



## Surface Water Quantity Models

### Progress Meeting Notes

June 1, 2015 – Teleconference

**Attendees:** CDM Smith: John Boyer, Kirk Westphal, Nina Caraway  
SCDNR: Joe Gellici, Andy Wachob, Scott Harder, Alex Pellet, Bill Clendenin  
SCDHEC: David Baize, Rob Devlin  
Clemson: Katie Giacalone  
Other: Eddie Twilley

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#### 1. Saluda Model and Unimpaired Flow Dataset

- a. Evaporation Methodology and Reservoir Hindcasting
  - Kirk Westphal summarized the adjustments to the evaporation methodology and reservoir hindcasting.
- b. UIFs - In progress
  - UIFs for all Saluda reservoirs have been developed. The team is now working down the basin, developing UIFs at selected locations, and developing UIFs for ungagged, included tributaries.
- c. Model - Calibration and baseline models in development
  - Tim Cox of CDM Smith has been setting up two Saluda SWAM models – one to be used for calibration, and which will include current and former users, discharges, etc. The second will be the baseline Saluda Model. Two aspects of the baseline model were discussed:
    - i. Within the Saluda (and in other basins) many water utilities sell water to and/or purchase from other utilities through interconnections. The SWAM model can be set up as a demand-based model, where the water use is assigned to the actual user, or as a permit-based model, where the water is assigned to the withdrawer. CDM Smith will prepare and circulate a summary of both approaches for DNR and DHEC consideration.

- ii. Current water demands can be included in the baseline SWAM models to reflect the most recent year, the last 5 years, or any variation of recent years. CDM Smith will prepare and circulate a summary of the recommended approach to characterizing current water demands for the baseline models.

## **2. Draft Edisto Framework Comments**

- CDM Smith is addressing the comments received from DNR on the Edisto model framework. Responses and an updated framework memorandum will be distributed to DNR and DHEC later in the week.

## **3. Stakeholder Involvement**

- a. First Edisto Meeting
  - i. June 18<sup>th</sup> at Edisto Research and Education Center, Blackville
    - Katie Giacolone noted that a few adjustments will be made, based on lessons learned from the Saluda Meeting. Two microphones will be provided during the Q&A session. Additionally, the iClicker questions will be revised and Clemson will ensure that the results are displayed and discussed on screen.
- b. First Broad Meeting
  - i. Proposed for week of July 20<sup>th</sup>
  - ii. Date and Location Options
    - David Baize will identify options used for DHEC stakeholder meetings in Spartanburg and provide those to Clemson.
- c. Website update
  - Katie Giacolone noted that the project introductory videos have been posted on the scwatermodels.com website, and that additional improvements are being made. The link to DNR's Surface Water Assessment site will be displayed more prominently, since that will be the location for stakeholders to access the project's technical documents.

## **4. Data Collection Update**

- a. Edisto - Charleston, Orangeburg & Batesburg Leesville
  - John Boyer noted that CDM Smith will be visiting Charleston Water System to copy representative paper withdrawal records from 1929 to 1983.
  - Orangeburg and Batesburg Leesville have provided some, but not all information requested. CDM Smith is following up.

- b. Broad
  - i. Winnsboro – Non-responsive
    - David Baize indicated that they currently do not have a utility director. His staff will reach out to their contact with the Town to help obtain the data.
  - ii. Spartanburg and Clinton – Waiting on reservoir data/intake elevations
- c. Pee Dee - Need to contact Golf Courses (after reviewing list with DHEC)
- d. Catawba
  - i. Started contacting users below Lake Wateree
  - ii. Received UIF dataset (1939-2010) and CHEOPS model
    - CDM Smith will evaluate the UIF dataset and documentation provided by HDR, and develop a recommended path forward. Extending the UIF dataset *geographically* (from Lake Wateree to the Congaree), but not *temporally* (leaving it to stop at 2010) was one potential option that was discussed. The Catawba-Wateree Water Management Group may choose to extend the UIF dataset in the future.

## 5. Upcoming Deliverables

- a. Finale Edisto Framework – CDM Smith will update and submit this during the week of June 1
- b. Draft Broad Framework – CDM Smith will submit this during the week of June 8
- c. Edisto UIF Methodology – CDM Smith will submit this during June (likely mid June).
- d. Saluda UIF Dataset – CDM Smith is endeavoring to complete the UIF dataset to the confluence of the Broad by the end of June.