

## Minutes from CHPS Meeting Thursday July 17, 2008

### Attendees:

ABRFC - Billy Olsen  
CNRFC – absent  
NERFC – Rob Shedd  
NWRFC – Harold Opitz  
NOHRSC – on leave  
Deltares - absent  
OCWWS – Randy Rieman  
OHD – Jon Roe, Chris Dietz, Joe Gofus

### Pre-reading:

- None

### 1. Feedback from DOH workshop.

No major issues have been raised. During the Q&A session following the CHPS presentation the tone was very positive and inquisitive in nature. Joe Intermill's demo was extremely well received.

Tom Adams expressed concern about the schedule, which shows parallel operations conflicting with OHRFC's flood season. The schedule shows non-CAT parallel operations spanning the period December 2010 through May 2011; this activity was designed to be a part-time effort spread out over time to accommodate the operational needs of all RFCs. The risk of floods delaying the overall CHPS schedule is considered small and acceptable.

On a side note, RobS did meet with Paul Tilles and Mark Glaudemans and will continue a dialog on NERFC's use of the new Daily QC features in MPE. Mark is planning to visit NERFC to provide further assistance.

The vision for CHPS is to ingest grids only; the transformation of station data to grids will occur outside of CHPS and can be done by any appropriate tool such as MPE, GFE, local applications or NMAP. We believe the original discussion on this arose during the May 2008 CAT meeting in Portland.

Recap: Because of issues with the existing NWSRFS-based mean areal pre-processors, we do NOT want to port them to CHPS. FEWS itself provides MAP- and MAT-like functionality, but they're different; so we can't simply switch to the FEWS versions. Instead during parallel operations the idea will be to generate both FEWS and NWSRFS mean areal forcings to see how well (or how poorly) they compare; once any gross discrepancies or biases have been addressed we will shut off generation of NWSRFS MAPs and MATs.

The main issue is that we can't QC station data in both CHPS and AWIPS. We must be able to handle river gauges. This topic is extremely important but there won't be an opportunity to discuss with the DOHs this week. Instead Jon agreed to mention it during his 5-minute "information update" session with the DOHs today at 1:00 pm. We will follow up with a separate GoTo discussion.

Was there a DOH realization that the issue of local applications for AWIPS II is not as big an issue any more? Unknown. [Author's note: AWIPS-II presentation was biased towards WFOs so the message wasn't on target. JoeO reported hearing conflicting information concerning the type and extent of local applications which will require re-work for AWIPS II; Chris said with CHPS we want to take a more national/rational approach to local applications. There wasn't enough time on the agenda for a discussion with the DOHs on this topic.]

Action: Jon to introduce to the DOHs the need to discuss data (forcings) QC after the workshop

Action: CAT to initiate a discussion with DOHs on the topic of forcings, pre-processing, and data QC.

## 2. Status Updates

### OHD software status:

- OHD will be testing the new ofside next week. NWRFC has volunteered to be a test site. The new version will create a second ascii file in parallel with the existing v12v5.buf, containing the Type Source information. The new file will be in the same directory. Suggested we name the new file v12v5.chps or v12v5.fews for consistency.
- Sac-SMA with FGIX is now up to Level 2 testing.
- Chanloss is underway and up to Level 1 testing.
- For Tatum we need RFC data – since this is no longer a BOC operation should we just put it on a back burner? No one on the CAT uses Tatum; however RandyR agreed to get some data to Lee Cajina because it might be more efficient just to finish up testing now.
- Res-sngl also needs some RFC data for Level 2 testing; Mike Pierce will get data to Lee.
- Rsnwelev – just started Level 2 testing; we have the necessary data.
- Res-J and Baseflow are the last 2 operations for BOC. Res-J will probably be done by Cham (who also did Res-sngl).
- Muskingham and Lay-coef are not used by CAT RFCs.
- Ssarres – Level 2 is complete; waiting for Deltares' October release of FEWS to OHD.
- Glacier, Continuous API, and SS-SAC are not BOC requirements.

Correction from JoeG on 7/18: "The developers already have operational test data for Res-Sngl, although they haven't completed the level 2 testing yet. It was **test data for RSNWELEV which they are still waiting for from Pete at CNRFC**. Lee also asked for **contacts for the CHANLOSS, Res-J and Baseflow** operations. He expects to need the **CHANLOSS** data within the next few weeks." Contact Joe for more information.

API model in CHPS - NERFC has already agreed to phase out API, so it's not needed for BOC. A project to compare API with Sacramento is also underway (contact: Reggina Cabrera). However, getting MARFC off their API will be a mammoth task not achievable within the CHPS implementation timeline. Therefore we have no choice but to provide the API with CHPS. MARFC can switch to Sacramento when they're ready. Joe Ostrowski may be willing to take on CHPS conversion, only if it has long-term benefits such as providing MARFC with valuable tools for future adapter development; or if it will provide a real-life example for future RFC CHPS developers.

ESPADP – meeting with JoeG, Chris, Hank Herr, and RobH yesterday 7/16 to discuss options for our approach to providing espadp functionality in CHPS. The agreement was that we would implement minimal changes where espadp continues to get location id and rating curves from fs5files, and flood stage from ihfs\_db. Espadp doesn't take its rating curves from ihfs\_db because there's no history, which is sometimes needed. This will work if we keep the necessary fs5files around which don't really have any use other than to keep espadp going. Once this is complete (estimate is ~2-4 weeks) Hank can begin working on a longer term solution for the EPG in XEFS. What about a rating curves database for RFCs? It would be a non-trivial task, not worth it for this task. We also discussed the idea at the workshop in June.

HEC-RAS: complicated contracting issues due to schedule dependencies. HEC has only just engaged their contractor RMA, which is much later than expected. This will cause a slip in the HEC-RAS schedule. OHD (Jon, Chris) will arrange a meeting between Deltares, HEC, and OHD to see if a compromise can be reached. OHD has no authority over HEC. Meanwhile OHD has accepted the RTi/Deltares proposal pending resolution of the schedule issue. RTi's role in this for the NWS is mainly project monitoring and administration. NWRFC will be impacted by any schedule slip. However Seann's work can continue independently; he expects to deliver migration tools and instructions to the CAT sites by December. CAT migration begins January 2009 and ends October 2009.

CAT hardware purchase: no progress – hold-up is in NOAA Procurement; Anita Middleton is on leave. However there appears to be no risk to an October delivery just yet.

Action: PeteF to get sample data to JoeG/Lee Cajina for RSNWELEV

Action: RandyR to get some NCRFC representative test segments to JoeG/Lee for the Tatum operation

Action: CAT to provide contact names to JoeG/Lee for CHANLOSS, Res-J and Baseflow

### 3. IFP meeting

Believe the only RFC which hasn't responded to Harold's email is Alaska. We should contact Scott Lindsey directly. The DOHs did a comprehensive job – there is a lot of good information to analyze.

RobS will be the only CAT member attending the upcoming IFP meeting (the other 3 are ABRFC/Mike, CNRFC/Pete, NWRFC/Joe). OHD doesn't currently intend to go.

Participants must keep two big picture goals in mind:

1. We do not want to recreate IFP!
2. We do not want Deltares to have to extensively customize FEWS for the NWS.

**Action: (reminder) Chris needs to provide accounting info to RobS for the trip.**

#### 4. CHPS Bits suggestions

Local applications – access to CHPS database via Deltares' API

Status with software (OHD model) migration

New documents available (and where they are – and/or distribute?)

Minutes from these meetings

Mix up the type of topics – some science-based, some administrative

**Action: none**

#### 5. Other Items

CHPS Hardware Design document – Deltares recently added info on p. 18 regarding bandwidth requirements for MC/FSS synchronization; it is surprisingly(?) low. Note the caveats: numbers are old, done on a shadow system, possible we'll use the system differently? We will use these numbers with caution, and will compare them against our own when the CAT hardware goes in. Billy pointed out a mistake on p. 16 regarding ref to Hurricane Katrina: it was the communications that went out, not a server failure; Billy will send an email to the list with correct wording.

CHPS contract – Proposal is in hand and under review. The document is very well structured and unusually comprehensive.

CHPS list servers – there seem to be so many..... Recap:

- o chps\_migration list is for the CAT (limited to this group) to hold discussions and easily communication information regarding migrating from FEWS Pilot to operational CHPS.
- o chps\_info is for anyone interested in hearing/sharing CHPS information. About 60-70 members.
- o As an aside, the xefs list has been fairly inactive and may end up merging with the chps\_info.
- o There are also several web sites – one is the OHD CHPS web page; another is Deltares' password protected FEWS wiki page. The password-protected nws.wldelft.nl overlaps with the wiki page but is getting stale and should probably be retired – the wiki would serve us better.
- o Also..... email address is rfc.chps@noaa.gov
- o Side note: need to improve wiki organization. It's very difficult to find a specific document. Any suggestions for improvement? Perhaps a global document index as a start.

AWIPS II schedule – the ATILC (formerly AELC) announced last week that AWIPS II deployment has slipped 7 months. No known written evidence to support this. However Billy said he’s seen it on the AWIPS web site; Billy will forward links/references to the list.

Action: Jon and Chris to arrange a meeting between Deltares, HEC, and OHD regarding HEC-RAS.

Action: Billy to send email with correction to hardware document for p.16

Action: Billy to forward a reference/link to AWIPS II documented information on the schedule slip.

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

Next meeting: Thursday 7/24/08. John Halquist will still be on leave.