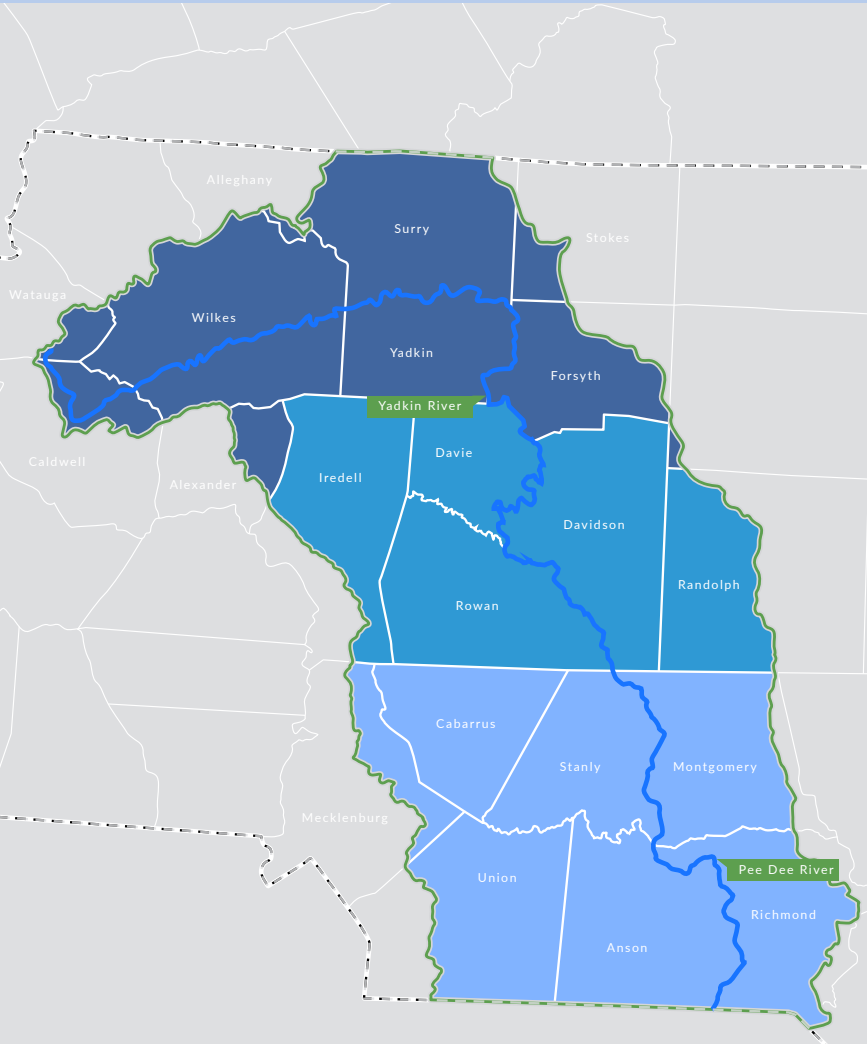


In 2018, the Yadkin-Pee Dee Water Management Group (YPDWMG) embarked on a multi-year process to develop a long-range Water Resources Plan to help preserve, protect, and extend the Yadkin-Pee Dee River Basin's water supply.

A Water Resources Plan guides regional coordination around complex water management issues for a river basin with the goal of ensuring a sufficient supply of water long into the future. The Plan is intended to identify water quantity and quality issues and concerns, evaluate potential strategies to solve these issues, and implement practical solutions coordinated on a basin-wide level.

The Plan is a roadmap for effective future management of the shared water resources which are important to our health, leisure, and economy.

Through a series of facilitated stakeholder workshops held throughout the Basin, the YPDWMG crafted a detailed framework for how this plan is to be developed and implemented over the coming years in four key areas.



### Communications

Strategies to engage and inform the Basin's stakeholders about key water resources issues



### Data/Research

Strategies to better inform our understanding of the Basin



### Mitigation

Strategies to address issues identified from Data/Research



### Funding

Strategies to fund Plan initiatives

Schedule

2019

2020

2021

2022

2023

2024

2025

PLAN A

PHASE 1

2

3

4

5

6

PLAN B

PHASE 1

2

3

4

5

6

7

PLAN C

PHASE 1

2

3

4

5a













5b

6



















7

# Yadkin-Pee Dee Water Resources Plan Scope





















## Phasing Plan A (2 ½ Years)

Phase (Task Descriptions)	Schedule	Est. Fee (Low)	Est. Fee (High)
<b>Phase 1 (Planning)</b>	Nov. 2018 - June 2019	\$90,200	\$90,200
Water Resources Plan Visioning and Planning Long Range Water Demand Projection Updates	 	Phase 1 currently under contract	
<b>Phase 2 (Scenario Development)</b>	July 2019 - Dec. 2019	\$79,000	\$100,000
Funding Assistance Planning Develop Communications Plan & Stakeholder Advisory Group Future Planning Scenarios - Identification Regulatory Agency Coordination for Hydrologic Model			
<b>Phase 3 (Hydrologic Model Updates)</b>	Oct. 2019 - June 2020	\$195,000	\$320,000
NC DEQ-DWR Hydrologic Model Update GIS Database Ongoing Communications & Outreach	  		
<b>Phase 4 (Hydrologic Model Evaluations)</b>	July 2020 - Dec. 2020	\$145,000	\$150,000
Future Planning Scenarios - Analysis Ongoing Communication & Outreach	 		
<b>Phase 5 (Evaluations &amp; Recommendations)</b>	Jan. 2021 - June 2021	\$263,000	\$403,000
LIP Enhancement & Basin-wide Drought Coordination Lake Management Evaluation and Recommendations Water Demand Management/Water Conservation Efforts Water Quality - Future Considerations Public Awareness and Education Recommendations Regulatory Issues Watershed Protection Opportunities BMP Standards Evaluation Sustainability and Resiliency Recommendations Basin-wide Water Supply Contingency Recommendations W. Kerr Scott Water Supply Allocation Study Recommendations Regional Collaboration with Other Basins Future Data Collection and Analysis Recommendations Project Identification, Funding, and Scheduling Ongoing Communication and Outreach	 		
<b>Phase 6 (Evaluations &amp; Recommendations)</b>	July 2021 - Dec. 2021	\$50,000	\$65,000
Water Resources Plan Document Development Water Resources Plan Public Rollout	 		
<b>Grand Total*</b>		<b>\$822,200</b>	<b>\$1,124,200</b>

\*Note: All grand totals include Phase 1 currently under contract

Phase (Task Descriptions)	Schedule	Est. Fee (Low)	Est. Fee (High)
<b>Phase 1 (Planning)</b>	Nov. 2018 - June 2019	\$90,200	\$90,200
Water Resources Plan Visioning and Planning Long Range Water Demand Projection Updates	 	Phase 1 currently under contract	
<b>Phase 2 (Scenario Development)</b>	July 2019 - Dec. 2019	\$79,000	\$100,000
Funding Assistance Planning Develop Communications Plan & Stakeholder Advisory Group Future Planning Scenarios - Identification Regulatory Agency Coordination for Hydrologic Model			
<b>Phase 3 (Hydrologic Model Updates)</b>	Oct. 2019 - June 2020	\$195,000	\$320,000
NC DEQ-DWR Hydrologic Model Update GIS Database Ongoing Communications & Outreach	  		
<b>Phase 4 (Hydrologic Model Evaluations)</b>	July 2020 - Dec. 2020	\$145,000	\$150,000
Future Planning Scenarios - Analysis Ongoing Communication & Outreach	 		
<b>Phase 5 (Technical Evaluations &amp; Recommendations)</b>	Jan. 2021 - June 2021	\$173,000	\$250,000
LIP Enhancement & Basin-wide Drought Coordination Lake Management Evaluation and Recommendations Water Demand Management/Water Conservation Efforts Water Quality - Future Considerations Regulatory Issues Watershed Protection Opportunities W. Kerr Scott Water Supply Allocation Study Recom. Ongoing Communication and Outreach	 		
<b>Phase 6 (Collaborative Evaluations &amp; Recommendations)</b>	July 2021 - Dec. 2021	\$100,000	\$173,000
Basin-wide Water Supply Contingency Recom. Public Awareness and Education Recommendations Project Identification, Funding, and Scheduling Regional Collaboration with Other Basins Future Data Collection and Analysis Recommendations BMP Standards Evaluation Sustainability and Resiliency Recommendations Ongoing Communication and Outreach	   		
<b>Phase 7 (Water Resources Plan Document &amp; Rollout)</b>	Jan. 2022 - June 2022	\$50,000	\$66,000
Water Resources Plan Document Development Water Resources Plan Public Rollout	   		
<b>Grand Total*</b>		\$832,200	\$1,145,200

# Phasing Plan C (6 ½ Years)

Phase (Task Descriptions)	Schedule	Est. Fee (Low)	Est. Fee (High)
<b>Phase 1 (Planning)</b>	Nov. 2018 - June 2019	\$90,200	\$90,200
Water Resources Plan Visioning and Planning	 	Phase 1 currently under contract	
Long Range Water Demand Projection Updates			
<b>Phase 2 (Scenario Development)</b>	July 2019 - June 2020	\$79,000	\$100,000
Funding Assistance Planning			
Develop Communications Plan & Stakeholder Advisory Group			
Future Planning Scenarios - Identification			
Regulatory Agency Coordination for Hydrologic Model			
<b>Phase 3 (Hydrologic Model Updates)</b>	July 2020 - June 2021	\$195,000	\$320,000
NC DEQ-DWR Hydrologic Model Update	  		
GIS Database			
Ongoing Communications & Outreach			
<b>Phase 4 (Hydrologic Model Evaluations)</b>	July 2021 - June 2022	\$145,000	\$150,000
Future Planning Scenarios - Analysis	 		
Ongoing Communication & Outreach			
<b>Phase 5a (Water Quantity Technical Evaluations &amp; Recom.)</b>	July 2022 - June 2023	\$115,000	\$160,000
LIP Enhancement & Basin-wide Drought Coordination	 		
Lake Management Evaluation and Recommendations			
Water Demand Management/Water Conservation Efforts			
W. Kerr Scott Water Supply Allocation Study			
Recommendations			
Ongoing Communication and Outreach			
<b>Phase 5b (Water Quality Technical Evaluations &amp; Recom.) Water</b>	July 2023 - June 2024	\$68,000	\$105,000
Quality - Future Considerations	 		
Regulatory Issues			
Watershed Protection Opportunities			
Ongoing Communication and Outreach			
<b>Phase 6 (Collaborative Evaluations &amp; Recommendations)</b>	July 2024 - June 2025	\$100,000	\$173,000
Basin-wide Water Supply Contingency Recom.	   		
Public Awareness and Education Recommendations			
Project Identification, Funding, and Scheduling			
Regional Collaboration with Other Basins			
Future Data Collection and Analysis Recommendations			
BMP Standards Evaluation			
Sustainability and Resiliency Recommendations			
Ongoing Communication and Outreach			
<b>Phase 7 (Evaluations &amp; Recommendations)</b>	July 2025 - Dec. 2025	\$50,000	\$66,000
Water Resources Plan Document Development	   		
Water Resources Plan Public Rollout			
<b>Grand Total*</b>		<b>\$842,200</b>	<b>\$1,164,200</b>