

The National Hydrography Dataset

Concepts and Contents

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Overview

The National Hydrography Dataset (NHD) is a comprehensive set of digital spatial data that encodes information about naturally occurring and constructed bodies of water, paths through which water flows, and related entities. The information encoded about these features includes classification and other characteristics, delineation, geographic name, position and related measures, a "reach code" through which other information can be related to the NHD, and the direction of water flow.

The data support many applications, such as:

- Making maps. Positional and descriptive data in the NHD provide the starting point for making many different kinds of maps.
- Geocoding observations. Much like street addresses provide a way to link data to a road network, the NHD's "reach code" provides the means to link data to water features.
- Modeling the flow of water along the Nation's waterways. Information about the direction of flow, when combined with other data, can help users model the transport of materials in hydrographic networks, and other applications.
- Maintaining data. Many organizations would like to share the costs of improving and updating their collections of geographic data. Unique identifiers and other methods encoded in the NHD help to solve technical problems of cooperative data maintenance.

In 1999, coverage was made available for the conterminous United States as the NHD Medium Resolution at 1:100,000-scale. In 2007, coverage was made available for the conterminous United States, Hawaii, Puerto Rico, the Virgin Islands, and Pacific Island Territories as the NHD High Resolution at 1:24,000-scale or better. This document described the NHD that is included in the NHDPlus: conterminous U.S. from NHD Medium Resolution and the islands from NHD High Resolution.

The Medium Resolution NHD is the culmination of cooperative efforts of the U.S. Environmental Protection Agency (USEPA) and the U.S. Geological Survey (USGS). Other organizations also contributed to the effort.

This volume describes the concepts and information content of the Medium Resolution NHD, including features, reaches, geographic names, coordinate systems, and data quality.