

# Triangle Water Supply Partnership Meeting Agenda

August 7, 2020

9:30 to 12:00



**Location:** Microsoft Teams Meeting

## Agenda items

<b>9:30 — 10:30</b>	<b>CLOSED SESSION: Review Scope and Fees for Regional Interconnection Model Update Project</b> The closed session began at 9:35am. The closed session adjourned at 10:21am.
<b>10:30 — 10:40</b>	<b>OPEN SESSION:</b> Larry Bridges (Chatham County) opened the meeting at 10:30am. <b><i>Additional attendees:</i></b> Jeff Adkins, HDR Chris Belk, Freese and Nichols Kevin Irby, CDM Smith Jamie Revels, Town of Cary Thomas Tant, Hazen and Sawyer Todd Davis, Hazen and Sawyer Bill Holman, The Conservation Fund Peter Raabe, American Rivers Jeffrey Thompson, Black and Veatch  Larry announced that the Partnership has decided to move forward with Hazen and Sawyer for the regional interconnections model update.
<b>10:40 — 10:50</b>	<b>Administrative Considerations</b> Review and adoption of minutes from June meeting Jen clarified that she will be sharing the minutes for the open session on the website after they are approved/voted on at this meeting. Syd: Minor correction to spelling of Katie van Werkhoven's last name Larry moved to approve the minutes and Ruth seconded. <b>Vote on approving minutes from June meeting:</b> Ben (Morrisville) : Yes Chris (Orange County): Yes David (Apex): Yes Elizabeth (Holly Springs): Yes Jamie (Cary): Yes

### Triangle J Mission Statement

To serve as an intergovernmental organization for local elected officials that works proactively on regional issues in order to sustain and improve the quality of life for our citizens.

Kim (Johnston County): Yes  
Marie (Hillsborough): Yes  
Steve (Harnett): Yes  
Vicki (Durham): Yes  
Whit (Raleigh): Yes  
Larry (Chatham County): Yes [moved]  
Ruth (OWASA): Yes [seconded]  
Pittsboro – not represented

**Other Administrative Items**

Jen: We will be meeting virtually in October and will be sending invoices shortly.  
No changes were noted on today's agenda.

**10:50 — 11:20**

**Regional Interconnection Model Project Q&A**

Jen: A special, full partnership meeting in September would help us stay on schedule by kicking off project with Hazen and Sawyer. In the absence of such a meeting, this will happen at the October Full Partnership meeting.

- Syd: I would propose a September meeting during the regularly scheduled Technical Committee meeting (first Friday on opposing month as Full Partnership meeting.)
- No comments from Partners; Jen to email all about this.

Syd: We feel strongly that at least one representative from each Partner should be on the Technical Committee, because this is where we will be interacting with Hazen and Sawyer. Please appoint someone from your organization and inform Jen who they are.

Jen will email all to clarify general point of contact, proxy, and point of contact for Hazen and Sawyer project specifically.

**Presentation from Hazen and Sawyer, Todd Davis**

Transfers between systems stress water systems, so the purpose of calibration is to identify pipes that limit transfers.

There is a difference between system-specific calibration (what you would do for master planning is well calibrated) and interconnection calibration (what we will do as part of this project.)

- For this project, we will need to understand how tanks to periphery to neighboring systems perform during transfers.
- Bottlenecks may not be near interconnects; they may be far away in the system.
- There are three ways we do calibration:
  - Traditional calibration involves field data collection
  - SCADA can replace or supplement fieldwork
  - For interconnections where there has not been a lot of structural changes in the system, we can calibrate the new regional model against prior work we have confidence in.
- Ruth: Calibration is typically using data--if you are calibrating using the prior model, what does that mean?
  - Todd Davis: We had confidence in the prior model, as it was calibrated with fieldwork; so where applicable, we use it to calibrate the new regional model by

**Triangle J Mission Statement**

To serve as an intergovernmental organization for local elected officials that works proactively on regional issues in order to sustain and improve the quality of life for our citizens.

directly comparing how the old and new model run for that area. This only works in areas where there has not been much change.

- Coleman: Do you all have to run a separate calibration if you are bringing water from one side of the region and pushing it out on the other boundary? Or do you look at each interconnection individually?
  - Todd: When calibrating, we try to capture what is going on in specific parts of the system. We can calibrate the model to the system conditions at the time of the test, and then can consider other scenarios.
- Todd: Another scenario we need to calibrate is where we do not complete a transfer, ie, at the site of a future connection. Here, we would do a hydrant test to represent a transfer and collect data for each system's performance at that site. With this method, we have to make assumptions since we are not actually measuring pressure/head loss going through the interconnection.
- Todd: Differences between calibration and defining boundary conditions:
  - Calibration represents a snapshot in time. Partners will want to consider conditions that vary from the time of the test; once calibrated, the model can generate boundary curves for a variety of scenarios.
  - We do not have to test it in both directions; we can calibrate and use the model if we test in one direction.
- Thom: These are generic examples; we will sit down with everyone to be sure of their specifics.

**Preliminary feedback/updates for consultant**

Jen: Todd and Thom will do 1:1s in the kickoff meeting; Thom, is there anything you would like to discuss now?

Thom: Hazen is ready to get started; feel free to reach out with questions!

**11:20 — 11:50**

**Around the table**

Jen: All Partners are in the midst of their source water risk & resilience plans and emergency response plans. Are there lessons learned that Partners would like to share? (Jen will also share slides from an EPA webinar focused on these plans.)

Ben Mills (Morrisville): No updates

Ruth (OWASA): We are bringing long-range water supply plan alternatives to the Board next week. We will share a link to resources with anyone interested. We have completed our draft AWIA Risk and Resiliency document out for review and are on track to meet requirements.

Coleman (OWASA): Nothing to add

David (Apex): Apex' Risk and Resiliency plan is moving along with our contractor; we expect to meet our December 31 deadline

Elizabeth (Holly Springs): Holly Springs is working through our System Development Fee process/update and is about to start the RR plan, so the slides will probably help us! We are in the process of discussing our long-range water supply plan and may need more water than originally projected.

Jamie (Cary): Cary is in the final stages of RR and EM plans for September deadline, working with Freese and Nichols.

Kim (Johnston County): Johnston County completed AWIA RR assessment in March and is working on EM plan for September. Concurrently updating SWPP and doing a long-range water supply study.

**Triangle J Mission Statement**

To serve as an intergovernmental organization for local elected officials that works proactively on regional issues in order to sustain and improve the quality of life for our citizens.

Larry (Chatham County): The Board approved budgeted funds for hiring a firm to help with RR and EM plan and we will be preparing an RFQ in the next month or so. We hope to have a firm under contract before the end of the year to meet June/December deadlines for these plans.

Jen: Larry, are there any updates you can share from Pittsboro? We do not currently have a representative. I know is that they hired a town manager, Chris Kennedy.

Larry: No updates.

Chris (Orange County): 1) The Eno is flowing at 25 cfs at Hillsborough USGS gauge; 2) Stage 1 water withdrawal limits are currently in place (as of 08/02/2020) in conformance with the Voluntary Eno River Users Agreement, but these Stage 1 withdrawal restrictions will likely terminate in a couple of days due to recent rains; 3) First phase of Lake Orange Dam CIP work is currently under contract and in design stage.

Marie (Hillsborough): The final components of Hillsborough's project to raise roads 10 feet around the reservoir will kick off next week; we expect this to be completed by June of next year. No word from NC DWR about gage installation project referenced at last meeting; Chris confirmed they did not respond to Orange County either. Additionally, working with Hazen on a redundancy analysis.

Steve (Harnett): We are working toward our ERP goal for September. The hurricane did not affect operations much, fortunately.

Syd (Durham): Durham contracted with AECOM to complete RR plan and submitted the certification to EPA despite both COVID and Durham malware attack in March. Currently we are working on our EM plan and SWPP plan (noted that EPA changed the name); both are on schedule to complete by September.

Vicki (Durham): Durham's compliance services building is scheduled to open the first of September and we will gladly host when possible in person. We are resuming disconnections, which is absorbing a lot of time.

Syd: Durham never heard back from DWR about reservoir level gages either.

Jen: Who was the point of contact at DWR for this?

Syd: It was never clear who was leading this; we heard first from Natalie Norberg.

Whit (Raleigh): Raleigh submitted our RR plan in March with the help of HDR, and are also working on them on EM and SWPP. Also recently found out that Raleigh's City Manager will be retiring at the end of the year.

Vicki: Durham's city manager Tom Ruffin is also retiring.

Bill Holman: Commended Cary for passing watershed protection in budget for this year; this will be a great catalyst for watershed protection efforts.

Larry: Thanks to Town of Cary for including Chatham County in efforts to complete RR and EM plans. Thanks to City of Durham for supplying us water when we had a lightning strike our plant and take it down for a few days during a time with not much rain.

Jen: Do we keep a log of case studies of how this partnership keeps this region resilient and strong? This would be great to do—Maya and I could work on this.

Larry: Just in emails.

- Several partners expressed interest in this

Syd: A spreadsheet Sarah's been working on regarding interconnection testing has some notes that might be helpful.

### **Triangle J Mission Statement**

To serve as an intergovernmental organization for local elected officials that works proactively on regional issues in order to sustain and improve the quality of life for our citizens.

Sarah: A running log and case studies written up would be beneficial. This spreadsheet would not serve as a running log but includes useful information to use in case studies.

Larry: Thanked all for joining and Hazen for presenting. The partnership continues to make great strides!

The meeting was adjourned at 11:36am.

**Triangle J Mission Statement**

To serve as an intergovernmental organization for local elected officials that works proactively on regional issues in order to sustain and improve the quality of life for our citizens.