

OGIC HYDRO MEETING

Friday, September 15, 2000, 9:00 am - 12 pm

BLM District Office, Salem

Attendees:

Bob Harmon, OWRD

Jon Bowers, ODFW

Ian Reid, NRCS

Stephen Bown, USFS-Region 6

Cy Smith, Oregon GIS Coordinator

Marc Koski, BLM-Salem District

Dan Wickwire, BLM-Oregon State Office

Sharon Clarke, CLAMS, OSU

Emmor Nile, ODF

Handouts:

1) 5th-field watershed status map (at

<http://www.reo.gov/reo/projects/watersheds/ws5status.jpg>)

Agenda/discussion items:

1) Clearinghouse

- a) **Server.** Dan invited everyone to the BLM-USFS joint GIS field conference to be held in Bend at the "Riverhouse" during the week of October 16th. On Wednesday afternoon (10/18), during the conference Jack Horton, ESRI-Olympia, will demonstrate the Hydro Clearinghouse server that he has been working under contract to the REO. This will be the first demo of the finished product.

Dan, Bob, and Ian, were a part of a group the previous week that attended a status briefing put on by Jack in the ESRI office in Olympia. Many of the programming modules are already completed or near completion. The plan is to have a prototype ready for testing by the first week in October.

Emmor and Sharon asked if a single, statewide data set would also be available for downloading from the Clearinghouse. Dan and Bob estimated that the size of such a data set would be too large for most people to handle through the Internet. Bob proposed working with the Oregon GIS Service Center to take care of the periodic capture and distribution of a snapshot of a statewide hydro data set from the Clearinghouse, probably via CD(s).

- b) **Pre-loading the server.** There was discussion about the need to have the Hydro Clearinghouse "pre-loaded" with the complete 100K hydro data set and how this would be accomplished for Oregon (Washington has already completed the process for its area). Dan reminded the group that Jack's server design required a pre-existing data set with which to check LLIDs against during the check-in/out process. The issue then is who will pre-load the server with data for Oregon? Jon reported that he had talked with Stan Allen, Pacific States Marine Fisheries Commission (PSMFC), and found out that Dale (REO) has already been discussing it with him. At this point we don't know if any arrangements have been finalized between the REO and the StreamNet program at the PSMFC.

2) Framework data model.

- a) **“Tweaks.”** At another meeting last week in Olympia, Bob, Dan, and Ian summarized discussions with our Washington partners regarding “tweaks” to the model. It was initiated by the results of separate implementation trials conducted by the Washington DNR and BLM-Oregon State Office. Notably, a flow path code was added to the watercourse line type event table to differentiate between primary and secondary flow paths through water bodies. The meeting also focused on determining whether events would cover the entire extent of the hydrographic network, or not, and, when necessary, what the default attributes would be. An updated version of the hydro model should be out within a week or two. It can be found on the following sites:

Oregon Geospatial Library: <http://www.sscgis.state.or.us/coord>

Washington hydro framework: <http://framework.dnr.state.wa.us/hydro>

- b) **“Consistent” representation across scales.** Sharon asked a question about the ability to portray the hydrography “consistently” at 24K, i.e., at the same density. This relates to the degrees, and by different methods, that the data are being densified. Sharon and Emmor noted that they would like to show, or have been asked to show, “just the blue lines,” or those stream segments that originally came from the quads. Initially, most thought that if the data were attributed as being derived from quad maps, DLGs, CFFs, or variations of 24K quads that that would be adequate. Mark noted that after just one edit the metadata event table for the “blue line” arcs would not reflect the 24K quad as a source if they had been edited from another source.

A couple of suggestions were offered. The first was to create a new field in one of the event tables that would tag the arc as a “blue line” at one of several scales used by the USGS, i.e., 500K, 250K, 100K, and 24K. This could be applied as a separate event table by the OGIC Hydro group for Oregon hydrography data without effecting the regional (OR/WA) hydro framework. Eventually, it could be proposed as an update to the framework model. The second suggestion was to create a standalone cartographic theme without densified data for the state. The group will consider both suggestions.

Mark noted that the next BLM GIS field users conference would be in February of 2001.

- 3) **OWRD-BLM funding agreement.** Bob updated the group on the Oregon Plan moneys that had been awarded to the OWRD through the OWEB for completing the Oregon 24K hydrography framework. A funding proposal was made to the OWEB in April for \$273,000. \$250,000 was awarded which will be paid to the BLM Oregon State Office in Portland to expand its hydro data compilation work into the state where it has not already been completed. Bob and Dan took an educated guess as to where the Forest Service had 24K hydro data (watersheds with less than %60 percent USFS ownership). This will be refined as better status data are received from the USFS. Half of the grant money is dedicated to the integration of data in watersheds

where the BLM and USFS overlap. Dan noted that integration could occur either before or during submission to the Clearinghouse. It won't be easy either way.

Emmor will look into how ODF's Spencer Gross 12K hydro data for northwestern Oregon may be used in this process.

Mark asked about what the priorities were for compiling the 24K hydro framework. Bob replied that the first priorities were in the Willamette basin and then to the northeast for other basins tributary to the Columbia River. This should support the Oregon Plan and related stream restoration activities. Bob informed the OGIC Hydro group that they will have input into this as work progresses. A status map of the watersheds completed so far by the BLM is at:

<http://www.or.blm.gov/gis/projects/hydro/hydrostat.htm>

- 4) **Crenulation.** Dan brought up a concern that he has had with the data sources people use for adding new streams (densifying) through the crenulation process. Variations in the location of contour lines between adjacent quads have been found in the 24K quad-based data (DRGs, DLGs, etc.). The quality of the WOODB (12K) data is sometimes suspected as well, noted Mark and Sharon. Dan proposed that a 'hierarchy' of preferred data sets used for crenulation be composed and made a part of the Clearinghouse "Roles & Responsibilities" management protocols. Emmor, with the agreement of the group, urged that the Tagged Vector Contour (TVC) be used wherever possible since the other data sets are essentially derived from them.
- 5) **Watersheds (delineation of 5th-field, 6th-field, etc. at 24K or better).** Ian began by covering the project status (see handout referenced at top of these notes). Dan expressed concern that the "concept lines category" on the status map (handout) was not clear. It doesn't tell him who the partners in the watershed are, if they've met and agreed on the concept lines, or if the lines were validated by the data stewards.

Dan helped to summarize the larger process issues as follows:

- a) **'New' 5th-field lines at 24K in eastern Oregon.** Dan and Ian, and much of the group, agreed that a workshop should be held 'out east' to complete the process of identifying and certifying the concept lines. To assist this process, Dan and Ian will identify contacts from the BLM districts and USFS forests that should be involved.
- b) **Corrections to the 24K 5th-field data in western Oregon.** Dan suggested that he, Stephen, Dale, and Karen get together during the 3rd week in October, as they did in 1998, to create a new, corrected snapshot of the 5th-fields for western Oregon.
- c) **Delineating 6th, 7th, and beyond; defining a check-in/out process.** Mark urged that time had to be taken to develop a data structure, data model and attributes, for the watershed data. Ideally, there would be one coverage with all of the

delineations—5th, 6th, etc.—contained within. Ian agreed that a single data structure was necessary and should be apart of the discussions. Ian and Dale are also exploring the development of a clearinghouse server, similar to the Hydro Clearinghouse, for checking in and out watersheds for editing or general use. This would fulfill the same goals of having a single, up to date data set, and in a central location accessible to all.

- 6) **Next meeting.** Thursday, November 16th, 2000 at the BLM Salem District Office, Table Rock room, from 9:00am to noon.

Notes written up by Bob Harmon with “pre-apologies” for any errors, omissions, etc.