# Minutes from CHPS Meeting Thursday March 5, 2009

### Attendees:

ABRFC – Billy Olsen, Eric Jones, Mike Pierce, Jeff McMurphy CNRFC – Rob Hartman, Alan Haynes
NERFC – Rob Shedd, Ed Capone, Ron Horwood
NWRFC – Harold Opitz, Joe Intermill
NOHRSC – John Halquist
Deltares – Karel Heynert, Edwin Welles
OCWWS – Randy Rieman
OHD –Jon Roe, Joe Gofus, Chris Dietz

# Pre-reading:

• None

# 1. Daylight Saving Time

USA adjusts on March 8; Europe adjusts on March 29. Difference between USA and NL is one hour less than usual for a few weeks.

Action: None.

### 2. Deltares visit to OHD next week

Purpose is prep work and planning for next CAT workshop. Need to make significant progress so that we have things to present by the workshop. Topics will include: DB archiving (Chris will have some updates by next week); calibration (develop an approach); verification; and XEFS.

Action: None.

## 3. Next CAT workshop

Mon 3/30 – Tues 3/31 in Sacramento Start at 8:00 am/ Travel Sunday 3/29 and Weds 4/1. Please send cost estimates to Chris.

Calibration: requirement is to have something in operations by January 2010. That probably isn't enough time to come up with a final solution, so we should use current capabilities as the requirements, but try to take as generic an approach as possible so we don't design ourselves out of future requirements for (e.g.) distributed modeling. We want to ultimately think ahead enough to go beyond just SAC models.

Outstanding action from the last CAT workshop: new Calibration team to be formed with members from NERFC, NWRFC, and ABRFC. Team will gather CHPS calibration

requirements for BOC, so NWS/Deltares can define an implementation plan by April 2009. This AI appears to have fallen through the cracks. OHD and Deltares will attempt to put together a solution description during their time together next week. With the framework as a basis, a Calibration team will need intensive activity (similar level as the IFD team) in order to define tasking for OHD. OHD/Deltares will arrange a conference call with the Calibration team to discuss the solution description in detail. Deltares has experience in this area with other FEWS users. The interface should have the same 'look and feel' as the rest of FEWS; however the CAT acknowledged that if the most efficient solution involves reusing the existing ICP software then that would be acceptable. Perhaps a two-phased approach might be necessary; certainly the introduction of distributed modeling will require a complete re-think of the way RFCs do operations.

Also noted: 1. the tight coupling with an archive database solution. 2. Also the fact that some RFCs already rely on distributed modeling (hl-rdhm) as part of their operations (Gridded FFG), but there is not a suitable distributed model calibration system or set of procedures for RFC-wide implementation of distributed modeling at this time.

Archive Database: this project is being addressed; Chris will provide Deltares with a progress update next week. NOAA procurement will be an issue again this year – probably worse than last time.

Other agenda topics for the workshop? Deltares will describe progress on IFD. The CAT needs to make a decision on rating curves (discussed several times). We need to address training – all types (migration, systems, forecasting) – dates and length. If time permits we should discuss support structure, otherwise that can wait until the CAT workshop in June. Don't forget the potential requirement to run CHPS on "any" operating system......

We will finalize an agenda for the workshop next Monday and distribute.

NOHRSC wants to discuss with Deltares how to add an extra visit or two to Chanhassen

Plans for Deltares follow-on visits to CAT RFCs weeks of Mar 30 and Apr 6: Edwin described who would be where and when. He agreed to document and distribute the schedule.

HEC-RAS: the April 1 meeting between OHD and HEC must occur before we can schedule a TIM between Deltares and RMA. There are some technical problems which have been difficult to resolve due to the distance/time zones. If the problems persist Deltares may have to spend face time in Davis with RMA. It's important for OHD to be aware of any work not covered by the current MOA so Jon can work on getting RMA engaged.

Acceptance testing the week of Apr 6 in Silver Spring: Ron Horwood and Joe Intermill will attend as before.

Action: any CAT member with thoughts/vision for the future of Calibration should email them to Chris ASAP for consideration during design discussions with Deltares the week of March 9.

Action: OHD-Deltares to arrange a Calibration conference call on Wednesday March 11 at 11:00 am EDT (8:00 am PDT) with the newly formed Calibration team.

Action: Deltares to finalize and distribute the CAT workshop agenda by COB 3/13. Action: Deltares/Edwin to document their travel schedules for the weeks of 3/30 and 4/6.

### 4. First CAT-II call Tues 11:00am EDT

Need to get the cat\_2 infolist up and running. Chris is in the process of adding members in bulk (no need for HICs, DOHs, and SCHs to request individual subscriptions). CAT members will be subscribed but not most others on the chps\_migration list. Will add Deltares/Peter and Deltares/Edwin.

Chris/RobH will distribute the BOC-II document for discussion at the first conference call next Tuesday; also details for the call.

Action:RobH to send out the BOC-II document to the cat\_2 list.

## 5. Measuring progress/success on quad charts for Jack Hayes

Providing monthly quad charts for CHPS is now a new requirement for OHD.

Harold pointed out that the WR RFCs already report on CHPS performance goals to their regional directors. Does OHD need to produce something separate? Jon will discuss with Ken Pavelle, who can contact the HSDs for more information. Progress reports need to be consistent for all.

Action: Jon to find out if RFC progress reports to the regions will address OHD's need to report CHPS progress to Jack Hayes.

## 6. Next monthly "CHPS status briefing" on March 12

Did any issues come out of the HIC conference last week? Generally: concurrence that we need to retire NWSRFS by the end of 2011.

### Also for HL-RDHM:

- 1. Do not put as-is into CHPS;
- 2. No one is using the operational distributed model (DM) currently integrated into NWSRFS to issue river forecasts. HL-RDHM is used to issue operational RFC products such as GFFG at some RFCs, but HL-RDHM is a different model than the NWSRFS DM and is run stand-alone outside of NWSRFS. Therefore, it is not critical to implement HL-RDHM or any other distributed model into the CHPS environment for the BOC-I time frame.

#### Action: None.

#### 7. Other items

7a. Summary of migration progress.

#### ABRFC:

Forcings efforts are generally going well except for GRIBs from GFE. Deltares is looking into this. MarkG's group is close to a netCDF-to-GRIB translator; so a possible alternative exists (i.e., use netCDF files generated by GFE not GRIB).

So-called "blob id" problem is back in analysis at Deltares (this causes the FSS to fall over). This is holding up AB's use of their live system, but isn't yet preventing migration activities. As soon as a fix is available Deltares will send a patch to ABRFC. Note that Deltares will need to clear out AB's database during their next visit.

Display configurations have been complicated. Although a non-trivial exercise (a lot of details) this is not a major issue.

Segment migrations going well, but the dual product streams (with and without QPF) have not been tested and are cause for concern. Deltares believes ensembles will provide the necessary capability but ABRFC has yet to test it because they can't use their live system. They are holding off because they don't want to have a system failure and have to re-do their work. This will be a major focus of the Deltares site visit.

Status of migration script updates? 2 sets of changes still need to be merged together at Deltares.

General: still positive and ready to migrate. Eagerly awaiting access to their live system!

### NWRFC:

3 forecast groups now working.

In the process of cleaning up some segments, which is forcing some decision-making.

It is painful working without a live system.

Reminder that documentation (distributed at migration training?) is very helpful but still needs some improvement.

They are getting GRIBs out of DailyQC (ascii -> xmrg -> gribit -> grib). They have now generated shapefiles. They are about to begin comparing the 2 different types of MAPs(?).

They have 365 basins and are aiming for a June completion date. A lot depends on the MPE development.

#### CNRFC:

No major problems. Some difficulty importing some grids. They are still developing a migration strategy. Rain is finally interfering with their migration efforts!

#### **NERFC:**

No significant issues. Alison has been making good progress on Maine. 10-15 locations have been successfully migrated. The first segment with Res-J went well; a second one is being worked. No display configurations have been attempted yet. An ssh key issue arose but a solution is known and will be shared with RandyR.

Headwater Guidance – their WFOs aren't convinced they can live without this. We must identify a path forward. We will discuss at the workshop.

Standby database appears to have a memory chip problem – may need to be reseated or replaced. They're still diagnosing the problem.

Deltares/Karel: impressed at the speed with which the RFCs are making progress.

7b. John Halquist has been installing FEWS on a system at NOHRSC. He has noticed some things he would like to change; he will send details in an email to Deltares/Edwin. Is this of interest to the CATs? Yes, please CC them for information.

7c. Technical support call beginning in less than 30 minutes. JoeI, Harold (NWRFC), ABRFC, RobS (NERFC), CNRFC will participate. Deltares and John Halquist will not be able to make the conference call.

7d. RandyR has an outstanding action item to determine standard directories/naming conventions for CHPS at CAT (and therefore CAT-II) RFCs. He will address this item during one of the upcoming operational support calls.

Action: Deltares to add to the CAT workshop agenda a session on how to address Headwater Guidance for CHPS.

Action: John Halquist to summarize FEWS configuration change suggestions to Deltares/Edwin, with CC to CAT members.

Action: At one of the upcoming operational support calls RandyR will lead a discussion/determine standard directories/naming conventions for CHPS.

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 operational support conference call today at 1:00 pm EST
- CAT-II conference call on Tuesday 3/10/09 at 11:00 am EDT
- CHPS Briefing to HICs, DOHs, SCHs on Thursday 3/12/09 at 11:00 am EDT
- Interactive Forecast Display (IFD) team meeting on Wednesday 3/18/09 at 11:00 am EDT

• Regular CAT meeting on Thursday 3/19/09 at 11:00 am EDT.