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Purpose of the Procedure

Flood Insurance Studies search for geospatial data during Discovery tasks. If needed data are not available, studies might fund the collection of new data and would like to know about other organizations that might share in these costs. 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.

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. Studies can avoid wasting time with dead-end searches and cold calls 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 flood insurance studies, information for the project Discovery stage, and other useful information for the Territory.

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

Kevin Gabelman, Geospatial Data Coordination Lead
Regional Service Center IX
(415) 671-7188
Kevin.Gabelman@atkinsglobal.com

Default Flood Hazard Base Map for the Territory

This section will be completed by the GDC team in a future version of this document.

Geospatial Data Coverage

Find below information about and links to statewide (and Federal agencies’ national) geospatial datasets. The list is provided to save time during Discovery activities when building a list of candidate geospatial datasets available for the study; it is not a prescription of datasets that must be used in a Flood Insurance Study.

Major Territory Holdings

Orthophotos
Dataset name:
Data currentness:
Accuracy/Scale:
U.S. Territory Geospatial Data Coordination Procedure

Horizontal datum:
Fee associated?
Available for redistribution?
Dataset source:
Dataset contact:

This section will be completed by the GDC team in a future version of this document.

Transportation (roads, railroads, and airports)
Dataset name:
Data currentness:
Accuracy/Scale:
Horizontal datum:
Fee associated?
Available for redistribution?
Dataset source:
Dataset contact:

This section will be completed by the GDC team in a future version of this document.

Hydrography (rivers, streams, lakes, and shorelines)
Dataset name:
Data currentness:
Accuracy/Scale:
Horizontal datum:
Fee associated?
Available for redistribution?
Dataset source:
Dataset contact:

This section will be completed by the GDC team in a future version of this document.

Political boundaries (county, municipal)
Dataset name:
Data currentness:
Accuracy/Scale:
Horizontal datum:
Fee associated?
Available for redistribution?
Dataset source:
Dataset contact:

This section will be completed by the GDC team in a future version of this document.

Publicly owned lands (national, state, and local parks, forests, etc)
Dataset name:
Data currentness:
Accuracy/Scale:
U.S. Territory Geospatial Data Coordination Procedure

Horizontal datum:
Fee associated?
Available for redistribution?
Dataset source:
Dataset contact:

This section will be completed by the GDC team in a future version of this document.

**Cadastral (parcels)**

Dataset name:
Data currentness:
Accuracy/Scale:
Horizontal datum:
Fee associated?
Available for redistribution?
Dataset source:
Dataset contact:

This section will be completed by the GDC team in a future version of this document.

**Terrain (elevation)**

Dataset name:
Data currentness:
Accuracy/Scale:
Horizontal datum:
Fee associated?
Available for redistribution?
Dataset source:
Dataset contact:

This section will be completed by the GDC team in a future version of this document.

**Data Distribution Process for Territory Data**

This section will be completed by the GDC team in a future version of this document.

**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.

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 Major State Holdings section of this document for geospatial data that meets FIRM production requirements).

**Table 1. Discovery Data Resources**

<table>
<thead>
<tr>
<th>Data</th>
<th>Data Source</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watershed boundaries</td>
<td>National</td>
<td>See National Operating Procedure, NHD available for Guam</td>
</tr>
<tr>
<td>Jurisdictional boundaries</td>
<td>Department of Land Management (DLM)</td>
<td>DLM makes land parcel and municipal boundaries data available through the Guam Data Viewer at the following location: <a href="http://guamgis.guam.gov/Website/GuamViewer/viewer.html">http://guamgis.guam.gov/Website/GuamViewer/viewer.html</a></td>
</tr>
<tr>
<td>Tribal land boundaries</td>
<td>N/A</td>
<td>No known statewide data for Guam</td>
</tr>
<tr>
<td>State lands</td>
<td>Department of Land Management (DLM)</td>
<td>DLM makes land parcel and municipal boundaries data available through the Guam Data Viewer at the following location: <a href="http://guamgis.guam.gov/Website/GuamViewer/viewer.html">http://guamgis.guam.gov/Website/GuamViewer/viewer.html</a></td>
</tr>
<tr>
<td>Federal lands</td>
<td>Department of Land Management (DLM)</td>
<td>DLM makes land parcel and municipal boundaries data available through the Guam Data Viewer at the following location: <a href="http://guamgis.guam.gov/Website/GuamViewer/viewer.html">http://guamgis.guam.gov/Website/GuamViewer/viewer.html</a></td>
</tr>
<tr>
<td>Major roads</td>
<td>Census</td>
<td>See National Operating Procedure, TIGER/Line 2010 Transportation data available for Guam from Census bureau</td>
</tr>
<tr>
<td>Streams</td>
<td>National</td>
<td>See National Operating Procedure, USGS NHD available for Guam</td>
</tr>
<tr>
<td>Coastal Barrier Resource Areas</td>
<td>National</td>
<td>See National Operating Procedures</td>
</tr>
</tbody>
</table>
## U.S. Territory Geospatial Data Coordination Procedure

<table>
<thead>
<tr>
<th>Data</th>
<th>Data Source</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watershed boundaries</td>
<td>National</td>
<td>See National Operating Procedure, NHD available for Guam</td>
</tr>
<tr>
<td>Coordinated Needs Management Strategy</td>
<td>National</td>
<td>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: <a href="https://hazards.fema.gov/femaportal/docs/RSC%20Contact%20Information.pdf">https://hazards.fema.gov/femaportal/docs/RSC%20Contact%20Information.pdf</a></td>
</tr>
<tr>
<td>Topographic/bathymetric data</td>
<td>FEAMA Regional Office</td>
<td>FEMA Region IX Geo-index RSC 9 Geospatial Data Coordination Lead</td>
</tr>
<tr>
<td>AAL data from HAZUS</td>
<td>National</td>
<td>See National Operating Procedure</td>
</tr>
<tr>
<td>Coverage areas for known community and Tribal risk assessment data</td>
<td>N/A</td>
<td>No known data exists for Guam</td>
</tr>
<tr>
<td>Flood control data</td>
<td>National</td>
<td>See National Operating Procedure</td>
</tr>
<tr>
<td>Locations of stream gages</td>
<td>National – USGS</td>
<td>See National Operating Procedure</td>
</tr>
<tr>
<td>Past flood claims and repetitive loss properties</td>
<td>National</td>
<td>See National Operating Procedure</td>
</tr>
<tr>
<td>Locations of clusters of Letters of Map Change</td>
<td>National – FEMA</td>
<td>See National Operating Procedure</td>
</tr>
<tr>
<td>Known flooding issues beyond effective FIRMs and the Coordinated Needs Management Strategy database</td>
<td>FEMA Regional Office</td>
<td>Region IX keeps track of known flooding issues beyond FIRMs and CNMS through a &quot;flood issue ad hoc requests&quot; list maintained by the RSC9 Geospatial Data Coordination Lead</td>
</tr>
<tr>
<td>Areas of planned development, high growth, or other natural land changes</td>
<td>Bureau of Statistics and Plans (BSP)</td>
<td>BSP makes land use planning data available through the Guam Data Viewer at the following location: <a href="http://guamgis.guam.gov/Website/GuamViewer/viewer.html">http://guamgis.guam.gov/Website/GuamViewer/viewer.html</a></td>
</tr>
<tr>
<td>Locations of ongoing or updated stream studies</td>
<td>FEMA Regional Office</td>
<td>RSC9 Geospatial Data Coordination Lead</td>
</tr>
<tr>
<td>Locations of wave and tide gauges</td>
<td>National – NOAA</td>
<td>See National Operating Procedure</td>
</tr>
<tr>
<td>Locations of wind gauges</td>
<td>National – NOAA</td>
<td>See National Operating Procedure</td>
</tr>
<tr>
<td>Primary frontal dune</td>
<td>N/A</td>
<td>No known data exists for Guam</td>
</tr>
</tbody>
</table>
## U.S. Territory Geospatial Data Coordination Procedure

<table>
<thead>
<tr>
<th>Data</th>
<th>Data Source</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>Watershed boundaries</td>
<td>National</td>
<td>See National Operating Procedure, NHD available for Guam</td>
</tr>
<tr>
<td>Beach nourishment or dune restoration projects</td>
<td>N/A</td>
<td>No known data exists for Guam</td>
</tr>
<tr>
<td>Comparison of stillwater elevations</td>
<td>N/A</td>
<td>No known data exists for Guam</td>
</tr>
<tr>
<td>Available effective study data</td>
<td>National</td>
<td>See National Operating Procedure</td>
</tr>
<tr>
<td>Orthophotography</td>
<td>Local</td>
<td>RSC9 Geospatial Data Coordination Lead maintains link to orthophoto developed by FEMA Region IX for Guam</td>
</tr>
<tr>
<td>Proposed discussion areas, problem areas, areas of proposed mitigation projects</td>
<td>Local</td>
<td>RSC9 Geospatial Data Coordination Lead maintains records of problem areas based on Region's communications with local communities and logs them as CNMS &quot;ad hoc&quot; requests</td>
</tr>
<tr>
<td>Land use and soil information</td>
<td>NRCS</td>
<td>SSURGO soil info for Guam is available for download at: <a href="http://data.geocomm.com/catalog/GU/group201.html">http://data.geocomm.com/catalog/GU/group201.html</a></td>
</tr>
<tr>
<td>Reference points to locate areas with flooding issues</td>
<td>Local</td>
<td>RSC9 Geospatial Data Coordination Lead maintains records of known flooding issues on Region's communications with local communities and logs them as CNMS &quot;ad hoc&quot; requests</td>
</tr>
<tr>
<td>Hydraulic structures: bridges</td>
<td>National</td>
<td>See National Operating Procedure or links to National Inventory of Bridges</td>
</tr>
<tr>
<td>Hydraulic structures: culverts</td>
<td>N/A</td>
<td>No known statewide data for Guam</td>
</tr>
<tr>
<td>Hydraulic structures: dams</td>
<td>National</td>
<td>See National Operating Procedure or links to National Inventory of Dams</td>
</tr>
<tr>
<td>Coastal structures, shoreline structures, manmade embankments, surge conveyance pathways, and shoreline change data</td>
<td>N/A</td>
<td>No known data exists for Guam</td>
</tr>
<tr>
<td>Local structure and topographic data from the existing hazard mitigation plans</td>
<td>N/A</td>
<td>No known data exists for Guam</td>
</tr>
<tr>
<td>Historic inundation areas and High Water Marks</td>
<td>N/A</td>
<td>No known data exists for Guam</td>
</tr>
<tr>
<td>Data</td>
<td>Data Source</td>
<td>Location</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------------</td>
<td>------------------------------------------------------------</td>
</tr>
<tr>
<td>Watershed boundaries</td>
<td>National</td>
<td>See National Operating Procedure, NHD available for Guam</td>
</tr>
<tr>
<td>Clusters or locations of Individual Assistance/Public Assistance grants and locations of grant projects completed, planned, or underway</td>
<td>N/A</td>
<td>No known data exists for Guam</td>
</tr>
<tr>
<td>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</td>
<td>N/A</td>
<td>No known data exists for Guam</td>
</tr>
<tr>
<td>Other information on FEMA grants, as described in G&amp;S Appendix I</td>
<td>N/A</td>
<td>No known data exists for Guam</td>
</tr>
<tr>
<td>Data deficiencies identified in hazard mitigation plans</td>
<td>N/A</td>
<td>No known data exists for Guam</td>
</tr>
<tr>
<td>Information from FloodSmart on market penetration</td>
<td>N/A</td>
<td>No known data exists for Guam</td>
</tr>
<tr>
<td>Community Assistance Visits / Community Assistance Contacts</td>
<td>National</td>
<td>See National Operating Procedure</td>
</tr>
<tr>
<td>Community Rating System class information</td>
<td>National</td>
<td>See National Operating Procedure</td>
</tr>
<tr>
<td>Information from other Federal agencies</td>
<td>National</td>
<td>See National Operating Procedure</td>
</tr>
<tr>
<td>Information from State agencies</td>
<td>N/A</td>
<td>No known data exists for Guam</td>
</tr>
<tr>
<td>Current community plans, ordinances, or programs to alleviate flooding or manage stormwater</td>
<td>N/A</td>
<td>No known data exists for Guam</td>
</tr>
<tr>
<td>Other known hazards</td>
<td>N/A</td>
<td>No known data exists for Guam</td>
</tr>
<tr>
<td>Information on active disasters</td>
<td>N/A</td>
<td>No known data exists for Guam</td>
</tr>
</tbody>
</table>
Federal Nationwide Geospatial Data Holdings

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

Finding and Accessing Other Existing Geospatial Data

Find below information about and links to ways of searching for additional geospatial data available for the Territory. 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.

Clearinghouses and Inventories for the Territory

This section will be completed by the GDC team in a future version of this document.

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. To access the NDOP system, go to the NDOP web site at <http://www.ndop.gov> and follow the link “Project Tracking.” For the NDEP system, go to the NDEP web site at <http://www.ndep.gov> and follow the link “Project Tracking.”

TED Query Tool

This tool provides access to information about Federal, state, and local government agency and private sector data holdings gathered by the Census Bureau.

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-work and for potential partners for new data collection activities.
This section will be completed by the GDC team in a future version of this document.

**Working with People**

**Useful Territory and Federal Contacts**
This section will be completed by the GDC team in a future version of this document.

**Involving the Territory’s Geospatial Coordinator in Flood Studies**
This section will be completed by the GDC team in a future version of this document.

**Territory Coordination Process for Building Geospatial Partnerships**
This section will be completed by the GDC team in a future version of this document.

**Finding Local Geospatial Contacts**
This section will be completed by the GDC team in a future version of this document.

**Provide Feedback on This Procedure**
When you find information in this Procedure or in other FEMA or Territory resources that are outdated, please tell the geospatial data coordination lead in the Regional Support Center what was wrong and the correct information (if you know it). Use the contact information for the lead listed in the section. The lead will use your feedback to update this Procedure.