<u>Minutes from CHPS Meeting Tuesday December 23, 2008</u>

Attendees:

ABRFC – Jeff McMurphy
CNRFC – Rob Hartman
NERFC – Rob Shedd, Ed Capone, David Vallee
NWRFC –
NOHRSC – John Halquist
Deltares – Karel Heynert, Micha Werner
OCWWS –
OHD – Pedro Restrepo, Jon Roe, Joe Gofus, Chris Dietz

Pre-reading:

- none

1. HEC-RAS training discussion

> Note on terminology for HEC-RAS training:
> > Basic training addresses "steady state" aspects of HEC-RAS.
> > Advanced training addresses "dynamic (aka transient, or unsteady)" aspects of HEC-RAS.

The national HEC-RAS training session will be at the Basic level. Prerequisites will include completion of a basic open channel hydraulics class. It isn't clear if HEC can give a Basic class during the week of March 9; Seann will clarify with Gary Brunner. Seann and RandyR will update the wording of the HEC MOA work order and coordinate with Jon to make sure it correctly reflects any changes before being issued. ABRFC and NERFC both need Basic training; but all RFCs will be invited to attend. Funds will come from NSTEP.

Pedro announced that OHD (Seann and/or Fekadu) will provide Advanced training for NWRFC, NERFC, and ABRFC (CAT RFCs). Advanced training will take place at a single location (e.g., NERFC) to be decided between NWRFC, NERFC, ABRFC, and OHD. OHD does not have the resources for Seann/Fekadu to travel to each RFC separately. OHD's schedule is fairly flexible. NERFC would like training before March. It is not practical to hold Advanced training during the same week as Basic training because too many people would be gone from the office. How will Advanced training be funded? Seann will seek funding from OCWWS via RandyR.

Advanced training for follow-on RFCs will be arranged at a later time.

Action: Seann Reed will clarify with HEC (Gary Brunner) whether HEC can still conduct Basic RAS training the week of March 9.
Action: Seann Reed and RandyR will update the wording of the HEC MOA work order; then coordinating with Jon to get it issued.

2. Estimates for Prep Workshop #3 @ end of January

NWRFC has already provided estimates; other CAT members should too. Estimates should be for travel to Silver Spring the week of January 26 for CHPS Preparation Workshop #3 [assume travel days are Monday and Friday].

Action: NE, AB, CN to submit workshop travel estimates to Chris

3. Meetings

The CHPS briefing will be on January 8; this does not leave much time for preparation and no time for review. Jon & Chris will use Harold's slides as a basis. Jon will rely on the CAT members to answer most questions, especially those pertaining to operations. This briefing is the first in a series; others will be more focused on progress reporting (what we did the previous month, what's planned for the coming month). Jon only expects to give the first briefing. RobS suggested it might be useful if CAT members took turns each month after Migration begins to describe their local experiences.

The next routine CAT meeting will be on Thursday January 15 2009.

Action: none

4. Other items

Ref. recent email thread "ACTION - More data needed from CAT RFCs".

What will happen to the data recently delivered to OHD? Karel pointed out that internal testing (i.e., internal to Deltares) would be conducted but formal testing won't be done until the next release is due in April. As Deltares finds the causes of variances they'll re-test and report back to the CAT; they'll also re-issue the spreadsheets containing statistics. The government (OHD?) will need to verify that the results are as reported by Deltares. OHD and Deltares will exchange updated versions of scripts, configurations, and software as they make adjustments. By the time we enter Migration training we should (i.e., must) be close to 100% acceptable results. There will still be some variances; a final decision will be made at the Preparation Workshop in January. At that time Deltares will provide an opinion whether they believe they can make the February training. If this group decides to delay the training, it will be for at least one month.

We thought NWRFC would wait until a single date had been agreed, but they sent their data on Dec 19. In the end Micha said that didn't really matter because testers can adjust (compared with the test scripts which attempt to simplify the steps).

The discussion then veered off to address exactly what data was being requested. It seems NERFC had misinterpreted the request and needed to re-run the segments; but so had the others. What do they need to provide? Deltares needs runs with no value-added forecaster processing. The request stemmed from last week's testing where JoeI, Ron, and Micha concluded there were some additional 18Z observations in the data that were making Adjust-Q behave differently (they noticed a "QINE bubble"); so they agreed that RFCs should capture runs without those obs. However the12Z observations sometimes don't arrive until as late as 14Z. RobS also said he didn't see any 18Z obs in his datasets. What about the previous day's MODs –they could contaminate the runs too. Perhaps we should be looking at a clean/cold start of NWSRFS and wait till the system gets to a steady state before comparing the outputs. This would be a non-trivial effort, maintaining a separate set of forecast groups.

Another issue: punch_segs does not use the same precision as FEWS, which introduces yet another variable into the results. This would only be true for Snow-17 and Sac-Sma.

Some options that were discussed briefly:
o OHD could modify the punch_segs software routines to generate higher precision output
o Someone (OHD?) could do a manual ts_edit on the data to remove QINs – the fewer and smaller the segments the easier this will be

NERFC also uses temperature forecasts; but temp forecasts come in as TS MODs. ABRFC does reservoir MODs via a local application which sends them directly to the HCL; they don't know how they would remove them.

It seems we should at least have the data we need – couldn't OHD perform the necessary runs at HQ? This would work best, given that we'll need to do a lot of testing and re-testing between now and migration. We certainly don't want the RFCs to keep going to the trouble of providing us data.

Can we ever guarantee a controlled test? John said the discussion reminded him of an attempt to define "raw model" for Julie's verification. In the end the group could not agree on the definition, and the team subsequently disbanded!

What about converting ofstest to CHPS? Good idea, better control of the data, but we don't know how complicated the configurations and connectivity might be – could be worse than other options.

Since numerous people in OHD and Deltares will be on leave until early January there's not much we can do. OHD took an action to get together with Deltares on January 5 to discuss the next steps. Although Micha will be out, Karel said he, Andre, and Mattijs can handle the discussion. Karel agreed to have Micha write up what he needs for testing so OHD can make necessary changes to the source code and/or the sample data, depending on the recommendation.

On a separate (minor) note, Deltares reported that Genna is at HEC this week for non-NWS business, but will take the opportunity to discuss testing with HEC. No other update is available.

Action: Deltares to provide a write-up describing the test data requirements for OHD; JoeG's team to discuss next steps with Deltares on January 5 .

Note: Action items from this and all previous meetings are contained in the "ActionItems" document maintained and distributed by Chris Dietz, OHD.

Next meetings:
    CHPS Briefing to HICs, DOHs, SCHs on Thursday 1/8/09 at 11:00 am EST
    Regular CAT meeting on Thursday 1/15/09 at 11:00 am EST