



## Surface Water Quantity Models

### Progress Meeting Notes

November 2, 2015 – Teleconference

**Attendees:** **CDM Smith:** John Boyer, Tim Cox, Kirk Westphal, Nina Caraway  
**SCDNR:** Joe Gellici, Andy Wachob, Scott Harder, Alex Pellet, Bill Clendenin  
**DHEC:** David Baize  
**Clemson:** Jeff Allen  
**Technical Advisory Committee:** Eddie Twilley, Ed Bruce, K.C. Price, Harrison Watson, Charles Wingard, Andy Fairey, Ruth Albright, Mullen Taylor, Mike Harrelson, Julie Metts

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#### 1. Saluda Basin

- a. Saluda Calibration Model Reservoir Adjustments
  - Tim Cox provided an update on additional adjustments to the calibration model, with regard to reservoirs. These included use of previous guide curves for Lake Greenwood and Lake Murray, which were in effect for a longer portion of the calibration period, compared to the current guide curves. Also, as suggested by DNR, the calibration period for Lake Murray and points downstream was shortened to coincide with the timing and use of the previous guide curve. Very minor adjustments were made to mainstem reach gain factors, following these adjustments. The updated calibration was posted for DNR/DHEC download and the Saluda Model Report was updated.
  - For the baseline model, Alex Pellet said that based on his review of water user withdrawals from 2004-2013, it was appropriate to use a 10-year average for setting baseline withdrawals, except for the "IN: DAK" water user. Their water demand has declined significantly since 2004, and a 5-year average (2009-2013) is deemed more appropriate.

- Scott Harder noted that DNR is interested in having more flexibility with regard to reservoir operating rules. For the more complex rules which are “hard-coded” in SWAM, the preference is for users to be able to make adjustments and test alternatives to those rules. John Boyer indicated that CDM Smith is preparing a scope outlining SWAM enhancements that would provide the additional flexibility DNR is requesting.

b. Update on Application (Cloud) Hosting

- John Boyer indicated that CDM Smith has completed pilot testing of the model as a hosted application in the cloud. No significant issues were found, and run times were quicker than on a standard laptop. John indicated that he is working with ICC Global to be able to provide the next SWAM training session for DNR and DHEC staff using the hosted environment.

**2. Draft Edisto Basin UIF Dataset**

- John Boyer indicated that, based on DNR comments, CDM Smith has made updates to the Draft UIF dataset for the Edisto basin; however, they are still working with SCE&G to correct and confirm discharge amounts from the Canadys station.

**3. Rescheduled Stakeholder Meetings**

- Jeff Allen noted that meeting spaces have been reserved for the upcoming stakeholder meetings.

- a. Pee Dee #1 - Tues, Nov 3 (Pee Dee Research Center, 2200 Pocket Rd, Florence)
- b. Catawba #1 - Wed, Nov 4 (City of Rock Hill Operations Center, 757 S Anderson Rd, Rock Hill)
- c. Edisto #2 - Tues, Dec 1 (Edisto Research Center, 64 Research Rd, Blackville)
- d. Saluda #2, - Wed, Dec 2 ( Greenville Public Library, 25 Heritage Green Place, Greenville)

**4. Upcoming Deliverables**

- a. Draft Edisto Calibration Model & Report Nov 20
- b. Broad UIF Methodology Memorandum, early Nov
- c. Draft Broad UIF Dataset, early Dec
- d. Draft Pee Dee UIF Dataset, early/mid Dec

## 5. Other Items

- a. Updated SWAM User's Manual (version 3.0) available
- b. Reservoir Operating Rule Enhancements
  - John Boyer noted that CDM Smith is preparing a scope outlining potential reservoir operating rule enhancements in SWAM, to address the additional flexibility DNR has requested.
- c. Saluda & Edisto Model Training for DNR/DHEC, Wed. Dec 3
  - Eddie Twilley asked if it would be possible for TAC members to attend the SWAM training session to be offered to DNR and DHEC staff. John Boyer noted that, assuming DNR and DHEC were OK with it, a meeting room with sufficient space could be made available. John noted that DNR and DHEC have already participated in an "intro to SWAM" session earlier in the year, and that this session would focus more on application of the Draft Saluda and Edisto models.