

NOAA Digital Coast Tools

	Tag					Can the tool be used for the Great Lakes?	Comments on NOAA Digital Coast tools relative to potential use in the Great Lakes region.
	Analysis	Learning	Reporting	Visualization			
<b>Tools (70 as of 2/3/19)</b>							
Atlas of Ocean Wealth	x	x	x	x	no - ocean		Geared for ocean coast.
Beach Nourishment Viewer			x	x	no - ocean		No data for Great Lakes.
Benthic Terrain Modeler	x				yes - general		ArcGIS extension. Supports benthic terrain classification. Creates bathymetric position index and rugosity data.
C-CAP Land Cover Atlas			x	x	yes - GL coverage		National web map by NOAA to view land cover from 1996 to 2010 by county or watershed. Includes Great Lakes region.
CAMEO Software Suite	x				yes - general		This suite of tools includes four core programs that can be used for all-hazards emergency response and planning—but especially for incidents that involve hazardous chemicals.
CMECS Crosswalk Tool	x				yes - general		ArcGIS tool. Translates existing spatial benthic habitat data sets into output data compliant with the Coastal and Marine Ecological Classification Standard. Will work for deep water of the Great Lakes.
Census Explorer			x	x	yes - GL coverage		Map different social, economic, and housing characteristics at state, county, or census tract. Requires Flash plugin.
Census QuickFacts					yes - GL coverage		Provides tables, maps, and charts of frequently requested Census statistics.
Citizen Science Water Level Application			x		yes - general		Web app to report and view water levels. Info on other tools. Contributions possible anywhere, none on Great Lakes as of 2/3/19, some for inland waters, most concentrated along mid-Atlantic coast.
Climate Wizard	x	x	x	x	yes - GL coverage		TNC interactive web map by TNC for nation of globe to view past or projected temp/precip by emission scenario.
Coastal Change Hazards Portal	x				no - ocean		Web map by USGS to examine hazards for severe storms, shoreline erosion, and sea level rise. For ocean coasts.
Coastal County Snapshots			x		yes - GL coverage		Web-based. Provides county level profiles of flood exposure, wetland benefits, and jobs. Includes Great Lakes.
Coastal Flood Exposure Mapper				x	no - ocean		Web-based. Needs more data (currently expanding). Creates maps that are easy for communities to make and share that are meaningful. Easy to use. Does not include Great Lakes yet.
Coastal Resilience Mapping Portal	x				no - ocean		Only cases for ocean coast.
Data Access Viewer					yes - GL coverage		Data access for Digital Coast. Includes Great Lakes.
Digital Shoreline Analysis System	x		x		yes - general		Desktop GIS-based shoreline change analysis tool.
ENOW Explorer			x	x	yes - GL coverage		Allows exploration of six sectors of the ocean and Great Lakes economy at the county scale.
EnviroAtlas		x	x	x	yes - GL coverage		Provides interactive tools and resources for exploring the benefits people receive from ecosystem goods and services. Requires Adobe Flash and other Adobe plugins for interactive map to work.
Environmental Response Management Application				x	yes - GL coverage		Web-based response mapping. Used to analyze oil spill response plans. Easy to use, needs account in order to use all data. There is a Great Lakes specific ERMA.
Environmental Studies Program Information System			x		no - ocean		Access studies that inform policy decisions related to outer continental shelf resource development. No GL info.
Essential Fish Habitat Mapper				x	no - ocean		Interactive map that shows fish habitat for oceans. Does include a nautical chart layer that includes Great Lakes.
Estuary Data Mapper	x				no - ocean		Desktop software to be installed? Only includes Atlantic states.
FUSION	x				yes - general		LIDAR data viewer and processing software. Desktop software.
Flood Event Viewer			x	x	yes - GL coverage		Interactive map provides viewable and downloadable flood event data from the U.S. Geological Survey's Short-Term Network (STN) database. Includes Lake Ontario 2017 flooding and other events in Great Lakes states.
GecoServ			x		yes - general		Searchable inventory of valuation studies for ecosystem services.
Global Change Explorer	x	x	x		yes - general		View scenarios of future human population, land use, and impervious surfaces. Visualize changes in streamflow, nutrient & sediment loads under different climate change scenarios.
Great Lakes Coastal Wetland Decision-Support Tool				x	yes - GL specific		Users can view, filter, and rank Great Lakes coastal wetlands based on conditions and access wetland monitoring program data. Data only for Michigan and Ohio.
Great Lakes Water Level Dashboard	x		x		yes - GL specific		Powerful visualization tool for Great Lakes water levels. Includes climate scenarios.
Gulf TREE		x			no - ocean		Interactive guide to climate resilience tools for the Gulf of Mexico provides filters and guided searches to help users identify tools that meet their needs. Great framework for tools
Hazards U.S. Multi-Hazard (HAZUS-MH)	x		x		yes - general		Nationally-applicable method to estimate potential losses from various hazards. Hazus-MH 2.1 works with ArcGIS 10.
Historical Hurricane Tracks	x		x	x	no - ocean		For ocean coasts. Interactive map of hurricane tracks.
Impervious Surface Analysis Tool	x		x		yes - general		ArcGIS extension. Calculates the percent impervious area from land cover and categorizes water quality in selected areas such as watersheds.
Information for Planning and Consultation		x	x		yes - GL coverage		This online tool quickly identifies USFWS-managed resources based on user-drawn project locations and provides resource lists and information such as conservation measures. Includes Great Lakes coverage.
Integrated Valuation of Environmental Services and Tradeoffs (InVEST)	x		x		yes - general		A family of ecosystem service evaluation tools from the Natural Capital Project led by Stanford University. Desktop GIS.
Lake Level Viewer (U.S. Great Lakes)				x	yes - GL specific		Interactive map that visualizes GL water levels in one foot increments.
MAPTITE	x				no - ocean		ArcGIS Spatial Analyst extension. Appears to be designed for tidal areas.
Marine Cadastre Track Builder	x				yes - general		ArcGIS tool. Utilizes ship AIS information.
Marine Geospatial Ecology Tools	x				yes - general		Open source geoprocessing toolbox supporting marine ecology. Requires ArcGIS 9.1 or later.
Marine Protected Areas Data Viewer				x	yes - GL coverage		Displays boundaries and provides access to the marine protected area data inventory. Includes Great Lakes coverage.
MarineCadastre.gov National Viewer	x				yes - GL coverage		Interactive map. Includes some data for Great Lakes, but seems targeted for ocean use.
Marxan with Zones	x				yes - general		Desktop software.
NACo County Explorer				x	yes - GL coverage		Visualizes county-level data on indicators related to demographics, economy, education, healthcare, and public safety & profiles cnty performance related to key federal policies. Includes GL region.
NEPAssist	x		x		yes - GL coverage		EPA tool that draws environmental data from publicly available federal, state, and local GIS sources and web services and screens environmental assessment indicators for a user-defined area of interest.
NOAA Tides and Currents Inundation Dashboard	x		x	x	no - ocean		Geared towards mid-Atlantic region.
National Beach Nourishment Database			x		yes - GL coverage		Seems much more focused on ocean coast. Does list a couple projects for Michigan, but doesn't support searching on Great Lakes states.
Nature's Network Prioritization Tool	x		x		yes - general		Helps identify conservation priorities. Displays a series of prioritization maps developed for a set of pre-defined scenarios. Coverage for Northeastern United States including NY, PA.
NatureServe Vista	x		x		yes - general		Integrates data and expert knowledge on conservation with land use and resource planning. Requires ArcGIS 10 and Spatial Analyst.
Ocean Law Search					yes - general		Searches legal documents concerning environmental statutes, legislative history, cases, & other documents. Planning purposes only.
Ocean Reporting Tool			x		no - ocean		For coastal and ocean planners along the southeast ocean coast. Provides summary statistics and interpretive analysis for five topics, including: energy and minerals, transportation and infrastructure, and economics.
OnTheMap	x		x	x	yes - GL coverage		Interactive map shows population and workforce stats for areas being affected by natural disasters. Includes GL coverage.
OpenNSPECT	x				yes - general		Desktop using MapWindow. Provides a means to analyze "what if" land use change scenarios. Estimates runoff volumes and pollutant loads. Story for Mullet River near Sheboygan.
Our Coast, Our Future - Flood Map	x	x		x	no - ocean		For California only - helps users understand, visualize, and anticipate ecosystem and human community vulnerabilities to sea level rise, coastal storms, and shoreline change hazards.
Partnership for Resilience and Preparedness Data				x	yes - GL coverage		Map-based, open data online platform that allows users to access and visualize spatial data reflecting past and future climate, as well as the physical and socioeconomic landscape for climate adaptation and resilience planning.
Practitioner's Toolkit for Marine Conservation Agreements	x				no - ocean		Only for oceans - hope to include GL in the future.
Quick Report Tool for Socioeconomic Data	x		x		yes - GL coverage		Allows quick access to socioeconomic (census, critical facilities, workforce, etc.) data down to county level. Includes GL coverage.
Rain Garden App	x	x			yes - general		Helps users determine rain garden size, placement and plant selection. Includes plant catalogs for MN and OH.
Riverine Flood Inundation Maps				x	yes - general		Interactive web maps help decision-makers visualize river flood stages to see how inundation could impact local resources. Limited coverage. No GL coastal sites.
SLAMM-VIEW 2.0				x	no - ocean		Powerful tool, models sea level rise (has scenario creation function). Limited to very few locations. Great Lakes not available.
Science in the Great Lakes Mapper				x	yes - GL specific		Spatially displays information about scientific research and monitoring efforts throughout the Great Lakes basin.
Sea Level Affecting Marshes Model	x		x		no - ocean		For ocean coasts. Model uses digital elevation data and other info to simulate impacts of sea level rise on wetlands and shorelines.
Sea Level Change Curve Calculator	x		x	x	no - ocean		For ocean coasts. Calculates projected rates of sea level change to assess vulnerability and compare several published sea level rise scenarios.
Sea Level Rise Viewer				x	no - ocean		For ocean coasts. Visualize impacts from sea level rise. Lake level viz tool coming to Great Lakes in FY14.
Sediment Volume Change Mapper				x	yes - general		View, query, and download data derived from comparing multiple lidar data sets and the changes between them. Couldn't load layers when checked.
Soil Data Viewer	x			x	yes - GL coverage		ArcGIS extension.
Surging Seas				x	no - ocean		Specific to sea level rise on ocean coast.
Tsunami Information Service			x	x	no - ocean		Specific to Hawaii.
United States Interagency Elevation Inventory				x	yes - GL coverage		Inventory of topographic and bathymetric data. Includes Great Lakes.
VDatum	x				yes - general		Datum conversion desktop software.
Wave Exposure Model	x		x		yes - general		Estimate wave energy and its effects on ecosystem functions, as well as on developed coastal and inland-water areas. Requires ArcGIS and data such as shoreline erosion, fauna, and landscape patterns.
Weather and Hazards Data Viewer				x	yes - GL coverage		Interactive map brings weather forecast information and hazards planning data into the same location. Helps managers monitor storms and fire weather and visualize potential impacts.

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4 yes - GL specific  
22 yes - GL coverage  
23 yes - general  
21 no