

## **PNWHF Steering Committee Meeting Notes 6-19-2013**

In Attendance: Dan Wickwire(BLM), Jay Stevens(BLM), Sheri Schneider(USGS), Anita Stohr(WADOE), Arleta Agun(WADFW), Bob Harmon(ORWRD), Jon Bowers(ODFW), Jed Roberts(DOGAMI), Ian Reid(NRCS-OR), Dave Brower(NRCS-WA), Van Hare(PSMFC), Clara Dair (USFS), Dana Baker(BLM), Craig Ducey, Janet Bretz (USFS)

### **Stewardship Roles and Responsibilities**

Dan Wickwire reviewed the PNWHF and PNWHF/USGS stewardship agreements. He noted that the stewardship agreement between USGS and PNWHF does not have an expiration date but the stewardship MOU among PNW agencies does expire on September 30, 2013. The PNW MOU has outdated contacts and likely outdated appendices relating to descriptions of roles. The group agreed to start working on the MOU language so that the agreement can be reinstated after expiration with revised language. Anita Stohr, Jay Stevens, and Dan Wickwire agreed to assist with initial review and modifications.

The group discussed the role of State Stewards. The Washington steward currently maintains a gatekeeper role for NHD checkouts that are non-federal. The Oregon steward has had a looser role (not strictly controlling checkouts) but it was agreed by group that Oregon non-federal checkouts should be more tightly monitored until new editors gain experience. A need was identified to develop some guidelines on editing to address the issue of reachcode modification, particularly on major streams where edits will affect existing event data tied to the NHD.

### **Stewardship Communication Protocols**

Rules for distinguishing major/minor edits were reviewed and the group agreed to a 'common sense' view where generally, scattered updates and additions would be viewed as minor edits and more complete re-working of hydrography within a hydrologic unit would constitute a major edit. All edits that would result in a hydrologic unit boundary change would be considered major edits.

The communication protocols that should be employed at a minimum should follow these rules:

- 1) Any edits on federal land performed outside of that federal agency require approval. Exceptions can be made for GNIS updates that do not involve geometry changes or deletion of reachcodes.
- 2) Minor edits on federal land performed internally do not require notification.
- 3) Minor external edits upstream of federal land in a 5<sup>th</sup> field unit require notification.
- 4) Minor external edits on 6<sup>th</sup> field units containing federal land require notification.
- 5) Notify state for minor edits on state or private land.
- 6) Request state approval for major edits on state or private land.

The contact database was recently revised by BLM to reflect changes in personnel. It is anticipated that USFS will need to review contacts to make sure they are up to date.

Agreement was reached to include the date of last revision in the name of the fileGDB and to keep file posted on PNWHF FTP location. The group also asked for instructions on use of FTP site.

The use and design of the database was discussed and the group decided that more guidance is required for use of the database, particularly to clarify who main contacts are for approval of final edits. Jay Stevens, Bob Harmon, and Jon Bowers agreed to set up a working session to review database design and documentation.

## **NHD Management Team Update**

Dan Wickwire provided a brief overview of recent topics worked on by the NHD Management Team and the WBD State Steward Workgroup (SSWG).

1. Both teams have been assisting with FY2014 planning and prioritization of USGS water projects.
2. Critiques have been provided to USGS National Geospatial managers concerning USGS support to NHD and WBD programs. Key areas included the following: technical management and vision, communication, project management, support and guidance for state stewards, public access to NHD and WBD products.
3. USGS is developing a implementation strategy for improved project management and use of agile. Project managers were recently provided agile training. Kevin McNinch and Ellen Finelli will report on this at an upcoming management team call.
4. USGS has initiated an “end-to-end” process improvement (Network Evaluation and Improvement) project. Horizon Systems has been hired to assist with this. USGS and Horizon are examining the high resolution VAA process to identify areas for improvement.
5. Issues surrounding data delivery have been discussed in both groups. USGS has prioritized resolution of this issue, as evidenced by their report at the last Advisory Team call.
6. Three hydrography related studies (that will involve state stewards) have been discussed:
  - A Mapping Science Committee Study (National Academy of Science/Maidment) that has a goal of examining the future of the hydrography data and its needs/requirements.
  - A hydrography business requirements study that has a goal of surveying uses of hydrography data across the country. Larry Sugarbaker will lead this study.
  - A stewardship assessment (50 states) study that has a goal of assessing stewardship of the NHD. This study has been delayed due to OMB limitations on large surveys.

## **NHD Tool Updates**

The 10.1 version of NHD update tools could be available as early as end of June 2013. The stand-alone NHD utilities (Build flow, m-value utility, etc.) are now available for 10.1 and Win7.

The WBD Tool and update processes are once again on hold. The WBD tool was released earlier this spring, training sessions were held, and the dataset was opened up for editing. Problems have since been encountered and updates are now on hold until the problems are resolved. No timeline has been announced.

Stephen Daw is planning a development cycle for late summer/fall 2013 following the resolution of the above cited problem. Stephen intends to use agile techniques and his current product backlog includes bug fixes, adding feature level metadata on lines, adding topology rules, and creating a Mod attribute update tool (for lines and polys).

## **HEM development Status and Demo**

Dan Wickwire provided an update on HEM Tool development and Dana Baker provided a demonstration of the latest accomplishments on the project. In summary, there are two versions of the HEM tools. The first is the well-established HEM desktop tool. And the second, currently under development, is the HEM web tool.

HEM desktop tool: USGS is distributing three versions of the desktop tool (2.6 for ESRI 10.1; 2.5 for ESRI 10.0; and 2.3 for ESRI 9.3. The desktop tool is very stable. Version 2.6 resulted from a January, 2013, development sprint that included the upgrade to ESRI 10.0 and the building of an MSI to make installs easier.

HEM web tool: The current HEM web development has the following objectives: (1) serve the tool's functionality via web (2) provide a sample client application that enables users to click on location, send coordinates and reach code, and return what is needed to create a HEM point or line event (3) Produce instructions on how to incorporate the code into a user organization web site and consume ArcGIS services (SOE) (4) develop functionality to create HEM metadata.

HEM web is a pilot effort and is approximately 50% done. Efforts began in FY2012. Four sprints are planned for FY2013. The demo provided at today's meeting reflects the deliverables after sprint 3. Dana provided a walkthrough of the current HEM web functionality for point and line events. She covered the following: (1) services and data (2) use of a Server Object Extension (SOE) (3) the overall page design and user interface (4) point and line event editing capabilities (5) metadata and (6) the configuration guide. Sprint 4, of this development cycle, is planned for late summer and will address an ArcServer bug fix that should be included in ArcGIS 10.2. USGS will stand up a test server for this purpose.

## **Generalization**

There was a group discussion on the CEGIS (Larry Stanislawki, author) generalization tools and their general applicability. Interest was expressed in use of the tools but concerns emerged regarding the level-of-effort required to execute them over areas larger than project size. Stream Order attributes now calculated in Oregon and Washington provide a means for cartographic generalization over larger areas but still doesn't get at the need for a hydrologic-equity-based pruning technique.

Sheri Schneider agreed to share additional information on USGS plans to apply the CEGIS tools more broadly and whether any samples are currently available in Oregon/Washington.

## NHD Geometry Replacement

Tamiko Stone gave a presentation on the lidar-derived geometry replacement that was done in Little North Santiam watershed in Oregon. She used the NHD update tools rather than the Geo Conflation tools for this update. She employed a technique that employed a partial preservation of NHD reachcodes; preserving reachcodes on streams that had GNIS names or fish data in BLM's ARIMS database. This technique was chosen over the GeoConflation Tools because of the radical differences in stream alignment between the new lidar-derived-geometry vs the original NHD in the LNFS watershed.. On projects where replacement geometry is more coincident with original geometry, the conflation tools may be more suitable.

## Updates on Activities from Participants

BLM – Gave updates on following projects

- 1) Lidar Pilot – Craig Ducey provided a status on the BLM/USGS agreement for lidar based hydro delineation. BLM continues there work on the project and plans to complete their efforts by late summer. Deliverables include NHD replacements for a selected set of HUs in Oregon and a final project report.
- 2) NetMap – BLM is piloting latest NetMap software. First project will likely be modeling intrinsic potential for anadromous fish habitat.
- 3) Stream Order – Western Oregon done. Eastern Oregon re-started, expected to be complete by end of July. Working on software and documentation. Trying to get more USGS participation to help with documentation and support.
- 4) ARIMS (Aquatic Resource Information Management System) Redesign – BLM OR/WA will be gathering requirements for a re-design of the ARIMS fish module this fall. This may be an opportunity to make changes in data design that would improve inter-agency data exchange. BLM agrees to keep Oregon agencies in-the-loop.
- 5) Wetlands Planning Dataset – BLM OR/WA is moving ahead with a periodic compilation of wetlands data from NWI, NHD, and local sources for use in regional-scale planning. The data is problematic for project level use because of disparate depictions of wetland and open water in NWI vs NHD.

OWRD - Status report. Started migration of OWRD's stream code in the Klamath basin earlier this year. Will maintain in HEM. Finding even split of issues from previous mapping of the ids and the NHD. Not a big number in total. This will provide the ground work for snapping water right points of diversion (PODs) to the NHD and importing as events. Also need a stream mile on the NHD (or some type of whole stream index) for sorting of POD information on the stream based on its location. Developing tools to do this. Will continue this work throughout the state. No timeline has been defined due to other issue in the Klamath that require OWRD's attention, but migration to the NHD remains a priority.

Meeting notes from the last OR Hydro meeting (5/23/13) will be posted on the OR state GIS site (GEO ) at: <http://www.oregon.gov/DAS/CIO/GEO/pages/fit/hydrography/hydromin.aspx>

ODFW – Status Report.

- In process of migrating LLID-based routes to events on NHD.
- Synchronized LLID events that were migrated to the NHD in September 2012 to an April 2013 version of the NHD
- LLID-based route system has been generated (despite pending edits to NHD) and provided to Oregon Water Resources Dept. (OWRD)
- Staging approximately 800 edits to the NHD and preparing to begin stewardship process with BLM, USFS and OWRD
- Once NHD edits are complete, LLID events will be synchronized again (~ summer 2013)
- Fish habitat and fish passage barrier data will then be migrated to events on the NHD (~ fall 2013)

NRCS –Oregon:

Ian Reid reported that Bryant Mecklam delivered the WBD review data set for the three Coquille River watersheds that are being updated with LiDAR data. This is the first step as we head toward the fall 2013 edit cycle.

### **Cooperative Maintenance of Alternative Route Systems (LLID)**

Some agencies have a need to maintain whole stream identifiers that can be used to generate alternative route systems using NHD geometry. Specifically, agencies that are reporting fish distribution data to StreamNet have been submitting these data in the LLID event format. Van Hare expressed openness to receiving data in different formats, i.e. spatial representations of events. He also reiterated that most agencies have expressed need to report in LLID format not just for StreamNet but for other consumers of the data that find a whole stream identifier easier to use. There was agreement in the group that the NHD should change it's route system to a whole stream identifier. Until that happens, there will be a need for state agencies to collaborate on maintenance of alternate identifiers to avoid conflicts and duplication of effort. The group agreed to convene a technical group to further discuss these issues.

### **Summary of action items**

- 1) Schedule review of contact database (Jay Stevens, Bob Harmon, Jon Bowers)
- 2) Schedule review of PNW MOU (Jay Stevens, Dan Wickwire, Anita Stohr)
- 3) Schedule BLM/DOGAMI tech discussion on geometry replacement
- 4) Work on Website Update (Dan Wickwire)
- 5) Schedule further discussion on LLID maintenance (Jay Stevens, Van Hare, WDFW, ODFW, OWRD)