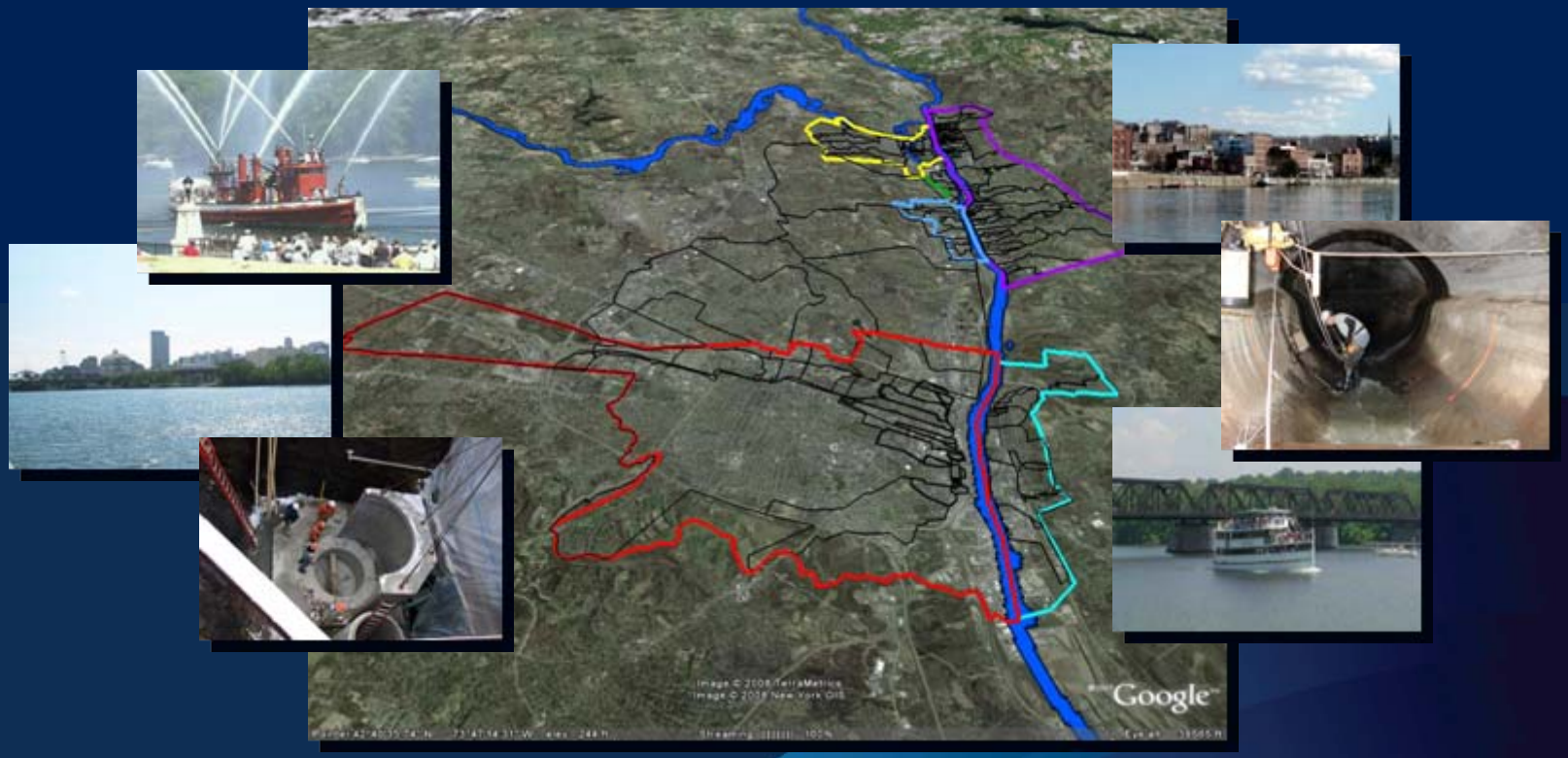
Albany Pool Combined Sewer System
Long-Term Control Plan Development



Citizen Advisory Committee Meeting
March 13, 2008

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Albany Cohoes Rensselaer Troy Watervliet Green Island

Agenda for March 13, 2008
Citizen Advisory Committee Meeting

- Introductions - *CDRPC*
- *Overview of 1st CAC Meeting*
- Long-Term Control Plan Development - *APJVT*
  - Project Organizational Framework
  - Public Participation Process
  - Scope of Work
  - Project Schedule
- Questions and Comments

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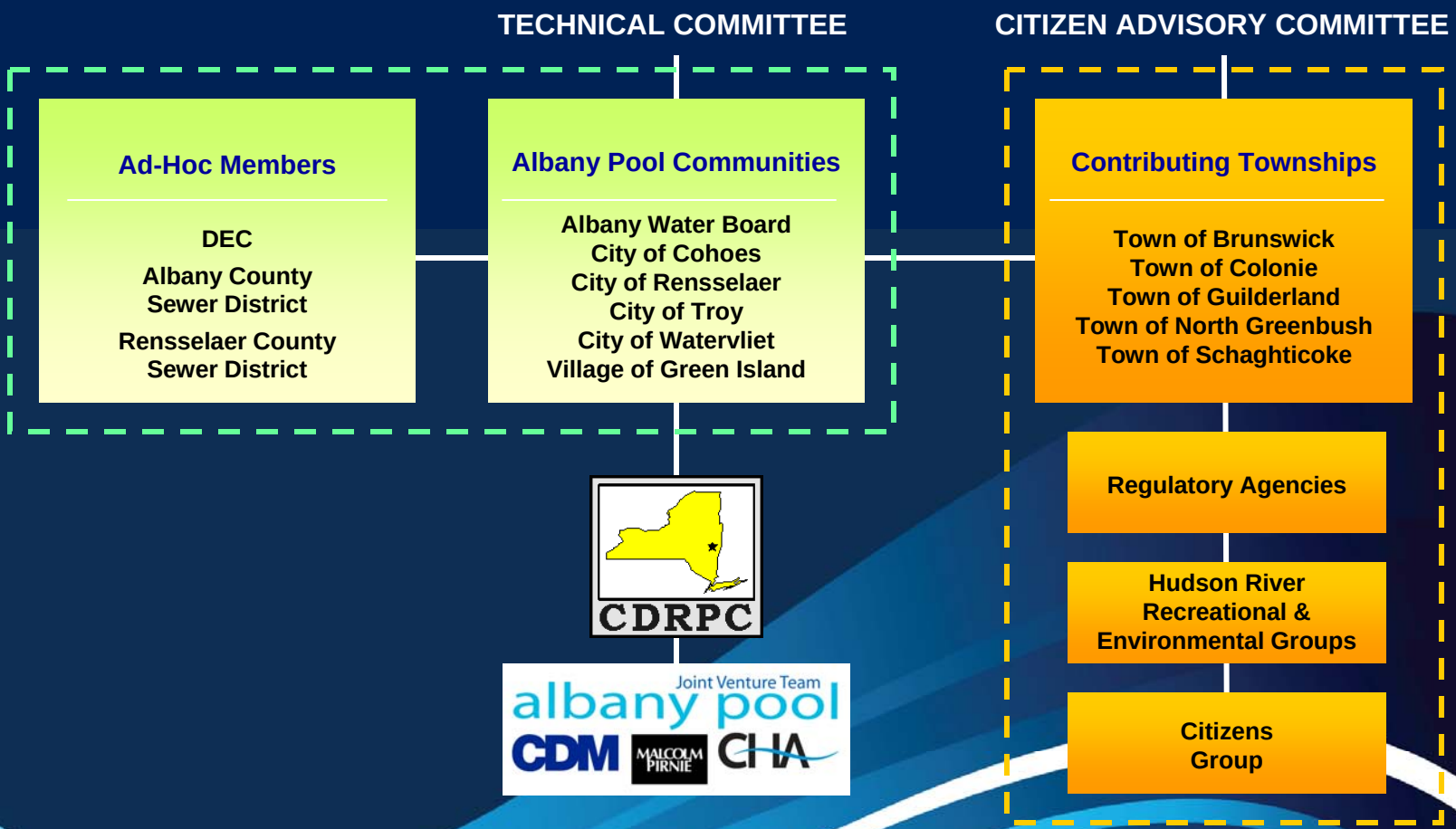
Project Organization Framework



Overview of the Technical Committee

- Directs the Development of the LTCP
- Makes Recommendations to Municipal Leadership
- Six Members - 1 Appointed by each Community
- Ad-Hoc Members from DEC and County Sewer Districts

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Overview of the Citizen Advisory Committee

- Advises the Technical Committee on Issues Important to the Public
- Advises/Assists with Public Outreach Process
- Composed of Representatives of:
  - Albany Pool Communities' Citizens
  - Hudson River Recreational and Environmental Groups
  - State and County Agencies
  - Adjoining Municipalities

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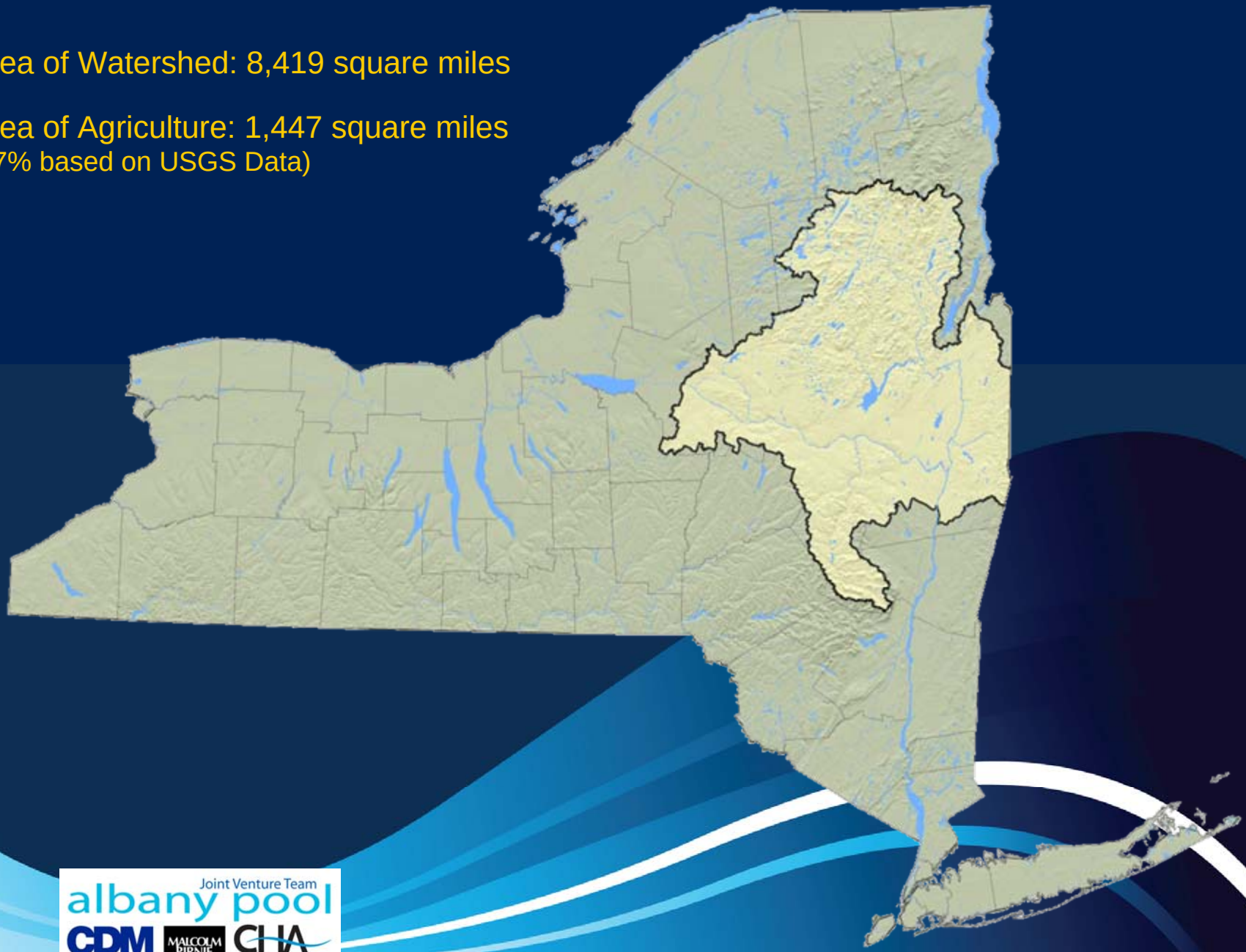
Area of Watershed: 8,419 square miles

Area of Agriculture: 1,447 square miles
(17% based on USGS Data)



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Watershed Based Approach

Overview of the LTCP Development Process

PUBLIC PARTICIPATION

CSS CHARACTERIZATION

Mapping, Database & Digitizing

Receiving Waters Condition Assessment

CSS Monitoring & Sampling

CSS Modeling

WWTP Wet-Weather Capacity Study

LTCP DEVELOPMENT

Develop & Evaluate CSO Control Alternatives

Funding, Financial Impact & Affordability

Implementation Schedule

Preparation of the LTCP Report

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Project Update…

Public Participation Plan

- Goals and Objectives:
  - Provide the Albany Pool Municipal Officials with Public Input
  - Establish Early Communication with the Public
  - Encourage Dialogue Between NYSDEC and the General Public
  - Solicit Public Concerns During the LTCP Development
  - Make the Technical Aspects of the Project Clear
  - Build Awareness of the Issues Associated with CSOs

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Public Participation Plan

- Target Audiences:
  - Albany Pool Communities' Ratepayers/Taxpayers and Residents
  - The Elected and Appointed Leadership of the Albany Pool Communities
  - Environmental Groups and Recreational Users Associated with the Hudson River
  - The Leadership and Residents of Communities Contributing Flows to the Albany Pool CSS
  - Riverfront Business Operators

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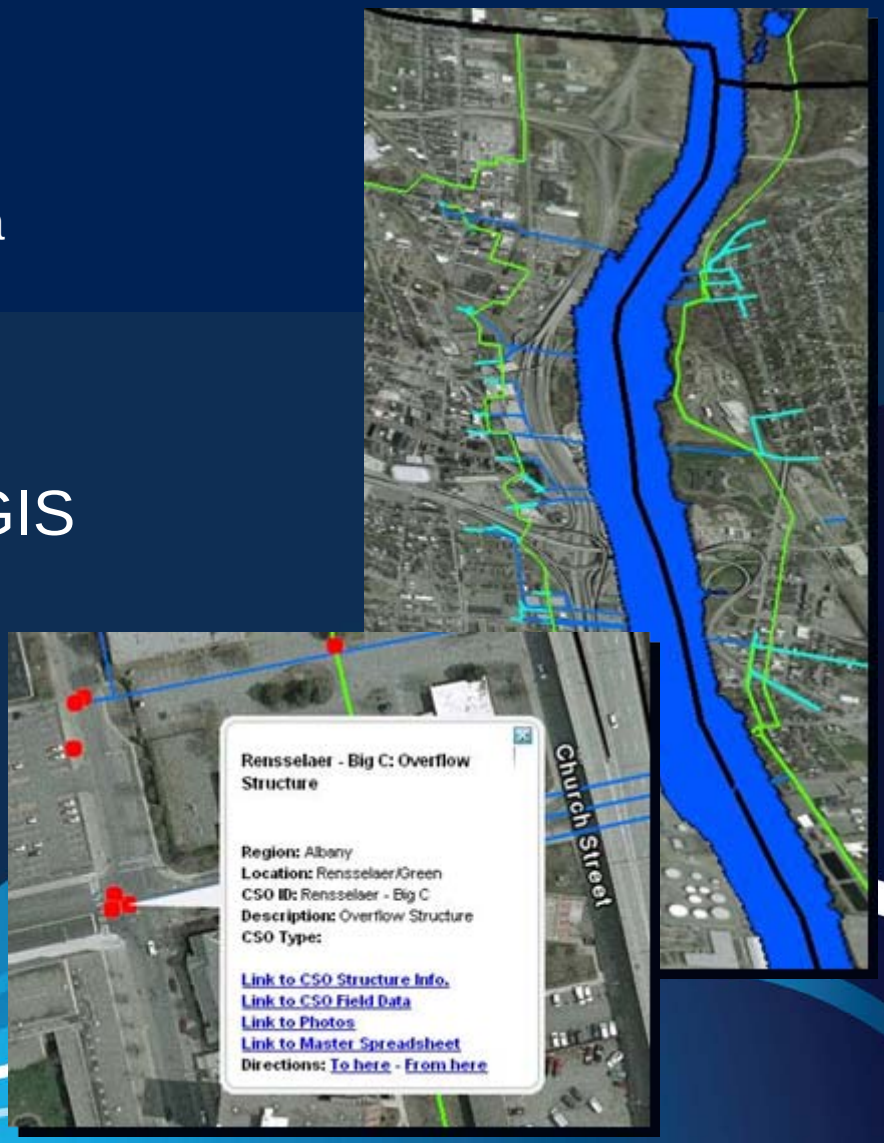
CSS Mapping, Database and Digitizing

- Data Collection
  - CSS Pipe Data
  - CSS Structure Data
  - Sewershed Data
- Field Verification
- Development of GIS Database



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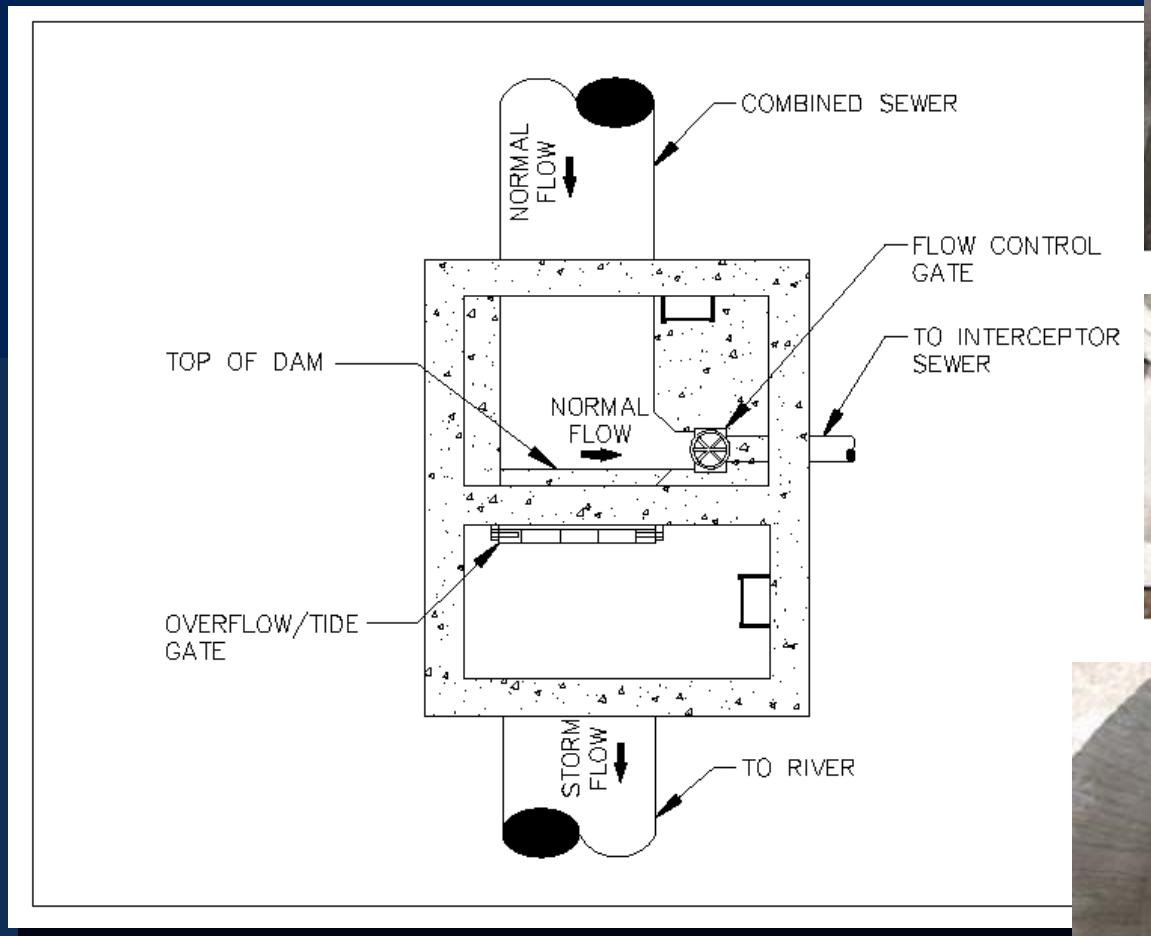
Gravity Overflow with Manual Gate



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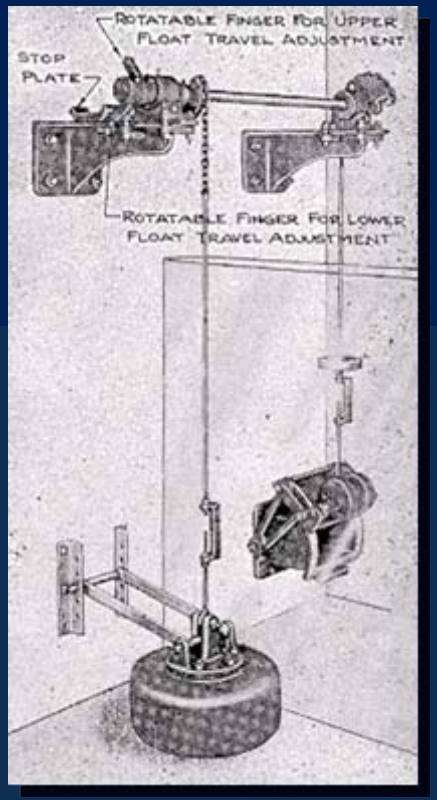
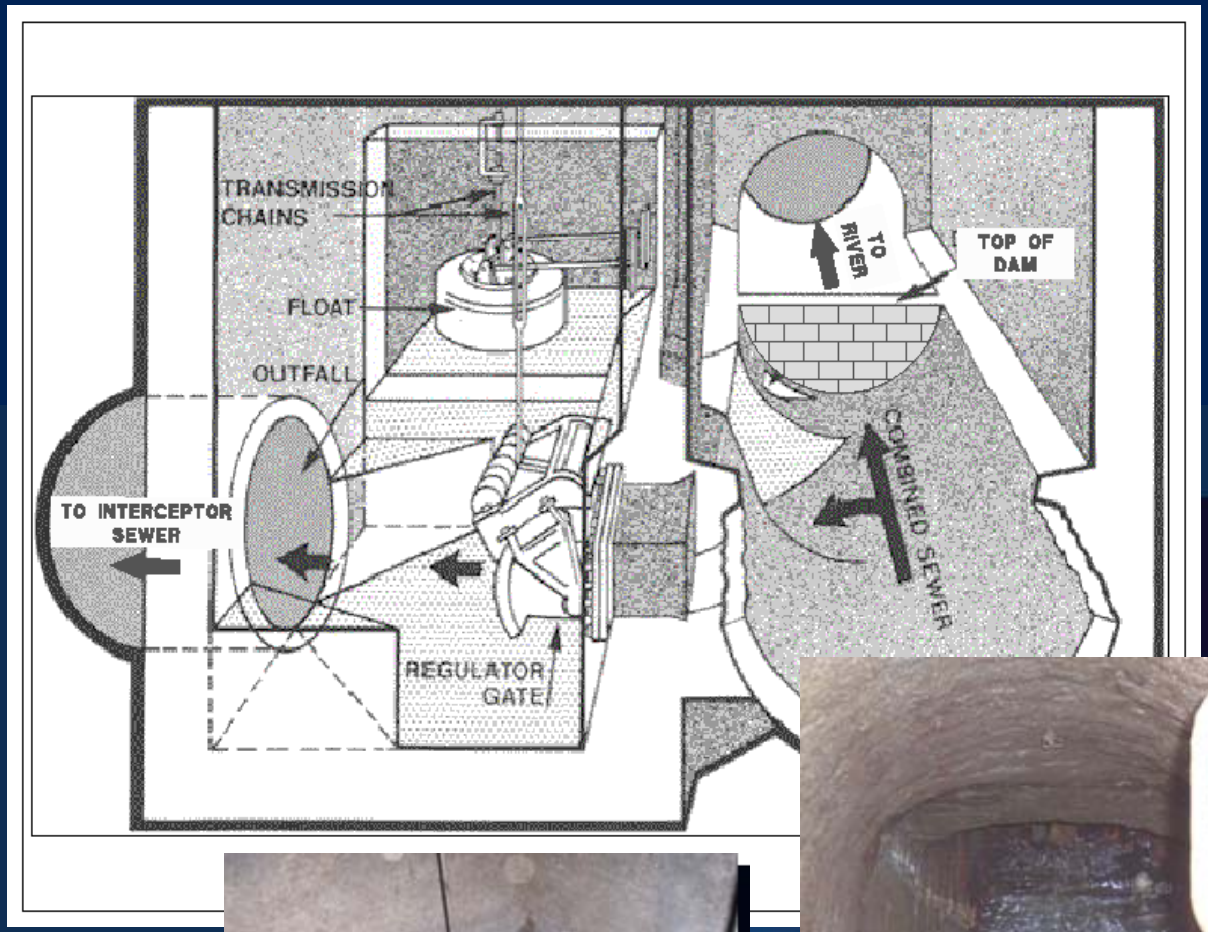
Overflow Regulator Gate





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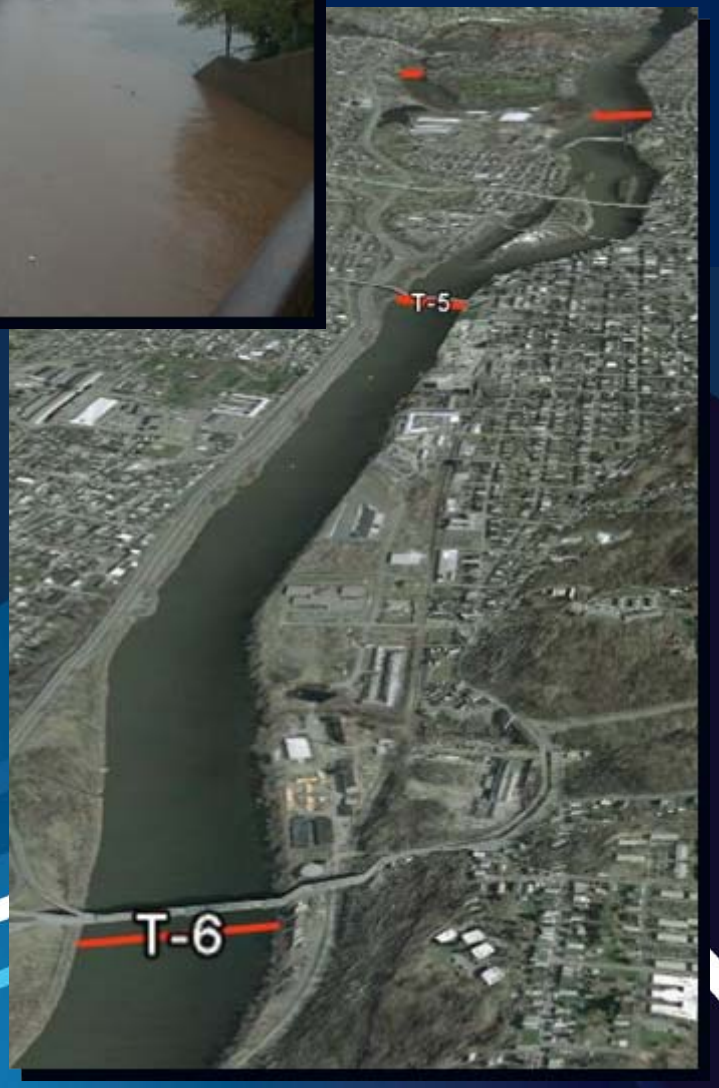
Receiving Waters Conditions Assessment

- General Approach:
  - Initial Assessment with Existing Data
  - Collection of Additional Sampling Data
    - Dry-Weather
    - Wet-Weather



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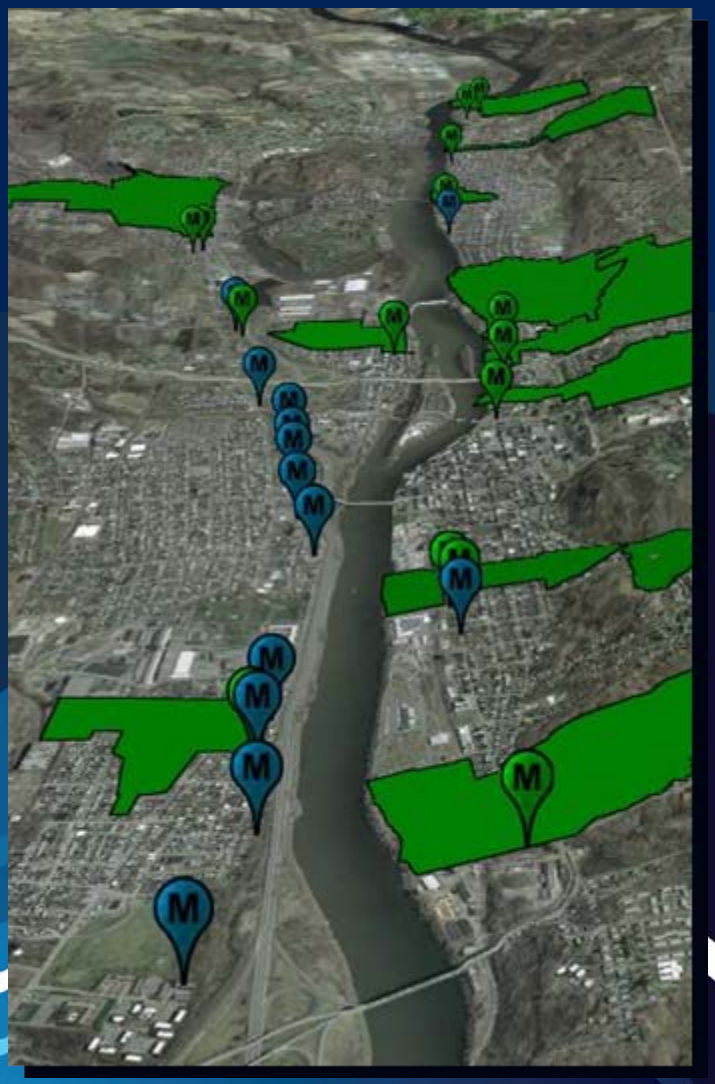
Combined Sewer System Monitoring

- Precipitation Data
- Sewer Network Monitoring
  - Flow Rate
  - Hydraulic Grade Line
- CSO Outfall Monitoring and Sampling
  - Overflow Rate/Volume
  - Characterize Overflows



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Combined Sewer System Modeling

- Model Development
- Calibration
- Application
  - Existing Conditions
  - Evaluate Control Alternatives
- CSO Control Benefits
  - CSO Frequency, Volume and Load Reductions
  - Water Quality Conditions

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WWTP Wet-Weather Capacity Study

- Evaluation Objectives:
  - Document Existing WWTP Capacity
    - Process
    - Hydraulic
  - Evaluate Alternatives to Increase WWTP Capacity
    - Secondary Capacity
    - Primary Capacity

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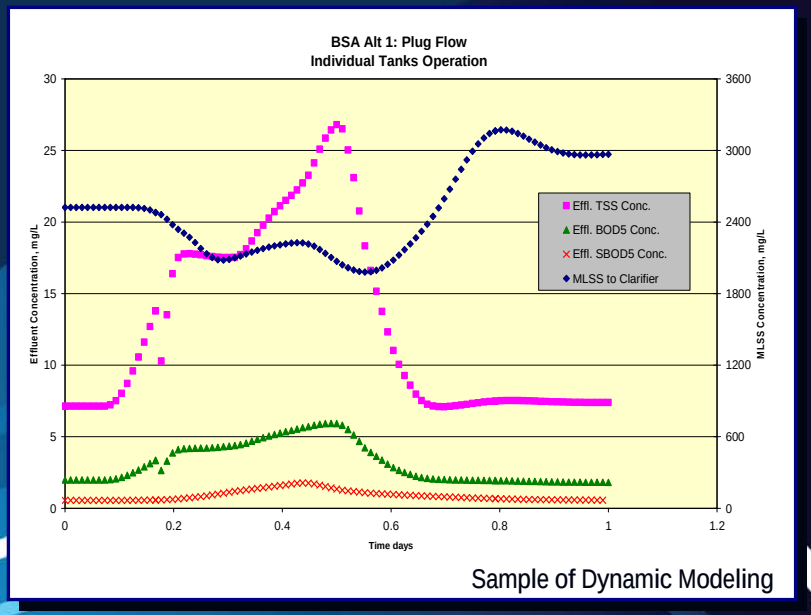
WWTP Wet-Weather Capacity Study

- Major Activities (for each plant):
  - Review Original Design Data
  - Review Historical Performance Data
  - Establish Future Flows and Loadings
  - Dynamic Process Modeling
  - Hydraulic Modeling
  - Brainstorming & Evaluation of Capacity Alternatives
  - WWTP Capacity Report



Sample of Dynamic Modeling

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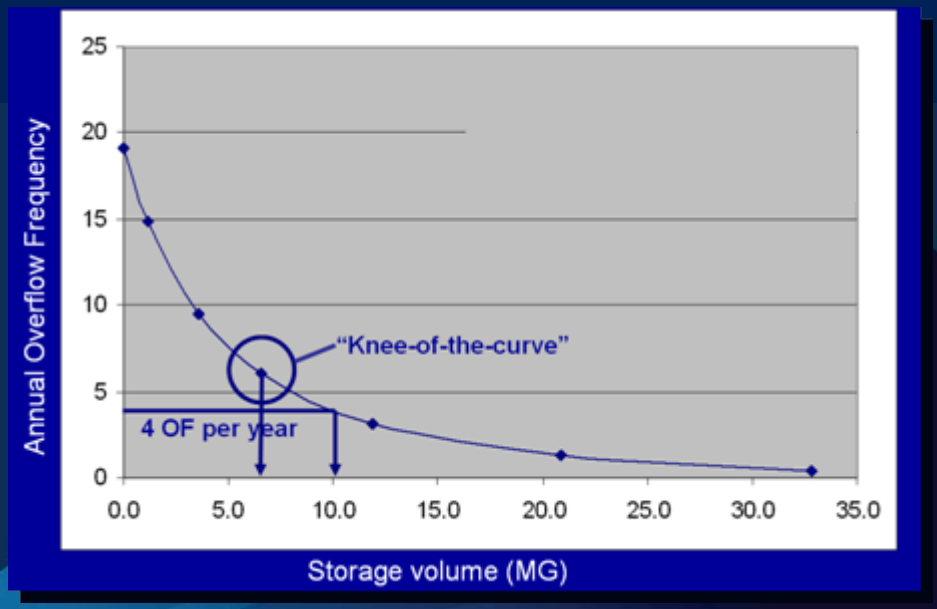
Develop and Evaluate CSO Control Alternatives

- Select Appropriate Compliance Strategy
- Shortlist Viable CSO Control Technologies
  - Screening/Floatables Control
  - High Rate Treatment
  - Real Time Control
  - Storage
  - Partial Separation
  - Green Infrastructure
- Develop Recommended
- CSO Control Alternatives
- Establish Cost-Effective
- Controls (“Knee-of-Curve”)



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Financial Impact and Affordability Evaluation

- Use EPA Guidance Document
- Adjust to Future Conditions
  - Property Tax Revenues
  - Unemployment
  - Business Environment
  - Debt Relative to Property Value
- Reflect “Real” Capital Improvement Needs of the Systems
- Use Rates Model to Evaluate Cost-Schedule Options

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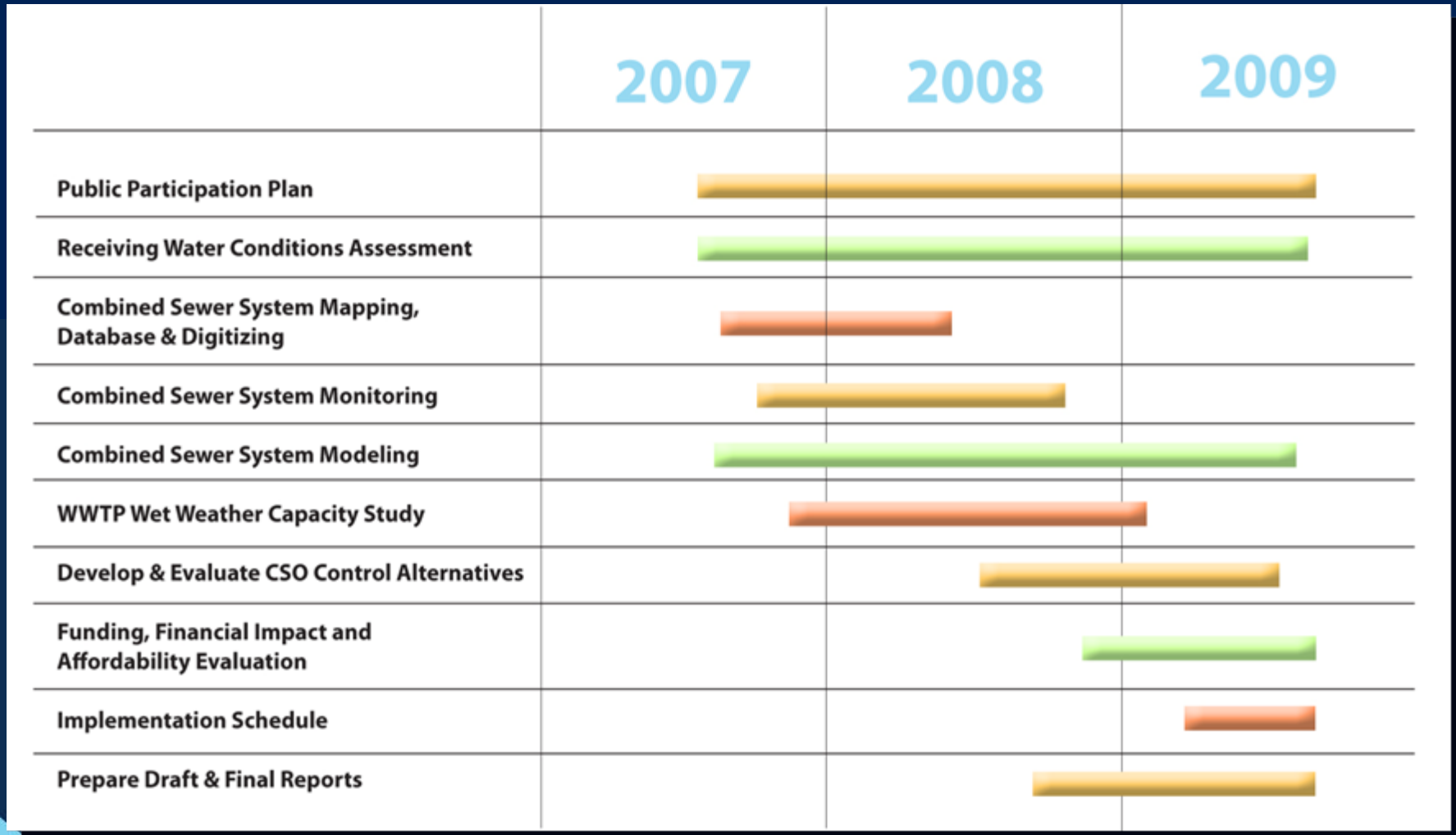
Project Schedule



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Moving Forward…

Public Informational Meeting Schedule

- **Round 1 - Project Introduction and Overview March 31, 2008 @ HVCC**
- Round 2 - Overview of CSS Characterization Findings 4th Quarter of 2008
- Round 3 - Evaluation of Mitigation Alternatives 2nd Quarter of 2009
- Round 4 - Presentation of LTCP Final Draft 3rd Quarter of 2009

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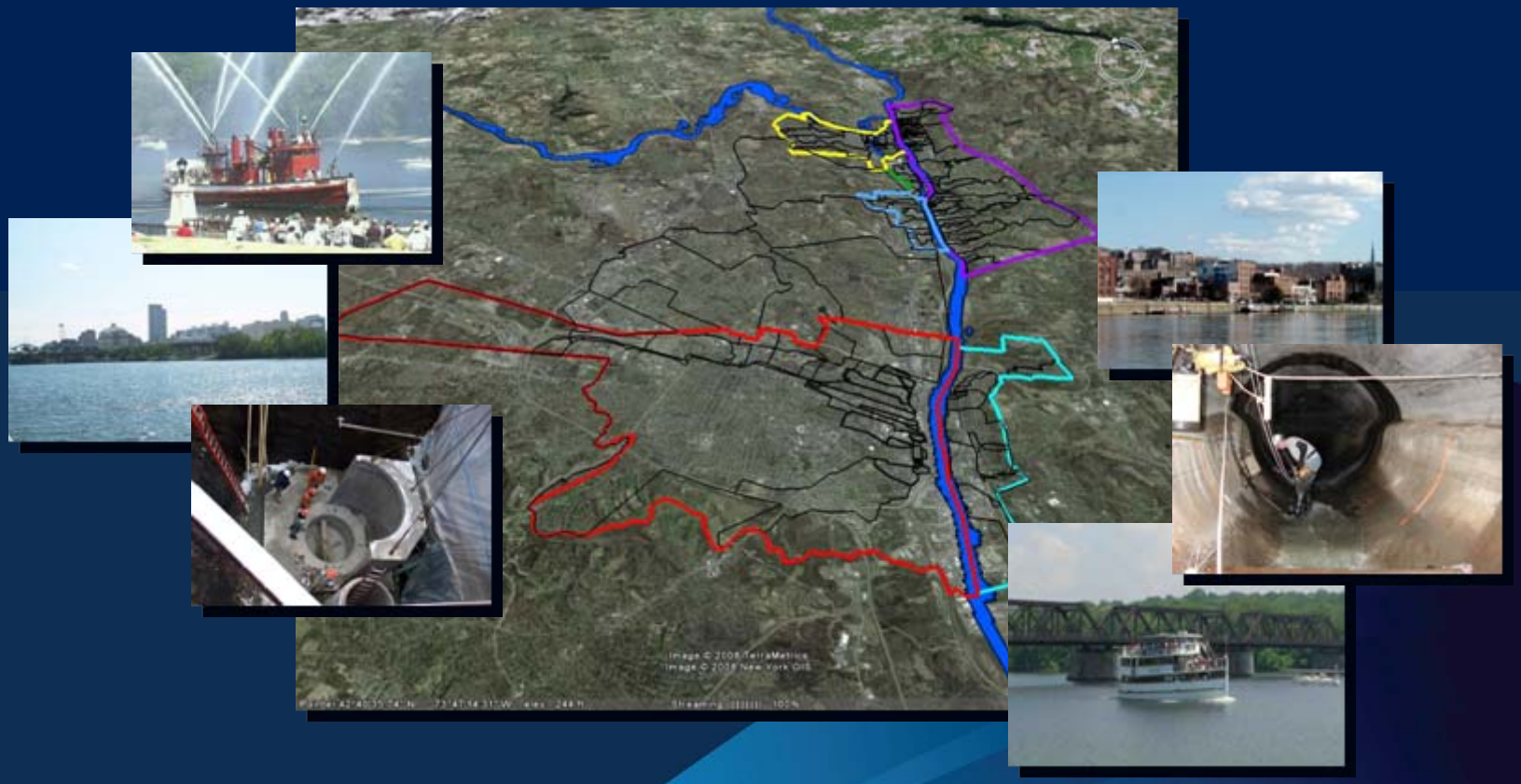
Albany Pool Combined Sewer System
Long-Term Control Plan Development



Questions or Comments

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