

MEMORANDUM OF UNDERSTANDING
BETWEEN THE
U.S. GEOLOGICAL SURVEY
AND
ENVIRONMENTAL PROTECTION AGENCY
FOR THE
COOPERATIVE MAINTENANCE AND ENHANCEMENT OF
THE NATIONAL HYDROGRAPHY DATASET,
THE NATIONAL HYDROGRAPHY DATASET PLUS, AND
THE WATERSHED BOUNDARY DATASET

**Memorandum of Understanding
between the
U.S. Geological Survey
and
Environmental Protection Agency
for the
Cooperative Maintenance and Enhancement of
the National Hydrography Dataset,
the National Hydrography Dataset Plus, and
the Watershed Boundary Dataset**

I. PURPOSE

The purpose of this Memorandum of Understanding (MOU) is to extend the arrangement between the U.S. Geological Survey (hereinafter referred to as USGS) and the Environmental Protection Agency (hereinafter referred to as EPA), together referred to as the Parties, to cooperatively maintain and enhance shared digital hydrography data and to include these data as a component of The National Map. These activities will be coordinated by a USGS-EPA Oversight Committee established by this MOU and charged with carrying out the objectives of the MOU. The shared digital hydrography data addressed by this MOU are the National Hydrography Dataset (NHD), the National Hydrography Dataset Plus (NHDPlus), and the Watershed Boundary Dataset (WBD). Simply put, the NHD contains the national stream network, the NHDPlus contains the NHD stream network integrated with the land surface (topography), and the WBD contains hydrologic reporting units. These data are used by the USGS to prepare its mapping products and to perform water quantity and quality modeling, and by the EPA to provide the national hydrologic transport network to support Federal and State reporting of surface water conditions as required under the Clean Water Act and for other modeling and water management applications. The shared hydrography data will contain the essential hydrographic information to which the USGS, the EPA, and many others can reference observations about hydrologic features and phenomena.

The NHD, the WBD and the 3D Elevation Program (3DEP) Bare Earth Digital Elevation Models (formerly known as the National Elevation Dataset) are Office of Management and Budget Circular A-16 National Geospatial Data Assets (NGDAs) for which the USGS is designated as the Dataset Manager. The NHDPlus is produced by integrating these three datasets.

II. BACKGROUND

The USGS, as the Nation's principal civilian mapping agency, is responsible for the production, collection, archiving, and dissemination of base cartographic and remotely sensed data for the United States, its territories, and possessions. To accomplish this mission, the USGS National Geospatial Program (NGP) produces and maintains a series of accurate, general-purpose topographic maps, and develops and maintains digital spatial databases to meet broad, multipurpose needs. These databases, along with the associated, derived products and services comprise The National Map. The NHD provides the surface water features that are displayed along with elevation-derived contours, for USGS topographic map products. The USGS distributes these data to support geographic information system and hydrologic modeling applications. The USGS NGP is also now pursuing a high resolution elevation-hydrography product based upon the NHDPlus. Lastly, the USGS NGP has initiated a requirements assessment to better understand business needs and benefits for improved water data.

The USGS Water Mission Area uses the NHD, the NHDPlus, and the WBD in the development of reference base maps for hydrologic studies, in water data collection and quantity-quality assessment, and as the basis for routing in hydrologic models. Major USGS water programs supported by these hydrographic datasets include the National Water Quality Assessment for water quality modeling, e.g., SPATIally Referenced Regressions On Watershed attributes (SPARROW), and the water quantity modeling activities of the Water Census and StreamStats. The USGS Water Program has collaborated with the EPA Office of Water to produce and maintain the NHDPlus, which builds upon and enhances the NHD and the WBD, to support water quantity and quality modeling.

The EPA uses the NHD, the NHDPlus, and the WBD to support the assessment and reporting of surface water conditions and the modeling/monitoring of waterborne pollution. Major EPA water programs supported by these hydrographic datasets include the National Aquatic Resource Surveys for sample site selection and watershed analysis, the Water Quality Framework for water quality assessment and reporting, and the Hydrologic and Water Quality System (HAWQS) for water quality modeling. These applications include the establishment of water quality performance measures that rely on these geospatial data.

In addition, the Department of Interior, the FGDC, and the Advisory Committee on Water Information recently launched an Open Water Data Initiative to demonstrate how a comprehensive set of water information, such as the NHDPlus, can be leveraged through a spatial data infrastructure to provide water quality and quantity data by Web services. The Open Water Data initiative will initially support the rapid access and analysis of flood and inundation information, chemical spill response, and comprehensive water resources management decision support.

The explosive growth of geographic information system applications in support of environmental and natural resource management, which depend upon spatially-referenced data, demands proper coordination of spatial data-related activities. The Parties coordination and cooperation within this Memorandum of Understanding is undertaken to improve service to the public by reducing duplication of effort and promoting the sharing of digital data meeting common standards. This MOU will implement objectives of the Office of Management and Budget (OMB) Circular A-16,

concerning the “Coordination of Surveying, Mapping, and Related Spatial Data Activities”. This MOU also supports the efforts and tasks of the Federal Geographic Data Committee including the development of the National Spatial Data Infrastructure.

The NHD, the NHDPlus, and the WBD provide the foundational data that already support community-wide water data integration and will support continued development of a more robust and diverse set of public domain data, tools, and services enabling improved management of our water resources. These activities will leverage government and industry standards and best practices.

III. AUTHORITIES

This MOU is entered into by the USGS under the authorities provided by The Organic Act of March 3, 1879, as amended, 43 U.S.C. 31 et seq., and 43 U.S.C. 36c. EPA authority for the activities discussed in this MOU are provided in Clean Water Act Sections 104(a) and (b), 33 U.S.C. 1254(a) and (b). When applicable, any further agreements that implement specific activities under this MOU will be pursuant to the authorities and policies governing such agreements, in accordance with section VII of this MOU.

IV. SCOPE

This MOU describes how the Parties will coordinate and cooperate in activities involving the *Cooperative Maintenance and Enhancement of the National Hydrography Dataset, the National Hydrography Dataset Plus, and the Watershed Boundary Dataset*. The activities covered by this MOU will be of mutual interest and benefit within, but not limited to, the following areas:

THE PARTIES RESOLVE TO:

- Establish a collaborative working relationship between both Parties to achieve the following primary objectives:
 - To plan and implement a program of shared data access, maintenance, enhancement, and distribution that ensures continued coordinated evolution of the NHD, the NHDPlus, and the WBD.
 - To maintain and enhance the existing NHD-NHDPlus-WBD data models and sets of features, attributes, and attribute values that can be used by the Parties.
 - To provide a catalog of water-related data that has been linked to, or associated with, the NHD, the WBD, or the NHDPlus by leveraging existing Web-based capabilities, such as the Federal GeoPlatform
- Coordinate stewardship roles and responsibilities – communicating on a regular basis – to ensure appropriate support and service are provided to the NHD, the NHDPlus, and the WBD users (data, software tools, technical assistance) to avoid duplication of effort and

to ensure continuity of service and smooth transition for users under new stewardship paradigms.

- Work collaboratively to address technical issues of data integration, services, and delivery tools in order to maintain consistent NHD, NHDPlus, and WBD products for the agencies and their partners.
- Utilize the most effective data transfer tools available to share and refresh data.
- Maintain web-based tools to facilitate user inquiries and to communicate the value and sources of the NHD, the NHDPlus, and the WBD to the user community via electronic media.
- Work collaboratively to enhance existing standards and specifications to ensure the long term integrity of the NHD, the NHDPlus, and the WBD.
- Develop and publish consistent information on the data delivery websites explaining this collaboration between the Parties.
- Collaborate to the degree possible and practical within the confines of the respective agency policy, procedure, funding, and resources.
- Establish an EPA-USGS Oversight Committee to provide strategic guidance, monitor progress, plan new actions, and assure the accomplishment of the primary objectives of this collaboration. The Committee may also identify and define additional objectives that are of mutual benefit to the Parties.

V. RESPONSIBILITIES

The Parties will continue to maintain open communication and coordination to facilitate a cooperative working environment to support current agency missions as they relate to the cooperative collection of geospatial data. EPA and USGS will provide leadership and program oversight for the cooperative activities conducted under this MOU.

The Parties intend to employ appropriate elements and personnel from each organization to implement the actions of the USGS-EPA Oversight Committee. The Parties expect that the Committee will consist of an equal number of managers from the Parties. Joint programmatic and technical working groups may be established as needed to address specific program, process, content standards, and other coordination issues.

The USGS-EPA Oversight Committee will commence operation 90 days after the MOU is signed by the Parties. It will develop a charter and meet on a schedule to be determined by the Committee. It will coordinate with the existing NHD, NHDPlus, WBD, NED/3DEP (elevation) and other data layer management groups, as appropriate, to meet the assigned objectives. The Committee will report their progress and plans at the bi-annual EPA-USGS Water Coordination meetings.

VI. IMPLEMENTATION

Specific activities to be conducted under this MOU and the method of their implementation will be determined on a case-by-case basis by the Parties in consideration of the merit, existing commitments, projected schedules, available funding and personnel resources, and other relevant factors.

As appropriate, implementation of additional activities under this MOU will be outlined in separate agreements, such as, but not limited to, Interagency, Innovative Partnership, Work share, or Data Sharing Agreements, which will be coordinated through mutual agreement between the Parties and independently authorized by appropriate statutory or other authority. As appropriate, the agreements implementing additional activities shall be made attachments to this MOU. Each agreement shall describe the project or activity agreed upon in regard to its objectives, scope, responsibilities of the Parties, project schedule, deliverables, and funding.

VII. FINANCIAL ARRANGEMENTS

This MOU defines the general terms upon which the Parties will cooperate. All commitments made by EPA and USGS are subject to the availability of appropriated funds and budget priorities. This MOU is neither a fiscal nor a funds obligation document and, as such, does not constitute a financial commitment on the part of either Party. Any endeavor or transfer of anything of value involving reimbursement or contribution of funds between the Parties will be handled in accordance with applicable laws, regulations, and procedures, including those for Government procurement and printing. Any such endeavors will be outlined in separate agreements, including work plans or statements of work, which shall be made in writing and shall be independently authorized by appropriate statutory authority. This MOU does not provide such authority. Specifically, this MOU does not establish authority for noncompetitive award of any contract or other agreement. Any contract or agreement for training or other services must fully comply with all applicable requirements for competition.

VIII. DISCLAIMERS

This MOU is a voluntary agreement that expresses the good-faith intentions of the Parties, is not intended to be legally binding, does not create any contractual obligations, and is not enforceable by any party.

This MOU does not create any right or benefit, substantive or procedural, enforceable by law or equity, by persons who are not party to this agreement, against USGS or EPA, their officers or employees, or any other person. This MOU does not apply to any person outside of USGS and EPA.

The Parties to this MOU make no express or implied endorsement or warranty as to the accuracy, completeness, or suitability for any particular purpose of any data, products, or

services prepared, exchanged, or made available under this MOU. Any applications of, or conclusions drawn from, these data, products, or services are the responsibility of the user.

IX. PUBLICATIONS AND RELEASE OF INFORMATION

The Parties intend to document and make available the activities conducted or scientific data developed under this MOU to the general scientific community through publication in appropriate journals or other established channels as soon as it is practical while adhering to good scientific practices. Publications documenting cooperative efforts may be prepared by either Party, or jointly, provided that the Parties have an opportunity to review, edit, and approve manuscripts prior to publication. In the event such reports or publications are copyrighted, each Party shall have a royalty-free right under the copyright to reproduce, distribute, and use such copyrighted work for its own purposes.

Release of information will be consistent with each Party's applicable regulations and guidelines pertaining to the availability and distribution of geospatial information. Releases of general information to the public may be made by the appropriate Party with respect to its own portion of the project/cooperation as desired. The Parties will seek to consult with each other prior to any such releases that reference the other Party's participation, consistent with the Parties' respective applicable laws and policies.

The Parties agree that sharing credit is mutually beneficial, and will assure that appropriate citation and attribution, including the use of official agency visual identifiers, is given for work performed under this MOU. Specific use of the agency logo or seal, however, will require advance approval by that Party.

X. PARTICIPATION IN SIMILAR ACTIVITIES

This MOU in no way restricts any of the Parties from participating separately in similar activities with other public or private agencies, organizations, and individuals, including other activities between the Parties.

XI. EFFECTIVE DATE, REVIEW, MODIFICATION, AND TERMINATION


This MOU shall take effect upon the date of the last signature and shall remain in effect for a period of five (5) years from that date. This MOU may be reviewed annually or at the request of either Party. This MOU may be modified at any time through the mutual written consent of the Parties. The Parties may terminate this MOU at any time by mutual written agreement of the Parties or by either Party through written notice to the other party at least ninety (90) days in advance of the desired termination date.

XII. POINTS OF CONTACT

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XIII. APPROVALS

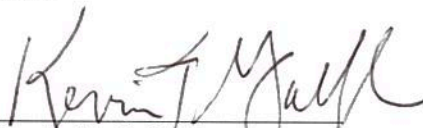
U.S. Geological Survey



William A. Werkheiser
Associate Director
Water

4/29/15

Date




Kevin T. Gallagher
Associate Director
Core Science Systems

4/29/15

Date


Environmental Protection Agency



Michael H. Shapiro
Principal Deputy Assistant Administrator
Office of Water

JUN 25 2015

Date



Renee P. Wynn
Deputy Assistant Administrator
Office of Environmental Information

June 30 2015

Date