NSGIC EDH for 3DNHD Monthly Forum:

Question and Answers

USGS: Building the Infrastructure for Updating NHDs with EDH in Alaska – May 19, 2021

Becci Anderson, USGS NHD and NHI Management and Planning Lead
Amanda Lowe, USGS Topographic Applied Research Section Chief
Steve Aichele, USGS User Engagement Hydrography Focus Area Lead

Participant Questions:

How is stream periodicity determined?
Periodicity is not determined from elevation. It is maintained for existing features through the conflation process. USGS is considering working with the water mission area at USGS to model the flow for given stream segments as a numeric value so that users can classify to their own parameters

Does the 3DNTD utilize 6 acres catchments within the HUC 12 or larger?
We do not define a minimum within the EDH specification. We want to capture anywhere water flows. I doubt we would go as small as 6 acres though it would be interesting to hear from others as to what they consider an effective minimum size unit.

Has any Part B & Part C work been done in TX yet?
No, we just received the EDH Part A data on 5/17. You must past part A before we go to part B and conflation.

Do the Clean Water Act mapping requirements support EDH?
Not directly but the better we can map small stream channels and the better we can estimate flow, the better we can support changes/improvements to the CWA.

Is the current NHD data model adaptable for 3D data and analysis? Are there modifications to the data model envisioned?
The model is adaptable in that we can attach Z values. However, as we move from cartography to data with modeling capabilities we need to better assess and support the development of a national data set. That may result in a lighter data model that can be more broadly applied. We are monitoring work in Canada and Australia hydrography data modeling and hope to build upon their efforts.

Will USGS create a repository to story / share approved Part A EDH data?
Not yet. We are looking for a 3DHP data model that includes and exposes that information. The more we are able to maintain the data at a central location, the better to manage the data.

Can the current Task Order "sample language" be shared with states?
Contact Becci Anderson or Steve Aichele and we can look into it.

Any process differences between urban/rural areas in TX?
We are seeing urban places where the hydro is highly engineered and present challenges. The pilot does highlight some interesting and varied approaches to mapping these areas and the results will inform our work.

Are you including storm sewer networks in the TX pilot
No, it is something we need to address. It's not possible to map every sewer network everywhere. How much mapping of local systems is enough? It varies with the size of the system.