New York

FINAL

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Table of Contents

Purpose of the Procedure
Default Flood Hazard Base Map for the State
Geospatial Data Coverage
Major State Holdings
Orthophotos
Transportation (roads, railroads, and airports)
Hydrography (rivers, streams, lakes, and shorelines)
Political boundaries (county, municipal)
Publicly owned lands (national, state, and local parks, forests, etc)
Cadastral (parcels)
Terrain (elevation)
Data Distribution Process for State Data
Useful Risk MAP Discovery Data Sources
Federal Nationwide Geospatial Data Holdings10
Finding and Accessing Other Existing Geospatial Data
Clearinghouses and Inventories for the State
National Digital Orthophoto Program (NDOP) and National Digital Elevation Program (NDEP) Tracking Systems
Geospatial One-Stop
Working with People
Useful State and Federal Contacts
Involving the State's Geospatial Coordinator in Flood Studies
The NYSDEC Geospatial Point of Contact is:11
State Coordination Process for Building Geospatial Partnerships11
Finding Local Geospatial Contacts
Provide Feedback on This Procedure
Other Useful Information
New York State Elevation Data Updates

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 portal, which is available at

http://pm.riskmapcds.com/riskmap_usergroups/GeoCoord/default.aspx (password required).

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 State.

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):

Curtis Smith, Geospatial Data Coordination Lead RAMPP Regional Support Center 2 (646) 434-4364 <u>Curtis.S.Smith@urs.com</u>

We appreciate the help of those who reviewed this document, in particular:

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Default Flood Hazard Base Map for the State

The default base map for flood hazard maps for the State is an image base map (orthophoto). The preferred projection and datums are UTM Zone 18, NAD 83, and NAVD 88.

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 State Holdings

Orthophotos

Dataset name: New York Statewide Digital Orthoimagery Program Data currentness: The program's goal is to continue obtaining imagery for the entire State on repeated 4-5 year cycles.

Accuracy/Scale: +/-4 ft. at the 95% confidence level (NSSDA) for 0.5-foot and 1-foot resolution. +/-8 ft. at the 95% confidence level (NSSDA) for 2-foot resolution. Ground sample resolution: 0.5 feet for New York City (NYC) metropolitan area (including NYC, Nassau County, and Westchester County), 1-foot for urban areas, 2-foot for non-urban areas. Optional upgrades for entire counties or designated urban areas for 1-foot, 0.75-foot, or 0.5-foot resolution imagery are available. In the first two years of the program, participants obtaining optional upgrades have included Counties and several State Agencies.

Horizontal datum: NAD83

Fee associated? No

Available for redistribution? Yes

Dataset source: New York State (NYS) Geographic Information System (GIS) Clearinghouse at <u>http://www.gis.ny.gov/</u>

Dataset contact: Frank Winters, (518) 242-5029, <u>fwinters@dhses.ny.gov</u> Available for download at NYS GIS Clearinghouse, (518) 242-5029, nysgis@dhses.ny.gov

Transportation (roads, railroads, and airports)

Dataset name: NYS Streets

Data currentness: Updated quarterly.

Accuracy/Scale: The NYS Office of Cyber Security and Critical Infrastructure Coordination (CSCIC) makes no claims to the accuracy of the information in this file. Horizontal datum: NAD83 Fee associated? No

Available for redistribution? May not be redistributed, commercial use is prohibited without special license arrangements.

Are road names part of the dataset? Yes

Are road names in TIGER format? Yes.

Dataset source: NYS GIS Clearinghouse at <u>http://www.gis.ny.gov/</u>

Dataset contact: NYS GIS Clearinghouse, (518) 242-5029, <u>nysgis@dhses.ny.gov</u> Notes: Vector file of public streets compiled from orthoimagery and attributed with street names, addresses, and route numbers. These data were created as part of the Accident Location Information System (ALIS) project. ALIS is a multi-agency project involving CSCIC, the NYS Department of Motor Vehicles (DMV) and the NYS Department of Transportation (DOT). A major component of the ALIS Project was the creation of up-todate statewide Geographic Information System (GIS) files.

Dataset name: NYS Railroad Lines

Data currentness: May 2013

Accuracy/Scale: In most cases, when Geom_Acc = T the segment has a positional accuracy error of less than or equal to 12 meters. If Geom_Acc = F then the segment was not found on the resource used for realignment but has been confirmed by Tele Atlas to exist. This only indicates that its accuracy is unknown.

Horizontal datum: NAD83

Fee associated? No

Available for redistribution? May not be redistributed, commercial use is prohibited without special license arrangements.

Dataset source: NYS DOT

Dataset contact: Ray Hessinger, 518-457-8075, <u>RHESSINGER@dot.state.ny.us;</u> NYS GIS Clearinghouse, (518) 242-5029, <u>nysgis@dhses.ny.gov</u>

Hydrography (rivers, streams, lakes, and shorelines)

Dataset name: NHD – High Resolution Data currentness: Continuous update process, per watershed Accuracy/Scale: 1:24,000 or better Horizontal datum: NAD83 Fee associated? No Available for redistribution? Yes Are hydrography names part of the dataset? Yes. These names are the same as those in USGS's Geographic Names Information System (GNIS) database. Dataset source: USGS NHD data page at <u>http://nhd.usgs.gov/data.html</u> Dataset contact: NYSDEC, (518) 402-8163, <u>watergis@gw.dec.state.ny.us</u> Notes: This dataset is maintained by NYSDEC under an agreement with USGS.

Political boundaries (county, municipal)

Dataset name: NYS Civil Boundaries Data currentness: Revised October 2013 Accuracy/Scale: CSCIC makes no claims to the accuracy of the information in this file. Horizontal datum: NAD83 Fee associated? No

Available for redistribution? See notes section. Dataset source: NYS GIS Clearinghouse at <u>http://www.gis.ny.gov/</u> Dataset contact: Frank Winters, (518) 242-5029, <u>fwinters@dheses.ny.gov</u>; <u>nysgis@dhses.ny.gov</u>

Notes: Available to members of the NYS Data Sharing Cooperative. Members are those organizations that have signed the NYS Data Sharing Agreement. At the time of the Discovery and Preliminary map presentation meetings, the County Assesor office should be queried about any changes to municipal boundaries within the previous State Fiscal year (Apr 1^{st} – Mar 31^{st}), as these might not have made it to the statewide compilation distributed by CSCIC; if any such changes do exist, please contact NYS Floodplain Mapping coordinator on how to proceed.

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

Dataset name: NYS Public Land Boundaries Data currentness: January 2005 Accuracy/Scale: unknown Horizontal datum: NAD83 Fee associated? No Available for redistribution? Yes, for non-commercial purposes (see notes below). Dataset source: NYS GIS Clearinghouse at <u>http://www.gis.ny.gov/</u> Dataset contact: Frank Winters, 518-242-5029, <u>fwinter@dhses.ny.gov</u>; <u>nysgis@dhses.ny.gov</u>

Notes: This file including derivative products is copyrighted by CSCIC (copyright 2005). A signed license is required or access through the NYS GIS Data Sharing Cooperative. Such file and derivative products may be used for any lawful purpose except commercial resale provided the following statement appears on all electronic or hardcopy created products: "This file or derivative product was created with information copyrighted by the New York State Office of Cyber Security and Critical Infrastructure Coordination (copyright 2005)."

Cadastral (parcels)

Dataset name: 2010 Real Property Data Data currentness: January 2010 Accuracy/Scale: The maps from which the points are derived have a horizontal positional accuracy of +/- 10 feet. The points represent the visual center of the parcel and therefore can occur anywhere inside the polygon that makes up the parcel. The accuracy, therefore, cannot be guaranteed. Horizontal datum: NAD83 Fee associated? No Available for redistribution? No; see Notes section.

Dataset source: NYS GIS Clearinghouse at <u>http://www.gis.ny.gov/</u>

Dataset contact: Nicholas Berry, Tax and Finance, (518) 530-4078, nicholas.berry@tax.ny.gov; NYS GIS Clearinghouse, (518) 242-5029,

nysgis@dhses.ny.gov

Notes: Available to members of the NYS Data Sharing Cooperative. Members are those organizations that have signed the NYS Data Sharing Agreement. Parcels may not be developed for some counties, as the statewide layer is still under development.

Terrain (elevation)

Dataset name: New York State Digital Elevation Models (DEM) Data currentness: Unknown Accuracy/Scale: 1:24000 Vertical datum: NGVD29 Fee associated? No Available for redistribution? Yes. Acknowledgement of the U.S. Geological Survey and NYSDEC would be appreciated in products derived from these data. Dataset source: NYSDEC, Division of Water Dataset contact: Barbara Cruden, Division of Information Services, 518-402-9873, bjcruden@gw.dec.state.ny.us.

NYSDEC, Division of Water, available online at <u>http://cugir.mannlib.cornell.edu/datatheme.jsp?id=23</u>

Notes: LiDAR has been flown in many areas of the State, and where possible the Office of Information Technology Services (ITS) is attempting to generate 2-meter resolution DEMs for public distribution through the GIS Clearinghouse.

Data Distribution Process for State Data

New York has central distribution capability through the NYS GIS Clearinghouse. Spatial data published to the Clearinghouse are available for distribution to the general public or members of the data sharing cooperative depending on the licensing agreement. Federal, county and state owned data are distributed from this site. The distribution is only limited by entities that publish to the site.

Data can be searched and distributed by data set name, sector and organization. Data licensing agreements are identified where needed. NYS ITS, in coordination with the NYS Data Sharing Cooperative, maintains and is responsible for the distribution of data on this site.

The Cornell University Geospatial Information Repository (CUGIR) is an online repository in the National Spatial Data Clearinghouse program. CUGIR provides geospatial data and metadata for New York State. CUGIR coordinates its activities with those of the NYS GIS Clearinghouse.

Datasets that are part of the National Spatial Data Infrastructure are maintained by the State through agreements with the responsible Federal agencies, e.g., NHD, and are distributed primarily through the corresponding Federal facilities.

The State has created a centralized elevation data update, acquisition, and processing resource which is a part of the clearinghouse website (<u>http://gis.ny.gov/elevation/</u>). Data

can be retrieved by accessing the NYS Orthoimagery application (<u>http://www.orthos.dhses.ny.gov/</u>) and querying by location.

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 Discovery 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 on accessing the Discovery Data Repository are given in the *National Discovery 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 meet FIRM production requirements).

Data	Agency	Location
Watershed boundaries	National	See National Discovery Data Coordination Procedure
Jurisdictional boundaries	NYS GIS Clearinghouse	http://gis.ny.gov/ Phone: (518) -242-5029 Email: nysgis@dhses.ny.gov
	National	See National Discovery Data Coordination Procedure
Tribal land boundaries	National	See National Discovery Data Coordination Procedure
State lands	NYS GIS Clearinghouse	http://gis.ny.gov/
Federal lands	National	See National Discovery Data Coordination Procedure
Major roads	NYS GIS Clearinghouse	http://gis.ny.gov/gisdata/inventories/inde x.cfm?AlphaIndex=S
	National	See National Discovery Data Coordination Procedure

Table 1: Discovery Data Resources

Streams	NYS GIS Clearinghouse	http://gis.ny.gov/gisdata/inventories/inde x.cfm?AlphaIndex=S
	National	See National Discovery Data Coordination Procedure
Coastal Barrier Resource Areas	National	See National Discovery Data Coordination Procedure
Coordinated Needs Management Strategy	National	See National Discovery Data Coordination Procedure
Topographic/bathymetric data	NYS GIS Clearinghouse	http://gis.ny.gov/gisdata/inventories/inde x.cfm?AlphaIndex=T
	National	See National Discovery Data Coordination Procedure
AAL data from Hazus	National	See National Discovery Data Coordination Procedure
Coverage areas for known community and Tribal risk assessment data	Local	Local
Status of Hazard Mitigation Plans	National	See National Discovery Data Coordination Procedure
Flood control structure data	NYS GIS Clearinghouse	http://gis.ny.gov/gisdata/inventories/deta ils.cfm?DSID=1130
	National	See National Discovery Data Coordination Procedure
Locations of stream gages	National	See National Discovery Data Coordination Procedure
Locations of past flood claims and repetitive loss properties	National	See National Discovery Data Coordination Procedure
Locations of clusters of Letters of Map Change	National	See National Discovery Data Coordination Procedure
Known flooding issues not represented on effective FIRMs or listed in Coordinated Needs Management Strategy database	Local	Local
Areas of planned development	Local	Local
Areas of land use change datasets	Local	Local
Locations of ongoing projects or updated stream studies (e.g., highway improvements)	Local	Local
Locations of wave and tide gages	National	See National Discovery Data Coordination Procedure
Locations of wind gages	National	See National Discovery Data Coordination Procedure

Proposed inland limit of the Primary Frontal Dune, if present	Local	Local
Locations of any beach nourishment or dune restoration projects	Local	Local
Comparison of preliminary stillwater elevations with effective stillwater elevations for coastal areas	Local	Local
Available effective study data	National	See National Discovery Data Coordination Procedure
Orthophotography	NYS GIS Clearinghouse	http://gis.ny.gov/gisdata/inventories/resu lts.cfm?themeIDs=18
	National	See National Discovery Data Coordination Procedure
Proposed discussion areas, problem areas, areas of proposed mitigation projects	Local	Local
Land use and soil information	NYS GIS Clearinghouse	http://gis.ny.gov/gisdata/inventories/deta ils.cfm?DSID=574
	National	See National Discovery Data Coordination Procedure
Reference points to locate areas with flooding issues	Local	Local
Hydraulic structures	NYS GIS Clearinghouse	http://gis.ny.gov/gisdata/inventories/deta ils.cfm?DSID=1130
		http://gis.ny.gov/gisdata/inventories/deta ils.cfm?DSID=397
	National	See National Discovery Data Coordination Procedure
Coastal structures, including flood protection structures, shoreline structures, manmade embankments, surge conveyance pathways, and shoreline change data	National	See National Discovery Data Coordination Procedure
Local structure and topographic data from the existing hazard mitigation plans	Local	Local
Historic inundation areas and High Water Marks	Regional	Discovery Data Repository

Clusters or locations of Individual Assistance/Public Assistance grants and locations of grant projects completed, planned, or underway	National	See National Discovery Data Coordination 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 Discovery Data Coordination Procedure
Other information on FEMA grants	Local	Local
Any data deficiencies identified in hazard mitigation plans	Local	Local
Information from FloodSmart on market penetration	National	See National Discovery Data Coordination Procedure
Community Assistance Visits / Community Assistance Contacts	National	See National Discovery Data Coordination Procedure
Community Rating System class information	National	See National Discovery Data Coordination Procedure
Information from other Federal agencies	National	See National Discovery Data Coordination Procedure
Information from State agencies, non-profit organizations, universities, etc.	NYS GIS Clearinghouse	http://gis.ny.gov/
Current community plans, ordinances, or programs to	Local	Local
alleviate flooding or manage stormwater	National	See National Discovery Data Coordination Procedure
Other known hazards with geographical boundaries (e.g., earthquake faults)	National	See National Discovery Data Coordination Procedure
Information on active disasters	National	See National Discovery Data Coordination Procedure
Campgrounds, recreational areas, emergency access routes, etc.	NYS GIS Clearinghouse	http://gis.ny.gov/gisdata/inventories/deta ils.cfm?DSID=1114 See National Discovery Data
	National	Coordination Procedure
Any other data that might be appropriate	Local	Local

Federal Nationwide Geospatial Data Holdings

Information about nationwide holdings and programs of Federal agencies is available from the Mapping Information Platform web site at <u>https://hazards.fema.gov/femaportal/docs/ProgFacts1.pdf</u>.

Finding and Accessing Other Existing Geospatial Data

Find below 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.

Clearinghouses and Inventories for the State

An inventory of existing geospatial data products can be found at the NYS GIS Clearinghouse <u>http://gis.ny.gov/gisdata/index.cfm?nysgis=</u>

Metadata formats for the inventory of geospatial products vary depending on the data set's owner. Data requiring fees and special licensing restrictions are identified on the site.

The sharing and coordination of geospatial data in New York is organized through the NYS GIS Data Sharing Cooperative. This group consists of governmental entities and not-for-profit organizations that have executed data sharing agreements for the purpose of improving access to GIS data among members.

The State has an existing inventory of geospatial products that is available via download. In cases where data is not available for download, a contact person for the data is listed on the site.

FEMA is a NYS GIS Data Sharing Cooperative member, allowing the agency access to datasets at no charge and with no access restrictions beyond what is defined in license agreements.

The URL for the inventory is as follows: <u>http://gis.ny.gov/</u>

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 <u>http://www.ndop.gov</u> and follow the link "Project Tracking." For the NDEP system, go to the NDEP web site at <u>http://www.ndep.gov</u> and follow the link "Project Tracking."

Geospatial One-Stop

Geospatial One-Stop, available at <u>http://www.data.gov</u>, 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.

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 web site at <u>https://hazards.fema.gov/contacts/statecontacts/contacts.asp?page=NY</u>

A listing of New York GIS contacts for all levels of government and private, academic and nonprofit organizations can be found at: <u>http://gis.ny.gov/outreach/whoswho</u>

Involving the State's Geospatial Coordinator in Flood Studies

The NYSDEC Geospatial Point of Contact is: Tim Daly NYS Office Information and Technology Services (ITS) 625 Broadway, 3rd floor Albany, NY 12233-2750 (518) 402-9872 tmdaly@gw.dec.state.ny.us

When participating in the FEMA flood hazard mapping effort, the RSC will coordinate with NYS ITS through NYSDEC. NYSDEC prefers to be contacted in the following ways:

- a. Send project list at the start of each year
- b. Conference call at the start of data Discovery for each individual project
- c. Coordinate at local GIS meetings and conferences
- d. Send information once project scope is finalized
- e. CSCIC will continue to coordinate with the State's Flood Plain Management Office (NYSDEC).

The NYS ITS has a working relationship with FEMA Region 2 and NYSDEC, the agency responsible for updating the multi-hazard maps and providing input to the State's Risk MAP business plan.

State Coordination Process for Building Geospatial Partnerships

Coordination with New York State government is primarily through NYSDEC. Coordination activities take place at conferences, FEMA meetings, and phone conferences to discuss specific FEMA projects.

Future coordination activities will include working with the NYS GIS Clearinghouse, NYS GIS Data Sharing Cooperative and the Data Coordination, Standards &

Clearinghouse Work Group. Future coordination activities will include using the NYS GIS Data Sharing Cooperative as an avenue to distribute FIRM Databases.

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 archive and web searches at government link portals such as http://www.statelocalgov.net.

Local contacts are identified by NYSDEC during Discovery activities and all local communities and county agencies are invited to Discovery meetings.

Coordination with local GIS contacts is maintained through the NYS GIS Coordination Program. Participants and contact information for those in the coordination program are listed on the Clearinghouse website. Every NY county is included and those municipal governments that are part of the data sharing cooperative are also identified.

The State also maintains a list server that can be used to forward FEMA program information and production notices to State and county GIS contacts. The contact information for using this list server is:

http://gis.ny.gov/outreach/listserv/index.cfm?nysgis=. The levels of government in the contact list are primarily county governments, though State and municipal governments and authorities also retain GIS data. The counties maintain the majority of spatial data though the State administers the DOQQ program.

Provide Feedback on This Procedure

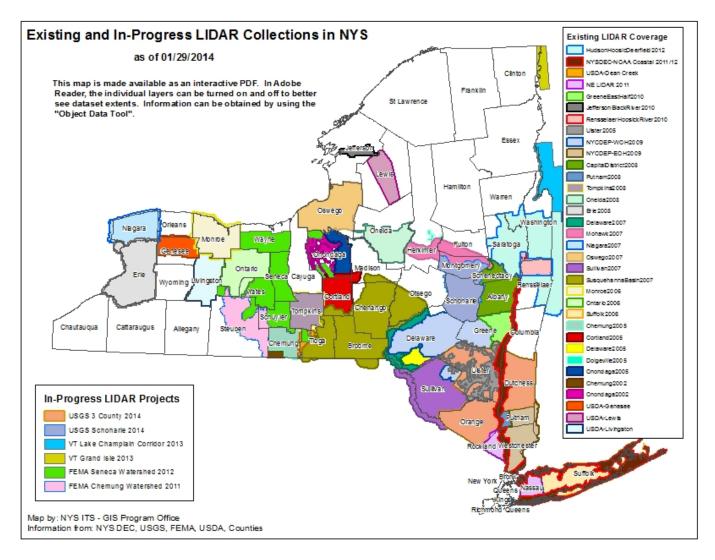
When you find information in this Procedure or in other FEMA or State resources that are outdated, please tell the geospatial data coordination lead in the RSC what was wrong and the correct information (if you know it). Use the contact information for the lead listed in the section Purpose of the Procedure.

The lead will use your feedback to update this Procedure.

Other Useful Information

New York State Elevation Data Updates

The following figures illustrate availability of high quality topographic datasets throughout the State of New York. These datasets are significantly higher resolution than the aforementioned statewide elevation datasets that are available.



Source: New York State GIS Clearinghouse, https://gis.ny.gov/elevation/lidar-coverage.htm

