

State Geospatial Data Coordination Procedure

Utah

FINAL

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FEMA

State Geospatial Data Coordination Procedure

Utah

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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.

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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.

- Utah GIS Portal
[\[https://gis.utah.gov/\]](https://gis.utah.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:

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

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).

The Utah Automated Geographic Reference Center (AGRC) also maintains a list of local GIS contacts [\[https://gis.utah.gov/about/\]](https://gis.utah.gov/about/). Their contact list includes GIS personnel on the city, county, and state levels of government as well as private industry.

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State Coordination Process for Building Geospatial Partnerships

Utah has a State Geographic Information Advisory Committee that helps build and maintain partnerships between the state and local agencies. The role of this committee is to track and prioritize data enhancement projects within the state. In addition, Utah has a Memorandum of Understanding between the state and fourteen federal agencies for the purpose of sharing and exchanging non-sensitive digital spatial information in the State of Utah. These partnerships are beneficial in decreasing the development of duplicate information and standardizing spatial data through communication among agencies in the State of Utah.

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 Utah (link to contact in *State and Federal Contacts* section of this document) with any questions and/or interest for project involvement.

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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 | Black and White Digital Orthophoto Quads (DOQ) |
| <i>location</i> | | https://datagateway.nrc.usda.gov | https://www.usgs.gov/core-science-systems/ngp/tnm-delivery/ |
| <i>notes</i> | | | |
| Transportation (roads, railroads, and airports) | Local Community Supplied Data - check on availability | Utah GIS Portal Transportation | TIGER/Line Files |
| <i>location</i> | | https://gis.utah.gov/data/transportation/roads-system/ | 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) | Utah GIS Portal Water |
| <i>location</i> | | https://www.usgs.gov/core-science-systems/ngp/national-hydrography | https://gis.utah.gov/data/water/ |
| <i>notes</i> | | | |
| Political Boundaries (county, municipal) | Local Community Supplied Data - check on availability | Utah GIS Portal Administrative Boundaries | TIGER/Line Files |
| <i>location</i> | | https://gis.utah.gov/data/boundaries/ | 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 | Utah GIS Portal Boundaries | Utah GIS Portal Boundaries |

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| Table 1: Base Map Sources | Option 1 | Option 2 | Additional |
|---|---|---|---|
| <i>location</i> | | https://gis.utah.gov/data/boundaries/ | |
| <i>notes</i> | | | |
| Public Land Survey System (PLSS -section, township, range) | Bureau of Land Management | Utah GIS Portal Cadastre | |
| <i>location</i> | https://navigator.blm.gov/home | https://gis.utah.gov/data/cadastre/plss/ | |
| <i>notes</i> | | | |
| Cadastre (parcels) | Utah GIS Portal Cadastre | | |
| <i>location</i> | https://gis.utah.gov/data/cadastre/plss/ | | |
| <i>notes</i> | | | |
| Extraterritorial Jurisdiction (ETJ) Boundaries | Local Community Supplied Data - check on availability | | |
| <i>location</i> | | | |
| <i>notes</i> | | | |
| Terrain/Topo (elevation) | Local Community Supplied Data - check on availability | Utah GIS Portal Elevation/Terrain Data | National Elevation Dataset |
| <i>location</i> | | https://gis.utah.gov/data/elevation-terrain-data/ | https://www.usgs.gov/core-science-systems/ngp/tnm-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 Utah |
| 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 |

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| 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 Utah |
| Locations of wind gauges | N/A | Not applicable in the State of Utah |
| Proposed inland limit of the Primary Frontal Dune , if present | N/A | Not applicable in the State of Utah |
| Locations of any beach nourishment or dune restoration projects | N/A | Not applicable in the State of Utah |
| 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 Utah |
| Local structure and topographic data from the existing hazard mitigation plans | Local | Check with community |

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| 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 |