

State Geospatial Data Coordination Procedure

North Dakota

FINAL

October 2020



FEMA

State Geospatial Data Coordination Procedure

North Dakota

[Last updated 10/30/2020]

Table of Contents

Table of Contents	1
Purpose of the Procedure.....	2
Preferred Base Map Sources	2
Useful Risk MAP Discovery Data Sources.....	2
Geospatial Data Resources	3
State and Federal Contacts	3
Local Geospatial Contacts.....	3
State Coordination Process for Building Geospatial Partnerships	4
Involving Shareholders in Flood Studies	4
Table 1: Base Map Sources	4
Table 2: Discovery Sources.....	7

State Geospatial Data Coordination Procedure

Purpose of the Procedure

The Department of Homeland Security's (DHS) Federal Emergency Management Agency (FEMA) prepared the Geospatial Data Coordination Procedures to outline sources of geospatial data and contact information, preferences for base map data and state geospatial participation in flood insurance studies, information for the project Discovery stage, and other useful information. The Procedures provide information of common interest to the multiple flood insurance studies that occur in a State and save the studies the effort required to repeatedly discover this information independently.

If you have questions, updates, or comments about this procedure or other geospatial data coordination resources, contact the geospatial data coordination lead at your RSC:

- Ms. Mary Gilliland, Geospatial Data Coordination Lead - RSC VIII
(303) 308-3572 / Mary.Gilliland@aecom.com

This document and additional information relating to geospatial coordination can be found on FEMA's Mapping Information Platform (MIP) [<https://hazards.fema.gov/>]. Navigate to the 'Tools & Links' page and then locate the 'Additional Resources' section.

Preferred Base Map Sources

Table 1 at the end of this document identifies the preferred geospatial data sources for mapping partners to use when performing updates to Flood Insurance Rate Maps (FIRMs). Although this table is not a prescription of datasets that must be used, those listed below have been successfully leveraged during FEMA's Map Modernization and Risk MAP programs.

Useful Risk MAP Discovery Data Sources

Information on Discovery data sources is provided in this document to reduce the level of effort needed on each subsequent Discovery data collection effort. Coordination with local community sponsors for additional local data remains an integral part of Discovery and local data should be used where appropriate.

The National Geospatial Data Coordination Procedure document contains information on data resources available from other Federal agencies (OFAs), including those that FEMA maintains at the national level, and should be used in conjunction with this State Geospatial Data Coordination Procedure document. In addition, FEMA and its contractors have created a geospatial Discovery Data Repository to host data that are not readily accessible through direct sources such as Web sites or subscription services and/or are not updated on a frequent basis. Instructions for accessing the Discovery Data Repository are provided in the National Geospatial Data Coordination Procedure document. Details on the Discovery Data Repository can be found in the National Geospatial Data Coordination Procedure document.

State Geospatial Data Coordination Procedure

Table 2 at the end of this document identifies data resources that are available at the regional and State levels and if there are no data available other than the national datasets. Resources in this table have been identified as appropriate for Discovery projects and may not represent the best data sources for FIRM production (please see the Preferred Base Map Sources section of this document for geospatial data that meets FIRM production requirements).

Geospatial Data Resources

Listed below are useful links to geospatial data resources applicable to FEMA's Risk MAP project life cycle.

- North Dakota GIS Hub
[\[https://www.gis.nd.gov/\]](https://www.gis.nd.gov/)
- BLM Navigator
[\[https://navigator.blm.gov/home\]](https://navigator.blm.gov/home)
- USGS 3D Elevation Program
[\[https://www.usgs.gov/core-science-systems/ngp/3dep\]](https://www.usgs.gov/core-science-systems/ngp/3dep)
- The National Map
[\[https://www.usgs.gov/core-science-systems/ngp/tnm-delivery/\]](https://www.usgs.gov/core-science-systems/ngp/tnm-delivery/)
- FEMA's Map Service Center (MSC)
[\[https://msc.fema.gov/portal\]](https://msc.fema.gov/portal)
- FEMA's Mapping Information Platform (MIP)
[\[https://hazards.fema.gov/\]](https://hazards.fema.gov/)

State and Federal Contacts

The main contacts for the State's geospatial activities and Federal agencies' representatives in the State are available on the MIP:

[\[https://hazards.fema.gov/contacts/statecontacts/contacts.asp?page=ND\]](https://hazards.fema.gov/contacts/statecontacts/contacts.asp?page=ND)

Local Geospatial Contacts

Local contacts, including those from counties, special government districts, tribes, municipal governments, and other organizations may also have useful geospatial data holdings. Contact information may be available from the state, FEMA regional office, web searches, and government link portals such as [\[https://www.statelocalgov.net\]](https://www.statelocalgov.net).

State Geospatial Data Coordination Procedure

State Coordination Process for Building Geospatial Partnerships

The North Dakota Information Technology Department and the North Dakota GIS Technical Committee operate the GIS Hub, an infrastructure comprised of geospatial data storage, data services, and application interfaces. The GIS Hub supports state agencies in the development of their GIS and the dissemination of common interest data to other levels of government and the public.

Additionally, the North Dakota GIS Technical Committee (GISTC) [<https://www.gis.nd.gov/gis-technical-committee>] provides planning and discussion on what the North Dakota GIS Hub should be for state agencies and the public. The GISTC consists of seven agencies as specified by [executive orders](#). The GISTC has been an example of state agencies working together. This group has defined ownership and stewardship of data stored within their agencies and provides a conduit for communication and data to other agencies and organizations.

Involving Shareholders in Flood Studies

FEMA Region VIII and the RSC maintain a FIRM project status map viewer, which can be accessed here: [<http://arcg.is/1qe4qO>]. Please reach out to the FEMA Region Representative for North Dakota (link to contact in *State and Federal Contacts* section of this document) with any questions and/or interest for project involvement.

State Geospatial Data Coordination Procedure

Table 1: Base Map Sources

Table 1: Base Map Sources	Option 1	Option 2	Additional
Orthophotos	Local Community Supplied Data - check on availability	National Agriculture Imagery Program (NAIP) Imagery	North Dakota GIS Hub Imagery
<i>location</i>		https://datagateway.nrcs.usda.gov	https://gishubdata.nd.gov/
<i>notes</i>			
Transportation (roads, railroads, and airports)	Local Community Supplied Data - check on availability	North Dakota GIS Hub Transportation	TIGER/Line Files
<i>location</i>		https://gishubdata.nd.gov/	https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-line-file.html
<i>notes</i>			
Hydrography (rivers, streams, lakes, and shorelines)	Local Community Supplied Data - check on availability	National Hydrography Datasets (NHD)	North Dakota GIS Hub Hydrography
<i>location</i>		https://www.usgs.gov/core-science-systems/ngp/national-hydrography	https://gishubdata.nd.gov/
<i>notes</i>			
Political Boundaries (county, municipal)	Local Community Supplied Data - check on availability	North Dakota GIS Hub Administrative Boundaries	TIGER/Line Files
<i>location</i>		https://gishubdata.nd.gov/	https://www.census.gov/geographies/mapping-files/time-series/geo/tiger-line-file.html
<i>notes</i>	Reference the National Flood Hazard Layer (NFHL) to help identify possible edge-matching issues.		
Public Lands (national, state, and local parks, forests, etc)	Local Community Supplied Data - check on availability	North Dakota GIS Hub Boundaries/Locations	
<i>location</i>		https://gishubdata.nd.gov/	

State Geospatial Data Coordination Procedure

Table 1: Base Map Sources	Option 1	Option 2	Additional
<i>notes</i>			
Public Land Survey System (PLSS - section, township, range)	Bureau of Land Management	North Dakota GIS Hub Boundaries	
<i>location</i>	https://navigator.blm.gov/home	https://gishubdata.nd.gov/	
<i>notes</i>			
Cadastre (parcels)	Local Community Supplied Data - check on availability		
<i>location</i>			
<i>notes</i>			
Extraterritorial Jurisdiction (ETJ) Boundaries	Local Community Supplied Data - check on availability	North Dakota GIS Hub Boundaries	
<i>location</i>		https://gishubdata.nd.gov/	
<i>notes</i>			
Terrain/Topo (elevation)	Local Community Supplied Data - check on availability	North Dakota GIS Hub Elevation	National Elevation Dataset
<i>location</i>		https://gishubdata.nd.gov/	https://www.usgs.gov/core-science-systems/ngp/tm-delivery/
<i>notes</i>			

State Geospatial Data Coordination Procedure

Table 2: Discovery Sources

Table 2: Discovery Sources	Data Source	Location
Watershed boundaries	National	See National Operating Procedure
Jurisdictional boundaries	See Table 1	See Above
Tribal land boundaries	National	See National Operating Procedure
State lands	See Table 1	See Above
Federal lands	National	See National Operating Procedure
Major roads	National	See National Operating Procedure
Streams	See Table 1	See Above
Coastal Barrier Resource Areas	N/A	Not applicable in the State of North Dakota
Coordinated Needs Management Strategy	National	CNMS data is available by request from each of FEMA's Regional Service Centers (RSC). Contact information for each RSC is available at the following website: https://hazards.fema.gov/femaportal/resources/rsc_contacts.htm
Topographic/ bathymetric data	National	See National Operating Procedure
AAL data from HAZUS	National	See National Operating Procedure
Coverage areas for known community and Tribal risk assessment data	FEMA Regional Office	Contact FEMA Region VIII
Status of Hazard Mitigation Plans	FEMA Regional Office	Contact FEMA Region VIII
Flood control structure data	National	See National Operating Procedure
Locations of stream gages	National – USGS	See National Operating Procedure
Locations of past flood claims and repetitive loss properties	National	See National Operating Procedure
Locations of clusters of Letters of Map Change	National - FEMA	See National Operating Procedure
Known flooding issues not represented on effective FIRMs or listed in Coordinated Needs Management Strategy database	Local	Check with community

State Geospatial Data Coordination Procedure

Table 2: Discovery Sources	Data Source	Location
Areas of planned development	Local	Check with community
Areas of land use change datasets	National – USGS	The USGS Land Cover Institute (LCI) provides access to a wide variety of land use change and land cover data sets including the National Land Cover Dataset (NLCD). Data sets can be downloaded from the USGS at https://www.usgs.gov/core-science-systems/national-geospatial-program/land-cover .
Locations of ongoing projects or updated stream studies (e.g. highway improvements)	Local	Check with community
Locations of wave and tide gauges	N/A	Not applicable in the State of North Dakota
Locations of wind gauges	N/A	Not applicable in the State of North Dakota
Proposed inland limit of the Primary Frontal Dune , if present	N/A	Not applicable in the State of North Dakota
Locations of any beach nourishment or dune restoration projects	N/A	Not applicable in the State of North Dakota
Available effective study data	FEMA	See National Operating Procedure
Orthophotography	See Table 1	See Above
Proposed discussion areas, problem areas, areas of proposed mitigation projects	FEMA Regional Office	Contact FEMA Region VIII
Land use and soil information	National – NRCS	The USDA Natural Resources Conservation Service (NRCS) maintains national soil data in a GIS format. Data can be downloaded from their online Web Soil Survey (https://websoilsurvey.sc.egov.usda.gov/App/HomePage.htm) or from the NRCS Data Gateway.
Hydraulic structures	National	See National Operating Procedure
Coastal structures , including flood protection structures, shoreline structures, manmade embankments, surge conveyance pathways, and shoreline change data	N/A	Not applicable in the State of North Dakota
Local structure and topographic data from the existing hazard mitigation plans	Local	Check with community

State Geospatial Data Coordination Procedure

Table 2: Discovery Sources	Data Source	Location
Historic inundation areas and high water marks	Local	Check with community
Clusters or locations of Individual Assistance/Public Assistance grants and locations of grant projects completed, planned, or underway	National	See National Operating Procedure
Locations of projects and structures completed or planned for FEMA Hazard Mitigation Assistance grant programs or mitigation funds from other agencies or entities, such as the Small Business Administration	National	See National Operating Procedure
Other information on FEMA grants	National	See National Operating Procedure
Information from FloodSmart on market penetration	National	See National Operating Procedure
Community Assistance Visits / Community Assistance Contacts	FEMA Regional Office	Contact FEMA Region VIII See Also National Operating Procedure
Community Rating System class information	National	See National Operating Procedure
Information from other Federal agencies	National	See National Operating Procedure
Current community plans, ordinances, or programs to alleviate flooding or manage stormwater	Local	Check with community
Information on active disasters	FEMA Regional Office	https://www.fema.gov/disasters
Campgrounds, recreational areas, emergency access routes, etc.	National	See National Operating Procedure