

**Professional Services Related to:  
Albany Pool CSO LTCP – Part B  
Progress Report No. 15  
May 31, 2009 – October 15, 2009**



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



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## **Project Management and Coordination**

### ***Recent Activities:***

- Technical Committee Meeting was held with CDRPC and the Albany Pool Communities (APCs) on June 4, 2009 to review the findings of the CSS modeling efforts.
- Meeting was held on June 19, 2009 with the DEC to discuss their concerns relative to the receiving waters assessment and potential DO issues associated with CSO discharges.
- August 12-20, 2009: The first round of Legislative Leadership Meetings was held with key officials from the APCs.
- Technical Committee Meeting was held with DEC, CDRPC and the APCs on August 26, 2009 to review the findings of the CSS modeling efforts.
- Technical Committee Meeting was held with CDRPC and the APCs on September 9, 2009 to discuss the recommended modeling approach for the DO river assessment.
- Technical meeting/presentation was attended on September 17, 2009 by members of CDRPC, the APJVT and the APCs. The presentation was given by Emnet, manufacturer of system monitoring and real-time control equipment.
- Technical Committee Meeting was held with DEC, CDRPC and the APCs on September 24, 2009 to discuss the recommended modeling approach for the DO assessment and proposed project schedule extension.
- Citizen Advisory Committee (CAC) Meeting was held on October 7, 2009 to review the findings of the CSS modeling efforts.

### ***Planned Activities:***

- During the next quarter, arrangements will be made for continued community, Technical Committee (TC) and Legislative Leadership meetings, as deemed appropriate. Anticipated activities include the next Public Information Meeting on November 10 at 7pm in the Bulmer Communications Building, Hudson Valley Community College.

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## **Task B1 – Public Participation**

### ***Recent Activities:***

- Technical Committee Meetings, as noted above.
- The 4<sup>th</sup> CAC Meeting was held on October 7, 2009 to review the findings of the CSS modeling efforts.

***Planned Activities:***

- The 2<sup>nd</sup> Public Informational Meeting is scheduled for November 10, 2009. The primary objectives of the 2<sup>nd</sup> meeting will be to review the findings of the CSS monitoring and sampling program, the receiving waters assessment and the preliminary CSS Modeling efforts.

***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**

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***Recent Activities:***

- Coordination with DEC and the APCs to develop an approach to assess potential DO issues in the Hudson River. The approach was discussed with DEC on September 24, 2009 and subsequently approved by the Department.
- Additional Tributary Sampling Program was completed during July and August. The program defined seventeen sampling locations, within six tributaries, for five additional dry-weather sample events and three additional wet-weather sample events. The goal of this additional sampling was to locate regions where potential sources of fecal coliform exist within the member communities (such as previously unknown CSO locations or sanitary connections). A secondary goal was to identify potential external sources from upstream communities.
- Continued development of the 1-D River Model to assess impacts associated with CSO discharges, as well as proposed mitigation alternatives.
- The EPA Water Quality Analysis Simulation Program (WASP7) has been selected to be the Receiving Water Quality Model (RWQM) to assess potential DO issues. 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 will be linked with a hydrodynamic model (SWMM5) that will provide flows, depths and velocities.

***Planned Activities:***

- Continue development of the SWMM5 1-D River Bacteria Model and WASP7 Model.

***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 end of October of 2009. As a result, this task is presently 9 months behind 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 APC's 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 revised project schedule (attached) has been prepared and submitted to the DEC.

### **Task B3 – Combined Sewer System Mapping, Database and Digitizing**

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#### ***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**

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#### ***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**

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#### ***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.

***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 end of October of 2009. 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**

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***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 1<sup>st</sup> or 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**

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***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.

***Planned Activities:***

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

***Schedule:***

- Activities associated with this task were planned to occur between July of 2008 and August of 2009. In general, activities associated with this task continue to be progressed; however, the task activities and timeline have been impacted by the river model development and assessment. This task is now scheduled for completion by June of 2010.

**Task B8 – Funding, Financial Impact and Affordability Evaluation**

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***Recent Activities:***

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

***Planned Activities:***

- Collection of preliminary data in the 1<sup>st</sup> quarter of 2010.

***Schedule:***

- Activities associated with this task were planned to occur between December of 2008 and September of 2009. This task is now scheduled for completion by June of 2010.

**Task B9 – Implementation Schedule**

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***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. This task is now scheduled for completion by June of 2010.

**Task B10 – Prepare Draft and Final LTCP Reports**

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***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. This task is now scheduled for completion by September of 2010.