

# South Carolina Surface Water Quantity Models Monthly Summary

Invoice Date:	November 21, 2014
For Services Between:	October 19, 2014 and November 15, 2014
Invoice No.:	3

# Summary of Work Completed During Invoice Period

#### **Project Management and Related Tasks**

- Continued internal project coordination and management tasks, including:
  - o Weekly project team meetings
- Incorporated NDNR/DHEC comments on Draft Modeling Plan and submitted Final Modeling Plan
- Began preparation of Unimpaired Flow Methodology Report for the Saluda Basin.
- Submitted Quarterly Report No. 1 covering the period August 15 through November 15.

## **Data Collection**

- Reviewed approach for estimating surface water withdrawals for agriculture irrigation with DNR/DHEC.
- Continued contacting registered surface water users in the Saluda basin and confirming and collecting historical withdrawal and operational data.

## **Data Analysis and Modeling**

<u>Saluda</u>

o Continued SWAM model enhancement to incorporate daily time step.

#### <u>Edisto</u>

- Began reviewing and organizing DHEC-provided withdrawal data prior to contacting registered users.
- Note that project startup-activities including the kickoff meeting, modeling plan, model enhancement and other activities were included under the Edisto Basin budget. The Edisto was originally identified as the pilot basin for modeling.

#### <u>Broad</u>

• Began reviewing and organizing DHEC-provided withdrawal data prior to contacting registered users.

#### PeeDee

o No work completed

#### <u>Catawba</u>

o No work completed



## <u>Santee</u>

• No work completed

## <u>Savannah</u>

o No work completed

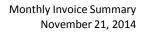
## <u>Salkehatchie</u>

o No work completed

## **Summary of Upcoming Work**

Over the next month, the project team will:

• Continue with data collection with the focus on contacting permitted users in the Edisto, and Broad river basins to obtain historical water use and related data. Finish data collection from permitted users in the Saluda.





- <sup>0</sup> Prepare and submit Draft Unimpaired Flow Methodology Report (Due Dec 1<sup>st</sup>)
- 0 Finish incorporation of the daily time step and initiate testing
- 0 Continue development of the Saluda Basin model framework (Due Jan 15<sup>th</sup>)

# Issues Impacting Scope, Schedule, or Project Cost

No issues were identified during the previous month which might impact schedule. 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:

- O 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.
- <sup>®</sup> The ability to use near-term hydrologic flow forecasts (for example, 60-day streamflow forecasts from NOAA) for month-to-month operational planning.
- 0 Use of HEC DSSVue for and DSS files for results display and analysis.

CDM Smith will continue to solicit input from stakeholders and future model users, and discuss the expected level of effort with DNR and DHEC, so that decisions can be made about prioritizing and implementing these possible future enhancements as the project moves forward.