

Lake Phelps Water Management Study



April 2018

Lake Phelps Water Management Study

Objectives

- Background on Pettigrew State Park
- Discussion of the 1980 Lake Management Study
- Current park initiatives
- Potential for partnering on a new hydrologic study

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Pettigrew State Park

- The park was established in 1936
- Lake Phelps is approximately 16,600 the second largest natural lake in the state
- Approximately 1,300 acres of parkland around the lake and an addition 4,400 acres along the Scuppernong River
- Park activities include camping, fishing, picnicking, boating, hiking and wildlife viewing



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Pettigrew State Park

PETTIGREW STATE PARK

LEGEND

- Accessible
- Bathhouse
- Biking Trail
- Boat Ramp
- Canoe Launch
- Family Camping
- Group Camping
- Hiking Trail
- Hospital - Washington County Emergencies - 911
- Park Boundary
- Park Office
- Parking
- Picnic Area
- Point of Interest
- Ranger Residence
- Restrooms
- Roads
- Telephone
- Water depth contour relative to 10.9 feet above sea level.

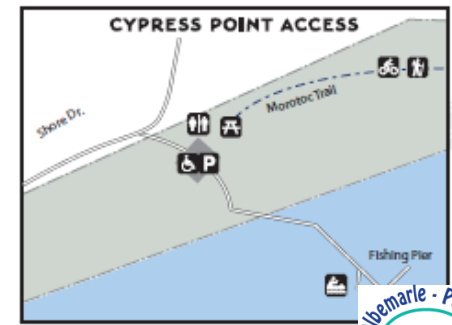
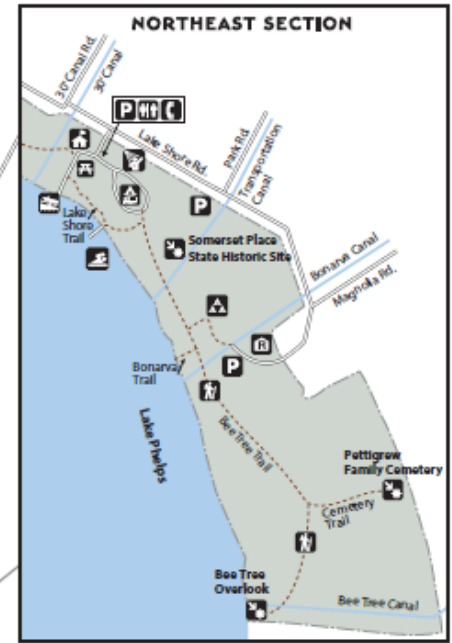
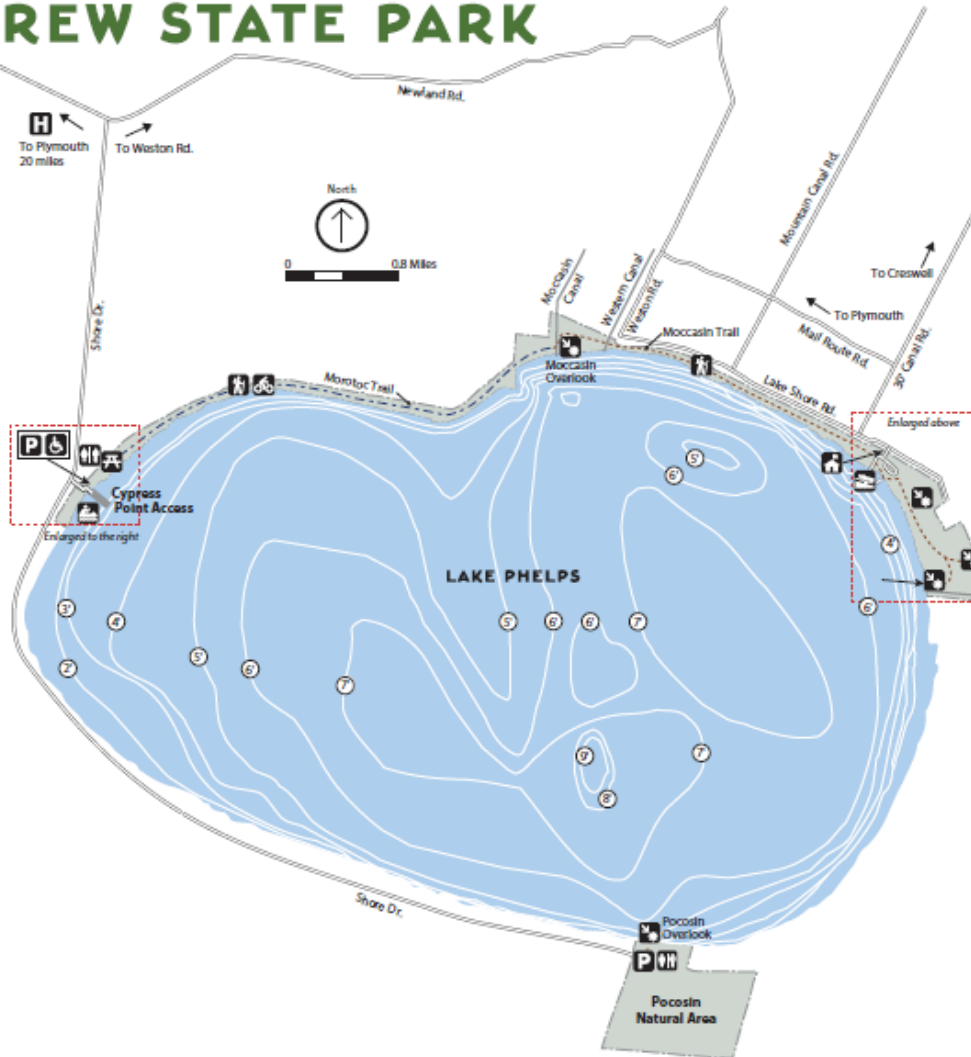
TRAILS

Cemetery Trail	0.34 mile
Bee Tree Trail	1.3 miles
Lake Shore Trail	0.25 miles
Moccasin Trail	2.8 miles
Morotoc Trail	4.2 miles

All trails are rated as easy and distances are one-way.



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1980 Lake Management Study

Purpose of the Study:

- Preserves the lake's natural integrity
- Enhance wildlife habitat
- Maintain outdoor recreation
- Reduce flood frequencies/durations

“for the combined best interest citizens of North Carolina, their visitors, lake's neighbors, and the landowners along the canals which drain water to the lake.”



1980 Lake Management Study

The study called for water levels in Lake Phelps to be maintained between 10.41 and 12.1 feet
Lake fluctuation is currently divided into 4 hydro-management periods:

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1980 Lake Management Study

1. November to early February
(period of lake recharge)
2. Early February to mid- March
(a period of flow release for anadromous fishery)
3. Mid-March to mid-July (a period of lake recharge)
4. Mid-July to late October
(a period of flow release in preparation of the tropical storm season)

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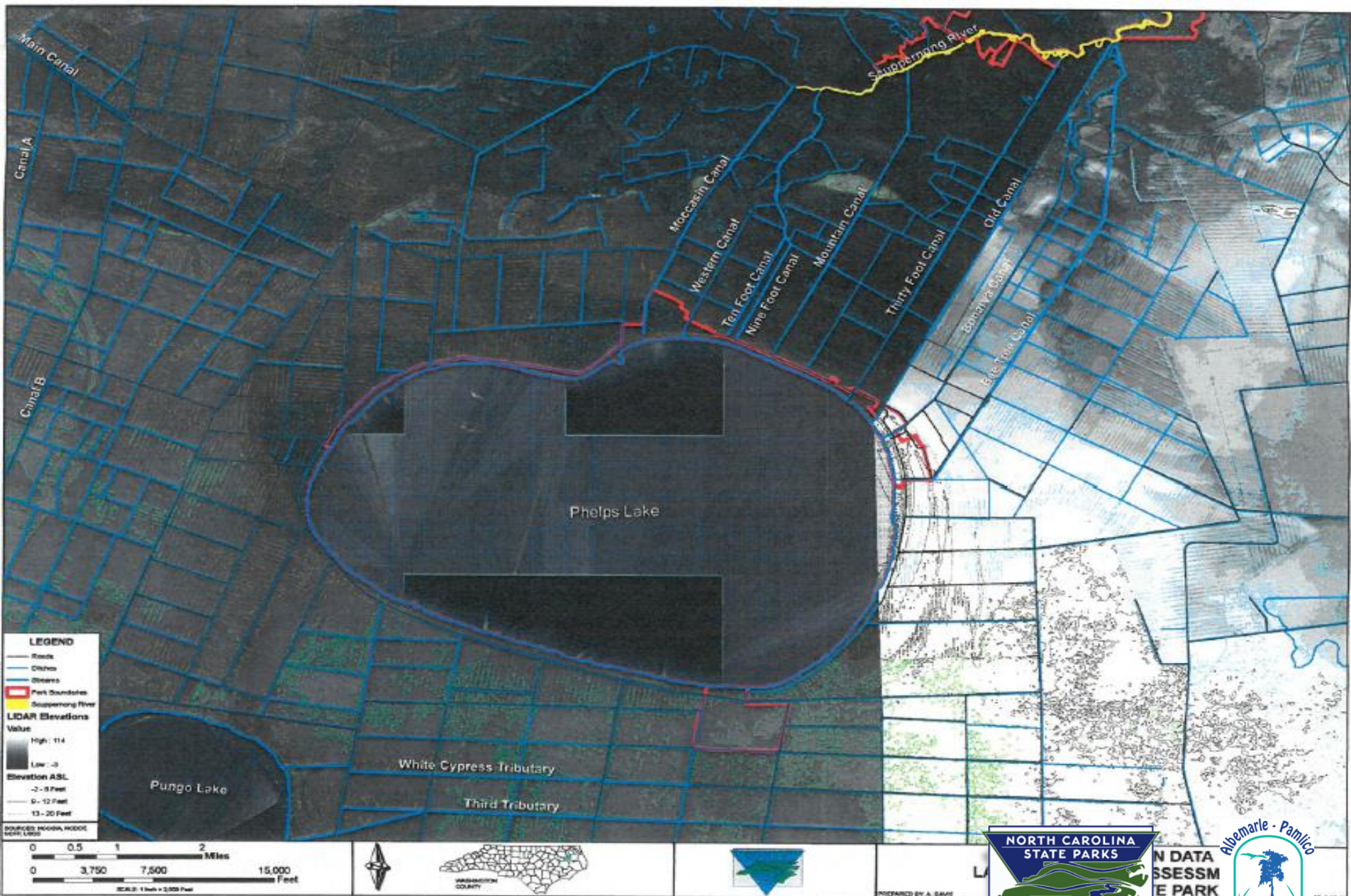


Current Park Initiatives

- Replacement of Current
- Current style will be maintained
- No new work associated with the project

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Potential for Partnering

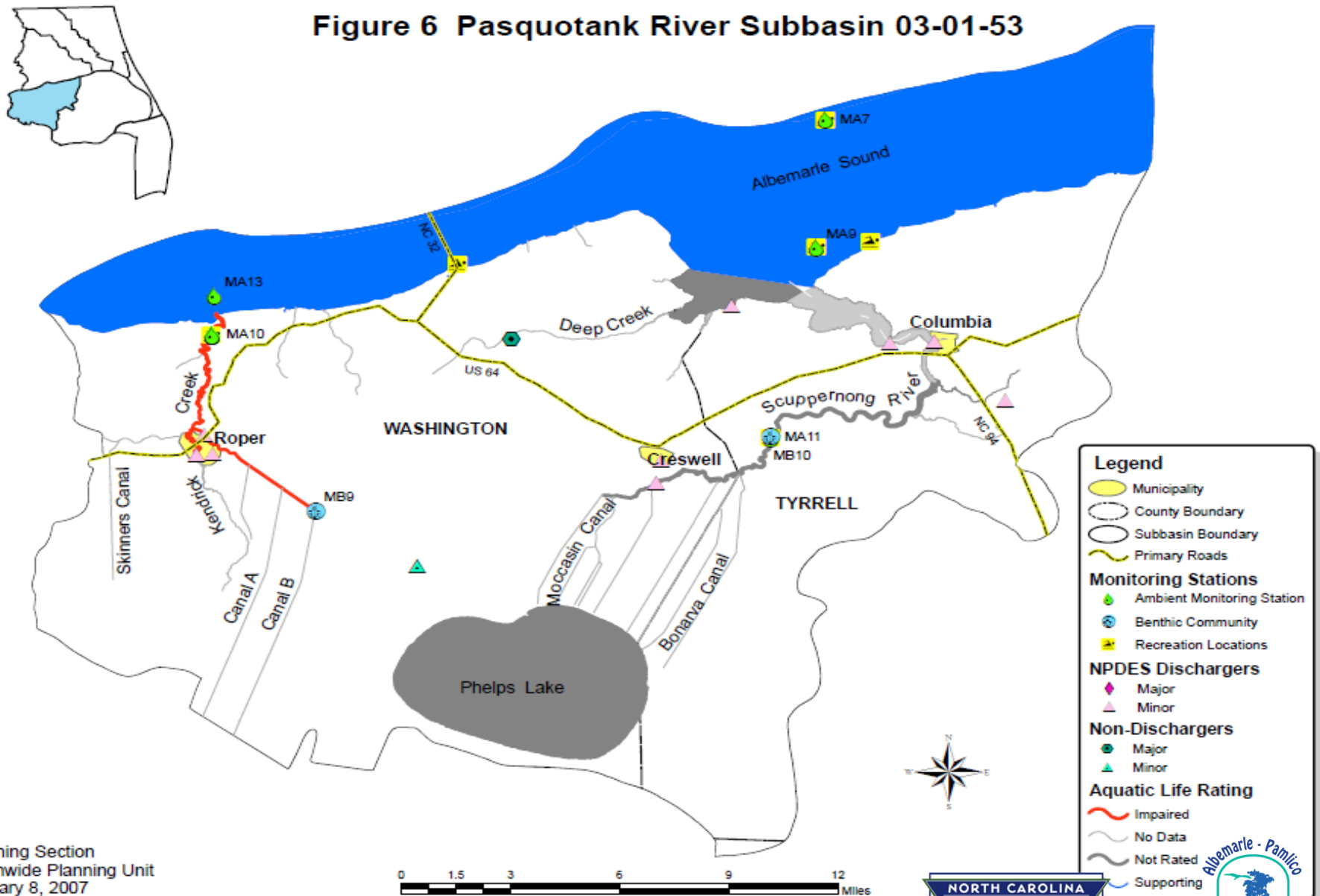
Opportunities

- Lake Phelps is a small portion of the overall watershed
- Need for overall coordination in the region
- Allow for credibility in the region
- Ability to bring partners to the table

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Figure 6 Pasquotank River Subbasin 03-01-53



Planning Section
 Basinwide Planning Unit
 January 8, 2007



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Potential for Partnering

Challenges

- Some distrust of government organizations in the region
- Cost of funding a new water management study (\$350,000)
- Stakeholders have widely differing views of how water should be managed in the region

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Questions?



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