

## WBD Steering Committee Minutes

July 27, 2015

8 a.m. PDT, 9 a.m. MDT, 10 a.m. CDT, 11 a.m. EDT

Teleconference number:

From the National Center in Reston, dial internally x4848

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<http://usgs.webex.com>

(15) WBD Steering Committee

### Attendees:

Laura Davenport, Steve Nechero, Dave Blodgett, Steve Aichele, Nate Booth, Pete Steeves, Al Rea, Vicki Lukas, Kim Jones, Susan Buto

Excused: Jeff Simley, Dave Blodgett, Jay Stevens, Wendy Blake-Coleman, Mike Eberle

### 1. **Welcome** (Nate Booth-Chair)

- a. Updates to WBD personnel
  - i. Karen Hanson has retired, Sue Buto has taken 120 day detail behind Karen
  - ii. Steven Daw from NGTOC left USGS. Kim Jones taking 120 day detail in Steven's place
  - iii. Taking opportunity to step back and think about how WBD enterprise is working and what can be improved or changed
  - iv. Coordinating with NGP and UTWSC director to fill coordinator positions
- b. Other USGS Water activities
  - i. FY16 budget restructuring. Effort to simplify water mission area. Shouldn't impact WBD/NHD other than highlight importance of the data/programs
- c. National Hydrography Requirements Benefits Study (NHRBS)
  - i. Working with Steve Aichele to coordinate. Workshop scheduled for August 13
- d. OWI
  - i. NWIS modernization, rollout of new time series database
  - ii. Open water data initiative – value of accessible, machine readable data
    1. Summer institute looking at better flood forecasting and western drought
    2. Infographics to turn water data into compelling story
    3. Congressional briefing later this week

### 2. **NRCS** (Steve Nechero)

- a. What is going on at NRCS
  - i. The primary users of NHD and WBD will be the field offices. The Conservation Delivery Streamlining Initiative (CDSI) started in 2010 and NRCS uses ArcGIS 10 and a product called Conservation Toolkit to do Conservation Planning. There are about 2500 offices around the USA and US Territories that are using GIS, plus power users at the State and Regional Level. We have estimated about 8000 GIS users in NRCS.
  - ii. For WBD and NHD databases to be useful in NRCS we need to have tools that integrate the geospatial science data into business workflows for conservation and environmental analysis.
  - iii. Updates to MOU with USGS for WBD and NHD – NRCS wants to expand our focus beyond data management and data provisioning to fully integrating the datasets into NRCS for analytics
  - iv. Climate Change, Soil Health, Drought topics are prominent and a focus of NRCS Leadership. We have many initiatives supporting these science efforts. NRCS is active on elevation front. NRCS is a ranking member of NDEP and 3DEP. NRCS has invested over 30 million dollars on high resolution elevation from 2004 to 2015. We have discover projects with ESRI and University of Texas at Arlington on

water body detection using LiDAR. No stream component in process as of yet. Looking at University of Texas at Austin and geonet for potential collaboration. NGCE wants to vet tools through our team/Nate to get buy in on the “value add” of the databases and their use in science and modeling. NRCS would like hydro enforced DEMs from LiDAR for analytics.

**3. Hydrography Program-NHD updates** (*Al Rea, Jeff Simley*)

- a. Focus for this FY on hi-res NHDPlus. Focus on data and network improvement to build out NHDPlus products. Need good foundation in place to avoid choosing between referencing data to either 100k NHDPlus and 24k nhd. Choosing between reference datasets divides the community. Hi-res network can be generalized as needed for modelers.
- b. NHDPlus version 2 software is being adapted to modernize hi-res iteration (arcpy, file geodatabases, tiff)
- c. Regions 1,2,6,12,14,15 should be starting to come out of the pipe in next month or two. Data will then quickly move into refresh mode. Will develop a team to review from national and local perspectives to identify and fix problems
- d. Hydro seminar series kicked off in April. 3<sup>rd</sup> session is scheduled for July 30 2 pm EDT. Anita Stohr – Putting NHD to work in Washington State. Two lightning talks, Dave Holtschlag – UFINCH, Susan Phelps, Local-Res NHD stream delineation
- e. Hydro data model group – simplify/modernize data model for NHD/WBD. Need to reconcile differences between how HUCs and reaches are delineated. HUCs and hydro correspondence is good but there are differences – need to resolve definitional differences between datasets to unify data model
- f. Open Water Data initiative – several datasets have been stood up as services. National seamless NHDPlus now available with flattened data model to remove related tables – all in flowline table. Next moving toward web based forum and code sharing
- g. ESRI conference discussion with David Maidment. NHDPlus for eastern seaboard before next hurricane season?

**4. NHRBS** (*Steve Aichele*)

- a. Closed survey couple months ago: 595 responses, 532 individuals, 24 agencies, 50 states, 4 non-profits
- b. Sorting through and setting up interviews with respondents
- c. 63 USGS mission critical activities have been forwarded to Nate and others. These have been distilled down to 6 activities. Discussion next week with key stakeholders in USGS to ID key requirements/benefits/cost for those six.
- d. State interviews in progress
- e. Data ingested to cleaned up database and narratives will be sent back to respondents
- f. Final report at end of year
- g. Looking forward to hydrologic data model that can be used for cartography or analytics

**5. NWIS in WBD** (*Sue Buto*)

- a. Drainage area workgroup
- b. Tools for automated DA delineation developed by workgroup and Curtis Price
  - i. National consistency among water science centers
  - ii. 16 water science centers, 4,370 sites funded in pilot project
  - iii. Tools run the process, back to science centers for QA/QC
- c. TX USACE interest for runoff modeling, 600-700 gages. Currently working on list of gages
- d. Formation of sub-committee to address non-contributing areas. Current process only identifies non-contributing areas if full HUC12.

**6. WBD FY15 data improvements** (*Kim Jones*)

- a. Improvement of TOHUC downstream codes, working on integrating with national dataset
- b. Names review, synchronization with GNIS, WBD national will work with stewards to approve proposed updates
- c. MODs field, pilot information needs to go to updated standards, State Stewardship working group wants to expand to additional areas to make sure process works across the nation

- d. 14 digits for AK input to WBD – all Forest Service lands

**7. US/Canada harmonization effort (Pete Steeves)**

- a. Canadian partners, IJC
- b. Retirements on Canadian side have also affected makeup of the team. New members are reinvigorating the process
- c. Key focus has been hydrography and watershed boundaries. Primary first pass at 8-digit completed over 1 year ago
- d. Phase 3 activities wrapping up – extending 10-12 units into Canadian side. Calendar year focus on AK interface with Yukon and BC. Two workshops working on concept lines working with regional agencies to get everyone on same page. Workshops involve heads-up reviewing of concept lines and discussion.
- e. Moving ahead – hydrography is in maintenance phase, some updates to hydrography from natural resources Canada “medium” resolution to high resolution. Invitation to task force to attend “innovation day” and discuss harmonization going forward
- f. AI comment: NHDPlus will likely find issues with network. Updates need to be processed in reasonable time frame across boundaries. Will need coordination

**8. FY 16 planning (Sue Buto)**

- a. Ongoing needs with tool updates keeping up with ESRI and USGS requirements, timely and error free delivery of WBD edits
- b. New requests for data integrity tools: acres and sq. km; States, synchronization of HULevel and HUCClass on line features, in tool topology checks, web feature service for NWIS drainage areas.
- c. Standards updates including new data model additions, high resolution elevation delineation, updates to line and polygon MOD fields, updates to 14- and 16-digit delineation process
- d. Nate: Differences between data models should be addressed
- e. Steve Nechero – NRCS funding for tools and processes?
  - i. Resources always needed
  - ii. Vicki – in negotiation phases so timing is good
  - iii. Team will discuss further

**9. Data, Tools and Stewardship support update (Kim Jones)**

- a. Switching from 9.3.1 servers and tools to 10.x.
- b. Server migration has happened, need tools to work
- c. Server changes will result in a new stewardship workspace for job checkout
- d. There was a working copy of the tools in May but connectivity issues occurred. 10.2.2 version of tools will be available for internal testing any time now. Two rounds of internal testing then round of external testing. 18<sup>th</sup> aug – last day for 9.3.1 job checkout, check in by sept 30. Oct 1 9.3.1 will no longer be supported.
- e. Working with data management team to get a clean version of national seamless. Weekly snapshot requires qa/qc – takes full 2 days to run topology on dataset and then evaluate for errors
- f. Normal stewardship activities. Maine in edit phase and submitting for NQC. Kansas tool training, Florida coastal training
- g. AI comment – need to develop a way to expedite the process for NHDPlus?

**10. NRCS update (Laura Davenport)**

- a. When tools are approved by USGS NRCS will certify for use
- b. Biannual snapshot slated for September – in gateway

**11. Next quarterly meeting**

- a. Fall 2015 – Will send out a doodle pool for early November. Week of 16 is AWRA.