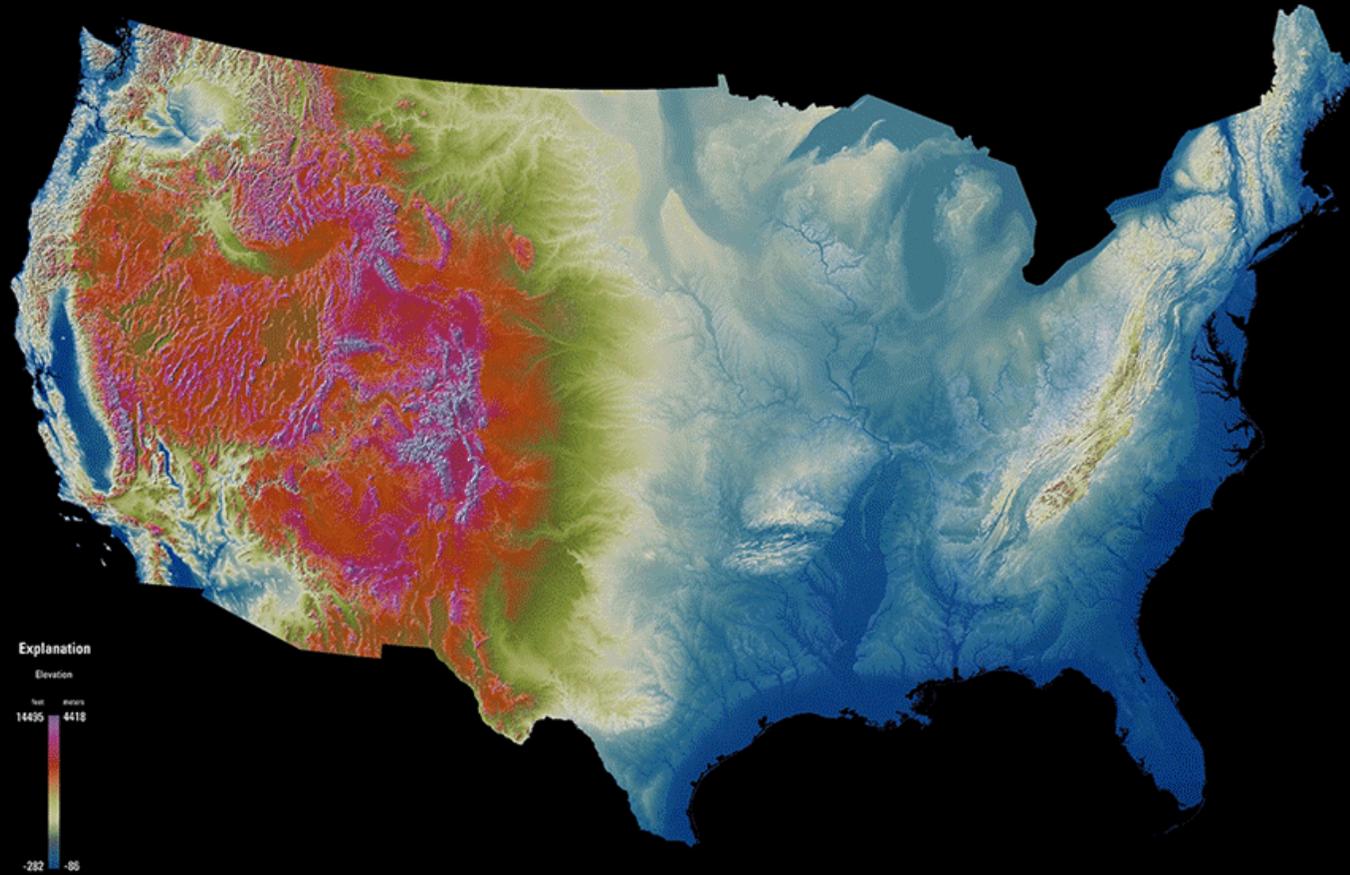


What's special about 3DHP Data



U.S. Department of the Interior
U.S. Geological Survey



David Blodgett
USGS Water Mission Area Geospatial Intelligence Branch

Summary

Key Features of 3DHP (from a heavily biased perspective)

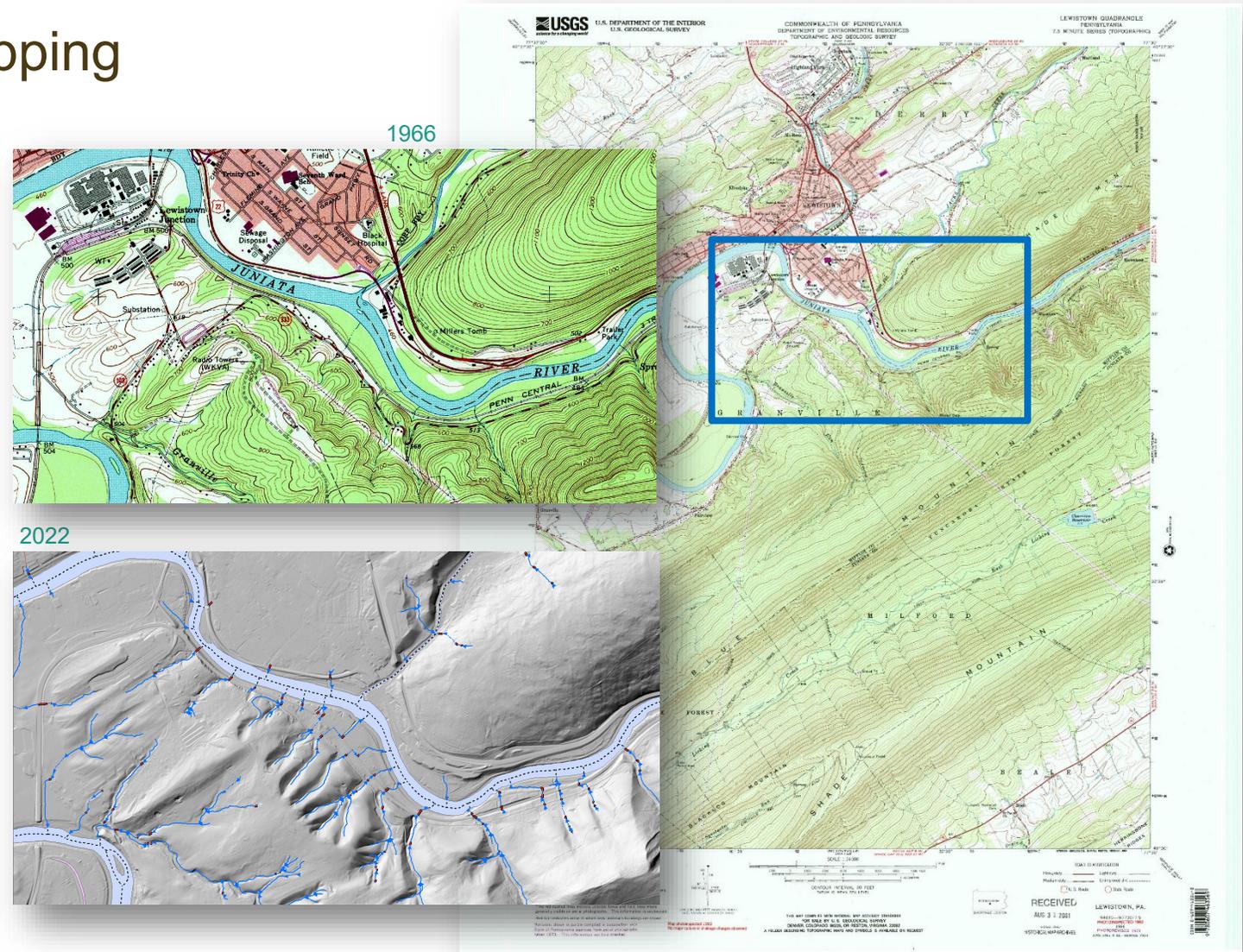
- 3DHP is elevation integrated.
 - SW/GW coupling and other applications sensitive to elevation are better supported.
- 3DHP is at the heart of water data on the Web!
 - We've broken out of the geodatabase and can integrate in new more scalable ways.
- 3DHP supports advanced analyses out of the box!
 - Network information and other key derived attributes are baked into 3DHP data production.

3D Hydrography Program

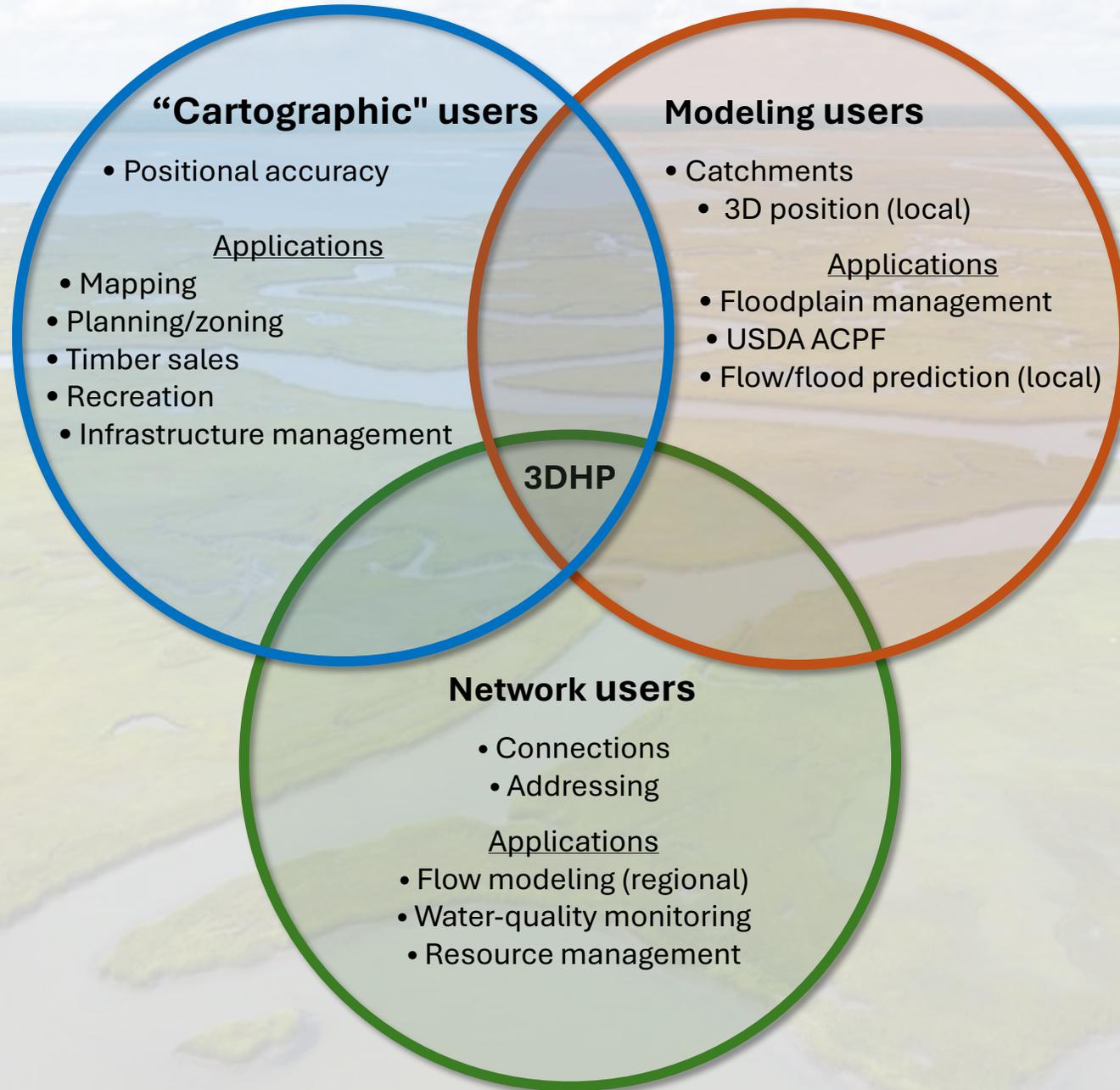
A new era for surface water mapping

*3DHP is the first **systematic remapping** of the Nation's hydrography since the original USGS 24K topographic mapping program was active between 1947 and 1992*

- New data
- New database
- New products



3DHP User Communities



3D Hydrography Program (3DHP)

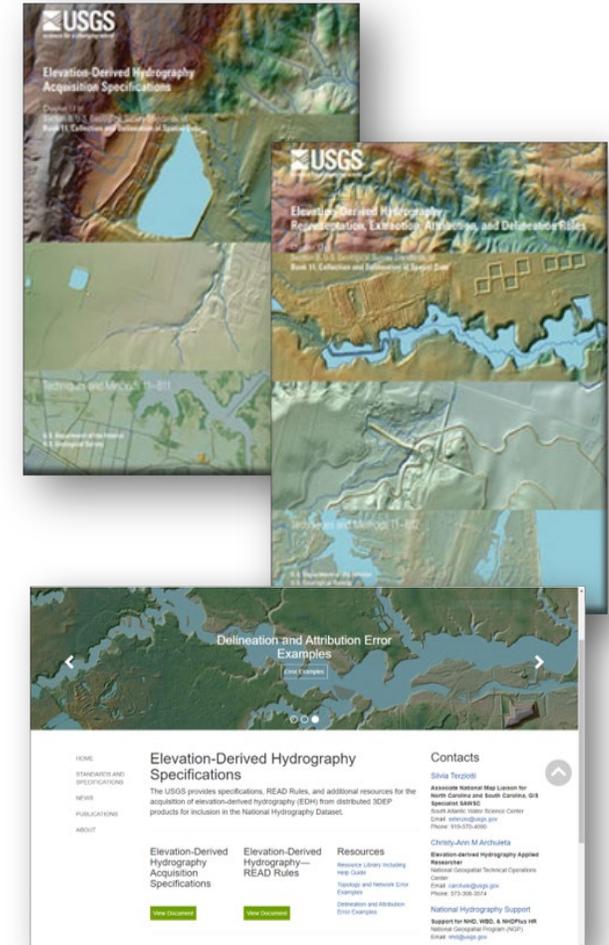
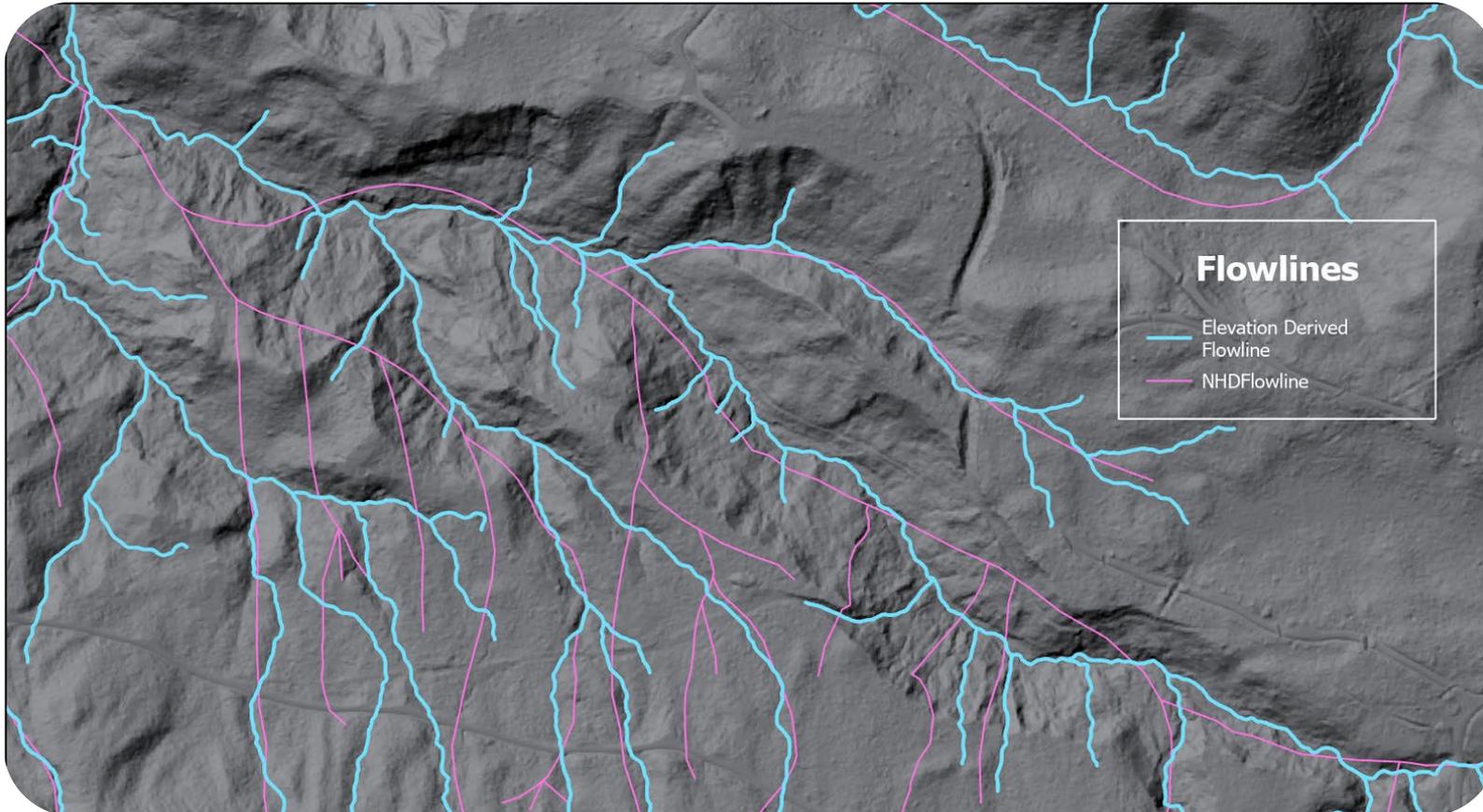
Focused on hydrologic applications

- Entirely new approach to hydrography data acquisition and management
- Derived from and aligned with 3DEP elevation data
- Input data validated to meet an acquisition specification
- Radically simplified data model
- Flowlines match 3DEP elevation
- Catchments aggregated to build hydrologic units

	3DHP	
Completion of Consistent National Coverage	 100%	9 years
Source Data		Derived from 3DEP 1m DEMs
Accuracy		+/- 2m (90% CE)
Number of features nationally		200- 300 million
Annual benefits		\$1.047B
Needs met		Most needs met
Interoperability		Connections to wetlands, groundwater, and engineered hydrography; underpins Internet of Water

More accurate, more precise, more consistent

Data collected and validated to meet specifications

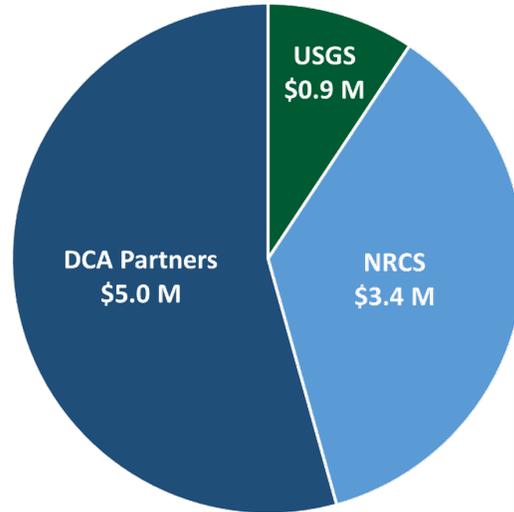


3DHP FY25 Data Acquisition – CONUS+

FY25 Totals

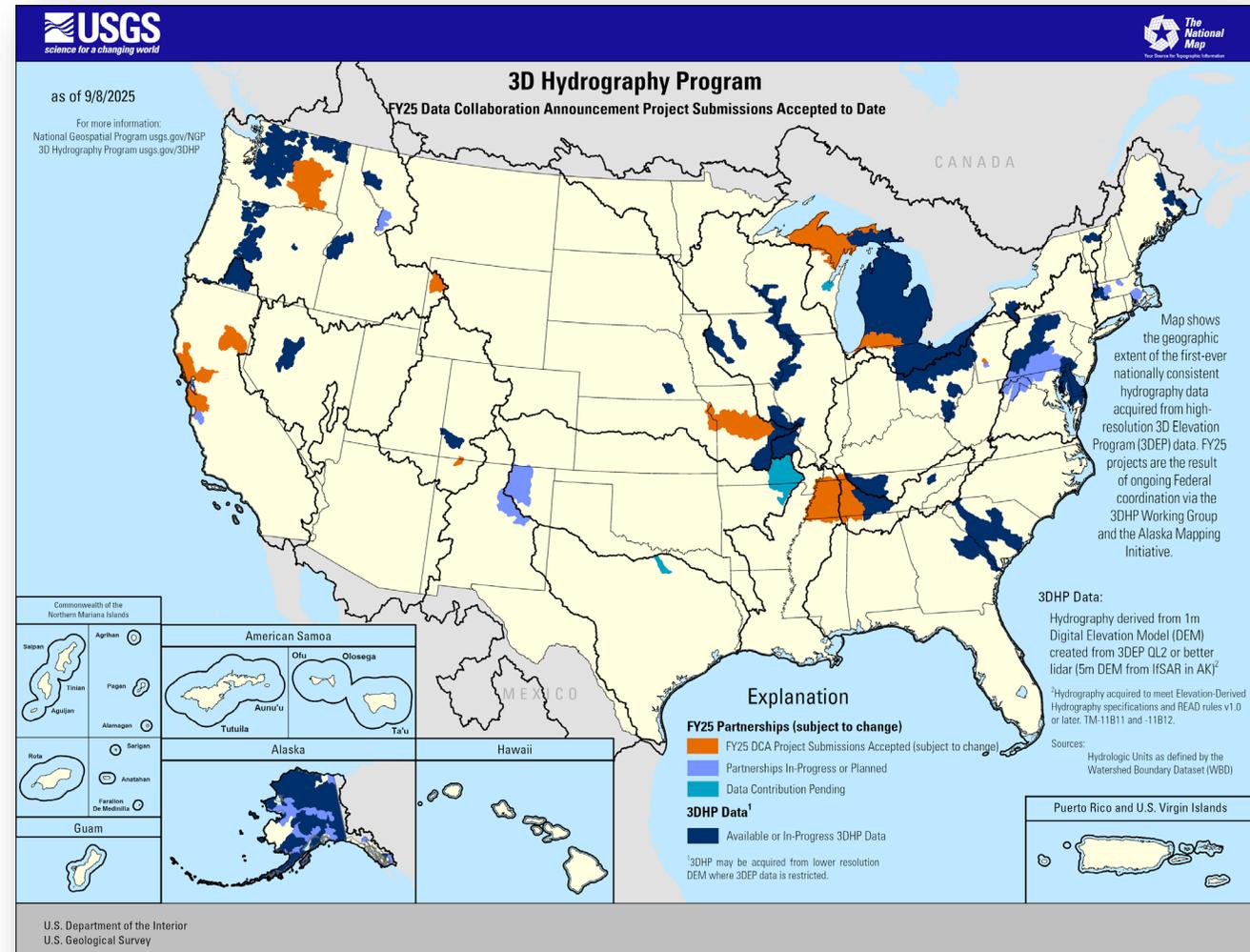
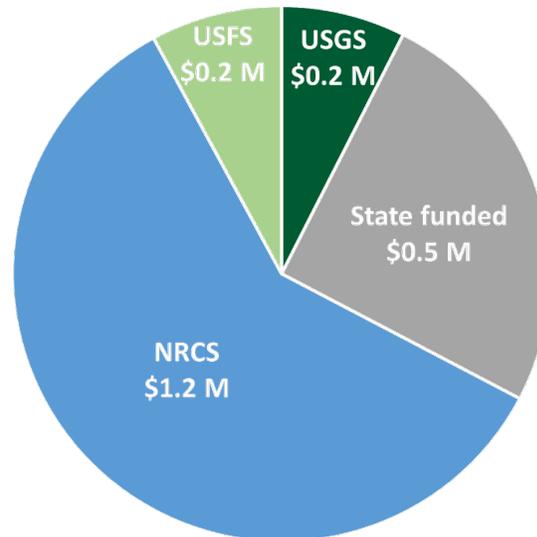
Data Collaboration Announcement

10 projects in 8 states
64.8k sq mi
\$9.2M total value



Federal Partnerships and State Projects

4 Federal projects in 4 states
2 State projects in 1 state
21k sq mi
\$2M total value



3DHP Status

- Data production
 - Surface water features derived from 3DEP data through contracted work
 - USGS produces catchment areas and watersheds necessary for analysis and routing, as well as other key attributes
- 21.4% of the Nation in progress at FY25 EOY, including a large amount of Alaska – 65%
- Interest in 3DHP data is increasing rapidly in CONUS



3DHP Products

- Annual staged product
 - Available in GDB and GPKG
 - Static and referenceable – with unique DOIs
 - Published about January 15 each year
 - <https://doi.org/10.5066/P137YZUK>
 - Reflects data holdings as of Sept 30 of the preceding year
- Quarterly service updates
 - ESRI Web Feature Service
 - Updated quarterly (typically ~15th of October, January, April, and July)
 - Latest data holdings - Downloadable if necessary
 - Basis for Geoconnex (Geoconnex.us) data sharing/discovery system
- Addressing tools are coming...

