Professional Services Related to: Albany Pool CSO LTCP - Part B Progress Report No. 16 October 15, 2009 - March 1, 2010



# Capital District Regional Planning Commission and the Albany Pool Joint Venture Team



# **Project Management and Coordination**

#### Recent Activities:

- A meeting was held with CDRPC, the Albany County Sewer District and the City of Albany to discuss concerns regarding a DEC request for an interim floatables screening program.
- Project Meeting was held on November 25, 2009 with the DEC to discuss the Albany Pool Communities (APCs) request for a schedule extension for the submittal of the Draft LTCP, as previously made on August 17, 2009.
- Technical Committee Meeting was held with CDRPC and the APCs on December 9, 2009 to review the findings of the river modeling efforts.
- Technical Committee Meeting was held with CDRPC, DEC and the APCs on December 15, 2009 to review the findings of the river modeling efforts.
- Technical Committee Meeting was held with CDRPC and the APCs on January 15, 2010 to
  discuss the DEC's request that the APCs complete a BMP Initiative in support of the
  proposed schedule extension for submittal of the Draft LTCP. In addition, the APJVT
  provided an overview of the Financial Impact & Affordability Evaluation work, and
  discussed/outlined the specific data requested from the communities.
- Technical Committee Meeting was held with CDRPC, DEC and the APCs on January 21, 2010 to provide a more detailed technical discussion of the river modeling efforts and findings.

# Planned Activities:

- Technical Committee (TC) Meeting scheduled for March 8, 2010 to discuss response to the DEC's comments received on February 26, 2010.
- During the next quarter, arrangements will be made for continued community, TC and Legislative Leadership meetings, as deemed appropriate.

### Task B1 – Public Participation

#### Recent Activities:

- Technical Committee Meetings, as noted above.
- The 2<sup>nd</sup> Public Informational Meeting was held on November 10, 2009. The primary objectives of the 2<sup>nd</sup> meeting were to review the findings of the CSS monitoring and sampling program, the receiving waters assessment and the preliminary CSS Modeling efforts.

## Planned Activities:

• Citizen Advisory Committee (CAC) Meeting will be scheduled upon DEC's approval of the river modeling approach and findings.

#### Schedule:

• Meetings supporting the public participation program are planned to continue throughout the duration of the LTCP development process.

# Task B2 - Receiving Water Conditions Assessment

#### Recent Activities:

- Completed development of the 1-D River Model to assess impacts associated with CSO discharges, as well as proposed mitigation alternatives.
- Completed DO Modeling of the Hudson River using the EPA Water Quality Analysis Simulation Program (WASP7). WASP is a dynamic compartment-modeling program for aquatic systems, including both the water column and the underlying benthos. WASP provides the full capability to simulate transport and decay of bacteria and analyze the impact of BOD on dissolved oxygen. The time varying processes of advection, dispersion, point and diffuse mass loading and boundary exchange are represented in the model. WASP was linked with a hydrodynamic model (SWMM5) that will provide flows, depths and velocities.
- Met with DEC on December 15, 2009 and January 21, 2010 to review the modeling approach and findings, and to discuss various comments and/or concerns from the Department.
- Received comments from the DEC in regards to the presentation given on December 15, 2009. Responses provided prior to the follow-up meeting with DEC on January 21, 2010.
- The Receiving Water Quality Model Development (RWQMD) Report was submitted to the DEC on February 16, 2010.
- Received comments from the DEC on the RWQMD Report on February 26, 2010.

## Planned Activities:

- Address DEC comments necessary for approval of the Receiving Water Conditions Assessment Report.
- Meeting scheduled with DEC on March 15, 2010 to discuss comments received on February 26, 2010.

### Schedule:

• Development of the river model is behind schedule primarily due to the time required to analyze the significant amount of data collected for the river systems. The work performed to date has been expansive with the information detailed in the RWQA representing the most significant study on bacteria performed on the Albany Pool to date. Per the original project schedule, the receiving waters model was to be developed and fully calibrated by February 1, 2009. Due to the issues detailed above, the APJVT does not expect the completion of this work until the second quarter of 2010. As a result, this task is presently over a year behind the original schedule. This is in large part due to the unanticipated efforts and delays needed to resolve the modeling approach, as well as the concerns surrounding the recorded low dissolved oxygen levels in the Hudson River. This issue has further limited the APJVT's ability to aggressively move forward with the alternatives evaluation which relies

upon a receiving water quality model. Furthermore, the introduction of an additional parameter of concern may increase the extent of the alternatives evaluation should a dissolved oxygen issue need to be addressed. It is acknowledged that this work has taken longer than expected; however, the APCs place a high priority on fully understanding the potential water quality issues and program objectives at this time given the potential cost burdens associated with this type of program. A project schedule extension is currently being negotiated between the APCs and the DEC.

# Task B3 - Combined Sewer System Mapping, Database and Digitizing

#### Recent Activities:

 Continued the coordination and delivery of mapping and electronic files to a central project database.

### Planned Activities:

• Continue with the coordination and delivery of electronic files to the central database.

#### Schedule:

• All major tasks and activities associated with the development of the LTCP have been completed. General database management activities will continue throughout the project.

# Task B4 - Combined Sewer System Monitoring

#### Recent Activities:

• Completed analysis of the CSS monitoring data.

#### Planned Activities:

• All major tasks and activities associated with the development of the LTCP have been completed.

### Schedule:

• Task completed. Monitoring data was delivered to the APJVT 2 months later than anticipated due to the time required by the vendor to perform additional work associated with the "expanded" monitoring program. While the expanded program has resulted in a 2 month delay, the additional data has proven to be vital in the efforts to characterize the existing systems' performance.

# Task B5 – Combined Sewer System Modeling

# Recent Activities:

 Completed the development and calibration of the four (4) SWMM models for the ACSD and RCSD treatment facilities.

- Completed optimization and are currently developing alternative evaluation runs for the CSS models.
- Submitted the Draft CSS Model Development and Baseline Conditions Report to the DEC on November 2, 2010.
- Received comments from DEC on December 18, 2009 in regards to the *Draft CSS Model Development and Baseline Conditions Report*. Responses were provided back to the Department on January 15, 2010.

#### Planned Activities:

• Continue development of the alternative evaluation models.

#### Schedule:

• Activities associated with this task were planned to occur between August of 2007 and August of 2009. In general, calibration of the models was completed behind schedule due to the delayed delivery of the monitoring data, along with the increased calibration efforts associated with the additional 20 monitoring sites. Per the original project schedule, the receiving waters model was to be developed and fully calibrated by February 1, 2009. Due to the issues detailed above, the APJVT does not expect the completion of this work until the second to third quarter of 2010. This is in large part due to the unanticipated efforts and delays needed to resolve the modeling approach, as well as the concerns surrounding the recorded low dissolved oxygen levels in the Hudson River. This issue has further limited the APJVT's ability to aggressively move forward with the alternatives evaluation which relies upon a receiving water quality model.

## Task B6 – WWTP Wet Weather Capacity Study

# Recent Activities:

• Continued to develop the Existing Capacity Review Technical Memorandum for the RCSD and the ACSD North and South Plants.

#### Planned Activities:

• Finalize the *Draft Existing Capacity Review Technical Memorandum* for the ACSD and RCSD treatment facilities.

# Schedule:

• Activities associated with this task were planned to occur between November of 2007 and February of 2009. In general, the treatment plant evaluations continue to move forward. At this time, the APJVT anticipates that the evaluations will be completed in the 2<sup>nd</sup> quarter of 2010. These activities are not associated with the "critical path" for the completion of the LTCP.

## Task B7 – Develop and Evaluate CSO Control Alternatives

## Recent Activities:

- Continued the development of regulatory compliance strategies, and the identification and screening of viable control technologies.
- Continued evaluation of "local" CSO control alternatives.
- Began "regional-approach" alternatives evaluation.

#### Planned Activities:

- Continue work to develop regulatory compliance strategies, and identify and screen viable control technologies.
- Continue to develop CSO control alternatives and costing.
- Continue "regional-approach" evaluations.

### Schedule:

• Activities associated with this task were planned to occur between July of 2008 and August of 2009. While progress has been made in regards to the CSO control alternative evaluations, activities associated with this task have been put on hold until the Receiving Water Quality Model Development Report and the associated findings have been agreed upon by the APCs and the DEC. As such, the task activities and timeline continue to be impacted by the river model development and assessment. Since this work is presently on hold, we are not able to predict a completion date for this task at this time.

# Task B8 – Funding, Financial Impact and Affordability Evaluation

# Recent Activities:

- An introduction/overview of this work was provided to the APCs on January 15, 2010.
- Began collection of APC's financial data.

## Planned Activities:

 Complete collection of preliminary data, and begin Financial Impact & Affordability Evaluation.

#### Schedule:

 Activities associated with this task were planned to occur between December of 2008 and September of 2009. Completion date for this work can not be assessed until the CSO Control Evaluation work resumes.

# Task B9 – Implementation Schedule

#### Recent Activities:

• There were no activities performed for this Task during this period.

#### Planned Activities:

• No activities for this Task are scheduled for the next quarter.

# Schedule:

 Activities associated with this task were planned to occur between April of 2009 and September of 2009. Completion date for this work can not be assessed until the CSO Control Evaluation work resumes.

# Task B10 - Prepare Draft and Final LTCP Reports

# Recent Activities:

• Began preliminary write-ups for tasks completed to date.

# Planned Activities:

• Continue with the development of the LTCP in regards to tasks completed.

#### Schedule:

• A formal request in regards to the extension to the project schedule has been submitted to the DEC. The submittal date for the Draft LTCP is presently being negotiated.