#### Coventry Wastewater Facilities Plan Update

Presented by: Kent Nichols & Tim DeGuglielmo, Weston & Sampson

October 16, 2017

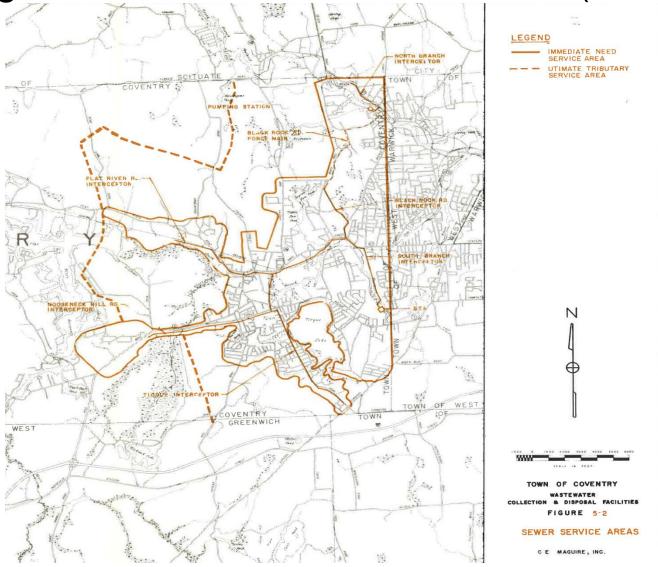


### Facility Plan Introduction

- Facility Plan (FP) to be updated every 5-years for a 20-year future planning period.
  - Last Update in 2016.
- Original Wastewater Studies began in late 1960s to early 1970s
- History of this Facility Plan
  - 1995 Facilities Plan
  - 2003 Facilities Plan Reaffirmation
  - 2010 Facilities Plan Update
  - 2016 Facilities Plan Update
- Approved FP is required to be eligible for the SRF program.



#### Original Town Sewer Service Areas (1977)





.....

.....

## Existing Town Planning Areas (2016) AG AC Tiogue Lake Ν-



......

# Changes Included in the 2016 FP Update

- Update/Confirm information from the previous FP document (2010 FP Update).
- Update Wastewater Flow Estimates for the 20-year Planning Period.
- Update the FP to include recently constructed and/or acquired sewer infrastructure.
  - Sewer Contract 6/6A (Lakeside Drive Area).
  - Sewer Contact 7/7A (Industrial Drive Area).
  - Woodland Manor System (Pump Station and Forcemain).
- Proposed utilization of additional capacity in the Woodland Manor System to include additional areas of need (i.e. Area N-1 – Nooseneck Hill Road/Mapleroot Village).
- Provide recommendations for the Town's wastewater system moving forward.

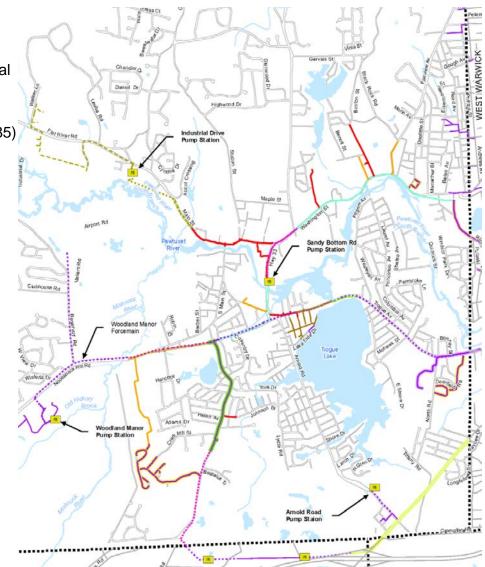
### Sewer Program Needs

- Planning areas were prioritized for the sewer program based on physical characteristics and OWTS limitations of the area(s).
  - Shallow groundwater
    - OWTS systems in high groundwater have increased chance of causing groundwater pollution from leach field effluent.
  - Shallow bedrock
    - OWTS systems in areas with shallow bedrock do not allow the proper depth of soil for filtering/treatment of leach field effluent.
  - Steep ground slopes
    - OWTS leach field construction/reconstruction and layout difficult in steeper sloped areas.
  - Soil Suitability
    - Soil's ability to absorb and filter leach field effluent.
  - Lot sizes
    - Smaller lot sizes make the construction of new and replacement OWTS layout difficult.
  - Distance to surface water(s)
    - Close proximity to a surface water increase the likelihood of direct discharges from a failing OWTS system
    - Flooding concerns.



#### History

- <u>History of Existing Sewer System</u>
  - New London Turnpike Sewer (early 1980s)
  - Broad Street Sewers (Harris)
  - Woodland Manor PS and FM (~1980)
  - Arnold Road Pumping Station and Force Main (Cal Chemical, ~1985)
  - North Road Terrace Sewers (CHA, ~1985)
  - North Branch Interceptor Sewer (Victor Elec.~1985)
  - Hopkins Hill Road Sewer (1989-1991)
  - Contracts 03-01 & 03-02 (2004)
    - Tiogue Ave & Washington St Areas and Sandy Bottom Rd PS
  - Contract 03-03 (2006)
    - Hopkins Hill Rd FM
  - Contract 4 (2007)
    - Tiogue Ave/Anthony St/ Fairview Ave/Ramblewood Estates
  - Contract 5 (2008)
    - Main St/Contentment Dr/Boston St Areas
  - Contract 2008A (2008)
    - Johnson Blvd
  - Contract 6/6A (2012)
    - Lakeside Drive Areas
  - Contract 7/7A (2014)
    - Industrial Drive Areas
  - Arnold Road
    - Northern Arnold Road (2016-17)
    - Southern Arnold Road (2017)





#### Sewer Program

- Northern Arnold Road
  - Extension of the existing Contract 6 Lakeside Drive Project.
  - Served properties adjacent to Tiogue Lake.
  - Provided a discharge point for the proposed future Briar Point Area forcemain.
  - Fast tracked installation to be completed before final overlay of Arnold Road
- Southern Arnold Road
  - Dry gravity/low pressure lines installed as part of the service area for the future Briar Point area sewers.
  - Will become active once the Briar Point area is constructed.
  - Fast tracked installation to be completed before final overlay of Arnold Road.



## Existing Town Planning Areas (2016) AG AC Tiogue Lake Ν-



......

### Questions

#### westonandsampson.com

