

DATA DESCRIPTION



Critical Facilities in Coastal Geographies

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NOAA Office for Coastal Management
(843) 740-1200
coast.noaa.gov

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Abstract

The critical facilities data are derived from the USGS Structures Inventory Database (nationalmap.gov/structures.html). The structures in the derived data set display aggregated totals of law enforcement facilities, fire stations and EMS facilities, hospital and other medical facilities, and schools within several coastal footprints.

Geographic Coverage

Coastal Shoreline Counties

A county is considered a Coastal Shoreline County if it is directly adjacent to the open ocean, major estuaries, or the Great Lakes. These counties are considered to be most directly affected by issues pertaining to the coast. For more information, visit coast.noaa.gov/htdata/SocioEconomic/NOAA_CoastalCountyDefinitions.pdf.

Coastal Watershed Counties

A county is considered a Coastal Watershed County if one of the following criteria is met: (1) at a minimum, 15 percent of the county's total land area is located within a coastal watershed or (2) a portion of, or an entire county, accounts for at least 15 percent of a coastal watershed. The 15-percent rule was selected as an appropriate level for capturing counties with a significant impact on coastal and ocean resources. For more information, visit coast.noaa.gov/htdata/SocioEconomic/NOAA_CoastalCountyDefinitions.pdf.

Coastal States

All states (30) that are directly adjacent to the open ocean or the Great Lakes, as well as Washington D.C., Puerto Rico, and the U.S. Virgin Islands.

Coastal Portion of Coastal States

A state-by-state aggregation of all Coastal Shoreline Counties (see definition above).

Coastal Zone Boundaries

The area contained within the coastal zone as defined by each state participating in the Coastal Zone Management Act (subject to change). For a complete description of the methods used by each state with a coastal zone management program see the coastal zone definition for each state (coast.noaa.gov/czm/mystate).

FEMA Special Flood Hazard Area

Areas subject to 1-percent annual chance (100-year) coastal floods as determined by the Federal Emergency Management Agency (FEMA) through the National Flood Insurance Program (NFIP). Visit fema.gov/special-flood-hazard-area for more information.

USGS 8-Digit Hydrologic Unit Code (HUC)

The U.S. Geological Survey (USGS) has subdivided hydrologic units into a series of successively smaller levels, with the 8-digit HUC as the smallest. The 8-digit HUC is a geographic area representing part or all of a surface drainage basin, a combination of drainage basins, or a distinct hydrologic feature, often referred to as a watershed (water.usgs.gov/GIS/huc.html).

National Estuarine Research Reserve System (NERRS) Target Watersheds

The National Estuarine Research Reserve System (coast.noaa.gov/nerrs/) is a network of reserves dedicated to long-term research, monitoring, education and resource stewardship. Most NERRS units have delineated an associated target watershed that most directly impacts reserve. The remaining five NERRS units do not have a target watershed; they are Kachemak Bay, Mission-Aransas, Narragansett Bay, Waquoit Bay, and Lake Superior.

National Estuarine Research Reserve System (NERRS) Large Watersheds

For each of the National Estuarine Research Reserve System (coast.noaa.gov/nerrs/) units and their target watersheds (where applicable), large estuarine watersheds have been delineated using a flow analysis based on a 30-meter digital elevation model corresponding most closely to the boundaries of U.S. Geological Survey 8-digit Hydrologic Unit Code (HUC) watersheds.

U.S. Environmental Protection Agency National Estuary Program Study Areas

The mission of the National Estuary Program (NEP) is to protect and restore America's nationally significant estuaries. Each NEP has a designated study area and develops and implements a comprehensive conservation and management plan for that area. Each NEP has a single study area, with the exception of the Puget Sound NEP, which has divided its study area into seven sub-systems. Visit water.epa.gov/type/oceb/nep/ for more information.

U.S. Environmental Protection Agency National Estuary Program Watersheds

The National Estuary Program (NEP) has identified the estuarine and fluvial drainage areas associated with each of its program unit study areas. These larger watersheds were delineated so the NEPs can better understand pressures created upstream of their study areas, providing critical information to successfully implement their comprehensive conservation and management plans. Visit water.epa.gov/type/oceb/nep/ for more information.

50-Mile Buffer Area from the Coastline

The area within a 50-mile fixed distance from the coastline.

Hurricane-Prone Areas

The American Society of Civil Engineers (ASCE) delineates hurricane-prone areas of the eastern U.S. that are vulnerable to hurricane-force winds (90 mph or greater basic wind speed).

Data Analysis and Manipulations

The critical facilities data were obtained in ESRI geodatabase format from the USGS FTP (<ftp://rockyftp.cr.usgs.gov/vdelivery/Datasets/Staged/Struct/>). The critical facilities were then grouped into a series of classes in a GIS as shown in the table below:

Fcode	Description	Class
74000	Emergency Response or Law Enforcement Facility	Fire/EMS
74001	Ambulance	Fire/EMS
74002	American Red Cross	Fire/EMS
74017	Emergency Operations Center	Fire/EMS
74026	Fire/EMS Station	Fire/EMS
74028	Fire Training Facility/Academy	Fire/EMS
74038	Search and Rescue Office/Facility	Fire/EMS
74044	Office of Emergency Management	Fire/EMS
80000	Health or Medical Facility	Hospital/Medical
80002	Blood Bank	Hospital/Medical
80006	Day Care Facility	Hospital/Medical
80011	Hospice	Hospital/Medical
80012	Hospital/Medical Center	Hospital/Medical
80014	Medical Research Laboratory	Hospital/Medical
80022	Nursing Home/Long Term Care	Hospital/Medical
80024	Outpatient Clinic	Hospital/Medical
80027	Psychiatric Facility	Hospital/Medical
80028	Public Health Office	Hospital/Medical
80030	Rehabilitation Center	Hospital/Medical
80034	Substance Abuse Facility	Hospital/Medical
74004	Border Patrol	Law Enforcement
74006	ATF	Law Enforcement

74008	Civil Defense	Law Enforcement
74010	Coast Guard	Law Enforcement
74012	Customs Service	Law Enforcement
74016	DEA	Law Enforcement
74018	FBI	Law Enforcement
74030	Immigration and Naturalization Services	Law Enforcement
74032	Marshal Service	Law Enforcement
74034	Law Enforcement	Law Enforcement
74036	Prison/Correctional Facility	Law Enforcement
74037	Public Safety Office	Law Enforcement
74040	Secret Service	Law Enforcement
73000	Educational Facility	Schools
73002	School	Schools
73003	Elementary School	Schools
73004	Middle School	Schools
73005	High School	Schools
73006	College/University	Schools
73007	Technical/Trade School	Schools

The point locations for each class were then intersected with the coastal geography footprints, and the points were aggregated within the footprints by class.

Quality Control and Quality Assurance

Point locations were spot checked against aerial photography to ensure the point location was in the correct location, and web searches were performed to confirm addresses of buildings.

All of the data reported in these data files met the quality assurance specifications.

Request for Acknowledgment

NOAA requests that all individuals who download data acknowledge the source of these data in any reports, papers, or presentations. If you publish these data, please include a statement similar to: "Some or all of the data described in this article were produced by the U.S. National Oceanic and Atmospheric Administration, National Ocean Service, Office for Coastal Management."

Keywords

socioeconomic, HAZUS, critical facilities, flooding

Data Access

Data can be downloaded from the web at

coast.noaa.gov/dataregistry/search/collection/info/criticalfacilities.

A full data dictionary can be found at

coast.noaa.gov/htdata/SocioEconomic/CriticalFacilities/CriticalFacilities_DataDictionary.pdf.