

Subcommittee on Spatial Water Data

Meeting Details:

Date/Time: February 26, 2016, 1:00 - 3:00 PM Eastern Time

Location: Teleconference only (administered from USGS Headquarters, 12201 Sunrise Valley Drive, Reston, VA 20192)

Conference Line: 703-648-4848

From non-DOI locations, dial toll free 855-547-8255
Conference code 1712-0464#

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Meeting number: 716 325 658

Shared document space:

<https://drive.google.com/open?id=0B877MDsx9pIFTmpocGE1d0M4TVE&authuser=0>

Agenda

All Times Eastern Time Zone

1:00 - 1:10 Introductions for new attendees

1:10 - 1:20 Presentation on EPA's StreamCat - Ryan Hill and Marc Weber

1:20 - 1:25 Status of GeoCloud and GeoPlatform - Tod Dabolt

1:25 - 2:30 Work Group Reports

2:30 - 2:40 New Issues

2:40 - 2:45 Adjourn

Attendees:

New (did not attend 8/28/14 or later meeting)

Ryan Hill (ORISE % US EPA, Western Ecology Division)
Marc Weber (US EPA, Western Ecology Division)

Returning (attended 8/28/14 or later meeting)

Al Rea (USGS)
Kernell Ries (USGS)
Ellen Finelli (USGS)
Dave Blodget (USGS)
Ariel Doumbouya (USGS)
Brenna Mefford (WY SEO)
Thomas Dabolt (DOI)
Steve Malers (Open Water Foundation)
Steve Aichele (USGS)
Dwane Young (EPA)
Bill Samuels (Leidos)
Pete Steeves (USGS)
Regan Murray (EPA)
Kevin MNinch (USGS)
Jane Schafer-Kramer (California DWR)
Jeff Davis (Cardno/NGWA)
Tad Slawecki (LimnoTech)
Chris Mickle (Cardno)

1:10 - 1:20 Presentation on EPA's StreamCat

by Ryan Hill¹ and Marc Weber²

¹ Oak Ridge Institute for Science and Education (ORISE) Postdoctoral Participant c/o US EPA Western Ecology Division

² US EPA Western Ecology Division, Freshwater Ecology Branch

Description: StreamCat is a recently-developed database of watershed metrics for the conterminous USA. StreamCat was developed within, and can be quickly linked to, the NHDPlus Version 2 geospatial framework. It provides more than 150 metrics that characterize upstream landscape features for all 2.65 million catchments within the NHDPlus Version 2. These features include both natural (e.g., climate or soils) and anthropogenic (e.g., percent urbanization) metrics that can be used as input for environmental and ecological modeling and applying model results to new, unsampled locations. In addition, we are developing a parallel dataset for lakes (LakeCat Dataset) that we hope will be available this year. In this presentation, we will briefly describe the development of StreamCat (including the

open/repeatable principles we followed), its main features, how to access the data, and provide some examples of how we are using StreamCat in our research.

Relevant links / background information:

StreamCat JAWRA Article - <http://onlinelibrary.wiley.com/doi/10.1111/1752-1688.12372/abstract>

StreamCat FTP site -

NARS Gateway - <http://www.epa.gov/national-aquatic-resource-surveys/streamcat>

StreamCat ReadMe - [Access Here](#)

StreamCat Metric List - [Access Here](#)

Data Processing and QA - [Access Here](#)

StreamCat GitHub site - <https://github.com/USEPA/StreamCat>

1:20 - 1:25 Status of GeoCloud and GeoPlatform

Tod Dabolt

FGDC Pilot GeoCloud project. NHDPlus test services have been on this platform. They are being moved to GeoPlatform cloud. URLs will change a bit in the future.

1:25 - 2:30 Work Group Reports

Drought Use Case Work Group

- Colorado River Basin Drought Visualization: progress underway on Spanish translation.
- Working on arranging a team call to follow-up on 2016 action plan. Date TBD.

Water Use Data Work Group

Water Use Data compilation in Sciencebase in need of review - now public:

<https://www.sciencebase.gov/catalog/item/55e65861e4b05561fa208878>. Have added 25 significant water use datasets, their period of record, release frequency, spatial extents, etc, as reviewed by the work group. Please email Sara (saralarsen@wswc.utah.gov) if you know of a larger dataset that we missed. Will work to build an interface that shows the “openly published” status of each dataset and many other attributes. Sciencebase itself is based on “open data” concepts, so as the information changes (e.g. from “Openly Published? Pending” to “Openly Published? Yes”) the interface will too. Also working on a draft report - our group’s final

deliverable. Our group will reconvene in March to discuss the report, Sciencebase, the interface, then we'll "be assimilated" by the drought use case.

Spill Response Work Group

Revised Spill Response Use Case paper

- Prioritized datasets
- More detailed discussion of HSIP Gold and Freedom
- The HSIP Freedom 2015 data product is a license-free subset of 356 HSIP Gold layers downloadable from the GII located at <https://gii.dhs.gov/HSIPFreedom.aspx>. A Homeland Security Information Network (HSIN) account is required to access the DHS Geospatial Information Infrastructure (GII) located at <https://gii.dhs.gov>.
- Examples of the varied types of information contained within the HSIP Freedom product include transportation data, energy data, emergency services data, public venues, basemap boundary data, and LandScan population data. HSIP Freedom in its entirety is unclassified; it is subject to the handling and distribution rules for "Unclassified For Official Use Only" due to licensing and sharing restrictions.
- Included a discussion of The Western Lake Erie Area Committee (WLEAC)-Ohio Mapping Project is a geographical information system (GIS) environmental emergency response tool which bring public (local, state, federal) and private sector responders together working in one GIS forum for spill response and emergency pre-planning.

Network-Linked Data Index Work Group

A small group met on February 16 to kickoff development. Things are getting started with basic code sharing and orientation happening between EPA contractor Indus Corp and USGS Office of Water Information. A github repository has been set up and will be populated with the NLDI initial database code in the coming weeks. <https://github.com/ACWI-SSWD/nldi-db>

Next steps are to plan implementation tasks to accomplish the first release goals:

- Have an updatable snapshot of STORET, NWIS WQ, and USDA STEWARDS in the index.
- A basic network navigation service that returns GeoJSON for segments up or downstream of a chosen comid/segment.
- A service that returns (network-linked) sites found to coincide with the comid segments found through navigation.
- A basic client for these services, possibly implemented in the Water Quality Portal for the National Monitoring Conference.

We will be heads down accomplishing technical tasks for then next month or two before considering an increase in scope or bringing in additional collaborators. Planning and high-level coordination among groups that might contribute content or components will be a primary goal but undertaken separate from the technical implementation process.

NHDPlus Framework Work Group

A new version of NHDPlus V2.1 national geodatabase is imminent. Process has been running several days. Should have a new version posted by next meeting. Data content updated, and new schema to include monthly mean flows, as discussed with this group previously.

2:30 - 2:40 New Issues

DHS HIFLD Open Data Portal

DHS released a big collection of data (HIFLD) into their open data portal, and some of it includes some pieces of NHD and other aspects of water resources.

Here's the landing page for the site

<https://hifld-dhs-gii.opendata.arcgis.com/>

And here's the water specific portion

<https://hifld-dhs->

[gii.opendata.arcgis.com/datasets?q=&sort_by=updated_at&group_id=430c1e08d8fc4398a87a399369066848](https://hifld-dhs-gii.opendata.arcgis.com/datasets?q=&sort_by=updated_at&group_id=430c1e08d8fc4398a87a399369066848)

If you poke around and do some searches, there are other useful water pieces in there as well

https://hifld-dhs-gii.opendata.arcgis.com/datasets/7743077dec214af1a131691751ac7fbc_0

https://hifld-dhs-gii.opendata.arcgis.com/datasets/dbe9229ab8304623a18de2851776a52c_0

Al's notes:

HR NHD -

The most useful feature classes, NHDFlowline, and NHDWaterbody, are not included
NHDPPoint, NHDLine, and NHDArea are only included for AK, PR, and USVI.
NHDPPointEventFC appears complete for 20130125

MR NHD -

The most useful feature class, NHDFlowline, is not included
NHDWaterbody seems complete for 20130125
MR NHD instead of NHDPlus, which is much more up-to-date

Streamflow Gages -

Source is NHDPlus V1, V2, NWIS. 10,390 gages included. Selection criteria are not specified.

Watershed Boundaries -

National Atlas 1:2,000,000 boundaries

Wendy Blake-Coleman will find us the contact information for the person in charge of HIFLD so we can report these issues.

HIFLD CONTACTS

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2:40 - 2:45 Adjourn