

3DHP FTN Monthly Forum:

Question and Answers

Enhancing the National Wetlands Inventory through Improved Interoperability with 3DHP

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Participant Questions:

What are BIL and IRA funds?

- Bipartisan Infrastructure Law (BIL)
- Inflation Reduction Act (IRA)

There are extensive BIL and IRA funds going directly to states and/or granting organizations that are actively working on spending plans.

Are there plans for a tabular link between NWI and 3DHP?

We've discussed several options. A tabular link is one potential option. We want to provide the data in ways that facilitates using the data in tandem. We're still trying to sort out how to do this. Conceptually, we don't want to duplicate mapping and will use information gathered from the pilots to scope and prioritize the approach.

What is the engagement between/among 3DHP, NWI, C-CAP land cover?

We regularly engage with USGS 3DHP and NOAA C-CAP through a variety of governance structures, as well as ad hoc meetings. Much of our collaborative work with USGS has been through the Federal Geographic Data Committee Water-Inland Theme, but we also work together on federal workgroups and initiatives. NWI is currently exploring synergies with 3DHP data in multiple states, including Texas, Pennsylvania, and Michigan.

We often work with NOAA via the Interagency Coastal Wetlands Working Group. NWI has multiple projects where we engage C-CAP staff, including a CONUS scale project and smaller projects in Washington and Florida. We're currently using the C-CAP 1 meter data to hone in on high resolution features, but have also worked with the 10 and 30 m products.

Given the current lack of funding for NWI, what is your sense of how NWI and 3DHP will come together in the future to offer a more integrated set of federal products?

The programs are laying the groundwork for greater interoperability and efficiency now. How fast we move forward will depend on resources. Past Presidential budgets have generally provided resources that don't make it through the budget process. We hope that this changes in the future. However, there are other opportunities for funding, including EPA Wetland Program Development Grants, as well as BIL and IRA funds. Money can be saved by mapping NWI and 3DHP concurrently or in quick succession.

How will geometric/spatial consistency between 3DHP features and NWI polygons be handled, generally speaking? I am thinking of topology considerations (alignment/matching edges, gaps, overlaps, etc.). Will NWI and NWI partners be leading that effort and making the NWI consistent with 3DHP or the other way around or a little of both?

A little of both. It will partly depend on standards/specifications but logistics will also come into play, like which data are collected first. Technical details and exact workflows are yet to be determined – but we have made some progress. For example, we have reduced feature duplication by not mapping swamp-marsh within 3DHP and mapping fewer narrow streams (<15 feet wide) within NWI. Pilot projects will yield an improved process. An important challenge will be to enhance interoperability but continue to provide a consistent product that meets standards.

Is it possible to update only NWI features in an area that are integrated to 3DHP (i.e., not updating upland wetlands disconnected from surface flow lines). Concern is that there is not a line between water and wetlands and I can't vision not mapping those together to provide topological consistency. Hoping there are ways to enhance where the data overlap and concern is that there is not a line between water and wetlands and I can't vision not mapping those together to provide topological consistency. Hoping there are ways to enhance where the data overlap and connect?

We agree that there are likely to be substantial benefits in terms of efficiency and data quality when streams and wetlands are mapped together. This is a great question – but it is challenging to answer without project specific information. Please reach-out to NWI directly and we can provide more information.

What if state partners map "wetlands", as defined by state/local regulations but branches of the federal gov't do not recognize these features &/or their connectivity. Would these features be removed from the federal data product (3DHP/NWI), potentially causing legal confusion?

The NWI Program maps biological wetlands, which are more inclusive than federal regulatory or jurisdictional wetlands. Thus, if a state mapped a federal regulatory wetland this would be considered a wetland by NWI. The federal definition of Waters of the U.S. (WOTUS) and thus wetland jurisdiction under the federal Clean Water Act has changed several times in the past. On the other hand, the biological wetland definition has remained the same. This allows us to not only map and monitor a wider range of wetlands, but also allows meaningful comparisons of wetland area over time. NWI maps are not changed when WOTUS definitions, and thus jurisdictional wetland definitions under the Clean Water Act, change.

We state that our wetland data are based on a biological and not jurisdictional definition and were not developed to represent the jurisdiction of federal, state, or other policies. It is then up to the organization to determine the use of the data.

Is FWS a partner in 3DEP interagency agreement?

USGS: FWS (not NWI specifically) has had an interagency agreement with USGS that included data acquisition in the past. Not sure of the current status.