



Suffolk County Department of Public Works Sewer District No. 3 – Southwest Sewer District Service Area Expansion Project



Dvirka & Bartilucci Consulting Engineers
Gannett Fleming Engineers, P.C.
LiRo Program & Construction Management, P.C.

 In association with
Cashin Associates, P.C.

Introductions

Elected Officials

Suffolk County Dept. of Public Works

Dvirka & Bartilucci / Gannett Fleming Engineers,
PC / LiRo Program & Construction Management
(Joint Venture)

Our Team



- **Dvirka & Bartilucci**

- Full service wastewater

- **Gannett Fleming**

- Full service wastewater
- GIS
- National experience

- **LiRo**

- Management
- Construction specialists
- Scheduling
- Cost estimating

- **Cashin Associates**

- SEQRA
- Public Education

- **Nova Consulting**

- Data gathering



Purpose of Meeting

Project Objectives

Project Approach

Study Criteria

Project Objectives

Five Study Areas - Deer Park, North Babylon, West Babylon, Wyandanch/Wheatley Heights, and West Islip



Vacant Commercial Space - Deer Park Avenue



Light industrial property - Deer Park area



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Single family home – West Islip



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Scope of Work

Task 1 – Public Education

Task 2 – Feasibility Report

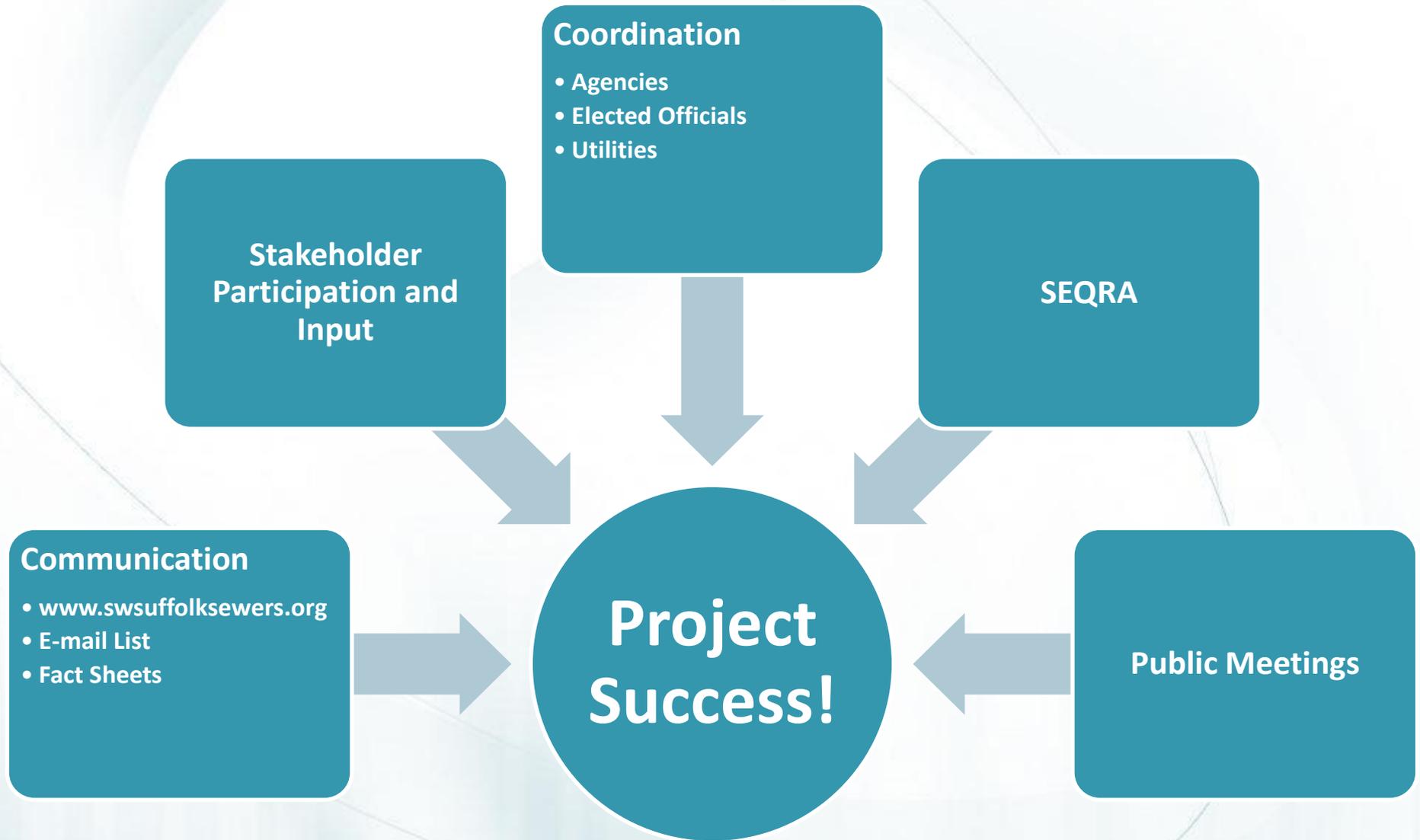
Task 3 – Environmental

Task 4 – Geographic Information System (GIS)

Task 5 – Project Administration

Task 6 - Deliverables

Task 1 - Public Education/Outreach



Task 2 - Feasibility Report

Data Collection and Review

- Meet with SCDPW, Towns of Babylon and Islip - ***Complete***
- Coordinate with GIS staff at SC, TOB and TOI - ***Complete***
- Review previous reports and data sources - ***Complete***

Establish Base Maps

- Topography - ***Complete***
- Groundwater Contours - ***Complete***
- GIS / parcel data (18,098 parcels) - ***Complete***

Task 2 - Feasibility Report Approach

Estimate Present and Future Flows

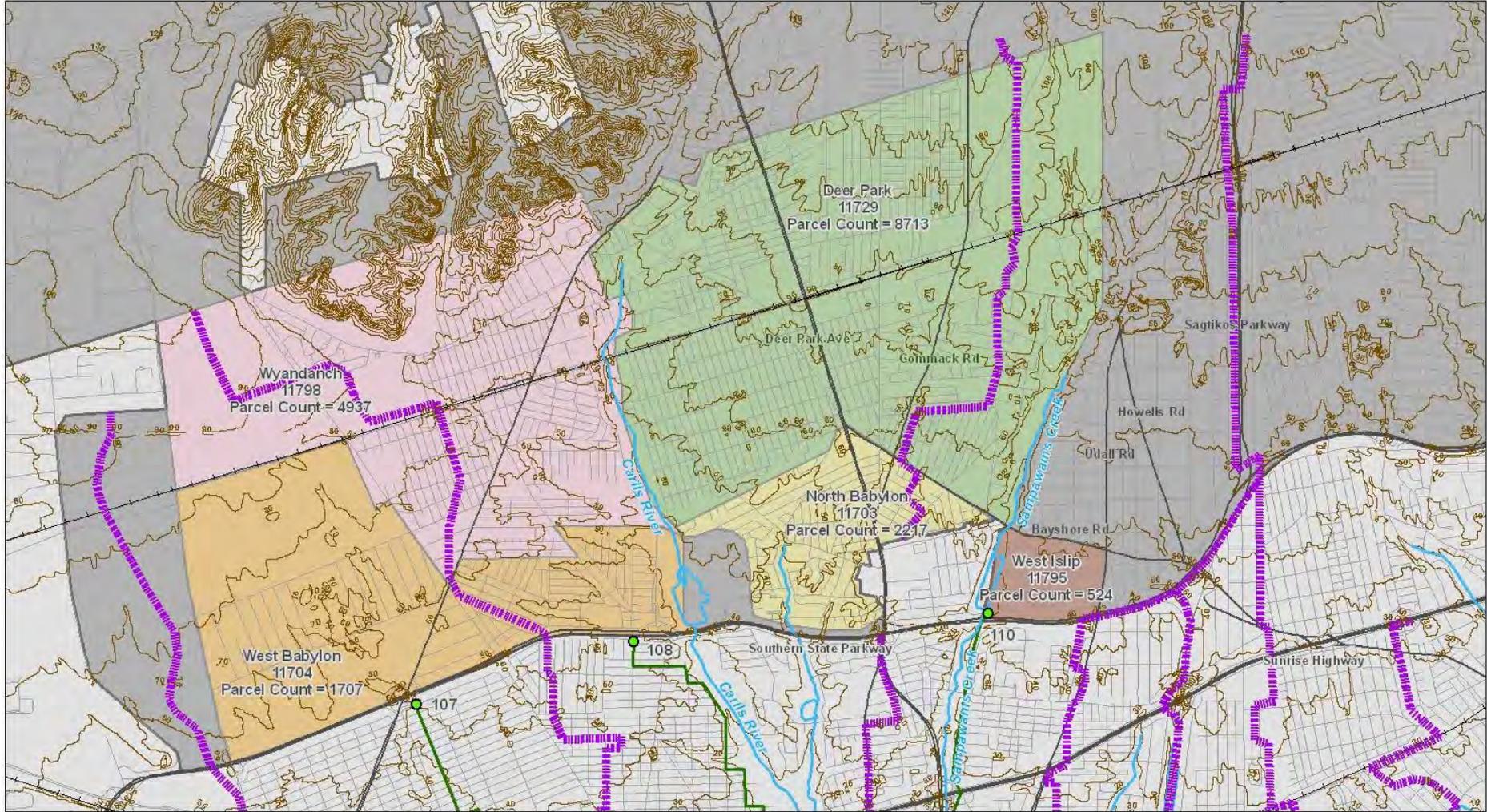
- Determine current land use and zoning - ***Complete***
- Estimate highest and best use of parcels – ***In progress***
- Estimate future build out and associated flows - ***In progress***
- Utilize recent SCWA water authority data (Winter 2010) - ***Complete***

Task 2 - Feasibility Report Approach

Evaluate Design Options

- Gravity System with Pumping Stations
- Deeper vs. shallow with more pumping stations
- Phased construction strategy
- Pressure systems
- Enhanced on-site systems
- More frequent maintenance

Task 2 - Feasibility Report

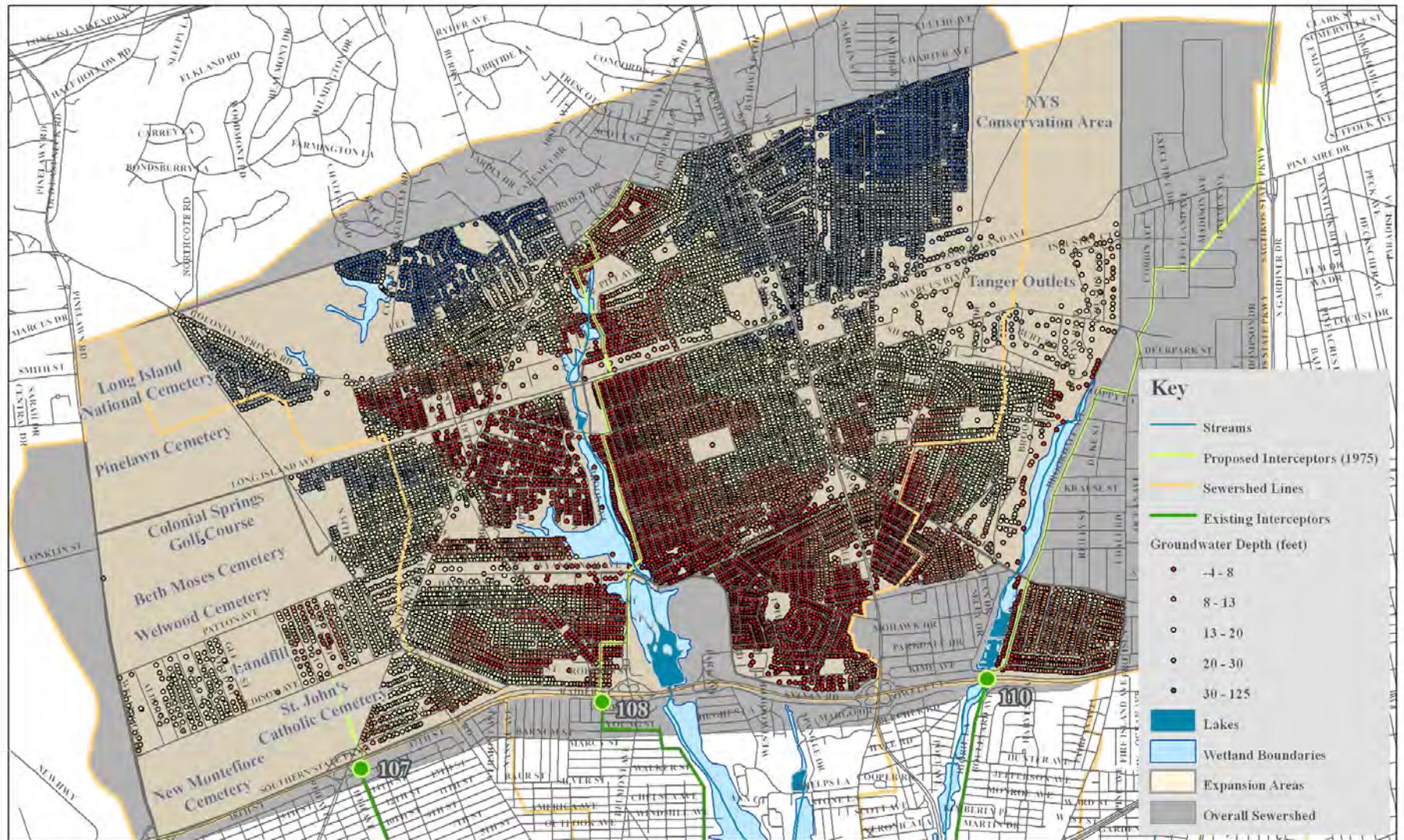


Southwest Sewer District No. 3 Overall Study Area

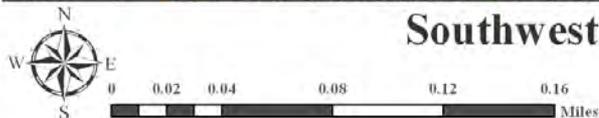
-  Drainage Basin Limits
-  Interceptors



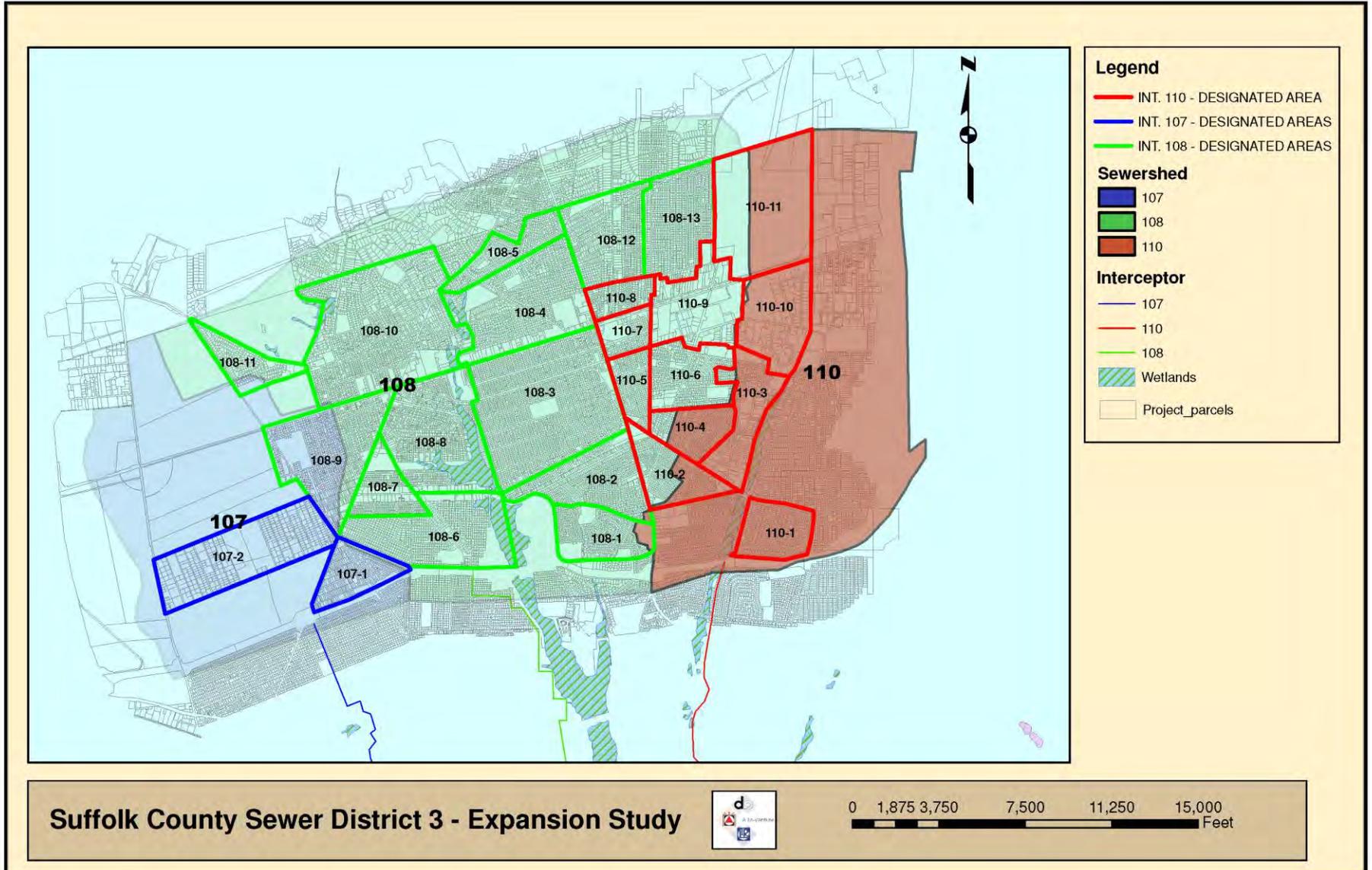
Task 2 - Feasibility Report



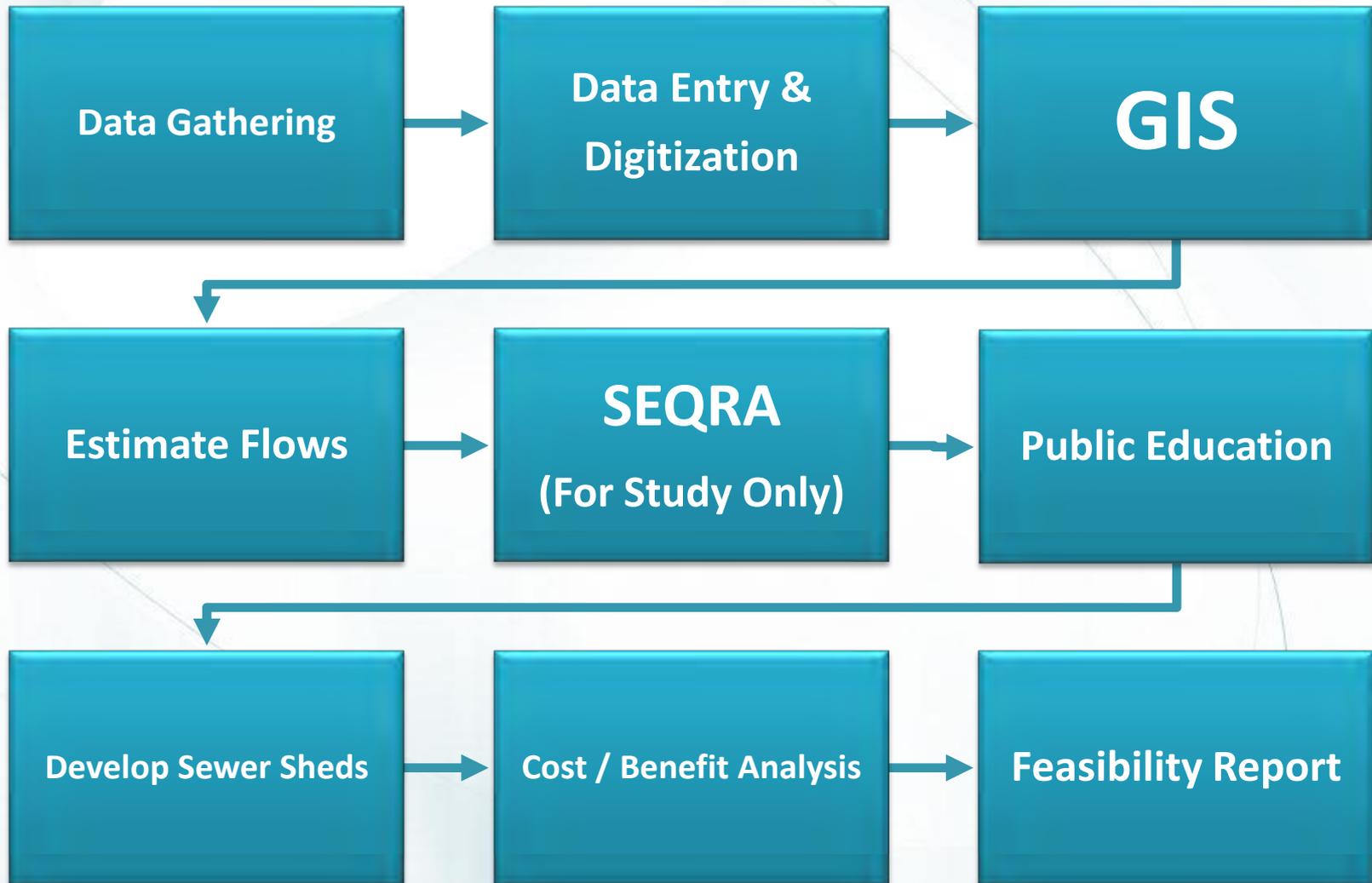
**Southwest Sewer District No. 3 - Overall Study Area
with Groundwater Depth**



Task 2 - Feasibility Report



Project Approach



Task 3 – Environmental Tasks

SEQRA Process to date

- Gathered background information
 - Study area is 9,461 acres or about 15 square miles
 - 18,098 parcels
 - Population about 100,000
 - Identified environmentally sensitive areas
 - Identified potential impacts

Suffolk County CEQ

- Submitted full EAF form for the Study to CEQ for review on November 1, 2011
- CEQ Review during meeting of November 16, 2011
 - Type II Action approved by CEQ

Task 4 – Geographic Information System

Use GIS Sources to Establish Baseline

- Zoning / Land Use / Parcel Data – *Complete*
- Topography and groundwater contours – *Complete*
- Sensitive Environmental Areas / Areas of Concern - *Complete*
- Parks, Schools, Religious Institutions, Open Space, Hospitals – *Complete*
- Use GIS to assist in the decision making process

Next Steps

Identify priority areas

- Downtown revitalization areas
- Industrial / commercial development areas
- Chronic on-site system problems
- Areas of environmental concern (groundwater / surface water)

Establish timeframe for follow up meeting

- Location and date

Project Schedule

Public Meeting #1 – February 16,
2012

Draft Feasibility Report – July 2012

Public Meeting #2 – July 2012

Final Feasibility Report – Early August
2012

Public Meeting #3 – Late August
2012

Economic Issues

Methodology for Cost Projections

- Utilize recent construction cost data templates and formulas
- Cost dependent on:
 - Depth, pipe diameter and length
 - Pumping stations
 - Groundwater depth (dewatering)
 - Environmental conditions (wetlands, adjacent areas)
 - Utility relocation
 - Land acquisition

Economic Issues

Potential Funding Alternatives

- USEPA Grants
- State Revolving Fund
- Downtown Revitalization Grants
- Privatized sewer district formation

Questions?