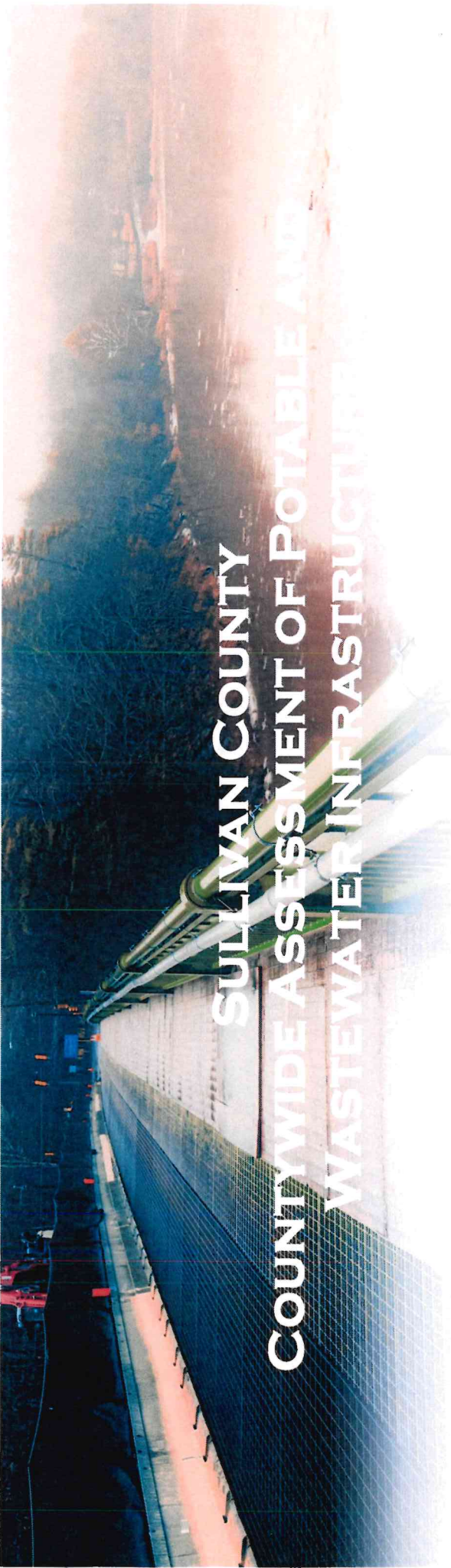




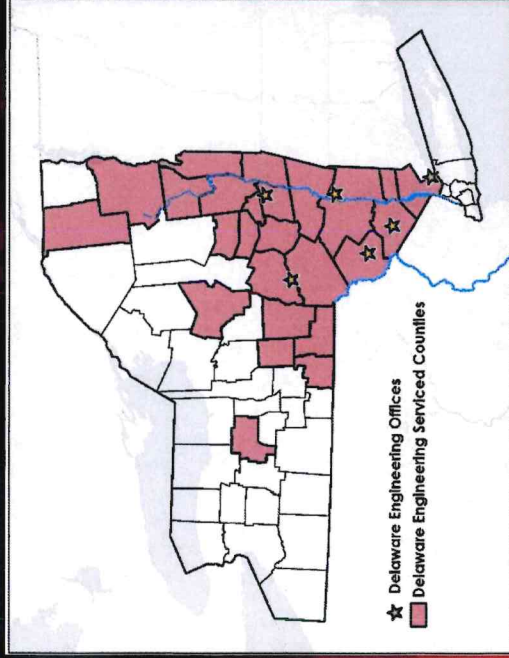
SULLIVAN COUNTY COUNTYWIDE ASSESSMENT OF POTABLE AND WASTEWATER INFRASTRUCTURE

Presented by
DELAWARE ENGINEERING, D.P.C.
Sullivan County Legislature
Planning and Community Resources Committee
May 7, 2026



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PROVIDING
COMPREHENSIVE
SERVICES
THROUGHOUT
NEW YORK STATE
SINCE 1987



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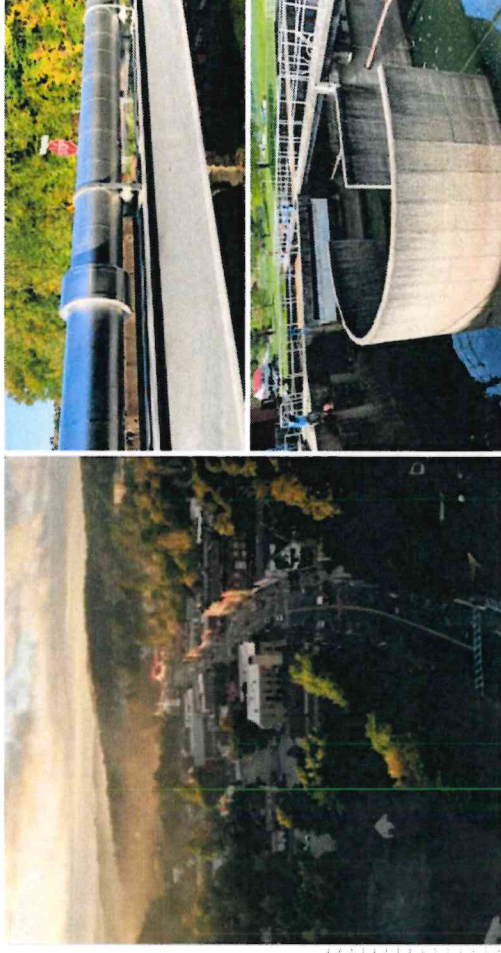
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Albany | Oneonta | Monticello | Goshen | Red Hook | Port Chester

Potable and Process Water
Wastewater Collection and Treatment
Stormwater Management
Hydraulic Modeling
Community Planning
Economic Development Analysis
Geographic Information Systems
Environmental Studies
Permitting and SEQR/NEPA
Public Infrastructure Grant Writing
Public and Industrial Buildings
Construction Engineering and Inspection

PURPOSE AND NEED

- Address aging infrastructure, regulatory compliance, and growth pressure
- Assist County municipalities with centralized collection of water and sewer system data
 - County and local planning springboard
 - Decision tool for prioritizing investment
 - Catalyze capital project grants and low-cost financing
 - Foster appropriate economic investment



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METHODOLOGY AND APPROACH

- **Data Collection**
 - *Checklist* – permits, engineering reports, record plans, operational records, district boundaries, regulatory orders, budgets, etc.
 - *Web and public data search* – GIS datasets, real property data, water withdrawal & SPDES permits, local websites
 - *Interviews with officials* – In-person and remote conversations with, depending on municipality, elected and appointed leadership, municipal engineers, contract operators
- **Evaluation and Analysis**
 - Reviewed for aging infrastructure
 - Regulatory compliance, and likely future regulatory requirements,
 - System sustainability
 - Permitted capacity and demands
 - Potable water sources and distribution
 - Sanitary sewer conveyance and treatment
 - Gap Analysis
- **Recommendations**



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GAP ANALYSIS

Level I

Basic understanding of:

- Geographic extent of service,
- Number of users,
- Amount of water supplied and adherence water quality standards

Level II

More precise understanding of:

- System extent, components, and financial status
- Location and type of infrastructure
- Ability to fund capital projects

Level III

Detailed understanding of system operating parameters, such as:

- Production from water sources
- Factors contributing to conformance to water quality standards
- Basis of design of system components and alternative designs evaluated

- More precise understanding of cost to provide service

Level IV

Comprehensive, precise understanding of:

- All system components
- System operational characteristics
- Factors contributing to regulatory compliance
- Cost to provide service



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GAP ANALYSIS



Level I

Level II

Level III

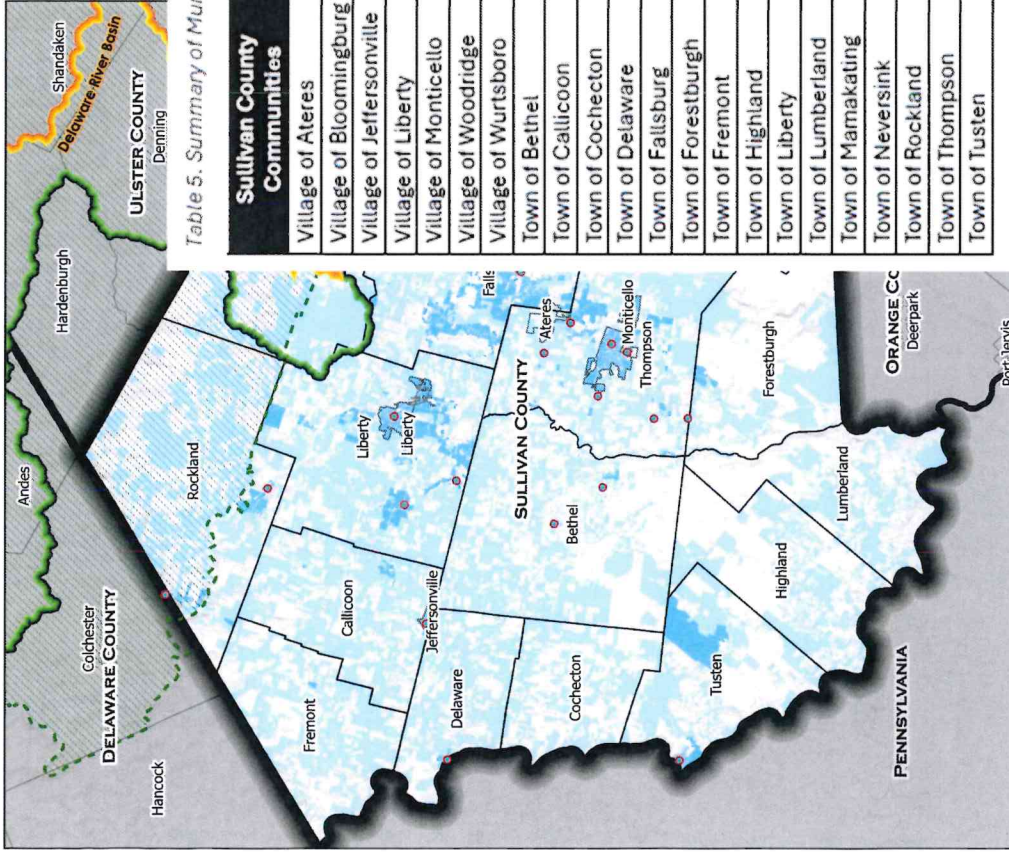
Level IV

- In summary:

- For all municipalities, fundamental aspects of the systems were available and reviewed.
- However, information available did not permit consistent precise evaluation and analysis of system status and specific capital or operational needs.
- What these results mean:
 - Available capacity was not assessed (neither at the system nor component levels).
 - Information available was not supportive of Countywide capital project recommendations.
 - However, broad categories of capital projects are identified and included in Volume 1 of the report.



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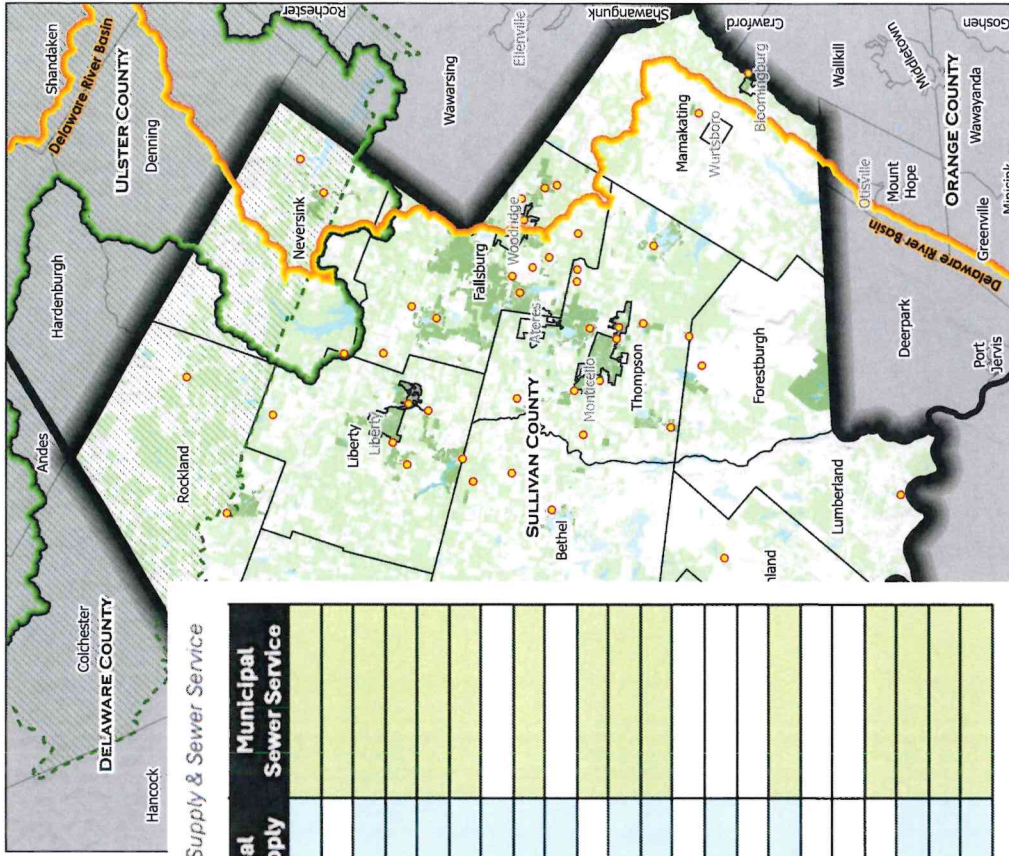


WATER WITHDRAWALS BY PARCEL
SULLIVAN COUNTY, NEW YORK

Prepared by: Delaware Engineering, P.C.
 Date: December 2025
 Source: Sullivan County, NYDEC

WITHDRAWAL PERMIT
 NYC WATERSHED
 DELAWARE RIVER BASIN
 PUBLIC WATER AREAS
 PRIVATE WATER AREAS
 CATSKILL PARK

0 2.5 5 10 Miles



WASTEWATER DISCHARGE BY PARCEL
SULLIVAN COUNTY, NEW YORK

Prepared by: Delaware Engineering, P.C.
 Date: October 2024
 Source: Sullivan County, NYDEC

SPDES PERMITS
 NYC WATERSHED
 DELAWARE RIVER BASIN
 PUBLIC SEWER AREAS
 PRIVATE SEWER AREAS
 CATSKILL PARK

0 2.5 5 10 Miles

Table 5. Summary of Municipal Water Supply & Sewer Service

Sullivan County Communities	Municipal Water Supply	Municipal Sewer Service
Village of Aterres		
Village of Bloomingburg		
Village of Jeffersonville		
Village of Liberty		
Village of Monticello		
Village of Woodridge		
Village of Wurtsboro		
Town of Bethel		
Town of Callicoon		
Town of Cochection		
Town of Delaware		
Town of Fallsburg		
Town of Forestburgh		
Town of Fremont		
Town of Highland		
Town of Liberty		
Town of Lumberland		
Town of Mamakating		
Town of Neversink		
Town of Rockland		
Town of Thompson		
Town of Tusten		

EVALUATION RESULTS: IDENTIFIED OPPORTUNITIES AND CHALLENGES

Water

Wastewater

- Opportunities**
- ✓ Proliferation of Decentralized Facilities
 - ✓ Intermunicipal Partnerships
 - ✓ Private Decentralized Systems
 - ✓ Interconnections
 - ✓ Growth and Development Pressures

- ✓ Proliferation of Decentralized Facilities
- ✓ Intermunicipal Partnerships
- ✓ Planning for Future Needs
- ✓ Interconnections
- ✓ Available Capacity

- Challenges**
- Known needed capital improvements
 - Proliferation of Decentralized Facilities
 - Available capacity
 - Small user base
 - Planning for Future Needs

- Proliferation of Decentralized Facilities
- Planning for Future Needs
- Cost of Capital Improvements
- Regulatory Compliance
- Growth and Development Pressures



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RECOMMENDATIONS

Context:

- County does not own infrastructure or have land use authority
- Policy and programmatic
- Address shared needs, support of municipalities,
- Means to develop basic data
- Detailed in a series of standalone sheets



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- I. Water/Sewer Technical Assistance Program (WSTAP)
- II. Asset Inventory Support
- III. Water-Sewer GIS Platform
- IV. Inflow and Infiltration (I&I) Mitigation Support
- V. Financial Analysis and Rates Support
- VI. Income Survey Support
- VII. Water and Sewer System Modeling and Assessment Support
- VIII. Water and Sewer Needs Interface and Clearinghouse
- IX. Model Policy and Regulation Development
- X. Water and Sewer Communities Consortium
- XI. Shared Procurement Needs Support
- XII. Shared Services Support
- XIII. Water and Sewer in the Land Development Process Training
- XIV. Municipal Officials Land Use Process Onboarding

Action I: Water/Sewer Technical Assistance Program (WSTAP)

Development and implementation of a County-led program providing Grants of Technical Assistance

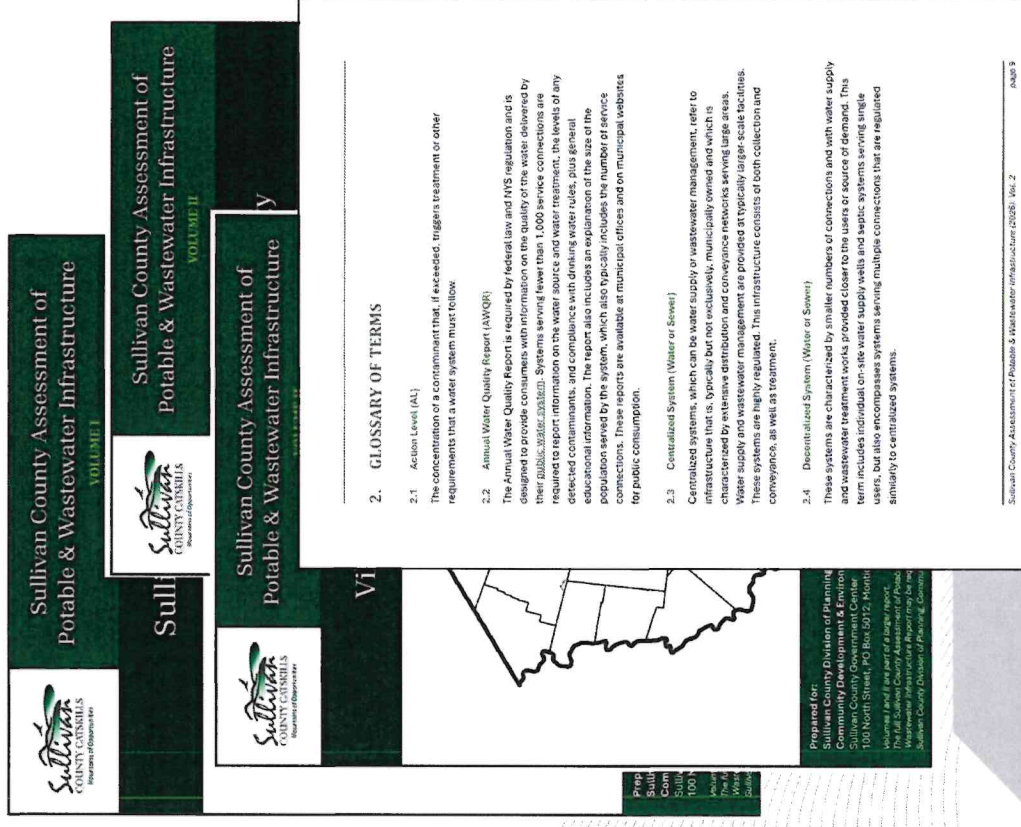
Objective: The program would address shared municipal needs for operating water and sewer systems, create economies of scale, and support municipalities in optimizing these essential services. It would also reinforce other CAPWI recommendations, serving as a cornerstone for meeting Countywide water and sewer needs.	Need: Municipalities that run water and sewer systems face similar challenges but often lack sufficient resources. The WSTAP would be a flexible, solicitation-based program requiring a local match (cash or in-kind) to help fill gaps in municipal capacity and advance priority projects.	Ongoing program evaluation and monitoring: emerging needs will be essential. Many of the priority actions noted here could be carried out under WSTAP, though not all would recur annually. The program model could also be adapted to other areas—such as land use planning or GIS—where DPEM or other County units are positioned to offer support.
Administration: County staff would manage applications, oversee projects, and handle consultant or vendor procurement. Municipalities would submit applications, designate project leads, support implementation, and contribute a reasonable match. Applications should provide enough information for the County to properly scope assistance.		
Implementation Lead:	Division of Planning, Community Development, and Environmental Management (DPEM)	
Partner(s):	Department of Grants Administration	
Timeframe:	Initial: 9 months to develop, resource, and promote program Subsequent: Annually thereafter	
Implementation Steps	• Program Development • Budgeting and Staffing • Scope of Work Development • Consultant Procurement and Oversight	Many of the priority actions noted here could be carried out under WSTAP, though not all would recur annually. The program model could also be adapted to other areas—such as land use planning or GIS—where DPEM or other County units are positioned to offer support.
Action Plan:	1. Identify program development team. 2. Develop program foundation. Program elements would include determining: Eligibility criteria; application process; budget; outreach and engagement plan; annual and/or rolling grant/solicitation cycle; match requirements; level of effort (e.g., max. hours and/or funding) per grant of assistance/project; procurement protocol and needs; and program evaluation. 3. Identify staff lead and/or needed staff resources. 4. For first grant cycle, determine type(s) of assistance to offer and customize program parameters based on type(s) of assistance (e.g., create application forms, eligibility criteria, deadlines/schedules, outreach/solicitation materials, etc.). 5. Submit budget request and implement.	
Funding Options:	Local or county funds; local match	
Resources:	Example program: https://cdripc.org/programs/technical-assistance; see also Attachment 1, which can form a basis for providing technical assistance to municipalities with respect to regulation of so-called “package plants”	

REPORT FORMAT AND AVAILABILITY

- Volume 1: County-level recommendations
- Volume 2: Individual municipal summaries and dataset available as either:
 - A compilation, as one document, or
 - 22 individual municipal summary documents
- Volume 2 also contains Glossary of Key Terms
- Persistent link from County website



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QUESTIONS?



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