

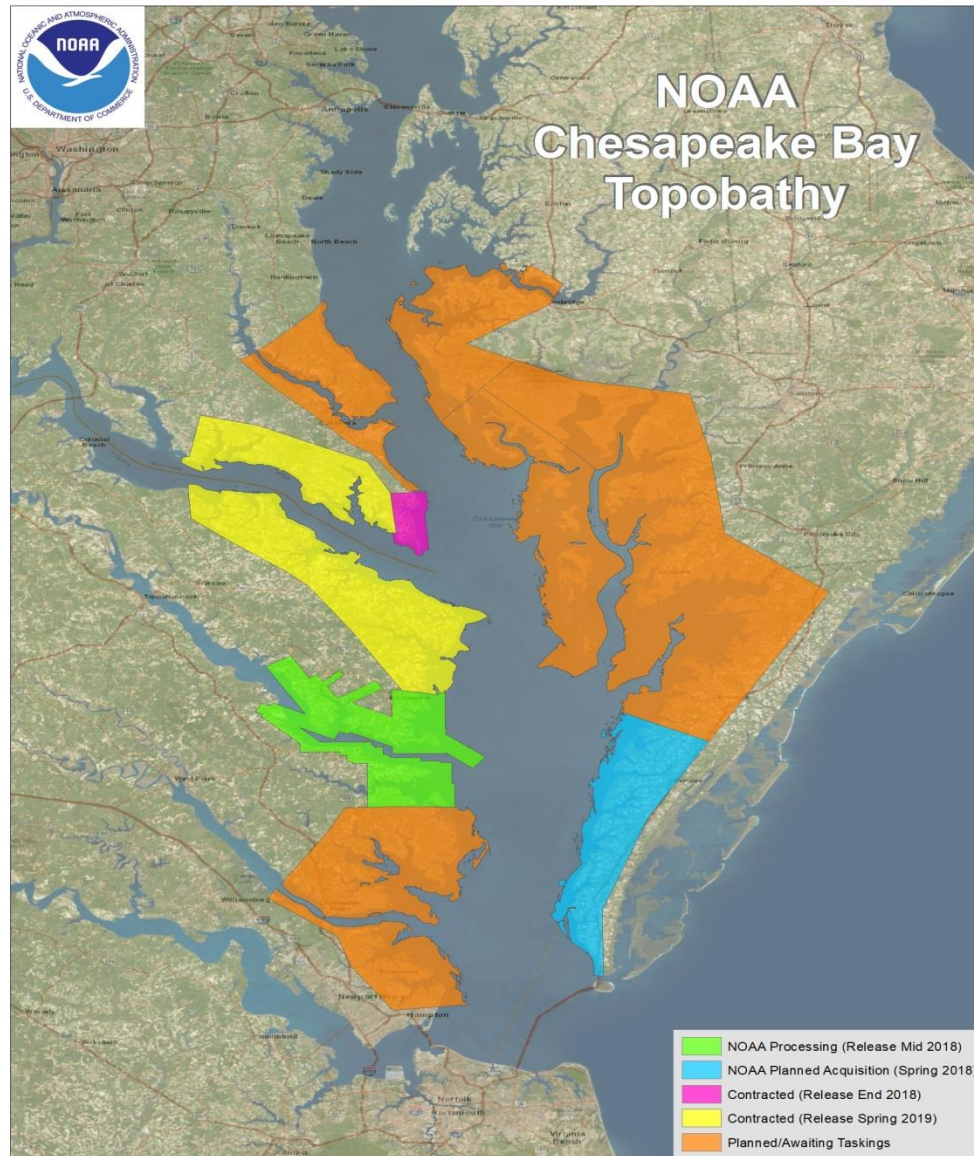
Maryland State Geographic Information Committee

Elevation Work Group

Quarterly Brief

April 2018

NOAA Near-shore Topobathy Lidar

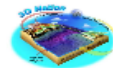


U.S. Naval Academy Coordination With NDAARSD



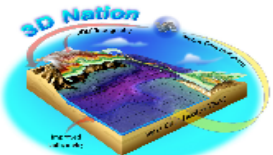
3D Nation Study-Maryland

3D Nation Elevation Requirements and Benefits Study



3D Nation Goal:

Continually improve the national elevation mapping foundation by coordinating the topographic, coastal, and bathymetric mapping activities across the Nation.



What is 3D Nation?

3D Nation serves as a unifying structure for a Nation's elevation efforts, and provides a consistent set of standards and objectives for an authoritative geospatial foundation to support national needs. The 3D Nation concept

provides the basis for mapping our nation's resources, transportation systems, businesses, public and private lands, and ecosystems in a changing world by unifying terrestrial and coastal/estuarine mapping efforts from the highest mountains to the deepest oceans to ensure public access to a complete national elevation dataset.

What is 3D Elevation Data?

3D elevation data refers to:

Topographic data - are 3D measurements of the terrestrial terrain.

Bathymetric data - 3D measurements of underwater depths and topography.

Why do we need to understand States' needs for 3D elevation data?

Critical decisions are made in every state across the Nation every day that depend on elevation data, ranging from immediate safety of life, property, and any imminent long-term planning for infrastructure projects, and more. We use elevation data in agriculture to increase crop yields and reduce fertilizer runoff. We use it to manage catastrophes such as hurricanes and earthquakes, for storm surge warnings and flood events. We depend on it to manage our nation's resources and plan a way for sustainable use, protection, and enjoyment of our lands and seas. State participation in the 2012 National Inland Elevation Assessment (NIEA) was key to determining how the 3D Elevation Program (3DEP) could best respond to the rapidly growing need for high-quality elevation data to represent the land, inland, and the NIEA study was helpful for a status assessment and strategic planning related to elevation data.

Today we have the same questions for elevation data in our inland rivers, oceans, coastal, and Great Lakes. What are the needs for, and value of, accurate three-dimensional topographic and bathymetric mapping data at the national level? How can Federal mapping agencies better design their programs to meet existing and future needs or build datasets? How do we document the 3D Nation that is economically competitive and environmentally sustainable?

The Emergency Working Group on Coastal and Coastal Mapping (EWG-COM) and the 3D Elevation Program (3DEP) are coming together to answer these questions with a series of online events on the 3D Nation study, learning more about the business case and a second benefit us to get real and form improved 3D

elevation data. Help us decide, together, on applying dollars to best meet many federal, state, and other national business needs.

What is the 3D Nation Elevation Requirements and Benefits Study?

The 3D Nation Study will document and define the requirements and needs for the wide range of mission critical needs that depend on 3D elevation data to inform policy, regulation, federal research, and management decisions. Such mission critical needs include food risk management, natural resources conservation, infrastructure and transportation, rural improvement, monitoring of climate, "middle ground" hazards, understanding water availability, safe and efficient shipping and logistics, environmental, and updating national statistics, among others.

The 3D Nation Study builds on the original NIEA to ensure the ability to assess how existing federal mapping programs serve decisions and identify the tradeoffs between different approaches while simultaneously laying out a path for the next round of JCIP for nationwide coverage has been completed. Importantly, the study adds our insight to rivers, oceans, coasts, and Great Lakes to the equation.

How can my State be part of the 3D Nation Study?

Help us to understand how much our Nation benefits from topographic and bathymetric elevation data, and how to design the next phase of federal elevation mapping programs to help meet State needs.

Designate a State Champion if you are a coastal or Great Lakes state, you may want to select a Co-Champion to help address inland and off-lake and Great Lakes requirements.

Get to know your USGS and/or NOAA offices; they will be with you every step of the way, providing materials, outreach to critical technical staff, drafting and/or attending meetings, as needed.

Outreach the study to State Agency heads, and encourage them to nominate study participants across Agency programs.

Review participation for representatives include a mix of key and critical State business needs.

Add in local, county, regional, tribal, and academic study participants where they can help and more robust state about State needs.

Review responses, and ensure critical State mandates and issues are fully represented.

Attend the workshop on new ideas and help lead discussion and bring consensus to the requirements for the State.

Write/Edit an introduction narrative that will become part of the final analytical report that will be published.

Before Final Publication

Give you State summary the final approval before results are published.

6 weeks

4 weeks

3D Nation Study-Status

- ❖ Kick-off teleconference March 23, 2018
- ❖ Rich Ortt, State Geologist is Maryland State Elevation Study Champion
- ❖ Survey Participant list submitted April 13th
- ❖ **Waiting for OMB Approval of Survey Questions**
- ❖ Administer Survey, 3-4 weeks
- ❖ Dewberry grouping and Analysis of surveys
- ❖ Workshop to review/clarify responses*

*combine with next WG meeting? At TUGIS? Timing....

Data & Services Update

- **ESRGC has processed Calvert and Anne Arundel Co QL1 data and a new statewide layer that reflects these county updates**
- **We are currently working with DoIT to upload all products and services to MD iMAP. We will be adding 2017 services and products to the existing 2011 services**
- ***Just a reminder of these services/products on MDiMap Elevation Portal***
- **Image services – aspect, dem (feet), dem (meters), hillshade, shaded relief, and slope**
- **DEMS - countywide**
- **LAS – point cloud download via custom user defined extent (intended for smaller AOI)**
- **LAZ –point cloud download via fixed block group extent (bulk option for large AOI)**

SERIOUS ABOUT ELEVATION- *NAME THAT SUMMIT MARKER?*

