

**Federal Geodetic Control Subcommittee
Vertical Reference System Work Group
Meeting Notes
November 18, 2010**

Location: NOAA, Silver Spring, MD; SSMC3, 8514
Time: 10:00 a.m. – 11:30 a.m. East Coast time
Call In Number: 877-426-5014, PASSCODE: 8484480

Attended

NOAA/NGS Renee Shields, Ajit Singh, Dave Doyle, Dan Roman, Christine Gallagher, Jeremy McHugh
USACE: Mark Huber, Gregory Snyder
USGS: Larry Hothem
NGA: Jim Frederick

1. Review meeting notes from September

2. Report on status of past FGCS and VRSWG actions

a. Summit

i. Selecting new datums project managers

- NGS is still in the process of naming project managers. The Director has been temporarily assigned to Acting Assistant Administrator for the National Ocean Service (NOS), and it is unclear if that will impact the timing.

ii. Pilot projects – NC/FEMA

- Dru Smith was not present to report out on the status of the NC/FEMA pilot project, but a meeting was recently held in North Carolina to begin determining what the project will involve

iii. Web site

- The web site is online, but it is difficult to find. You have to look at old headline stories, and the link is in the story about the Summit. Christine is looking for a new place to locate a link on the NGS website. Most of the proceedings and documents are available, but the final report with action items is still pending.

b. FGCS Secretariat

- Jeremy McHugh was introduced as the new Secretariat. Jeremy has worked at NOAA for most of the past six years, he worked at USGS for the past year, and he began his new position at NGS about two weeks ago.

- The FGDC meeting with a report out on FGCS scheduled for December has been rescheduled to the spring, and it is unclear if Joe Evjen or another person from NGS (e.g. Director or Acting Director) will provide the report.
- Jeremy sees the current priorities revolving around the new datums (i.e. geometric and geopotential) and integrating NGS databases (OPUS-DB and NGS-IDB) combined with the forthcoming OPUS-Projects. Dave D. made sure to highlight it is an opportunity to also integrate the CO-OPS database as well.
- Jeremy is focusing on re-establishing a contact list of participants for FGCS and has made a great deal of progress. There will be a meeting in January based from Silver Spring but with a teleconference option. The contact/membership list has grown enough that as many as ten agencies could be represented. There will also be a meeting in July coordinating with the ACSM/ESRI conference in San Diego. A video-conference option for the July 2011 meeting may also be explored.

c. FGCS invitation letters to Agencies

- Jeremy updated the group that invitation letters will only be sent out as a last resort. Success and progress has been made just using detective work and following up with folks who have moved on and no longer will be participating in the committee.
- Agencies that still do not have an updated representative include: Coast Guard, Naval Observatory, Indian Affairs, and TVA

3. Report on status of activities within each agency related to vertical datum issues

- Renee reported that the datums will not meet their initial release deadline. At the moment, the current date for expected release is 2022. However, that date could push back further, and the level of funding will have a tremendous impact on the time frame.
- There was a question, then discussion, about how the delay would impact consistency with our geographic neighbors in Canada and Mexico.
- Canada had initially intended to switch datums in 2011, but that has since been pushed back to 2013. They are sliding with NGS, so the relative timing between the two countries could remain fairly similar to the original plans. Resolving the datums across the borders will be challenging, but Dan Roman continues to work closely with them. Additionally, Canada is planning on adopting a semi-dynamic model, so their first update could coincide with NGS's release of its new datums.
- Mexico will gladly accept any information we can provide them, and they currently have no plan to make this update/switch.
- A discussion of when models would be released grew out of the idea that places like Alaska would not want to wait another 10-15 years to get a better model. Dan explained that NGS may hold back the datum until everything is done, but the current plan is release gravimetric geoids as they become available. This option should

definitely be available for Alaska, but it is more complicated in CONUS because the “borders” of different surveys still need to match up well.

4. *Topics for discussion*

- To facilitate the discussion of the topics listed below, Renee described the purpose of a spreadsheet she sent out before the meeting that provides each agency with the opportunity to list projects, products and services that are planned or ongoing and that will be impacted by the new vertical datum. Additionally, projects, products and services that currently have issues with NAVD88 can be discussed as well. Ultimately, the group could talk through tools to deal with these problems, discuss if whatever idea NGS has planned is adequate for agency-specific needs, etc.
 - a. *Goals of Workgroup*
 - b. *Developing work plan*
 - c. *Identifying actions*
 - d. *Tracking progress*
 - e. *Suggestions for future venues, activities, projects*
 - f. *Meaningful meetings*
- Larry Hothem reported that others at USGS may be better served at supplying the names of specific products, services, and programs that will be impacted by the new datums. This is especially true given the USGS reorganization, but he believes the National Digital Elevation Program is where most of that knowledge currently resides.
- Larry Hothem also asked if the questionnaire that registrants for the 2010 Federal Summit completed could supply some information about concerns, etc. Renee did not have the information available at this time, but it can certainly be pursued.
- COE will contact the districts to supply a list of projects, products and services that either have issues with vertical datums now or will in the future.
- Jim Frederick reported that NGA will begin a long-term (i.e. ten years) education effort about the switch to EGM08 with the knowledge that there could be another model (EGM24?) by the time the new datums are available. They are working with FAA, military aviation partners, and manufacturers to “socialize” EGM08.
- A discussion ensued about the challenges of updating data as the underlying models (e.g. geoid models) change. The group agreed the best (realistic) manner in which to deal with updating data is to make sure you know what models have been used so you can return to ellipsoid heights and then introduce the newest model. This process is easier said than done, but a first step is certainly developing a strategy to make people aware of the problem.
- Renee and Jim agreed that a working group should meet in December or January to try and tackle the problem of communicating the message that you have to have the ability to transform your data to bring in the new and more accurate models. Renee will send out a doodle poll to schedule the meeting, and NGS will make sure to include its FAA program leader and contacts.

- The charter was briefly reviewed, and a question arose of why it alludes to multiple vertical datums. A short discussion explained that the island territories are on different datums.

5. *Action items*

- Participating agencies will use the spreadsheet to list projects, products and services that are planned or ongoing and that will be impacted by the new vertical datum (or currently have issues with NAVD88).
- Renee will send out a doodle for a working group meeting with FAA representation and NGA to discuss strategy in “socializing” EGM08 and having data that can deal with new models.

Future meetings (quarterly): Jan 6, Apr 7, Jul 7, and Oct 6, 2011