

State Geospatial Data Coordination Procedure

Nevada

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State Geospatial Data Coordination Procedure

Nevada

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State Geospatial Data Coordination Procedure

Purpose of the Procedure

Flood Insurance Studies involve searching for geospatial data during discovery (formerly pre-scoping and scoping) tasks. If needed data are not available, studies might fund the collection of new data and, where applicable, encourage cost sharing among existing organizations. Detailed information about the role geospatial data coordination plays in studies is in the *Geospatial Data Coordination Implementation Guide*, which is available at https://hazards.fema.gov/femaportal/docs/GeoDataImplem_V3.pdf, and in *Scoping Guidelines: Pre-scoping and the Scoping Meeting*, which is available through the Regional Support Center (RSC).

Resources developed through FEMA's geospatial data coordination activities provide information about data and contacts for organizations that have geospatial data that cover large areas (like States) in which many studies are interested. Dead-end searches and cold calls can be avoided by starting with these proven sources of information.

One resource is this Geospatial Data Coordination Procedure. It outlines sources of geospatial data and contact information, preferences for base map data and State geospatial participation in studies, and other useful information for the State.

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

Xing Liu, Geospatial Data Coordination Lead
Regional Service Center IX
(510) 879-0955
xliu@mbakercorp.com

Default Flood Hazard Base Map for the State

The default base map for flood hazard maps for the State is recent, black and white, countywide orthophotography data provided by local governments to FEMA as public domain data. The resolution must be 1-meter resolution or better. If not available, locally provided vector basemap data or 2006 USDA National Agriculture Imagery Program (NAIP) imagery are used.

Geospatial Data Coverage

Below, you will find links to statewide (and Federal agencies' national) geospatial datasets and information about them. The list is provided to save time when building a list of candidate geospatial datasets available for the study during discovery activities; it is not a prescription of datasets that must be used in a Flood Insurance Study.

Major State Holdings

Orthophotos

Dataset name: 2010 USDA NAIP Imagery
Data currentness: (NAIP 2011 not flown for NV)
Accuracy/Scale: 1:12,000

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Ground sample resolution: 1 meter

Horizontal datum: NAD 83

Fee associated? No

Available for redistribution? Yes

Dataset source: <http://keck.library.unr.edu/Data/NAIP>

Dataset contact: Zachary Newell, newellz2@unr.edu

Notes: Members of the Nevada State Mapping Advisory Committee have funded NAIP 2010 for Nevada. NAIP imagery has many uses, and many States participate in NAIP. NAIP is leaf-on imagery and is not cloud-free, so the ground might be obscured. While NAIP (and other such imagery) can be used as base maps, the imagery must be checked to ensure that it provides a clear view of important features on the ground for areas of significance for flooding.

Transportation (roads, railroads, and airports)

Dataset name: US Census Topologically Integrated Geographic Encoding and Referencing (TIGER)/Line files

Data currentness: 2010

Accuracy/Scale: 1:100K

Horizontal datum: NAD 83

Fee associated? No

Available for redistribution? Yes

Are road names part of the dataset? Yes

Dataset source: <http://www.census.gov/geo/www/tiger/tgrshp2010/tgrshp2010.html>

Dataset contact: <http://www.census.gov/geo/www/tiger/tgrshp2010/tgrshp2010.html> and <http://www.nd.gov/gis/mapsdata/data/extractdata/>

Notes: The US Census is in the process of realigning TIGER/Line files to improve positional accuracy. New data are published every six months.

Hydrography (rivers, streams, lakes, and shorelines)

Dataset name: USGS-maintained National Hydrography Data set (NHD) for NV

Data currentness: 2010

Accuracy/Scale: 1:24K

Horizontal datum: NAD 83

Fee associated? No

Available for redistribution? Yes

Are hydrography names part of the dataset? Yes

Dataset source: <http://nhd.usgs.gov/>

Dataset contact: <http://nhd.usgs.gov/> and <http://www.nd.gov/gis/mapsdata/data/extractdata/>

Notes: N/A

Political boundaries (county, municipal)

Dataset name: US Census Topologically Integrated Geographic Encoding and Referencing (TIGER)/Line files (Designated Places)

Data currentness: 2010

Accuracy/Scale: 1:100K

Horizontal datum: NAD 83

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Fee associated? No

Available for redistribution? Yes

Dataset source: <http://www.census.gov/geo/www/tiger/tgrshp2010/tgrshp2010.html>

Dataset contact: geo.tiger@census.gov

Notes: N/A

Publicly owned lands (national, State, and local parks, forests, etc)

Dataset name: Surface Land Ownership from Nevada Bureau of Land Management

Data currentness: 2010

Accuracy/Scale: 1:100K

Horizontal datum: NAD 83

Fee associated? No

Available for redistribution? Yes

Dataset source: http://www.nv.blm.gov/gis/geospatial_data.htm

Dataset contact: N/A

Notes: This dataset was created to display the management status of the land through the State of Nevada. It has been updated to reflect the most current GCDB lines from Premier data. The ownership for each smallest division was identified by the previous land status layer. In areas of confusion or pieces that were divided in areas smaller than GCBD, the MTP was referenced as the final authoritative source.

Public land survey system (PLSS) (township and section lines)

Dataset name: PLSS from Nevada Bureau of Land Management

Data currentness: 2007

Accuracy/Scale: 1:100K

Horizontal datum: NAD 83

Fee associated? No

Available for redistribution? Yes

Dataset source: http://www.nv.blm.gov/gis/geospatial_data.htm

Dataset contact: N/A

Notes: This layer was developed by the US Bureau of Mines (USBM), Western Field Operations Center, through digitizing and joining all 100,000 BLM surface management maps of Nevada in 1988 through 1990. The original publication for which the data were created was by W.D. Crandell and M.M. Hamilton, entitled "Availability of Federally Owned Minerals for Exploration and Development in Western States: Nevada, 1985;" USBM Special Publication, 1990, 54 pp. The data were used by the USBM to create mine claim density maps. USGS publications OFR99-540 utilized the data in creating a specific mine claim density map of Nevada with 1996 claim data.

Cadastral (parcels)

No coverage available.

Notes: Parcel data is available in Washoe and Clark counties. Very limited parcel data is available outside of these counties.

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Extraterritorial jurisdiction (ETJ) boundaries

No coverage available.

Terrain (elevation)

Dataset name: USGS DEM

Data currentness: Varies

Accuracy/Scale: 1:24K for most of the State

Vertical datum: NGVD 29

Fee associated? No

Available for redistribution? Yes

Dataset source: <http://ned.usgs.gov/>

Dataset contact: N/A

Notes: As of 2004, the State converted DEMS from 30 meters to 10 meters for the entire State. This data is available through the USGS NED site.

Useful Risk MAP Discovery Data Sources

Preliminary 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 still 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. Instructions for accessing the Discovery Data Repository are provided in the National Geospatial Data Coordination Procedure document.

Table 1 identifies data resources that are available at the regional and State levels, and also 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).

Table 1. Discovery Data Resources

Data	Agency	Location
Watershed boundaries	National	See National Operating Procedure
Jurisdictional boundaries	Nevada Bureau of Land Management	Jurisdictional boundaries available at the Nevada BLM GIS portal: http://www.blm.gov/nv/st/en/prog/more_programs/geographic_sciences/gis/geospatial_data.html

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Data	Agency	Location
Tribal land boundaries	National	See National Operating Procedure
State lands	Nevada Bureau of Land Management (BLM)	Land ownership info available at the Nevada BLM GIS portal: http://www.blm.gov/nv/st/en/prog/more_program_s/geographic_sciences/gis/geospatial_data.html
Federal lands	Nevada State Land Department	Land ownership info available at the Nevada BLM GIS portal: http://www.blm.gov/nv/st/en/prog/more_program_s/geographic_sciences/gis/geospatial_data.html
Major roads	National	See National Operating Procedure
Streams	National	See National Operating Procedure
Coastal Barrier Resource Areas	National	See National Operating Procedure
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/docs/RSC%20Contact%20Information.pdf
Topographic/bathymetric data	FEMA Regional Office	FEMA Region IX Geo-index See RSC9 Geospatial Data Coordination Lead
AAL data from HAZUS	National	See National Operating Procedure
Coverage areas for known community and Tribal risk assessment data	FEMA Regional Office	Nevada Department of Public Safety has partnered with partnering with Nevada Bureau of Mines and Geology and entered a CTP agreement with FEMA Region IX to bring a customized version of the California MyPlan tool to Nevada. Once implemented, the Nevada MyPlan will be a risk assessment and communication tool that can be used for LHMPs, General Plans, and hazard mitigation projects. The POC for the NV MyPlan is Juliette Hayes at juliette.hayes@dhs.gov
Status of Hazard Mitigation Plans	Nevada Department of Public Safety (NDPS)	Statewide hazard mitigation plans can be found at the following NDPS site: http://dem.state.nv.us/Hazard_Mitigation.shtml
Flood control data	National	See National Operating Procedure
Locations of stream gages	National – USGS	See National Operating Procedure
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 beyond effective FIRMs and the Coordinated Needs Management Strategy database	FEMA Regional Office	Region IX keeps track of known flooding issues beyond FIRMs and CNMS through a "flood issue ad hoc requests" list maintained by the RSC9 Geospatial Data Coordination Lead

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Data	Agency	Location
Areas of planned development, high growth, or other natural land changes	County Planning Departments	A statewide layer for planned areas of development does not exist for the State of Nevada. However, counties such as Clark have their own land use planning databases that describe areas of planned development and rapid growth. The link to the data description is: http://gisgate.co.clark.nv.us/gismo/freedata.htm
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 http://landcover.usgs.gov/
Locations of ongoing or updated stream studies	FEMA Regional Office	RSC9 Geospatial Data Coordination Lead
Locations of wave and tide gauges	National – NOAA	See National Operating Procedure
Locations of wind gauges	National – NOAA	See National Operating Procedure
Primary frontal dune	N/A	Not applicable in the State of Nevada
Beach nourishment or dune restoration projects	N/A	Not applicable in the State of Nevada
Comparison of stillwater elevations	Local	No statewide coverage
Available effective study data	FEMA	See National Operating Procedure
Orthophotography	National	See National Operating Procedure
Proposed discussion areas, problem areas, areas of proposed mitigation projects	FEMA Regional Office	RSC9 Geospatial Data Coordination Lead maintains records of problem areas based on Region's communications with local communities and logs them as CNMS "ad hoc" requests
Land use and soil information	Local	Soil data for Nevada can be downloaded from the Soil Information for Environmental Modeling and Ecosystem Management at the following location: http://www.soilinfo.psu.edu/index.cgi?soil_data&index.html
Reference points to locate areas with flooding issues	FEMA Regional Office	RSC9 Geospatial Data Coordination Lead maintains records of known flooding issues on Region's communications with local communities and logs them as CNMS "ad hoc" requests
Hydraulic structures: bridges	National and FEMA Regional Office	See National Operating Procedure or links to National Inventory of Bridges; Nevada Department of Transportation also maintains a bridge inventory for inspection. Contact RSC9 Geospatial Data Coordination Lead for access
Hydraulic structures: culverts	N/A	No statewide coverage

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Data	Agency	Location
Hydraulic structures: dams	Nevada Department of Water Resources	NDWR maintains a state inventory of dams that is separate but related to the National Inventory of Dams. Information requests can be made to: Robert K. Martinez, robertm@water.nv.gov.
Coastal structures , shoreline structures, manmade embankments, surge conveyance pathways, and shoreline change data	N/A	Not applicable in the State of Nevada
Local structure and topographic data from the existing hazard mitigation plans	Nevada Department of Public Safety (NDPS)	Once implemented, MyPlan for Nevada should contain information about local structure from existing hazard mitigation plans
Historic inundation areas and High Water Marks	Local	No statewide coverage
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, as described in G&S Appendix I	National	See National Operating Procedure
Any data deficiencies identified in hazard mitigation plans	Local	No statewide coverage
Information from FloodSmart on market penetration	National	See National Operating Procedure
Community Assistance Visits / Community Assistance Contacts	National Only	See National Operating Procedure
Community Rating System class information	National Only	See National Operating Procedure
Information from other Federal agencies	National Only	See National Operating Procedure

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Data	Agency	Location
Information from State agencies	N/A	No statewide coverage
Current community plans, ordinances, or programs to alleviate flooding or manage stormwater	Local	No statewide coverage
Other known hazards	FEMA Regional Office	http://www.fema.gov/about/regions/regionix/
Information on active disasters	National	See National Operating Procedure
Campgrounds, recreational areas, emergency access routes, etc.	Local	No statewide coverage
Other data	Local	No statewide coverage

Data Distribution Process for State Data

Primary access to State data is through the Earth Sciences & Mining Research Information Center of the University of Nevada, Reno (<http://keck.library.unr.edu>).

Federal Nationwide Geospatial Data Holdings

Information about nationwide holdings and of Federal agencies' programs is available from the Mapping Information Platform website at <https://hazards.fema.gov/femaportal/docs/ProgFacts.pdf>.

Finding and Accessing Other Existing Geospatial Data

Below, you will find information about, and links to, ways of searching for additional geospatial data available for the State. These capabilities can be useful for finding geospatial data other than the statewide and Federal data listed above, including those of special governments, counties and parishes, municipalities, tribes, universities, and other organizations.

W.M.KECK Earth Sciences & Mining Research Information Center

<http://keck.library.unr.edu/>

The mission of the W. M. Keck Earth Sciences and Mining Research Information Center is to provide access for researchers, both onsite and from their remote desktops, to specialized bibliographic databases, scientific visualization and modeling packages, and geospatial data resources. This site provides access to download all USGS DOQ and DRG products for Nevada.

Nevada Bureau of Land Management Geospatial Data Portal

State Geospatial Data Coordination Procedure

http://www.blm.gov/nv/st/en/prog/more_programs/geographic_sciences/gis/geospatial_data.html

This website provides links to organizations that provide GIS data. BLM Nevada collects geospatial data using a variety of methods including GPS, on-screen digitizing, and conversion of tabular data and legal descriptions. Data from other Federal, State, and local agencies are also used when available.

Southern Nevada GIS Data

<http://gisgate.co.clark.nv.us/gismo/freedata.htm>

National Digital Orthophoto Program (NDOP) and National Digital Elevation Program (NDEP) Tracking Systems

These systems allow the search of orthophoto and elevation project information entered by Federal and other organizations. The NDOP system can be accessed at <http://www.ndop.gov>, and follow the link “Project Tracking.” The NDEP system can be accessed at <http://www.ndep.gov>, and follow the link “Project Tracking.”

Geospatial One-Stop

Geospatial One-Stop, available at <http://www.geodata.gov/>, provides access to geospatial data from many sources. Two parts of the site that should be investigated are the “data categories” for existing data and the “marketplace” for data that are planned or in-progress and for potential partners for new data collection activities.

Working with People

Useful State and Federal Contacts

The main contacts for the State’s geospatial activities and Federal agencies’ representatives in the State are available on the Mapping Information Platform website at <https://hazards.fema.gov/contacts/statecontacts/contacts.asp?page=NV>

Involving State’s Geospatial Coordinator in Flood Studies

The RSC has established periodic communications with the Nevada NSGIC representative.

State Coordination Process for Building Geospatial Partnerships

Nevada State Mapping Advisory Committee

<http://www.nbmng.unr.edu/smac/smac.htm>

The Governor of Nevada established the State Mapping Advisory Committee (SMAC) in 1983 to advise the U.S. Geological Survey (USGS) on State priorities for map products and to inform maps users about the status of mapping programs and the availability of map products. The Governor named the Director of the Nevada Bureau of Mines and Geology as the chair of SMAC. SMAC generally meets annually.

On November 6, 2000, the Federal Geographic Data Committee formally recognized the Nevada State Mapping Advisory Committee as the Nevada Regional Cooperating Group in support of the National Spatial Data Infrastructure program.

Nevada Geographic Information Society

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<http://www.ngis.org/portal/>

The goals of the NGIS are:

- To provide an objective educational forum without political, social, financial, or national bias.
- To foster the exchange of ideas and studies focused on the planning, operation, and consequences of such information systems.
- To promote professional interaction, stimulate research, encourage publication, and generally aid the advancement of its members and other organizations having related objectives.

Finding Local Geospatial Contacts

Local contacts, including those from special government districts (for example, a regional planning commission); counties, parishes, or equivalent governments; tribes, municipal governments; and other organizations (for example, local universities) also have geospatial data that can help a Flood Insurance Study. Contact information is available from the FEMA archives and government link portals such as <http://www.statelocalgov.net>.

The State does not maintain a statewide GIS contacts list. Updates for contacts and local datasets may be coordinated/submitted through Jennifer Mauldin, mauldin@unr.edu.

Primary access to State resources and contacts are available through the Nevada State Mapping Advisory Committee.

Strong County GIS Departments exist in:

- Clark County - <http://www.ClarkCountyNV.gov>
- Washoe County - <http://www.co.washoe.nv.us/gis/>

Provide Feedback on This Procedure

If you find information in this Procedure or in other FEMA or State resources that are outdated, please contact the geospatial data coordination lead in the RSC. Please provide the correct information, if you know it. Use the contact information for the lead listed in the section *Purpose of the Procedure*. The lead will use your feedback to update and redistribute this Procedure.