

South Carolina Surface Water Quantity Models Monthly Summary

Invoice Date: November 4, 2016
For Services Between: October 1, 2016 and November 2, 2016
Invoice No.: 26

Summary of Work Completed During Invoice Period

Project Management and Related Tasks

- Continued internal project coordination and management tasks, including:
 - Weekly project team meetings
 - Monthly project meeting by teleconference

Data Collection

- Data collection most river basins is substantially complete; however additional follow-up calls are being made as the data is analyzed and incorporated and used for unimpaired flow (UIF) development and model development.

Data Analysis and Modeling

Saluda

- The original calibration model was updated to include the latest reservoir operations enhancements and water user conservation enhancements. Remaining work includes finalizing the model report and submitting the final baseline model.

Edisto

- No work was performed. Remaining work includes finalizing the model report and submitting the final baseline model.

Broad

- No work was performed. Remaining work includes finalizing the model report and submitting the final baseline model.

Pee Dee

- No work was performed. Remaining work includes finalizing the model report and submitting the final baseline model.

Catawba-Wateree

- The draft calibration model was updated to include the LIP rules, and other minor adjustments were made in response to DNR comments.
- The Draft Model Report was updated and resubmitted to DNR and DHEC prior to the Nov. 2nd stakeholder meeting.
- The baseline model was substantially completed.

Santee

- The Draft UIFs were completed and provided to DNR and DHEC.
- Work on the calibration model was mostly completed, with a few remaining areas of focus.

Savannah

- Development of the UIFs for the tributaries continued and work on the calibration model was initiated.

Salkehatchie

- No work was performed. Remaining work includes finalizing the model report and submitting the final baseline model.

Stakeholder Involvement

- The second stakeholder meeting in the Catawba Basin was held on Nov. 2nd at the Rock Hill Operations Center.

Summary of Upcoming Work

Over the next month, the project team will:

- Finish development of the Santee Basin calibration model.
- Hold the 2nd Santee stakeholder meeting.
- Finalize and submit several of the outstanding, final modeling reports and baseline models.

Issues Impacting Scope, Schedule, or Project Cost

Schedule adjustments were made to reflect the project progress and more accurately account for future deliverables. Additional time has been spent (1) collecting water use and hydrologic information to support the UIFs and models; (2) performing model enhancements to provide increased user flexibility when modeling reservoirs and their operating rules; and (3) to allow for adequate review time of draft UIF datasets and models. In response, DNR has approved a time-only change order extending the project by five and one-half months, to the end of 2016. An updated schedule is attached.

During the project kickoff meeting, and based on DNR and DHEC review of the draft Modeling Plan, several potential out-of-scope model enhancements were identified. These include:

- A “Current Situation Analysis” for quasi-real time operational support. This functionality would provide a probabilistic analysis of current conditions at any future point in time and how conditions are likely to change within 6 or 12 months based on projected use and management patterns.
- The ability to use near-term hydrologic flow forecasts (for example, 60-day streamflow forecasts from NOAA) for month-to-month operational planning.
- Use of HEC DSSVue and DSS files for results display and analysis.

CDM Smith has presented a scope for implementing these enhancements to DNR and DHEC. The decision on whether to implement one or more of these enhancements will likely be made once additional models are completed.

Basin and Milestone	2016																					
	Aug					Sep				Oct				Nov				Dec				
	1-Aug	8-Aug	15-Aug	22-Aug	29-Aug	5-Sep	12-Sep	19-Sep	26-Sep	3-Oct	10-Oct	17-Oct	24-Oct	31-Oct	7-Nov	14-Nov	21-Nov	28-Nov	5-Dec	12-Dec	19-Dec	26-Dec
Catawba-Wateree																						
Model Framework																						
1st Meeting																						
UIF Dataset																						
Calibrated Model																						
2nd Meeting & Training																						
Santee																						
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Savannah																						
Model Framework																						
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UIF Dataset																						
Calibrated Model																						
2nd Meeting & Training																						

2016 Proposed Stakeholder Meeting Schedule

Basin	1st Meeting Week of:	2nd Meeting Week of:
Saluda	completed	completed
Edisto	completed	completed
Broad	completed	completed
Pee Dee	completed	completed
Catawba-Water.	completed	completed
Santee	completed	28-Nov-16
Savannah	completed	12-Dec-16
Salkehatchie	completed	completed

1 = First Meeting
 2 = 2nd Meeting
 D = Draft Completion Date
 F = Final Completion Date
 T = Training

Final Baseline models and modeling reports for all eight river basins will be submitted in November and December.