EXECUTIVE SUMMARY

NVCOG WASTEWATER REGIONALIZATION STUDY – PHASE 1

Through a grant award from the CT Office of Policy and Management (OPM), the Naugatuck Valley Council of Governments (NVCOG) has been working with five of its member communities, Derby, Ansonia, Seymour, Beacon Falls and Naugatuck to assess opportunities for regionalizing their wastewater collection and treatment infrastructure. Regionalization has the potential to reduce wastewater system costs and improve efficiencies by:

- Reducing duplication of costly infrastructure and sharing of facilities. This would be accomplished by physically connecting wastewater collection systems of the communities and by reducing the number of wastewater treatment plants (WWTPs) currently in service.
- Sharing administrative and operational systems. This could involve a centralized authority to manage operations and provide wastewater treatment service to the participating communities.

PHASE 1 FINDINGS

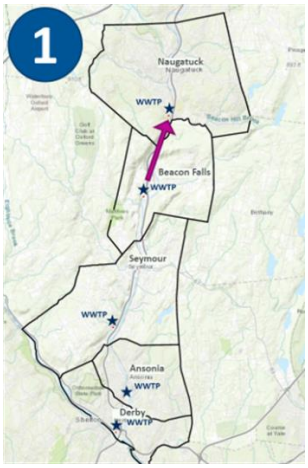
With the completion of Phase 1, the most significant findings are described below:

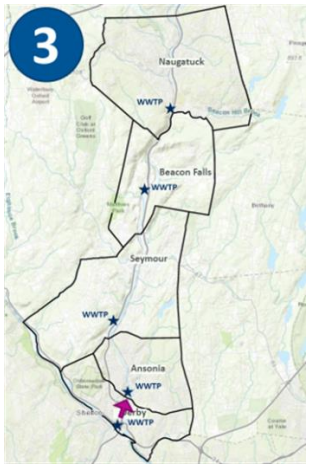
- There are extensive needs for the rehabilitation of wastewater infrastructure in the five study communities. More specifically and common to the five communities, the upkeep of the wastewater collection systems has been deferred for years. In addition, the WWTPs in four of the communities are facing significant upgrade and renewal needs. For example, Derby's plant has not had a major upgrade in approximately 40 years, and it has been nearly 30 years since a major upgrade was undertaken at Seymour's plant. At least two of the communities are under CT DEEP order, and one community is also under US EPA order.
- Planning level capital costs for the rehabilitation of wastewater infrastructure for the five communities is summarized in the following table. The projected capital cost to renew and upgrade the five treatment plants is nearly $200 million dollars. An additional $50 to $60 million dollars is needed for the collection systems. These costs represent the current scenario, or "base case" for this study, where each of the five communities has its own WWTP and related collection system. Total capital cost for the WWTPs and collection systems is more than $250M. These costs do not include the annual costs to manage, operate and maintain the systems, which has been estimated to be $15M per year collectively.

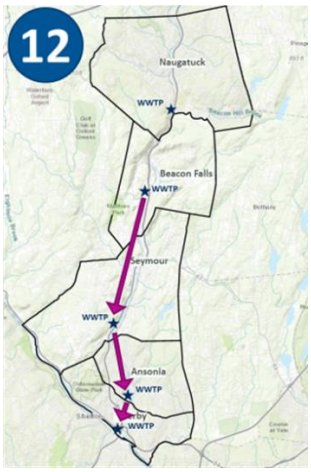
Projected 20-Year Wastewater Expenditures, Baseline Case (No Regionalization)

	Derby	Ansonia	Seymour	Beacon Falls	Naugatuck	**TOTAL**
Water Pollution Control Facility	$70.0M	$15.0M	$40.0M	$14.0M	$55.0M	$194.0M
Collection System	$8.0M	$10.3M	$8.5M	$3.1M	$ 18.5M	$48.4M
Large Pumping Stations	$4.2M	$3.0M	$2.0M	$0.5M	$1.0M	$10.7M
TOTAL	$82.2M	$28.3M	$50.5M	$17.6M	$74.5M	$253.1M

- Through an initial development and screening analysis, Phase 1 identified 12 regional wastewater system alternatives. Some examples shown below include: sending Beacon Falls flow to Naugatuck; sending all Derby flow to Ansonia; or sending all flow from Beacon Falls, Seymour and Ansonia to Derby. The figures below graphically depict these three regional examples, with all Phase 1 alternatives clearly demonstrating that numerous options exist for wastewater regionalization involving the five communities.







Phase 2 of this study will employ a "screening-out" evaluation of the 12 regional alternatives from Phase 1 where the least promising alternatives will be eliminated. The resulting "short list" of regional alternatives will be developed further, technically and cost-wise, and then compared to the base case where each community acts individually to meet their wastewater infrastructure needs. Finally, the ultimate goal of Phase 2 is to present a preferred alternative which would determine whether wastewater regionalization is viable in the Naugatuck Valley.

NEXT STEPS

While the Phase 1 effort indicates that wastewater system regionalization appears promising for the five communities, there is a need for significant work in Phase 2 to verify this initial assertion. During Phase 2, a detailed condition assessment of the treatment plants needs to be undertaken; and targeted flow monitoring may also be conducted within certain parts of the collection systems. This work will better define flows, infiltration/inflow (I/I) contribution, costs, schedule, and environmental and permitting requirements. Phase 2 is intended to provide a more complete understanding of the communities' infrastructure needs, the associated capital and operational costs, and the potential for impacts on the environment.

Under Phase 2 of this study, NVCOG and its consultant would work in partnership with the Department of Energy and Environmental Protection (DEEP), who is ultimately responsible for ensuring compliance with the Connecticut Environmental Policy Act (CEPA). The CEPA process begins with a 30-day Notice of Public Scoping in the Environmental Monitor and provides the public with an opportunity to help inform and refine the analysis of alternatives to be evaluated in a more detailed study, known as an Environmental Impact Evaluation (EIE). The resulting "short list" of regional alternatives will be further refined in the EIE, technically and cost-wise, and then compared to the base case (a.k.a. "no-build" alternative) where each community is presumed to act individually to meet their wastewater infrastructure needs.

Once a draft EIE has been published, there will be a 45-day public review and comment period. DEEP, working with NVCOG and its consultant, will review all comments received, prepare responses to substantive comments, modify the EIE as appropriate, and then prepare a Record of Decision for submittal to the Office of Policy and Management (OPM). OPM must then review all documents submitted and determine whether or not the EIE was adequately prepared.