

**March 3, 2021 Public Comments:**

- 1) From: Denis Hains: from Chat

2:02 PM: I have a comment for Mr. Friedman & RDML Brennan -

Q: With respect to Equity, Diversity and Inclusiveness priority, It is understood that NOAA-OCS is strongly supporting the IHO Assembly adopted "Empowering Women in Hydrography" initiative. Are there some targeted actions that NOAA-OCS will commit and deploy to engage into this specific initiative over the next years and the UN Decade of Ocean Science for Sustainable Development more specifically in collaboration with the "US-Canada Hydrographic Commission"?

A: John Nyberg will provide a response. OCS has a letter of support for IHO for gender diversity in contact of IHO women steering comte for career development. This provides no cost prof development opportunity.

- 2) From: bob.mcconnaughey@noaa.gov

Q: Is there an anticipated completion date for GRAV-D in Alaska? Thank you.

A: All of mainland Alaska is now complete, we are just waiting until we can get back out to the western half of the Aleutian Islands sometime in the next couple years.

- 3) From: Alan Leonardi re Dr. Larry Mayer presentation:

Great to see the successes of the Sairdron from the Ocean Exploration and NOPP funding, Larry. Tremendous success!

- 4) Ash Chappell: re Steve Murawski presentation

The Big Bend work noted is an OCS IOCM campaign project

- 5) Mark Luther to Steve Murawski:

For the record, Steve Murawski gives me too much credit - I've been involved with TB-PORTS since 1990 but it's development was all a NOAA accomplishment. I took over local management a few years after the system was declared operational and have continued that role in close collaboration with CO-OPS since.

- 6) Denis Hains to Juliana Blackwell:

Comment and Questions: Thx for your very good NGS presentation and Congrats for the impressive NGS work; (1) Will the new NSRS Geopotential Datum include the integration of a continuous Vertical Datum Surface representing the Lowest Astronomical Tides Chart Datums used for Hydrographic and Electronic Navigation Charting

- 7) John Kelley to Dr. Stockdon:

Is the NWPS-TWL forecast system for both extratropical and tropical cyclones? If yes, what NOAA storm surge model output is used for extratropical cyclones?

8) From Chris Freeman for Dr. Kinsman

The NSRS modernization is exciting for those of us in the seamless topo / bathy shoreline monitoring field. However, there will be challenges for those groups collecting very long-term datasets that have to go back and translate. For example, here in North Carolina, we have a 22 year and running shoreline monitoring program with at least one and if not two (post storm) datasets per year. We've had several adjustments over this time from NGVD29 to NAVD88 and update of the datum derived shorelines with epoch changes / Vdatum, etc that have cost our partner considerable dollars over time.

We recognize there are nice tools to help but my question is: As NGS works through the modernization, has there been recognition of these specific challenges and how NGS might aid in developing additional workflows and / or grant programs to help. With the understanding that many of the long-term programs we work on, for local municipalities with limited funding.

A; incorporating lessons learned from previous. Some growing pains. Bringing in from users and

9) Jon Dasler comment:

I would like to acknowledge the importance of Sentinel NWLON stations with collated CORS. The Calcasieu Pass, LA station with collocated CORS was instrumental in our survey for NOAA to open the entrance to Lake Charles, LA after hurricane Laura. This was the only operational CORS station in the area after Laura. I would encourage NOAA's effort to continue locating CORS stations at NWLON stations wherever practicable.

Rich Edwing responded.

10) Nathan Wardwell

Today has been very informative. The discussion on coastal resiliency has been exceptional. During the session the importance of tidal datums, water levels and time dependency has been highlighted. We know both land and sea level are moving thus over time tidal datums become out of date and are no longer representative of the current sea level. This challenge seems like a great opportunity to leverage long term water level and CORS data sets to develop a tidal datum epoch transformation tool for incorporation in VDatum. Doing so would reduce errors in VDatum transformations, improve storm surge modeling and better align tidal datums with the National Geodetic Survey's NSRS modernization effort.

Rich Edwing and Nathan Wardwell responded

## **March 4, 2021 Public Comments:**

1) Bob Moshiri

Another constituent that would tremendously benefit from near shore accurate mapping are the recreational fishers whose numbers ballooned from 50 million in 2019 to 57m in 2020. Accurate bathymetry means they would find their favorite fishing holes easier and faster, driving less thus consuming less gas and reducing pollution, as well as again enjoying themselves and bringing others onboard to live the outdoors. Getting families to leave their screens at home and spend time together is good for the health and well being of Americans, especially with boating being a safe activity in the era of COVID and possibly future contagious diseases.

2) Bob Moshiri, part 2

One important constituent that NOAA ought to consider as it surveys and develops near shore data are the approx. 100,000 boats that were purchased by new boaters in 2020. These new boaters are not experienced and do not venture too far out from marinas and the shorelines. Hence accuracy and bathymetry and accurate charts in the 40m depth range is of paramount importance not just for safety of navigation but to make sure new boaters are happy partaking in their favorite past time and come back.

3) Tony Cavell

In regard to many users not understanding much of the improvements happening. Possibly the best way to address this is by educational outreach through the speakers/educators who address these folks and topics. Resistance to improvements out of inertia will be or IS a very significant hurdle for all.

4) Tony Cavell, part 2

Comment: "End User Clients" should be identified separately between "wholesale" vs. "retail" users. Their needs in a product can be very different.

5) Rada Khaslova

Yesterday, Juliana Blackwell commented on NOAA NGS' plans for airborne LIDAR mapping in SE Alaska and Virginia. Presumably, the work in SE Alaska will be in support of the Alaska Coastal Mapping Strategy (ACMS). Can she confirm that these activities, particularly those in Alaska, will include contractors, as articulated in the ACMS and as is the established practice with the vessel based charting work for NOAA's NOS OCS?

6) Jon Dasler

Great presentation by Dan Roman.

Comment - VDatum is a valuable tool for the surveying and engineering community. There are many issues with the current VDatum models that should be addressed when updating to the new NSRS. Current models don't always align with CO-OPS tide stations (Pascagoula and others) that were not used in the model, models don't extend into ports

or overlap nearshore areas for conversion of vessel or airborne lidar, ties to orthometric heights (NAVD88) have inaccuracies and adjusted from superseded data, etc. NOAA should consider use of other agency water level stations in the development/validation of VDatum.

Question - Are updated VDatum models going to be rolled out with the Modernized NSRS? This coordination will be critical for the private sector for coastal engineering and coastal study efforts.

Loved Greg Seroka Presentation

Comment - Slide showing S104 water levels Dynamic Under Keel Clearance on Columbia is nice to see. This does get to the issue that USACE surveys don't align with the NOAA VDatum model of MLLW over the Columbia River Bar.

Question- Is there an effort to resolve these discrepancies to resolve chart datums between USACE and NOAA (Columbia River, Mississippi River SW Pass, etc.)?

7) Guy Noll

I would like to know how the Water Resources Development Act of 2020 releases restraints on usage of Harbor Maintenance Trust Fund for improving navigation services. Will HSRP have a role in addressing appropriate usage of these funds in supporting the information management of such programs as Precision Marine Navigation, PORTS, and Operational Forecast Models?

8) John Schneider

It is important to not focus solely on the PPU and Pilots. The vessel Masters must plan their voyage well in advance. This planning requires longer range planning. The voyage planning is done primarily with ECDIS. The vessel is loaded often times three weeks in advance.

9) Joyce Miller

Dr. Abdullah was talking about standards -- he should review the existing HSRP issue paper, which is "Surveying and Charting in US Channels, Harbors, and Anchorages." We did recommend that surveying to IHO standards be mandated and discussed why this was not happening. He might want to review and update that paper.

10) Guy Noll follow up question

As a follow-up to the short answer to my prior question, I'd like to point out that there are several ports who contribute to HMTF but do not need continual dredging projects to stay relevant to the Blue Economy. However, all ports need information services, such as those suggested in Ed Page's presentation on Alaska maritime traffic. As the goal of WRDA 2020 (<https://transportation.house.gov/imo/media/doc/2020-12-04%20WRDA%202020%20Conference%20Agreement%20Fact%20Sheet%20FINAL.pdf>) is to improve water infrastructure, and includes feasibility studies for publicly-reviewed projects, it should also fund other information technology projects that support improved navigation services.

11) From Denis Hains to Ed Page:

Q: Ed - in the context of Arctic Charting, have you initiated some work with local Arctic communities to involve them in Crowd-Sourced Bathymetry contribution?

12) From Steven Murawski re wind energy:

It's also much easier to get concessions for access to observations for an industry that is not as "mature" as the offshore oil and gas industry.