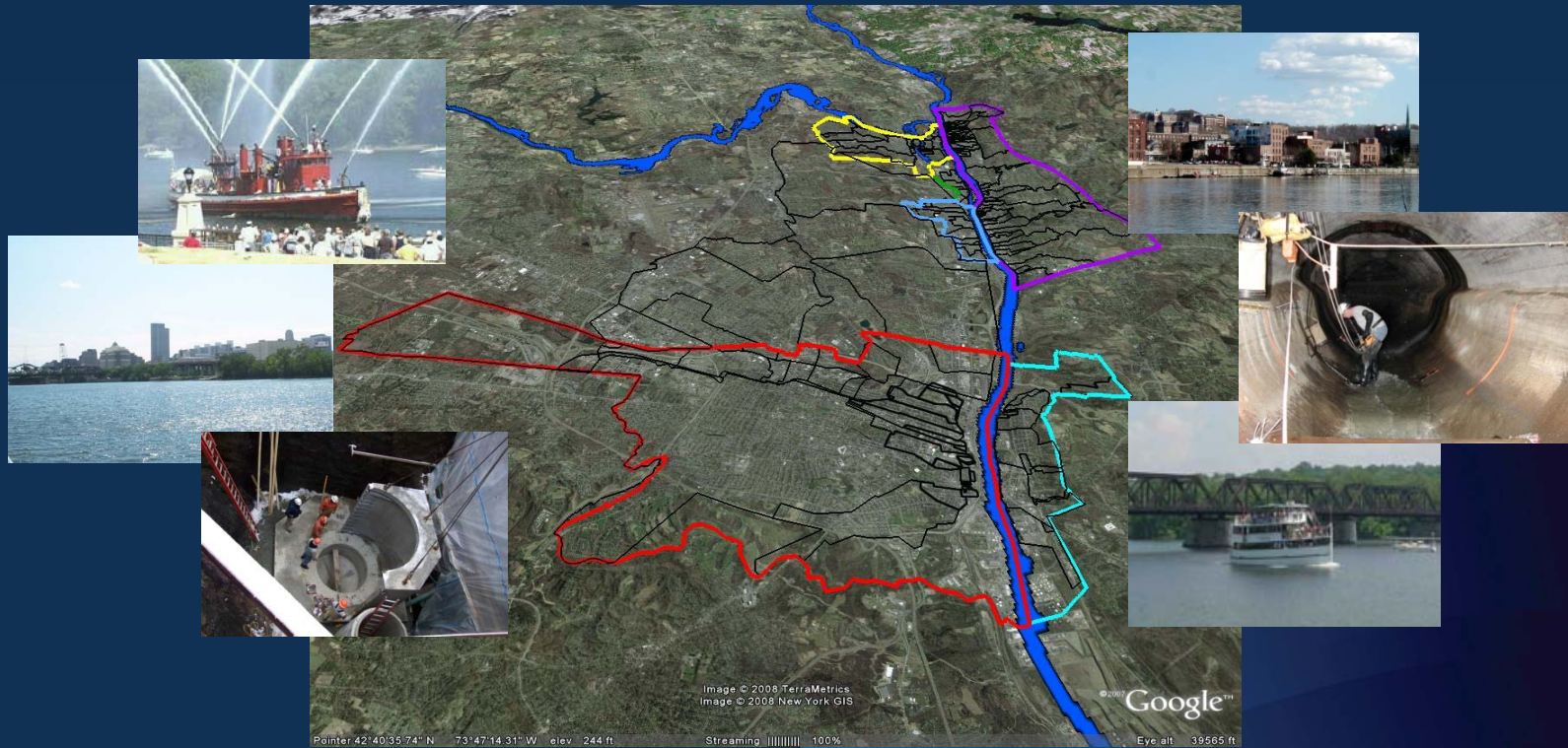


Albany Pool Combined Sewer System Long-Term Control Plan



Albany

Cohoes

Rensselaer

Troy

Watervliet

Green Island

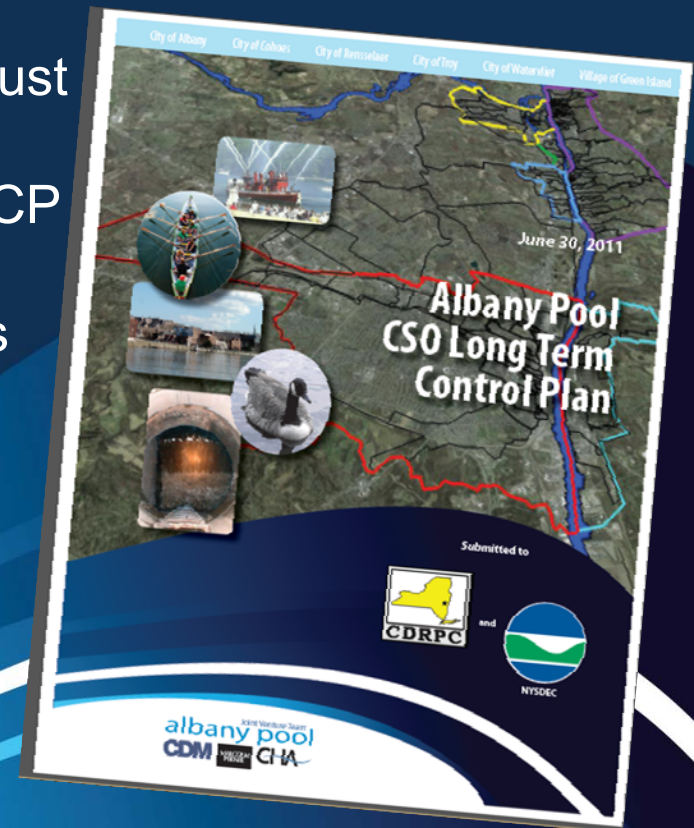


Coming Attractions

- Why do we need a Long Term Control Plan (LTCP)?
- Developing the Plan
- Projects and programs
- Order on Consent
- Mechanics of satisfying the LTCP & Order on Consent
- Roles and responsibilities

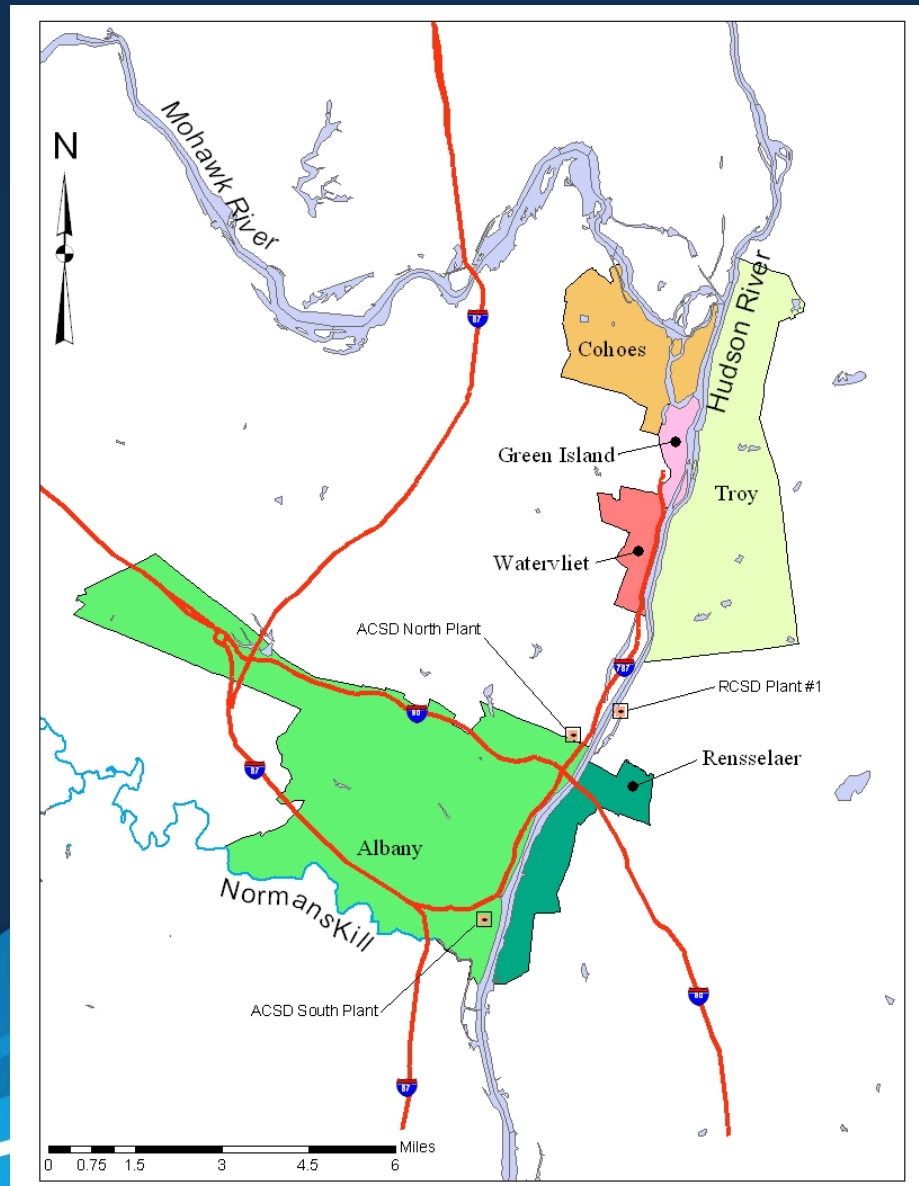
Why develop Long Term Control Plans?

- 1994 EPA CSO Control Policy
- 2000 Clean Water Act Amendment (Wet Weather Water Quality Act)
 - prohibit dry weather overflows
 - specify that impacts to the environment must be minimized
 - require creation & implementation of a LTCP
 - require public involvement in the process
 - permit phased approach to address CSOs
 - permit third party lawsuits



Defining Combined Sewer Systems

- **6 communities**
 - City of Albany
 - City of Cohoes
 - Village of Green Island
 - City of Rensselaer
 - City of Troy
 - City of Watervliet
- **92 discharge points**
- **2 sewer districts (Advisory role)**
 - Albany County Sewer District
 - Rensselaer County Sewer District



Benefits of Pooled Approach

- One Long Term Control Plan
- One study to establish baseline and one program to measure success
- One party to negotiate with DEC
- Each grant dollar benefits all in the Pool
- Shared cost of maintenance and planning

Receiving Waters Conditions Assessment (RWQ)

- Approximately a \$1M Program
- 15 dry weather sampling events
- 3 wet weather sampling events
- Sampling at 45 locations including
 - 10 river transects
 - 7 tributaries
 - 2 potential beach sites
 - 6 treatment plants



Albany

Cohoes

Rensselaer

Troy

Watervliet

Green Island

RWQ Modeling Conclusions

- CSO discharges does not preclude water quality standards attainment
- Bacteria standards will be met upon implementation of WWTP seasonal disinfection and improvements to headwaters and Patroon Creek
- Use **demonstrative approach** for evaluating CSO controls
 - No limit on number of overflows
 - Model to predict control outcomes
 - Post-construction monitoring
 - If water quality is not met, must design/build more controls**

Albany

Cohoes

Rensselaer

Troy

Watervliet

Green Island

Summary of CSO Statistics

Areas of Concern	Baseline	Post Construction of Recommended Projects
Untreated CSO Volume (Mgal)	1236	610
Number of Events	65	65
Wet Weather Flow Treated at WWTPs (Mgal)	2827	3453
Pool-Wide Percent Capture	69.5%	85%
CSO Flow Receiving Floatables Capture	27	454
Pool-Wide Treatment & Floatables Capture	70.1%	88.8%
Disinfection at WWTPs	No	Seasonal
Fecal Coliform WQ Standard Violations	30	0

Projects and Programs

•Disinfection Projects	\$9.66 million
•WWTP Process Improvements	\$3.62 million
•BMPs and System Optimization Projects	\$35.26 million
•Sewer Separation and Storage Projects	\$22.9 million
•Green Infrastructure Program	\$5.08 million
•Satellite Treatment and Floatables Control	\$55.87 million
•Tributary Enhancements	\$2.13 million
•Additional Pool-Wide Projects	\$2.01 million

Total cost of program: \$136.5m

Total cost Pool Projects: \$102m

NY CSO LTCP Program Cost Comparison

	Albany Pool Communities	Buffalo Sewer Authority	Onondaga County
Population (thousands)	180	Approx. 300	139
Service Area (sq. mi.)	80	110	100
CSO Area (sq. mi.)	22	43	11
Number of CSOs	92	59	63
Overflow Volume (Bgal/yr)	1.3	1.75	1.0
Compliance Costs (millions)	\$136M	\$350M	\$640M

Consent Order

- Resolves potential NYSDEC enforcement of alleged CSO violations by each Community.
- Requirement to form IMA within 1 year after Order is signed.
- Refers to LTCP and LTCP Supplemental Document.

Agreement with NYSDEC on terms of Consent Order reached on January 15, 2014.

Albany Pool IMA

- Agreement to pay percentage shares of LTCP Project Costs, including:
 - Planning, design, procurement, permitting, administration, implementation, construction, and post-construction inspection and approval;
 - Management, operation and maintenance of completed projects;
 - Region-wide projects, such as management and development of plans and manuals.
- Albany Pool MOA does not include:
 - Albany and Rensselaer County Sewer District Projects; or
 - Projects separately required by a Community's individual Consent Order.

IMA: Allocation Formula

- Weighted 85% by CSO Flow from each Community, 15% by Population (2010 Census).
- Percentage shares for each Community
 - Albany – 58.68%
 - Troy – 34.76%
 - **Cohoes – 2.74%**
 - Rensselaer – 2.13%
 - Watervliet – 1.16%
 - Green Island – 0.53%

Cohoes' Projects in LTCP*

Project Name	Plans & Specs	Completion	Estimated cost (Millions)
2011 Storm Sewer Improvements	<i>Completed prior to execution of the order</i>		\$1.51
Improvements at up to Eleven Regulators	10/1/2016	12/15/17	\$0.10
George St. Sewer Separation	10/1/2016	12/15/17	\$0.42
Middle Vliet St. Sewer Separation	10/1/2016	12/15/17	\$1.43
Columbia St. Phase II Separation	10/1/2021	12/15/22	\$1.00
Vliet St. Sewer Rehabilitation, Replacement & Separation	10/1/2021	12/15/23	\$1.93
Manor Ave. Sewer Rehabilitation, Replacement & Separation	10/1/2026	12/15/27	\$1.43
"Little C" Floatables Control Facility	10/1/2024	12/15/26	\$2.87
Total:			\$10.69m

***Does not include planning, legal, engineering oversight for projects that will take place in each and every community of Pool**

Cost Comparison

Year	Within LTCP	Outside LTCP
Estimated complete LTCP	\$102m	\$10.7m
Cohoes' Share	\$2.5m	\$10.7m

***Does not include planning, legal, engineering oversight for projects that will take place in each and every community of Pool**

LTCP Financial Costs for Next 3 Years

Year	Program Total*	Cohoes' Share*
2015	\$2,880,000	\$97,407
2016	\$3,570,000	\$116,313
2017	\$3,170,000	\$105,353
3-Year Total	\$9,620,000	\$319,073

*Includes planning, legal, engineering oversight for projects that will take place in each and every community of Pool

Local Development Corp. 501(c)3

Powers/Limitations:

- Governance structure will parallel IMA.
- Enter contracts for implementation of LTCP.
- Acquire property necessary to implement LTCP.
- Obtain loans, grants, or other funding.
- May issue bonds to fund implementation of LTCP, to be supported by member-guaranteed revenue, or by other means.
- Subject to FOIL, Open Meetings Law, Public Authorities Accountability Act of 2009; will adopt policies under PAAA/2009.

Next steps for the Albany Pool

- Continue to advance projects and programs including:
 - Research of Stormwater Credit and In-lieu-of-fee program
 - Research Green Infrastructure Technical Design Guidance
 - Regulator and Weir improvements to maximize flow to POTW
- Close on Environmental Facilities Corporation financing for Albany and Troy shares for next 3 years of the LTCP program
- Evaluate and implement credit program for past expenses

Questions and Comments

Martin Daley

Project Manager

Albany Pool Communities CSO Long Term Control
Plan

Capital District Regional Planning Commission

One Park Place, Suite 102

Albany, NY 12205

(518) 453-0850

mdaley@cdprc.org

www.cdrpc.org

