WATER MANAGEMENT PLAN

Wendy Stanton
Refuge Manager
September 26, 2023

<https://fws.gov/media/water-management-plan-and-environmental-assessment-pocosin-lakes-national-wildlife-refuge>



Pocosin Lakes NWR Water Management Plan

- This plan represents a comprehensive approach to water management at the landscape level. The development of this Plan included public input and the best available science and information. We are committed to inclusive, open, and transparent dialogue.
- This Plan relies on adaptive management to restore a healthy pocosin ecosystem and high-quality wildlife habitat.
- This Plan is a roadmap that will guide water management on the refuge for the next 15 years.

U.S. Fish & Wildlife Service

WATER MANAGEMENT PLAN AND ENVIRONMENTAL ASSESSMENT FOR **POCOSIN LAKES NATIONAL WILDLIFE REFUGE**

Hyde, Tyrrell, and Washington Counties, North Carolina



Photo: USFWS



Photo: D Sultner, USFWS

South Atlantic-Gulf Unified Region





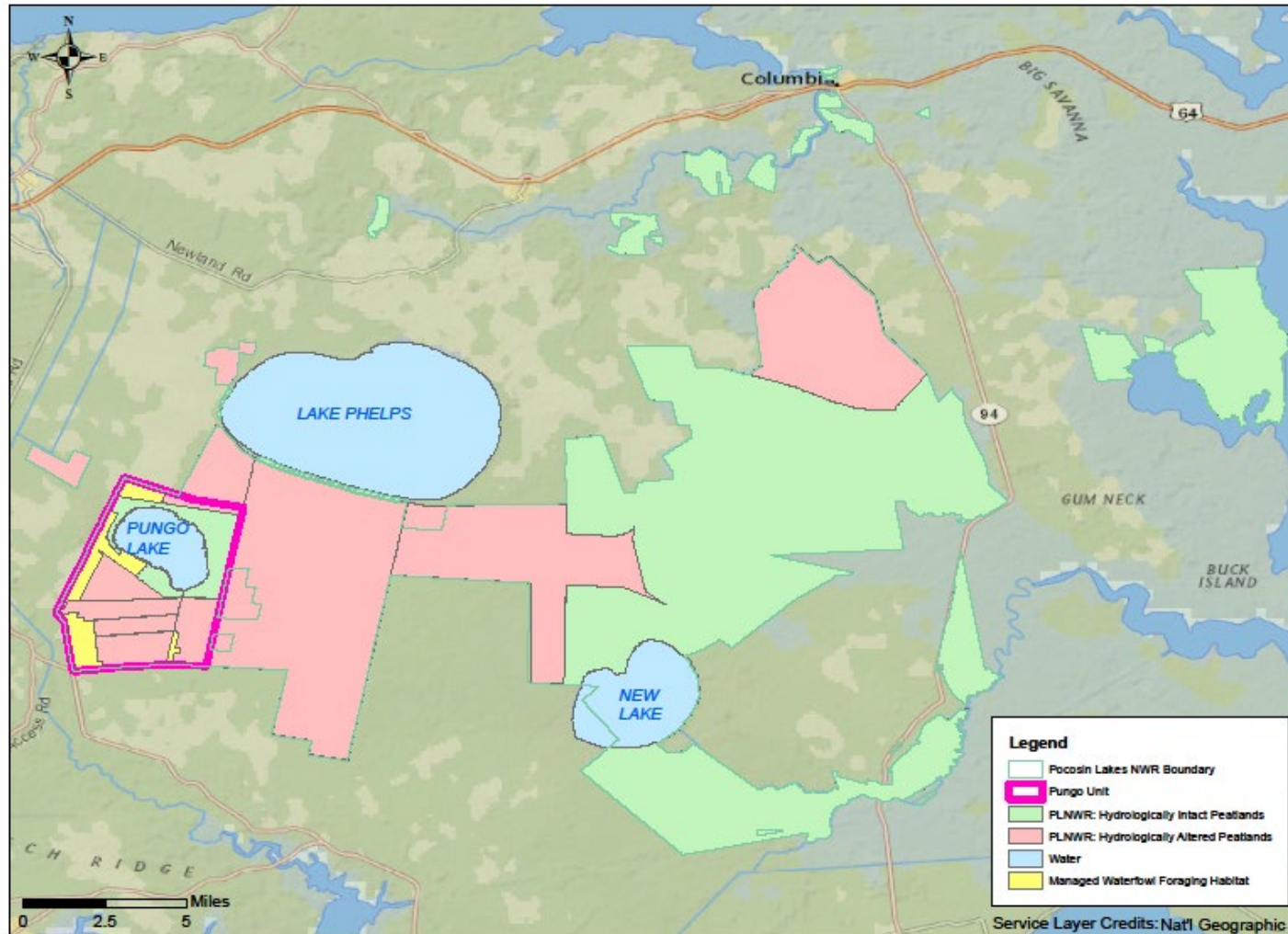
Inflation Reduction Act Funding

The Coastal North Carolina NWR Complex received \$27.25 million in Inflation Reduction Act funding for Albemarle-Pamlico (A-P) Sound restoration initiatives. The funds will be used on refuge lands and state gamelands.

In addition, the Refuge is coordinating closely with state and private partners (including the NC Department of Environmental Quality, the NC Regional Coastal Wetland Restoration Working Group) to maximize the conservation benefits of these funds.



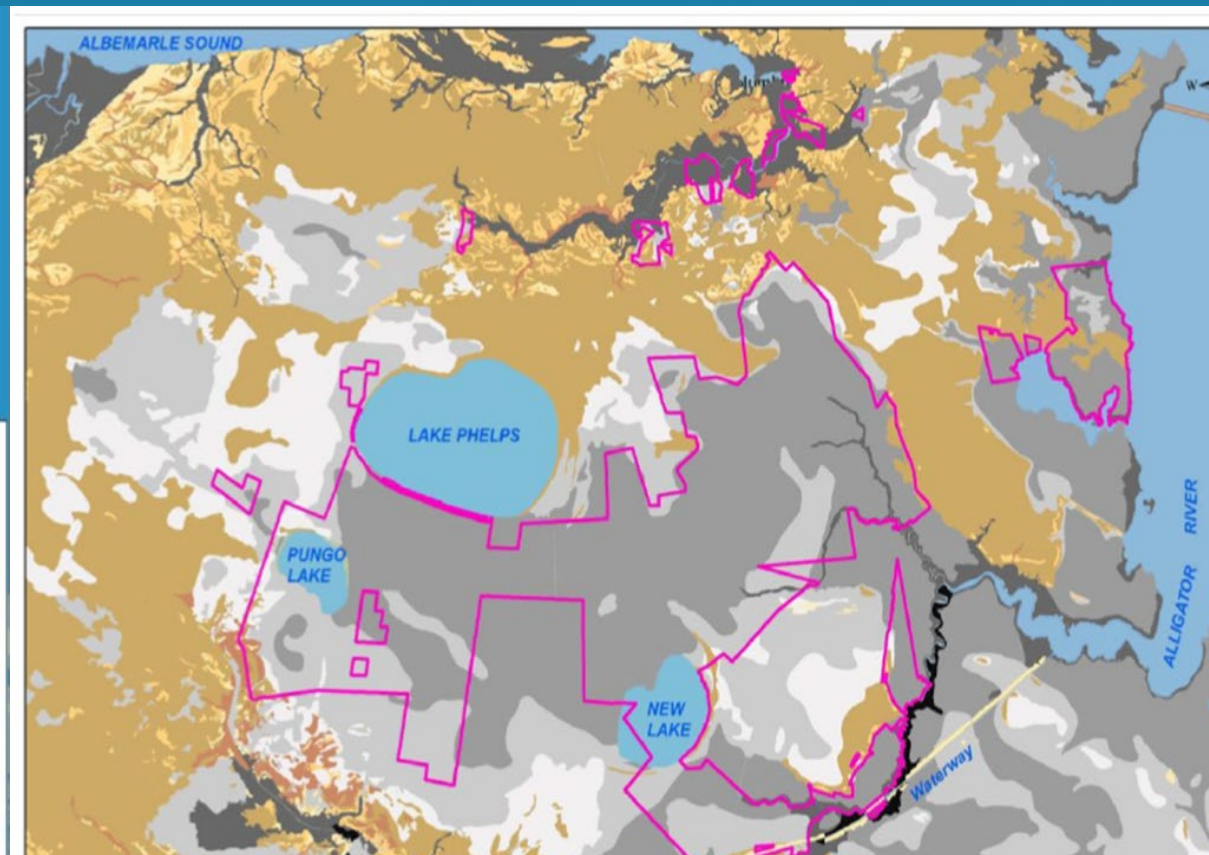
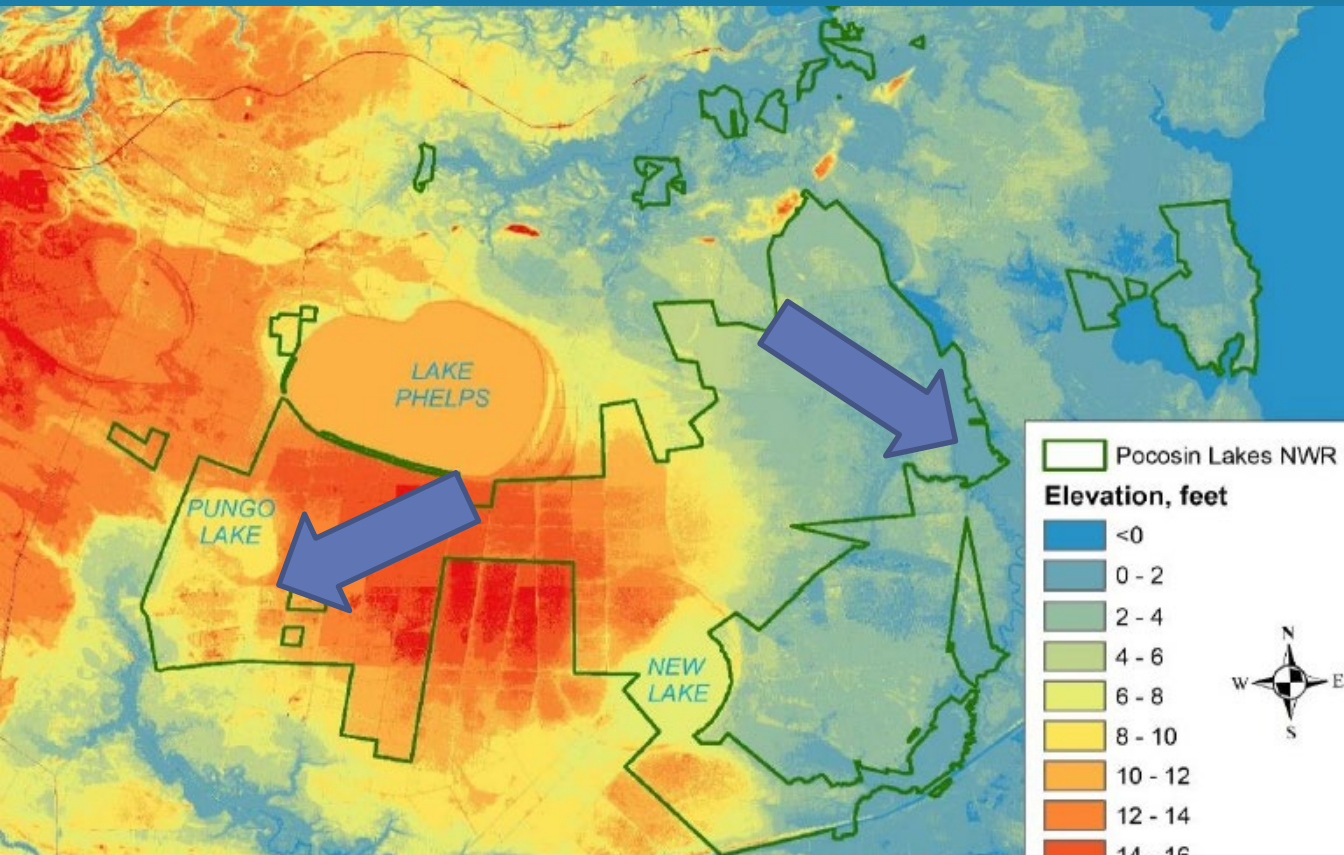
Water Management Plan





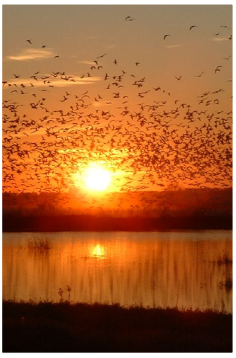
LiDAR elevation data for Pocosin Lakes NWR and surrounding areas (USGS 2014)

Pocosins “are swamps on a hill”





WMP OVERARCHING GOALS



GOAL 1 – Manage Water Resources to Provide Optimal Wintering Waterfowl Habitat (Pungo Unit)



GOAL 2 - Restore, Manage, Maintain And Protect Hydrologically Altered Peatlands



GOAL 3 – Maintain And Protect Intact Pocosins And Lands With Limited Restoration Potential



GOAL 4 – Use Water Management Capability To Enhance Fire Management



GOAL 1– Manage Water Resources to Provide Optimal Wintering Waterfowl Habitat (Pungo Unit)



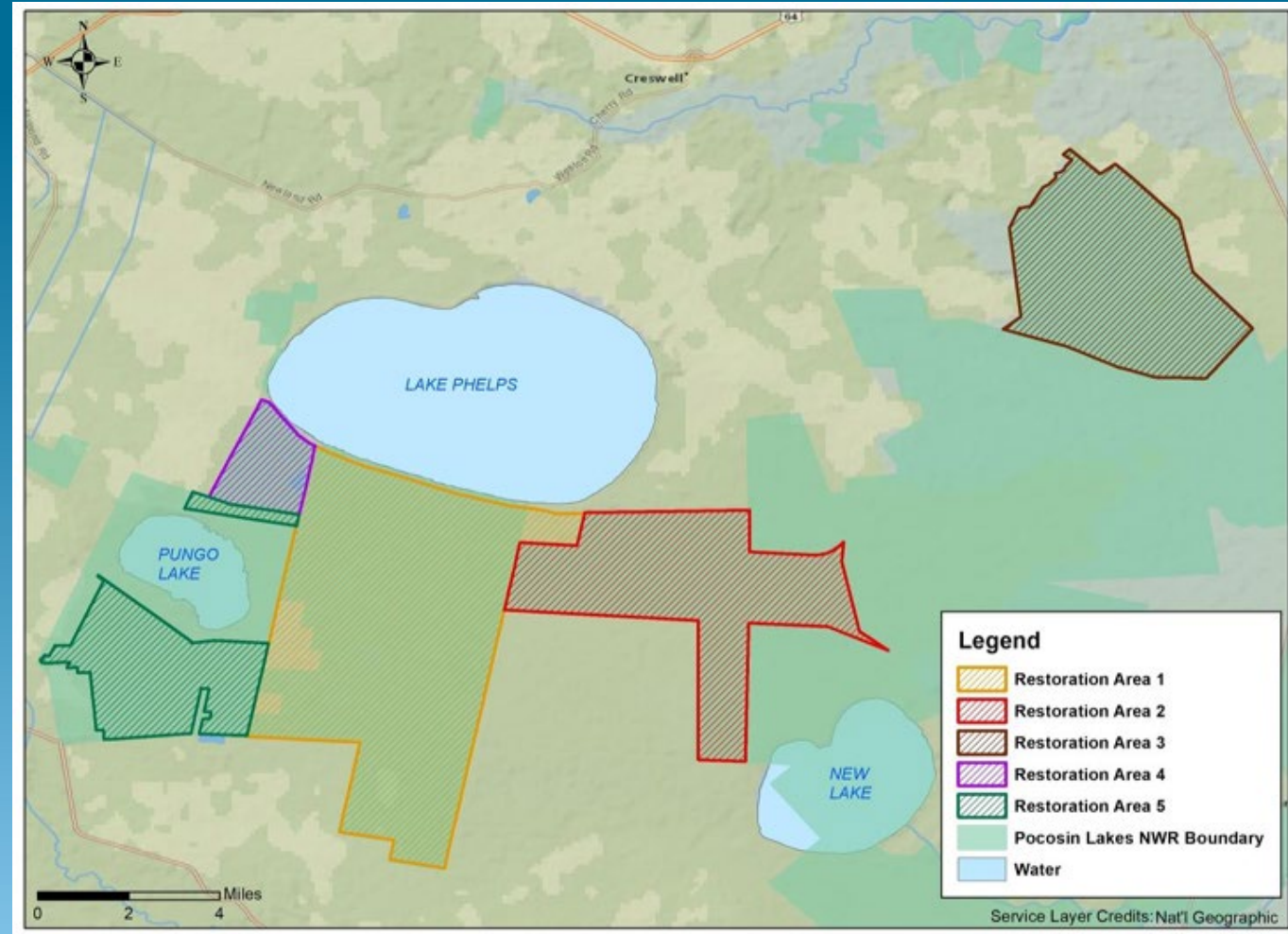
- Maintain water levels in Pungo Lake (waterfowl sanctuary).
- Manage ~500 acres waterfowl impoundments as moist soil habitat.
- Flood croplands for waterfowl foraging.



GOAL 2 Restore, Manage, Maintain And Protect Hydrologically Altered Peatlands (there are a total of 5 Restoration Areas)

Overall objective: Restore 42,000 acres of altered peatlands.

(Note: 37,000 acres have already been restored.)





Restoration Area 1 (17,000 acres)

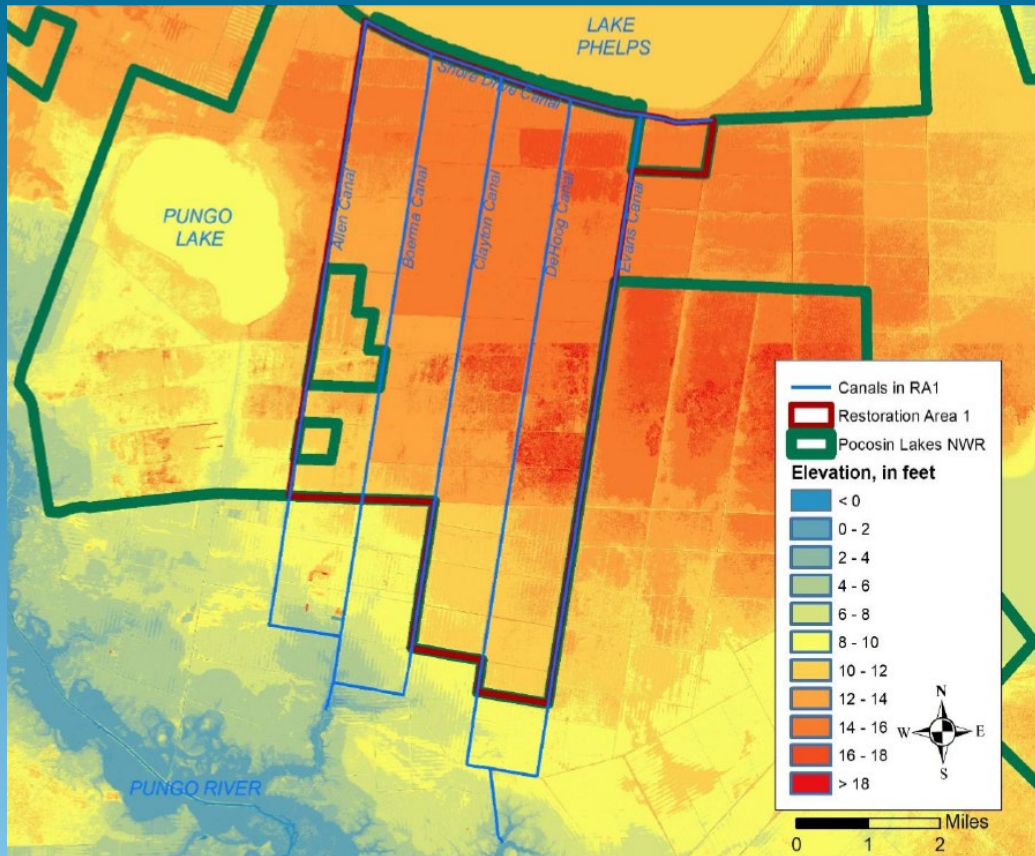
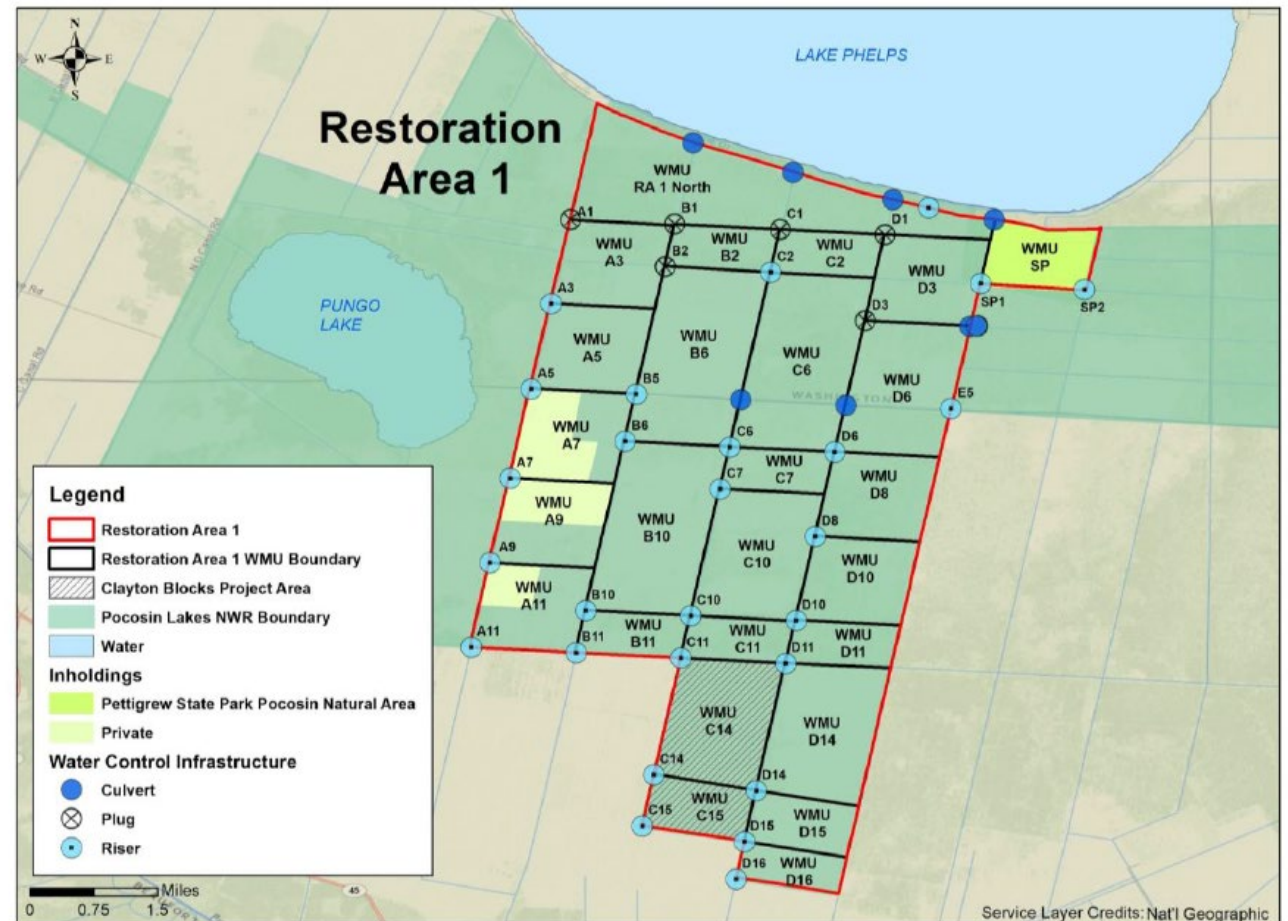


Figure A-25. Restoration Area 1 (RA 1) restoration infrastructure and Water Management Units (WMUs).



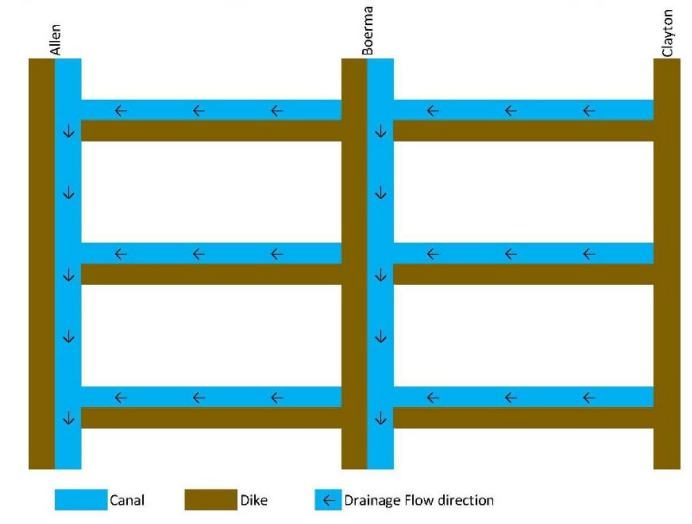


Restoration Area 1, continued

Strategies Employed Includes:

- Existing roads serve as dikes
- Water control structures are placed every one foot elevation change.
- The natural water flow on RA 1 is from NE to SW.
- Water levels and movement are designed to mimic natural pocosin wetland conditions.

Figure A-23. Illustration of typical section of Restoration Area 1 drainage system.





Restoration Area 2 (9,400 ac)

Figure A-27. LiDAR elevation data for Restoration Area (RA 2).

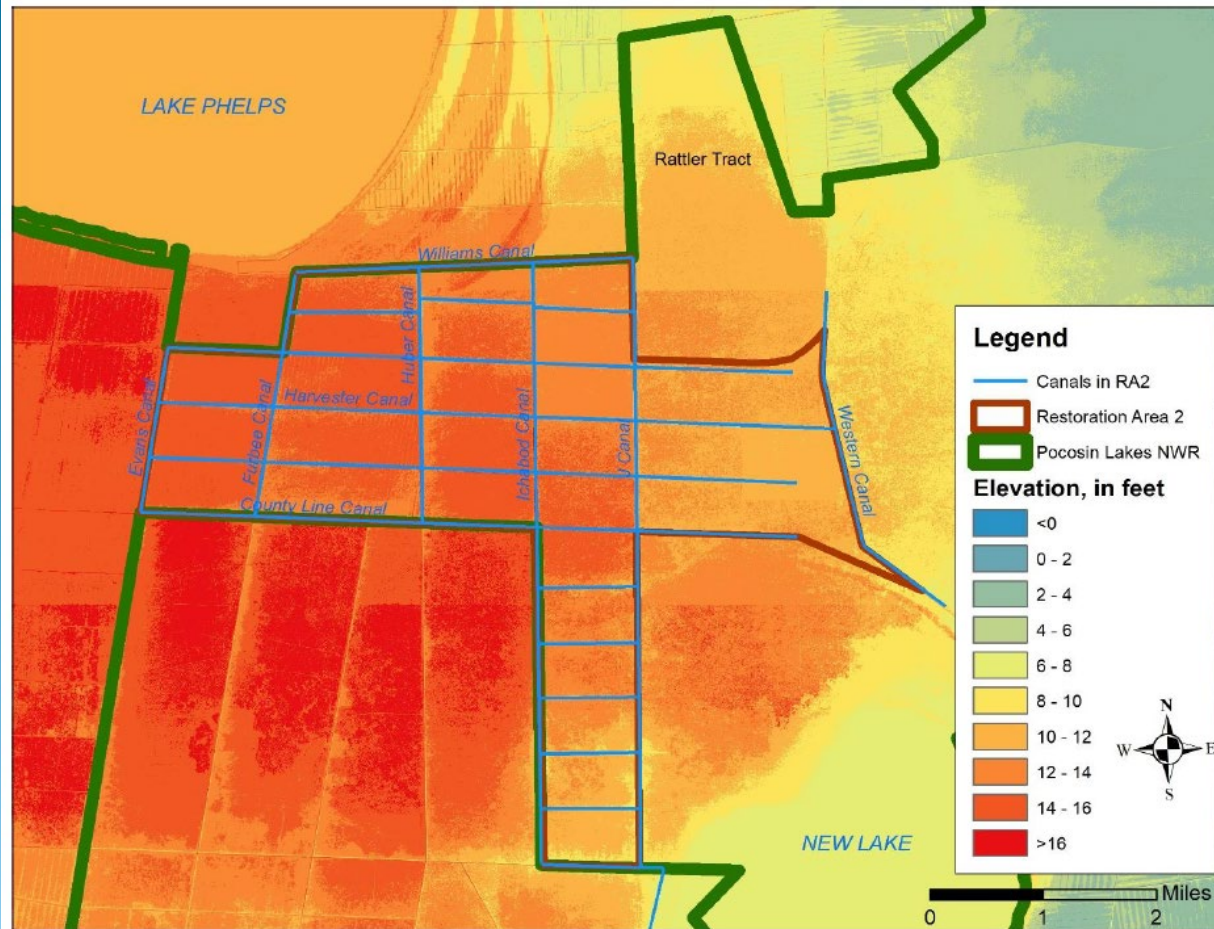
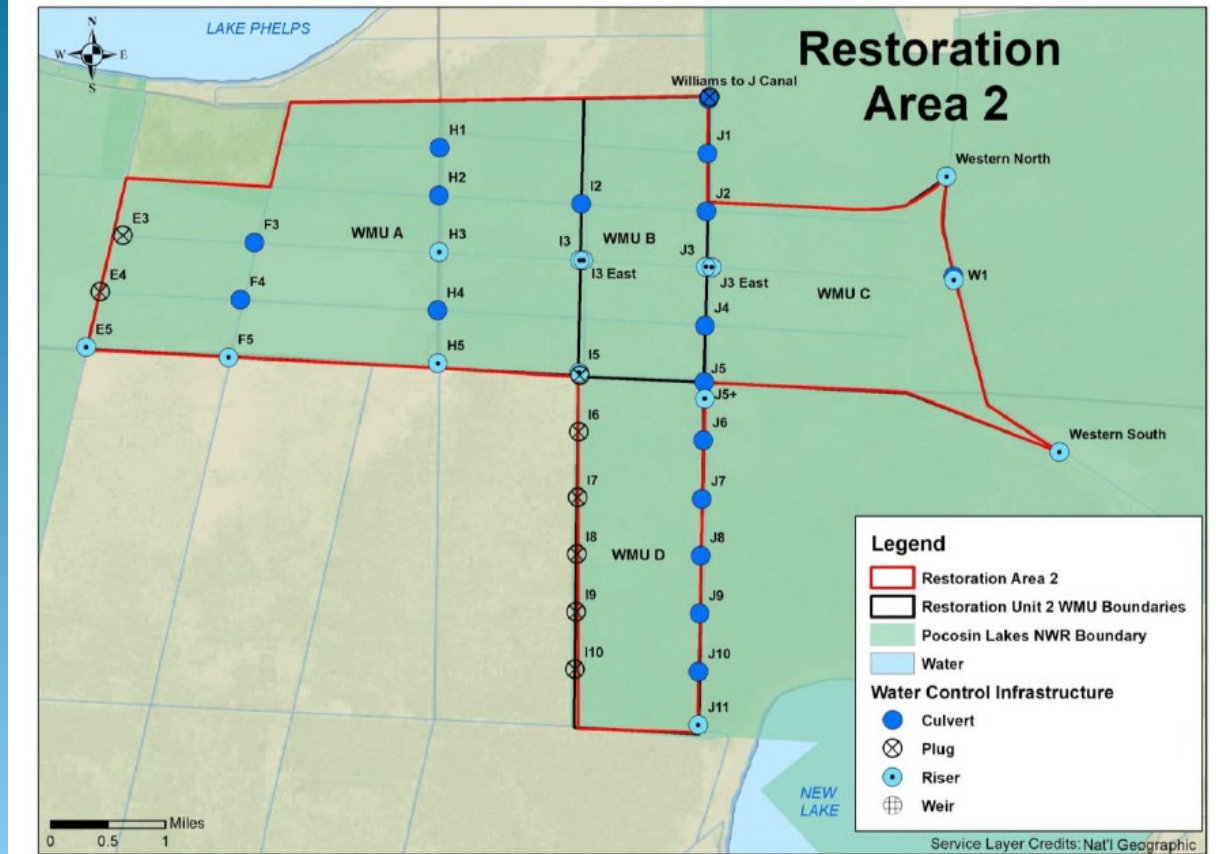


Figure A-28. Restoration Area 2 (RA 2) restoration infrastructure and water management units (WMUs).





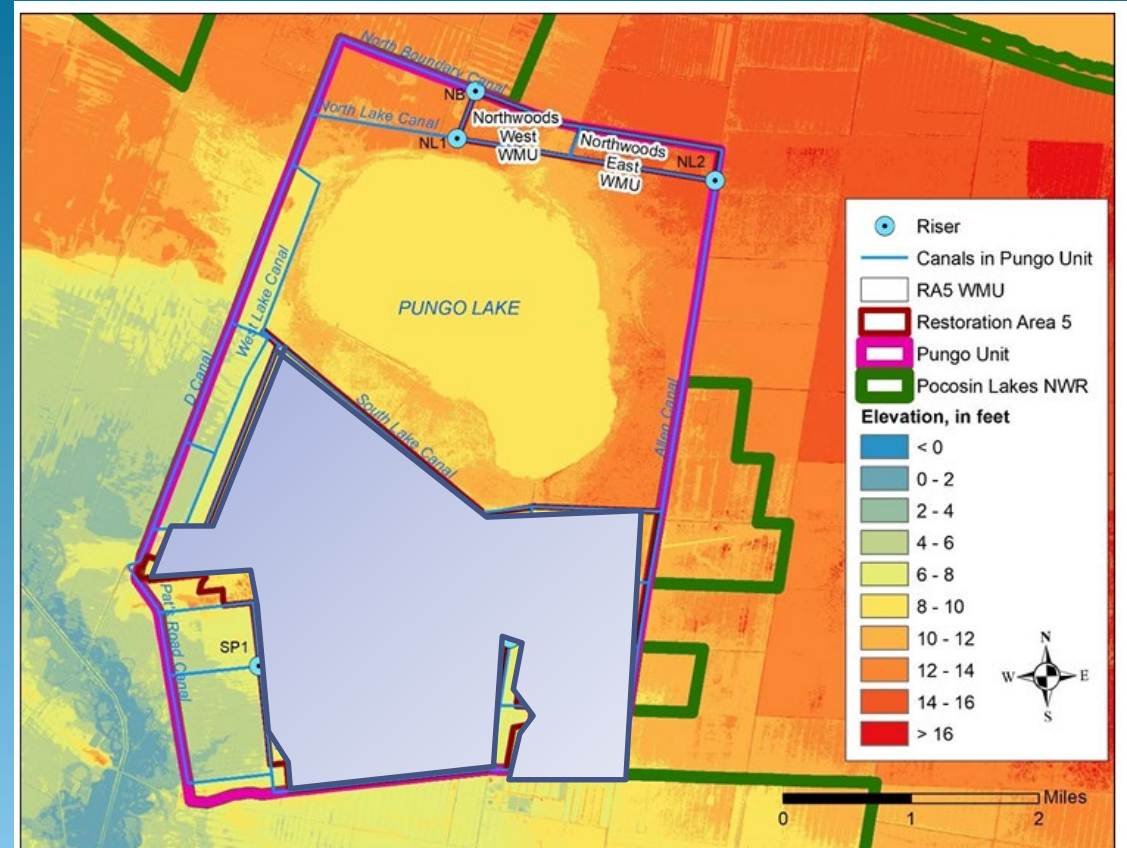
Restoration Area 3 (8,500 ac)

Note: Restoration Area 3 will be discussed under Goal 3



Restoration Areas 4 (1,800 ac) and 5 (5,300 ac)

Figure A-32. Restoration Area 4 (RA 4) restoration infrastructure and current and potential water management units (WMUs).





GOAL 3 – Maintain And Protect Intact Pocosins And Lands With Limited Restoration Potential

- Evaluate, maintain or improve floodplain connectivity projects.
- For example, remove sections of existing interior roads to improve floodplain functions.



Restoration Area 3 (8,500 ac)

Figure A-30. LiDAR elevation data for Restoration Area 3 (RA 3).

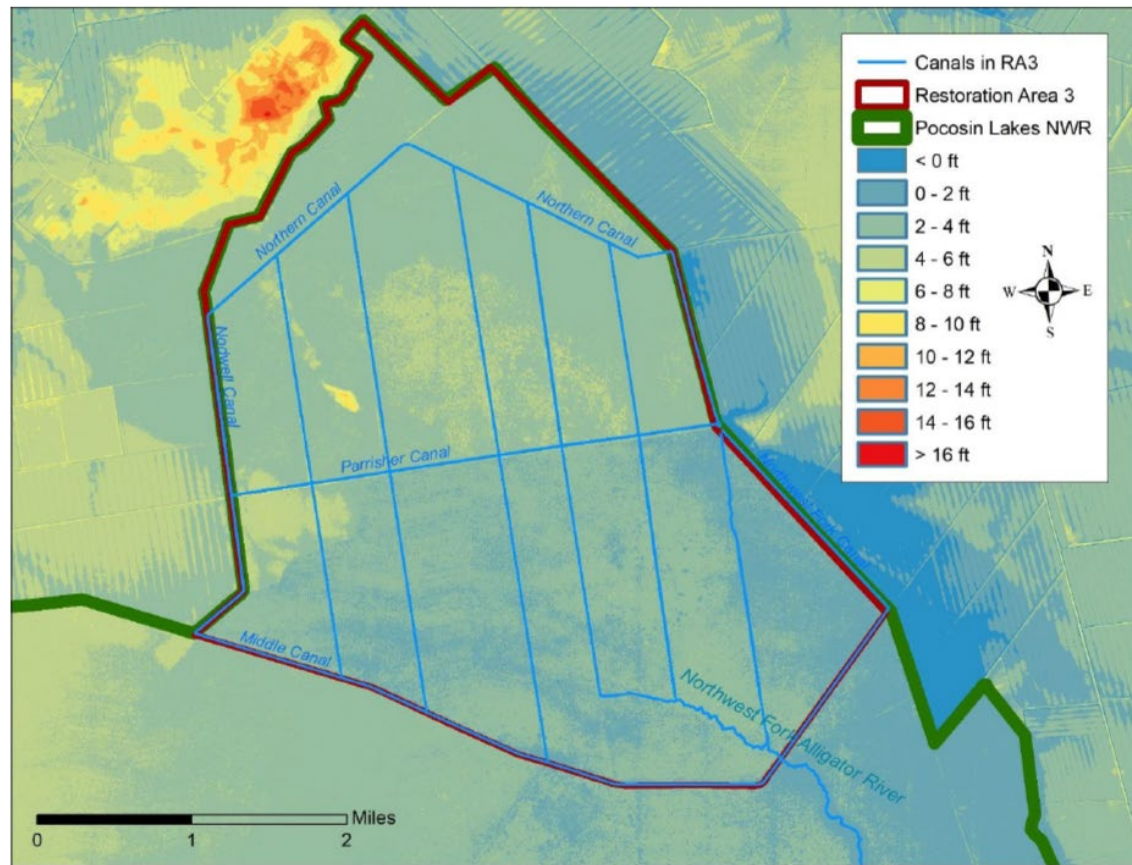
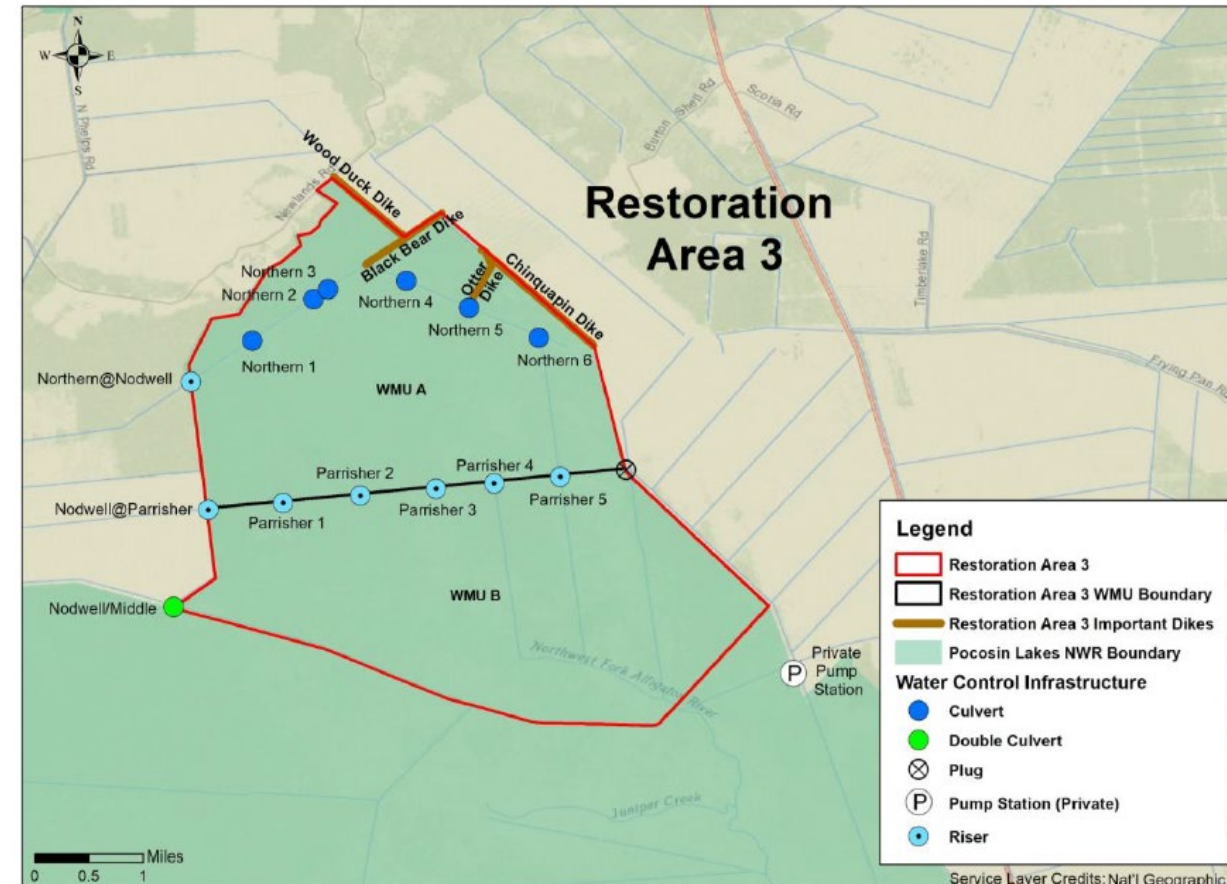


Figure A-31. Restoration Area 3 (RA 3) proposed restoration infrastructure and water management units (WMUs).





Summary

- The Plan emphasizes adaptive management to reconnect a healthy pocosin landscape and high-quality wildlife habitat.
- Refuge leadership continues to be committed to inclusive, open, and transparent dialogue.
- The Plan provides a roadmap for refuge management for the next 15 years.



Questions

