



# Planning for Growth: A Regional Wastewater Strategy for Future Development



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**HW**



# • What is the Arkansas Water Plan?

- “A comprehensive program for the orderly development and management of the state’s water and related land resources”  
Arkansas Code § 15-22-503(a)

## • Purpose

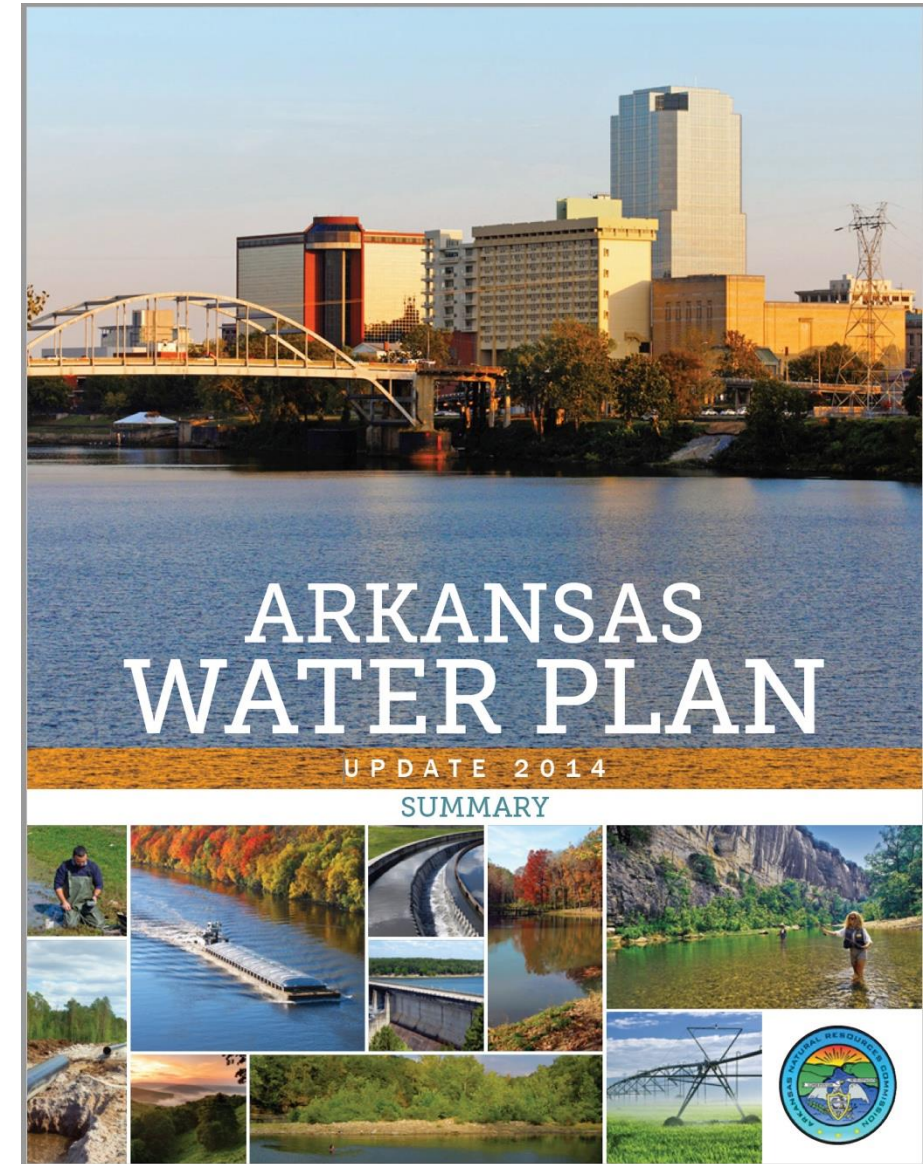
- To assess quantity and quality of water in Arkansas
- To be ready for growth, declines, and new challenges

## • Structure

- Supply
- Demands
- Issues
- Recommendations

## • Public Involvement / Stakeholder Engagement

- Approx. 250 Meetings and Presentations for the 2014 update



# Arkansas Department of Agriculture's Natural Resources Division and Arkansas Natural Resources Commission



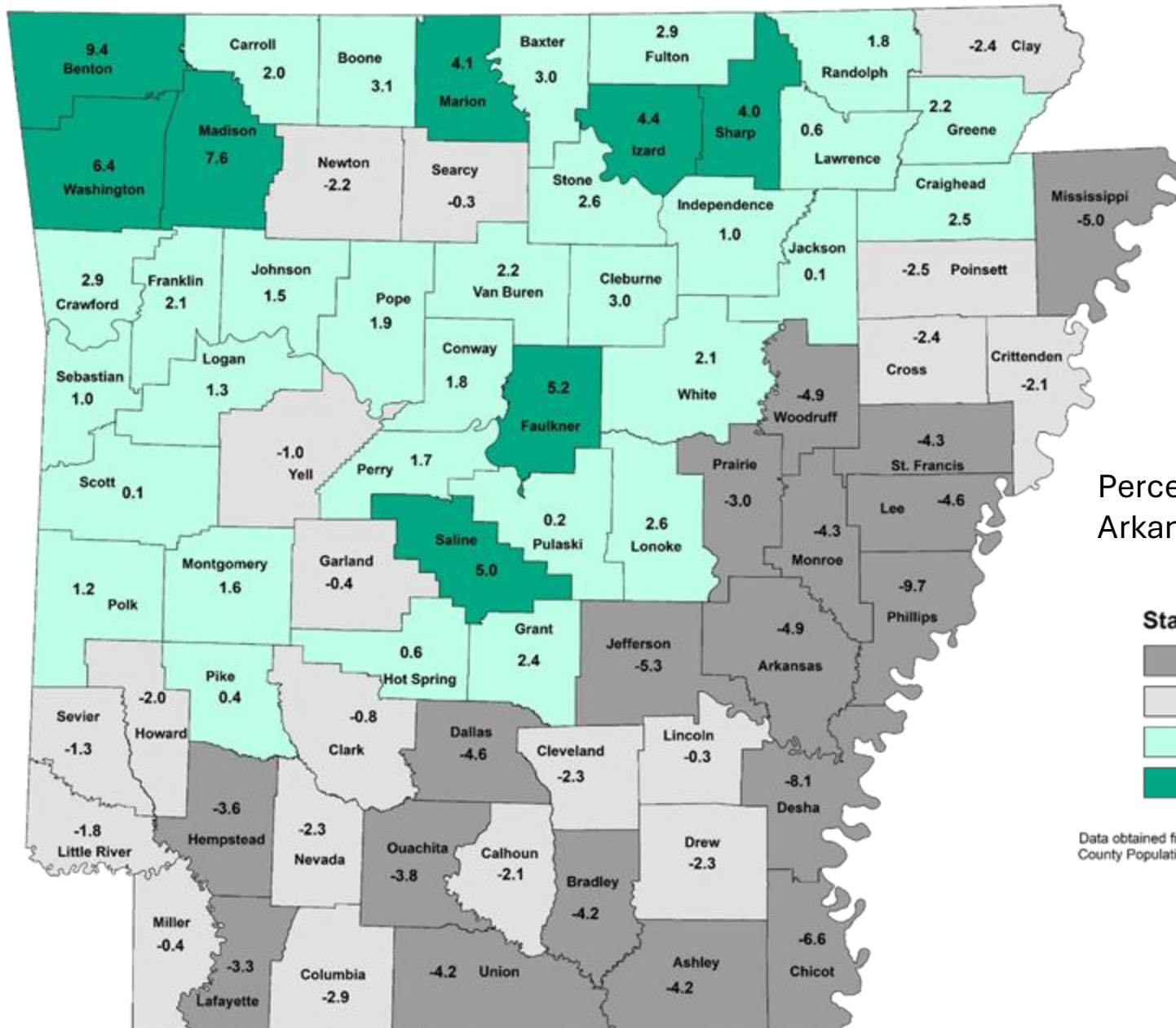
Governor Sander's Executive Order 23-27 directed the Arkansas Department of Agriculture and its Natural Resources Division to update the Arkansas Water Plan.

Pursuant to Ark. Code Ann. § 15-22- 503, The Arkansas Natural Resources Commission is responsible for the preparation and development of a comprehensive program for the orderly development and management of the state's water and related land resources (referred to as the "Arkansas Water Plan");

# 2024 Water Plan Goals

- Goal 1. Provide drinking water that supports public health and well-being.
- Goal 2. Provide water that supports environmental and economic benefits to the state and support interstate agreements.
- Goal 3. Use the best available science, data, tools, practices, and technologies to support water resource planning and management for current and future needs.
- Goal 4. Maintain and improve water supply, wastewater, stormwater, and flood control infrastructure and plan for future infrastructure needs.
- Goal 5. Maintain, protect, and improve water quality to support designated uses of waterbodies.
- Goal 6. Reduce the impacts of future flooding events on people, property, infrastructure, industry, agriculture, and the environment.





Percent Change in Total Population;  
Arkansas by County 2020 -2023

Data obtained from United States Census Bureau,  
County Population Totals Components of Change:  
2020-2023





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**nwa** Northwest  
Arkansas  
Council



Beaver **Water** District

# Steering Committee Kickoff Meeting



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# Regionalization Success in Arkansas

- Beaver Water District
- Northwest Arkansas Conservation Authority
- Razorback Greenway
- Central Arkansas Water
- Grand Prairie Regional Distribution District
- Benton/Washington Regional Public Water Authority



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# Most States Surrounding Arkansas Have Already Adopted a Regional Approach to Wastewater Management



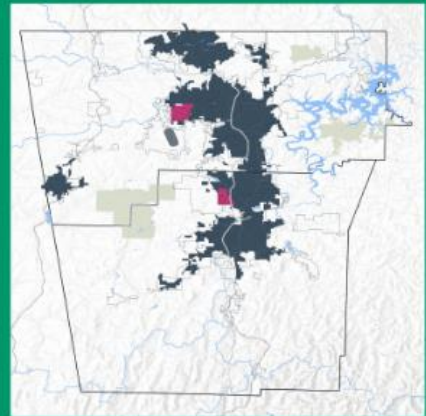


# Planning for Growth: A Regional Wastewater Strategy for Future Development Growth & Demand Projections

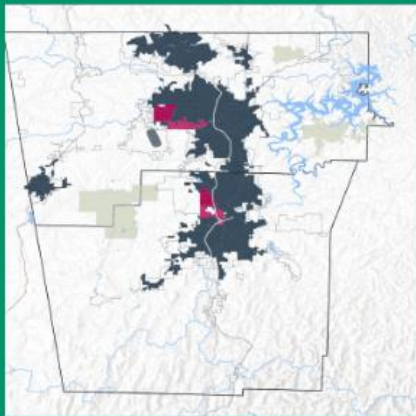
DPZ  
CODESIGN

- HW will collaborate with DPZ CoDesign and incorporate other planning & development studies for growth projections.
- HW will translate growth projections into phased wastewater collection & treatment needs.

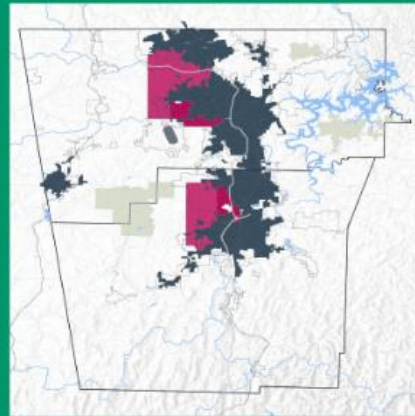
Source: Northwest Arkansas Council



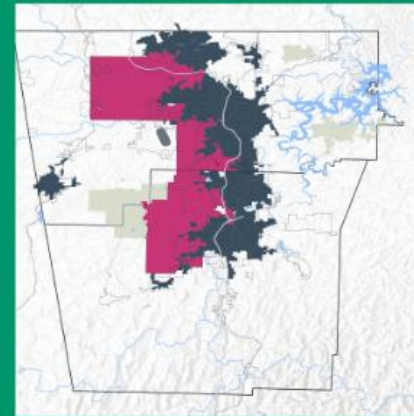
2025



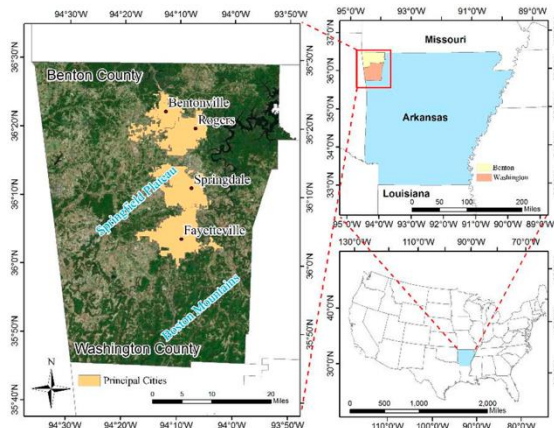
2026



2034



2050



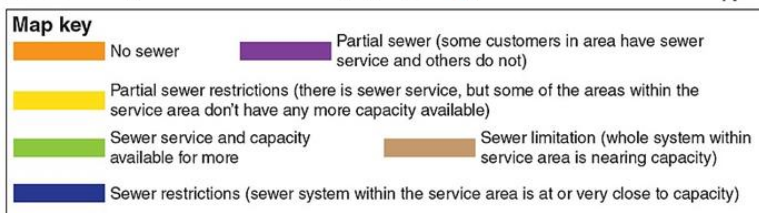
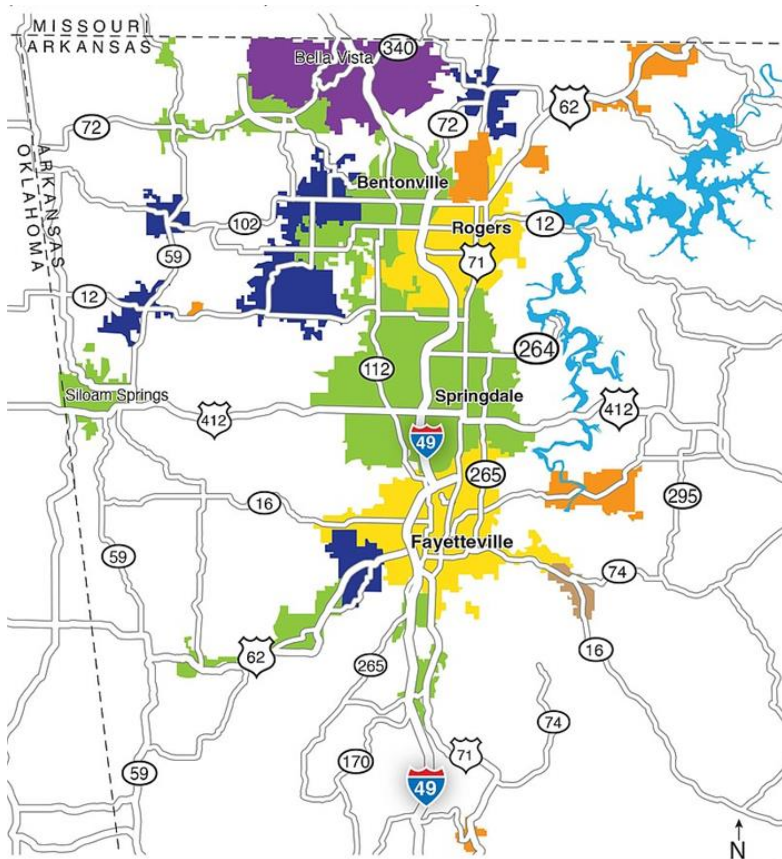
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# Planning for Growth: A Regional Wastewater Strategy for Future Development

## Wastewater Service Provider Inventory & Benchmarking



Source: Arkansas Department of Health

NWA Democrat-Gazette/Chris Swindle

- 41 Wastewater treatment facilities in 3 county region
  - 15 Municipal WWTPs
- > 91 MGD combined treatment capacity
- 4 WWTPs comprise > 70% of the region's combined treatment capacity
- Approximately 80% of the WWTPs are minor facilities (<1 MGD)
- More than 75% of municipal WWTPs are subject to a Consent Administrative Order (CAO) with ADEE
- Majority of existing WWTPs are overloaded & require immediate capacity expansion



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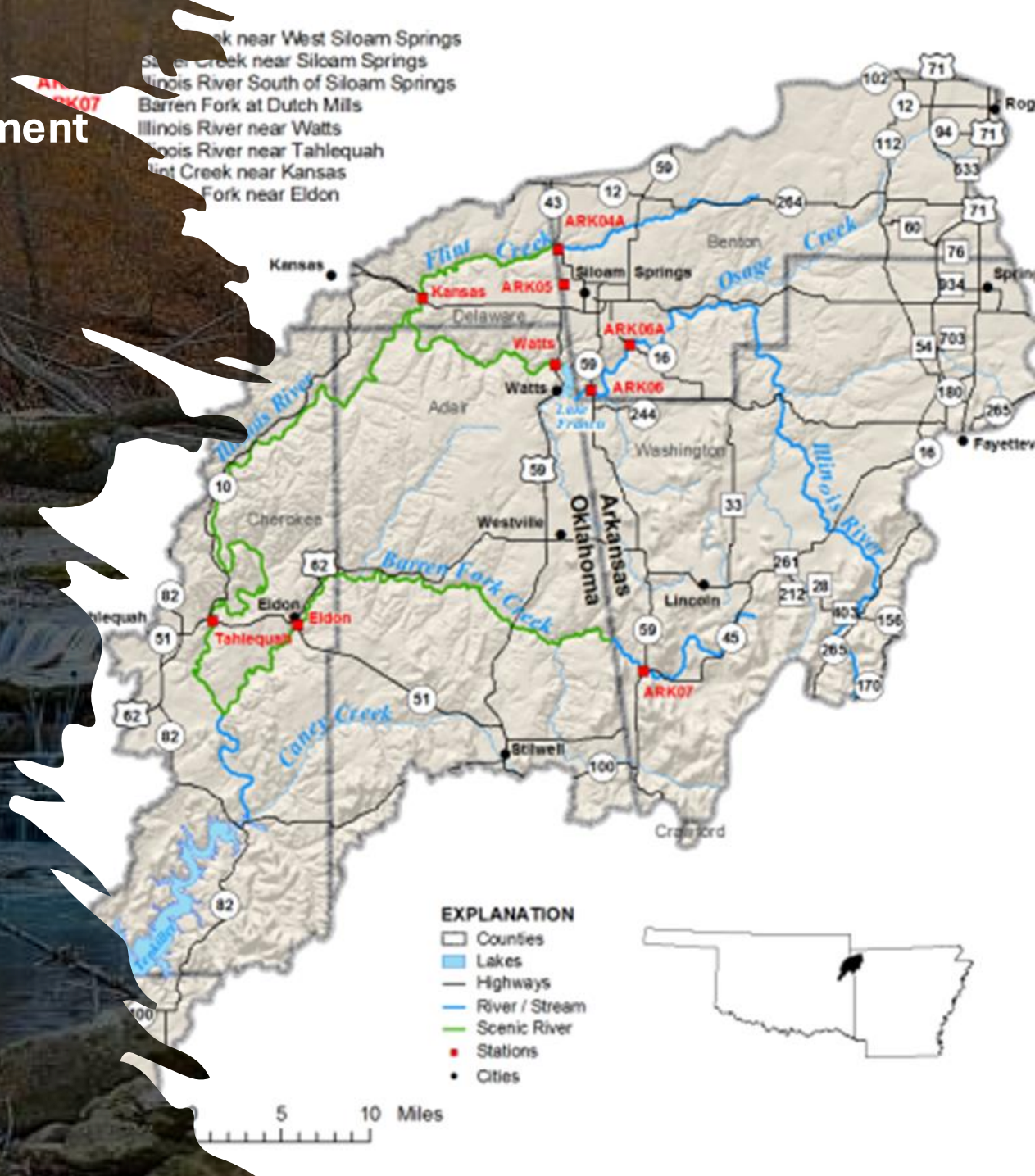
\* Based on max month flow exceeding 80% of plant capacity





# Planning for Growth: A Regional Wastewater Strategy for Future Development Environmental Impacts

- Public Health
- Protection of Region's Natural Resources
- Drinking Water – Source Water Quality & Quantity
- Arkansas-Oklahoma Arkansas River Basin Compact
- Source Water Impacts
- Alignment with Arkansas Water Plan





# Planning for Growth: A Regional Wastewater Strategy for Future Development Phased Approach

**Phase I – Development:** Develop an ideal, regionally optimized plan for wastewater infrastructure in the three-county region

**Phase II – Engagement:** Conduct stakeholder meetings and public presentations to communicate the region's wastewater infrastructure priorities and outline the proposed strategy and solicit feedback.

**Phase III – Implementation:** Update development phase recommendations based on feedback received during the Engagement Phase. Conduct a detailed financial analysis to assess the cost of the recommended improvements, identify value engineering options to maximize cost effectiveness, identify funding strategies, and establish a phased implementation plan.

Create Master Plan Document – 12 Months

Effectively Communicate Plan to All Stakeholders and Solicit Feedback ≈ 3 Months

Finalize Strategy Documents Accepted by Stakeholder Majority – 3 Months



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