



# Georgia Marine Debris Emergency Response Guide: Comprehensive Guidance Document

NOAA Marine Debris Program  
National Oceanic and Atmospheric Administration  
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## List of Acronyms

ACP	Area Contingency Plan
ADV	Abandoned and Derelict Vessel
BMP	Best Management Practice
C&D	Construction and Demolition Debris
CBRA	Coastal Barrier Resources Act
CBRS	John H. Chafee Coastal Barrier Resources System
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CINS	Cumberland Island National Seashore (of NPS)
CMPA	Coastal Marshlands Protection Act
CRD	Coastal Resources Division (of DNR)
DNR	Georgia Department of Natural Resources
DoD	U.S. Department of Defense
ECP	Emergency Conservation Program (of FSA)
EFH	Essential Fish Habitat
EPA	U.S. Environmental Protection Agency
EPD	Environmental Protection Division (of DNR)
ESA	Endangered Species Act
ESF	Emergency Support Function
EWPP	Emergency Watershed Protection Program (of NRCS)
FEMA	Federal Emergency Management Agency
FOSC	Federal On-Scene Coordinator
FSA	Farm Service Agency
GDOT	Georgia Department of Transportation
GEMA/HS	Georgia Emergency Management and Homeland Security Agency
GIS	Geographic Information Systems
HPD	Historic Preservation Division (of DNR)
LED	Law Enforcement Division (of DNR)
LIDAR	Light Detection and Ranging
MHHW	Mean Higher High Water
MSU	Marine Safety Unit (of USCG)
NCP	National Oil and Hazardous Substances Pollution Contingency Plan
NEPA	National Environmental Policy Act
NGO	Non-Governmental Organization
NOAA	National Oceanic and Atmospheric Administration
NPS	National Park Service
NRC	National Response Center
NRCS	Natural Resources Conservation Service
NRT	Navigation Response Team (of NOAA)
NWR	National Wildlife Refuge (of USFWS)
OCS	Outer Continental Shelf
SHPO	State Historic Preservation Office
SPA	Shore Protection Act
SSC	Scientific Support Coordinator
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard
USFWS	U.S. Fish and Wildlife Service



## Definitions

**Abandoned Vessel** – A vessel:

- (a) which has been left by the owner or some person acting for the owner with a vessel dealer, repairman, or wrecker service for repair or for some other reason and has not been called for by such owner or other person within a period of 30 days after the time agreed upon; or within 30 days after such vessel is turned over to such dealer, repairman, or wrecker service when no time is agreed upon; or within 30 days after the completion of necessary repairs;
- (b) which is left unattended upon or in any public water or at any port in this state without the consent of the agency having jurisdiction or docked at any private property without the consent of the owner of such property for a period of at least 5 days and when it reasonably appears to a law enforcement officer that the individual who left such vessel unattended does not intend to return and remove such vessel;
- (c) which has been lawfully towed onto the property of another at the request of a law enforcement officer and left there for a period of not less than 30 days without anyone's having made claim thereto;
- (d) which has been lawfully towed onto the property of another at the request of a property owner on whose property the vessel was abandoned and left there for a period of not less than 30 days without the owner's having made claim thereto; or
- (e) which has been left unattended on private property for a period of not less than 30 days without anyone's having made claim thereto (O.C.G.A. § 52-7-70(1)).

**Area Contingency Plan (ACP)** – Reference document prepared by an Area Committee for the use of all agencies engaged in responding to environmental emergencies in a defined geographic area. The purpose of the ACP is to define the roles, responsibilities, resources, and procedures necessary to address oil and hazardous substance incidents. For Georgia, the ACP is developed by U.S. Coast Guard (USCG) District 7, Marine Safety Unit (MSU) Savannah (U.S. Coast Guard [USCG], 2016).

**Buffer** – The area of land immediately adjacent to the banks of state waters in its natural state of vegetation, which facilitates the protection of water quality and aquatic habitat (O.C.G.A. § 12-7-3(2)).

**Chemical, biological, radiological, and nuclear-contaminated debris** – Debris contaminated by chemical, biological, radiological, or nuclear materials (Federal Emergency Management Agency [FEMA], 2016).

**Coastal area** – See definition for [Coastal zone](#).

**Coastal county** – Any of the 11 counties encompassed by the Georgia Coastal Management Program's [Coastal zone](#) ((O.C.G.A. § 12-5-322(4)).

**Coastal marshlands (Marshlands)** – Any marshland intertidal area, mud flat, tidal water bottom, or salt marsh in the state of Georgia within the estuarine area of the state, whether or not the tidewaters reach the littoral areas through natural or artificial watercourses (O.C.G.A. § 12-5-282(3)).

**Coastal zone (ACP coastal zone)** – USCG area of responsibility for response under the National Contingency Plan (NCP), with geographic boundaries defined in the *USCG MSU Savannah ACP* (USCG, 2016).

**Coastal zone (under Georgia Coastal Management Program, Coastal area)** – All tidally influenced waters and submerged land seaward to the state's jurisdictional limits and all lands, submerged lands, waters, and other resources within the counties of Brantley, Bryan, Camden, Charlton, Chatham, Effingham, Glynn, Long, Liberty, McIntosh, and Wayne (O.C.G.A. § 12-5-322(4)).

**Construction and demolition debris (C&D)** – Components of buildings and structures, such as lumber and wood, gypsum wallboard, glass, metal, roofing material, tile, carpeting and other floor coverings, window coverings, pipe, concrete, asphalt, equipment, furnishings, and fixtures (FEMA, 2016).

**Electronic waste (e-waste)** – Electronics that contain hazardous materials, such as computer monitors, televisions, cell phones, and batteries. These products may contain minerals and chemicals that require specific disposal methods (FEMA, 2016).

**Eligible applicant (FEMA definition)** – Entities who may receive public assistance reimbursement funding from FEMA under the Stafford Act. Eligible applicants include state and local governments, federally recognized Indian tribal governments, and certain private non-profits that serve a public function and have the legal responsibility to remove the debris (FEMA, 2016).

**Eligible debris (FEMA definition)** – Debris that is a direct result of a Presidential major disaster declaration, in the designated disaster area, and whose removal is in the public interest (i.e., eliminating the immediate threat of significant damage to improved public or private property or ensuring economic recovery of the affected community to the benefit of the community at large). Debris includes, but is not limited to, vegetative debris, construction and demolition debris, sand, mud, silt, gravel, rocks, boulders, and vehicle and vessel wreckage. Debris removal from waterways that is necessary to eliminate the immediate threat to life, public health and safety, or improved property is considered eligible (FEMA, 2016).

**Emergency (state definition)** – See definition for [State of emergency](#).

**Emergency (FEMA definition)** – Any occasion or instance for which, in the determination of the President, federal assistance is needed to supplement state and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United States (42 U.S.C. § 5122(1)).

**Emergency (NOAA Fisheries definition)** – A situation involving an act of God, disasters, casualties, national defense or security emergencies, etc., and includes response activities that must be taken to prevent imminent loss of human life or property (National Oceanic and Atmospheric Administration [NOAA], n.d.-b).

**Emergency (USACE definition)** – A situation which would result in an unacceptable hazard to life, a significant loss of property, or an immediate, unforeseen, and significant economic hardship if corrective action requiring a permit is not undertaken within a time period less than the normal time needed to process the application under standard procedures (33 C.F.R. § 325.2(e)(4)).

**Emergency Support Function (ESF)** – Mechanism for grouping functions most frequently used to provide federal support to states and federal-to-federal support, both for declared disasters and emergencies under the Stafford Act and for non-Stafford Act incidents. The state of Georgia also adopts the federal ESFs and assigns corresponding state agencies to each ESF in the *Georgia Emergency Operations Plan* as prepared by Georgia Emergency Management and Homeland Security Agency (GEMA/HS; GEMA/HS, 2015b). Incident waterway debris removal operations typically fall within ESF-3, Public Works and Engineering and ESF-10, Oil and Hazardous Materials Response.

**Environmental Sensitivity Index Map** – Maps produced by NOAA that are a compilation of information about coastal shoreline sensitivity, biological resources, and human use resources. This information is used in planning to create cleanup strategies before an accident occurs so that authorities are prepared to act in the event of such a spill (NOAA, 2016a).

**Estuarine area** – All tidally influenced waters, marshes, and marshlands lying within a tide-elevation range from 5.6 feet above mean tide level and below (O.C.G.A. § 12-5-282(7)).

**Federally maintained waterways and channels** – A waterway that has been authorized by Congress and which U.S. Army Corps of Engineers (USACE) operates and maintains for general (including commercial and recreational) navigation (FEMA, 2010).

**Hazard to navigation (USCG definition)** – An obstruction, usually sunken, that presents sufficient danger to navigation so as to require expeditious, affirmative action such as marking, removal, or re-definition of a designated waterway to provide for navigational safety (33 C.F.R. § 64.06).

**Hazardous waste** – Regulated under the Resource Conservation and Recovery Act and contains properties that make it potentially harmful to human health or the environment. A Resource Conservation Recovery Act hazardous waste is a waste that appears on one of the four hazardous waste lists or exhibits at least one of the following four characteristics: ignitability, corrosivity, reactivity, or toxicity (FEMA, 2016).

**Household hazardous waste/material** – Hazardous products and materials that are used and disposed of by residential consumers, including some paints, stains, varnishes, solvents, pesticides, and other products containing volatile chemicals that catch fire, react, or explode under certain circumstances or that are corrosive or toxic (FEMA, 2016).

**Improved property (FEMA definition)** – Any structure, facility, or equipment that was built, constructed, or manufactured. Examples include buildings, levees, roads, and vehicles. Land used for agricultural purposes is not improved property, nor are vacant lots, forests, heavily wooded areas, and unused areas (44 C.F.R. § 206.221(d)).

**Incident waterway debris** – See definition for [Waterway debris](#).

**Infectious waste** – Waste capable of causing infections in humans and can include animal waste, human blood and blood products, medical waste, pathological waste, and discarded sharps (needles, scalpels, or broken medical instruments; FEMA, 2016).

**Inland zone (ACP inland zone)** – U.S. Environmental Protection Agency (EPA) area of responsibility for response under the NCP, with geographic boundaries defined in the *EPA Region 4 Regional Contingency Plan* [U.S. Environmental Protection Agency [EPA], 2016a).

**Litter Law** – It shall be unlawful for any person or persons to dump, deposit, throw, or leave or to cause or permit the dumping, depositing, placing, throwing, or leaving of litter on any public or private property in this state or any waters in this state. Any person who violates this code section shall be guilty of a misdemeanor (O.C.G.A. § 16-7-43(a)(b)).

**Major disaster (FEMA definition)** – Any natural catastrophe (including any hurricane, tornado, storm, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, or drought), or, regardless of cause, any fire, flood, or explosion, in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance under this Act to supplement the efforts and available resources of states, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby (42 U.S.C. § 5122(2)).

**Marine debris (NOAA definition)** – Any persistent solid material that is manufactured or processed and directly or indirectly, intentionally or unintentionally, disposed of or abandoned into the marine environment or the Great Lakes (33 U.S.C. § 1956(3)).

**Marshlands**– See definition for [Coastal marshlands](#).

**Mean higher high water (MHHW)** – The average daily highest water height of each tidal day observed over the National Tidal Datum Epoch (NOAA, 2000).

**National Contingency Plan (NCP)** – Federal regulation (National Oil and Hazardous Substances Pollution Contingency Plan) that defines the authorities and responsibilities of designated federal agencies for responding to releases of oil, pollutants, and hazardous substances (EPA, 2016b).

**Navigable tidewater** (Navigable waters) – Any tidewater, the sea or any inlet thereof, or any other bed of water where the tide regularly ebbs and flows which is in fact used for the purposes of navigation or is capable of transporting at mean low tide boats loaded with freight in the regular course of trade (O.C.G.A. § 44-8-7(a)).

**Navigable waters (state definition)** – See definition for [Navigable tidewater](#).

**Navigable waters (federal definitions)** –

1. Navigable waters of the United States are those waters that are subject to the ebb and flow of the tide and/or are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. A determination of navigability, once made, applies laterally over the entire surface of the waterbody, and is not extinguished by later actions or events which impede or destroy navigable capacity (33 C.F.R. § 329.4).
2. Because FEMA only funds waterway debris removal when another federal agency does not have authority to fund the activity, their definition for navigable waterways (non-federally maintained) includes public waterways that are currently used for commercial and recreational navigation traffic and are not federally maintained or under the authority of a federal agency (FEMA, 2016).

**Obstruction** – Anything that restricts, endangers, or interferes with navigation.



**Outer Continental Shelf (OCS)** – The submerged lands, subsoil, and seabed, lying between the seaward extent of the states' jurisdiction and the seaward extent of federal jurisdiction. The OCS is subject to the jurisdiction and control of the federal government (Bureau of Ocean Energy Management, n.d.).

**Pollutant** – Dredged spoil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, industrial wastes, municipal waste, and agricultural waste discharged into the waters of the state. It does not mean:

(a) Sewage from vessels or;

(b) Water, gas, or other material which is injected into a well to facilitate production of oil or gas, or water derived in association with oil or gas production and disposed of in a well, if the well, used either to facilitate production or for disposal purposes, is approved by the appropriate authorities of this state, and if such authorities determine that such injection or disposal will not result in degradation of ground-water or surface-water resources (O.C.G.A. § 12-5-22(9)) .

**Pollution** – The manmade or man-induced alteration of the chemical, physical, biological, and radiological integrity of water (O.C.G.A. § 12-5-22(10)).

**Putrescent debris** – Debris that will decompose or rot, such as animal carcasses and other fleshy organic matter (FEMA, 2016).

**Recoverable waterway debris** – Generally any documented vessel, vehicle, recreational vehicle, or shipping container traceable to an owner (U.S. Army Corps of Engineers [USACE], 2010).

**Responsible Party** – The owner of a vessel and/or cargo, or an operator or lessee where the operator or lessee has substantial control of the vessel's operation.

**Severe marine debris event (NOAA definition)** – An atypically large amount of marine debris caused by a natural disaster, including a tsunami, flood, landslide, or hurricane, or other source (33 U.S.C. § 1956(6)).

**Soil, mud, and sand** – Soil, mud, and sand can be deposited after floods, landslides, winds, and storm surges on improved public property and rights-of-way (FEMA, 2016).

**Stafford Act** – The Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended (Public Law 93-288), provides the authorities and funding for federal support to state and local entities in responding to Presidential major disaster and emergency declarations (U.S. Department of Homeland Security, 2016).

**State of emergency** – Condition declared by the Governor when, in his judgment, the threat or actual occurrence of a disaster, emergency, or energy emergency in any part of the state is of sufficient severity and magnitude to warrant extraordinary assistance by the state to supplement the efforts and available resources of the several localities and relief organizations in preventing or alleviating the damage, loss, hardship, or suffering threatened or caused thereby (O.C.G.A. § 38-3-3(7)).

**State seaward boundary** – The seaward boundary of Georgia's coastal area extends to the outer limits of state jurisdiction, which is 3 nautical miles seaward from the mean low watermark.

Included within the coastal area are both waters of the state and submerged lands (Georgia Department of Natural Resources [DNR], 1997).

**Submerged shoreline lands** – The intertidal and submerged lands from the ordinary high-water mark seaward to the limit of the state's jurisdiction in the Atlantic Ocean (O.C.G.A. § 12-5-232(20)).

**Tide waters** – The sea and all rivers and arms of the sea that are affected by the tide, where the tide rises and falls, which are capable of use for fishing, passage, navigation, commerce, or transportation, and which are located within the jurisdiction of the State of Georgia (O.C.G.A. § 52-1-3(4)).

**Vegetative debris** – Whole trees, tree stumps, tree branches, tree trunks, and other leafy material. May be recyclable or have salvage value (FEMA, 2016).

**Vehicles and vessels (FEMA definition)** – Vehicles and vessels damaged, destroyed, displaced, or lost as a result of a disaster. These vehicles and vessels may eventually be abandoned because of the damage incurred or because the original owners have relocated. Vehicles and vessels may be classified as debris if they block public access and critical facilities (FEMA, 2016).

**Vessel** – Every description of watercraft, other than a sailboard or homemade or inflatable raft, used or capable of being used as a means of transportation on water (O.C.G.A. § 52-7-12(o)(3)).

**Waterway debris (Incident waterway debris)** – Any solid material, including but not limited to vegetative debris and debris exposed to oil, hazardous substances, pollutants, or contaminants, that enters a waterway following an acute release incident and poses a threat to the natural or man-made environment. This may include shoreline debris and debris in some inland, non-tidal waterways.

**White goods** – Discarded household appliances such as refrigerators, freezers, air conditioners, heat pumps, ovens, ranges, washing machines, clothes dryers, and water heaters. May contain ozone-depleting refrigerants, mercury, or compressor oils that must be removed before disposal. May be recyclable or have salvage value (FEMA, 2016).

# 1. Introduction

## 1.1 Purpose

The purpose of this document is to improve preparedness for response and recovery operations following an acute waterway debris incident in coastal Georgia. The term acute waterway debris incident is used to describe an incident – either natural or anthropogenic – that results in the release of large amounts of waterway debris. This document outlines existing response structures at the local, state, and federal levels to facilitate a coordinated, well-managed, and immediate response to waterway debris incidents impacting the state of Georgia.

Individual organization roles and responsibilities are presented in text form as well as in a consolidated one-page flowchart which functions as a decision tree for waterway debris response. The document also includes an overview of permitting and compliance requirements that must be met before waterway debris removal work begins. This information is also synthesized in a one-page reference handout.

Because all incidents are different, in reality some aspects of waterway debris response are subjective and not solely dependent on prevailing roles and authorities. This is especially true following a major, catastrophic, or unprecedented incident. This guide seeks to capture the most likely response structure and actions with the understanding that flexibility is an inherent component of an effective response.

The *Georgia Marine Debris Emergency Response Guide: Comprehensive Guidance Document (Guide)* serves as a complete reference for Georgia incident waterway debris response. The accompanying *Field Reference Guide* only includes the most pertinent information for quick reference in the field and during emergency response operations.

## 1.2 Scope of Guide

The *Guide* addresses potential acute waterway debris incidents affecting Georgia's coastal counties. Throughout this document, the term waterway debris (or incident waterway debris) is used in lieu of the term marine debris. In 33 U.S.C. § 1956(3), marine debris is defined as any persistent solid material that is manufactured or processed and directly or indirectly, intentionally or unintentionally, disposed of or abandoned into the marine environment or the Great Lakes. Although vegetative debris is not included in the legal definition for marine debris, stakeholders have identified it as a common debris stream of concern following natural disasters. To account for both marine debris and vegetative debris in this document, the term waterway debris is used and includes any solid material, including but not limited to vegetative debris and debris exposed to or that has the potential to release oil, hazardous substances, pollutants, or contaminants, that enters a waterway following an acute incident and poses a threat to the natural or man-made environment. This may include shoreline and wetland debris and debris in some inland, non-tidal waterways. This *Guide* specifically addresses waterway debris resulting from acute episodic incidents, such as disaster debris, and may not apply to chronic waterway debris issues.

## 1.3 Guide Maintenance

The *Georgia Marine Debris Emergency Response Guide* is a living document and is subject to change as additional information becomes available and updates are needed. The *Guide* will be maintained

by the National Oceanic and Atmospheric Administration's (NOAA's) Marine Debris Division in coordination with federal, state, and local stakeholders. Contact information will be verified annually, and the *Guide* will undergo a formal review every three years. The *Georgia Marine Debris Emergency Response Guide* and subsequent versions will be posted on NOAA's Marine Debris Division website at <https://marinedebris.noaa.gov/> (NOAA, 2016b).

## 2. Incident Waterway Debris in Georgia

### 2.1 Foreseeable Waterway Debris Incidents in Georgia

Coastal Georgia is vulnerable to both natural and anthropogenic hazards that could generate large amounts of waterway debris. With a low lying coastal area, an increasing population, and the fastest growing port in the nation, disasters along Georgia's coast can have severe and long lasting impacts to both the environment and the economy (GEMA/HS, 2014). [Table 1](#) shows the hazards most likely to affect the state ranked by highest risk, as calculated by GEMA/HS and reported in the *State of Georgia Hazard Mitigation Strategy* (GEMA/HS, 2014). Risk was determined by combining historical data with assessed vulnerability and potential impact.

Table 1. Hazards that pose the highest threat to the state of Georgia, scored and ranked by total risk. Data adapted from GEMA/HS (2014).

Rank	Hazard	Score	Risk
1	Tornado	32	H
2	Severe Weather	30	H
3	Inland Flooding	26	H
4	Drought	22	M
5	Wind	22	M
6	Winter Weather	21	M
7	Tropical Cyclone	21	M
8	Wildfire	18	M
9	Storm Surge	18	M
10	Dam Failure	15	L
11	Seismic Hazards	11	L
12	Sinkhole	7	L

**Risk Levels**

High = 26-35

Medium = 16-25

Low = 0-15

Regardless of the type of hazard to affect Georgia, debris removal projects have the highest costs in relation to other types of projects eligible for reimbursement through the Federal Emergency Management Agency (FEMA) following a Presidentially declared disaster (GEMA/HS, 2006). Since 1953, Georgia has had 42 major disaster and 9 emergency disaster declarations (FEMA, n.d.). The most recent disaster declaration within coastal Georgia occurred as the result of Hurricane Matthew, a high intensity hurricane that passed along the southeastern coast of the United States in October of 2016. Although Matthew was losing strength as it headed north toward the coast of South Carolina, it produced record breaking water levels, especially in coastal Georgia. [Figure 1](#) shows the highest water levels recorded during Hurricane Matthew, measured in feet above the mean higher high water (MHHW). Fort Pulaski, Georgia recorded a water level of 5.1 feet above MHHW, breaking the previous record of 3.4 feet during the Cape Sable Hurricane of 1947 (NOAA, n.d.-a). The maximum storm surge resulting from Matthew also occurred at Fort Pulaski, Georgia and measured just over 7.5 feet.



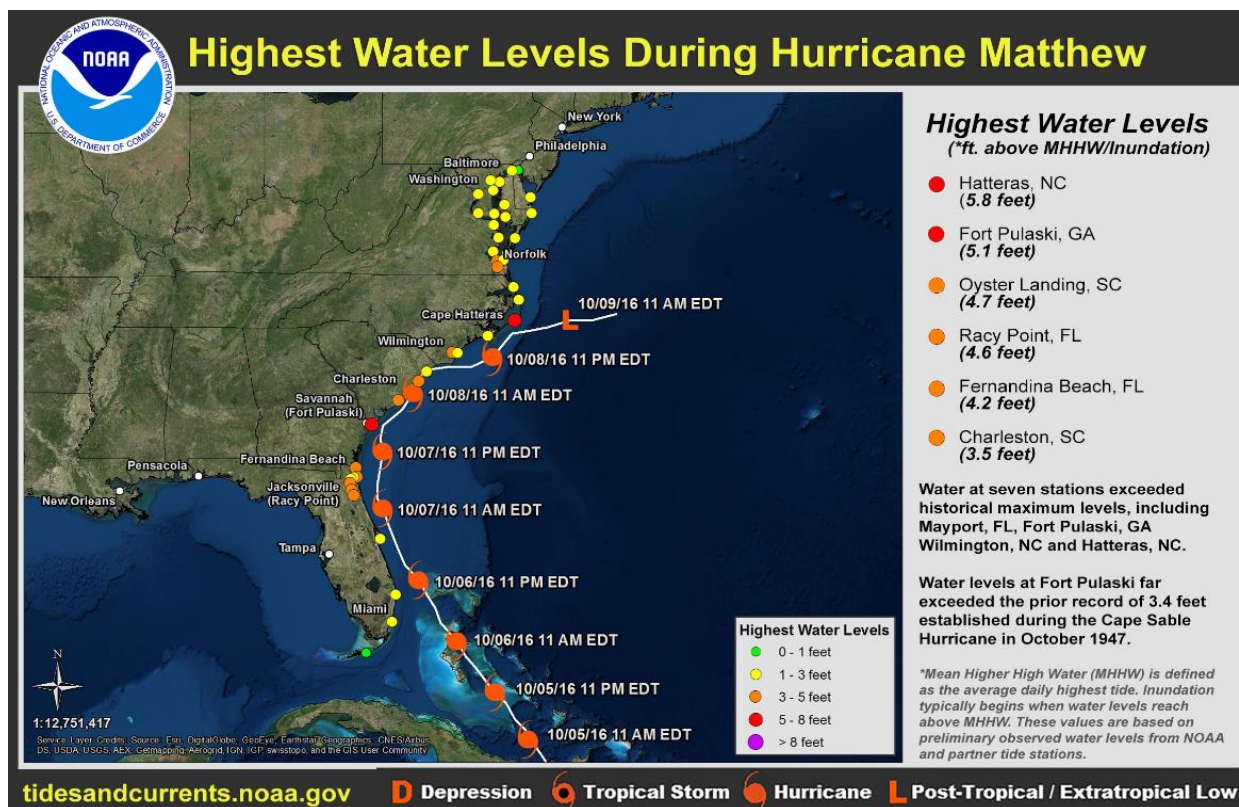


Figure 1. Highest water levels during Hurricane Matthew. Water levels are shown in feet above Mean Higher High Water (MHHW). Image retrieved from NOAA (n.d.-a).

Within Georgia's 11 coastal counties, tropical systems and associated storm surge pose the greatest threats to life and property (GEMA/HS, 2006). Additionally, these threats can produce significant amounts of waterway debris, possibly resulting in navigational hazards along the Savannah River, a shipping route for the largest single container terminal in North America (Georgia Ports Authority, n.d.). Large debris items, such as abandoned vessels, that block ships from entering the Port of Savannah will negatively impact the regional economy and the maritime transportation system; therefore, pre-event planning for waterway debris response and removal is crucial.

## 2.2 Prominent Debris Types

Some agencies' authorities are dependent on both the location and type of debris. Therefore, response to debris in Georgia waterways may vary depending on the debris type to be removed. Primary debris types generated after a disaster as defined by FEMA (2016) include the following (in alphabetical order):

- Chemical, biological, radiological, and nuclear-contaminated
- Construction and demolition (C&D)
- Electronic waste (e-waste)
- Hazardous waste
- Household hazardous waste/material
- Infectious waste
- Putrescent debris
- Soil, mud, and sand

- Vegetative debris
- Vehicles and vessels
- White goods

A description of each debris type is included in the [Definitions](#) section of this document. The exact mix of waterway debris that will be generated after a disaster is difficult to predict because different types of hazard incidents generally result in different debris types. [Table 2](#) includes an overview of typical debris streams that may occur after particular natural hazards. Although Table 2 only covers natural hazards, man-made hazards such as an accident during waterway commerce are also concerns. Man-made hazards are highly variable in both quantity and type of waterway debris released.

Table 2. Typical debris streams for different types of hazard incidents. Data adapted from FEMA (2007).

		Typical Debris Streams								
		Vegetative	Construction and Demolition (C&D)	Hazardous Waste	Household Hazardous Waste (HHW)	White Goods	Soil, Mud, and Sand	Vehicles and Vessels	Putrescent	Personal Property, Household Items
Natural Hazards	Floods	X	X	X	X	X	X	X	X	X
	Hurricanes/Tropical Storms	X	X	X	X	X	X	X	X	X
	Tornadoes/Wind Storms	X	X	X	X	X		X	X	X
	Winter/Ice Storms	X			X					
	Earthquakes		X	X	X	X				X
	Tsunamis	X	X	X	X	X	X	X	X	X

The type and quantity of waterway debris generated after a disaster is highly dependent on land use and existing infrastructure along Georgia waterways. For example, protected undeveloped areas near Sapelo Island are likely to generate vegetative debris, while developed properties in Savannah are likely to generate C&D debris. A land cover map for Georgia is depicted in [Figure 2](#) and illustrates the distribution of land use types in the state, including developed lands. Increased development in the floodplain will increase the likelihood of waterway debris following a natural hazard event.

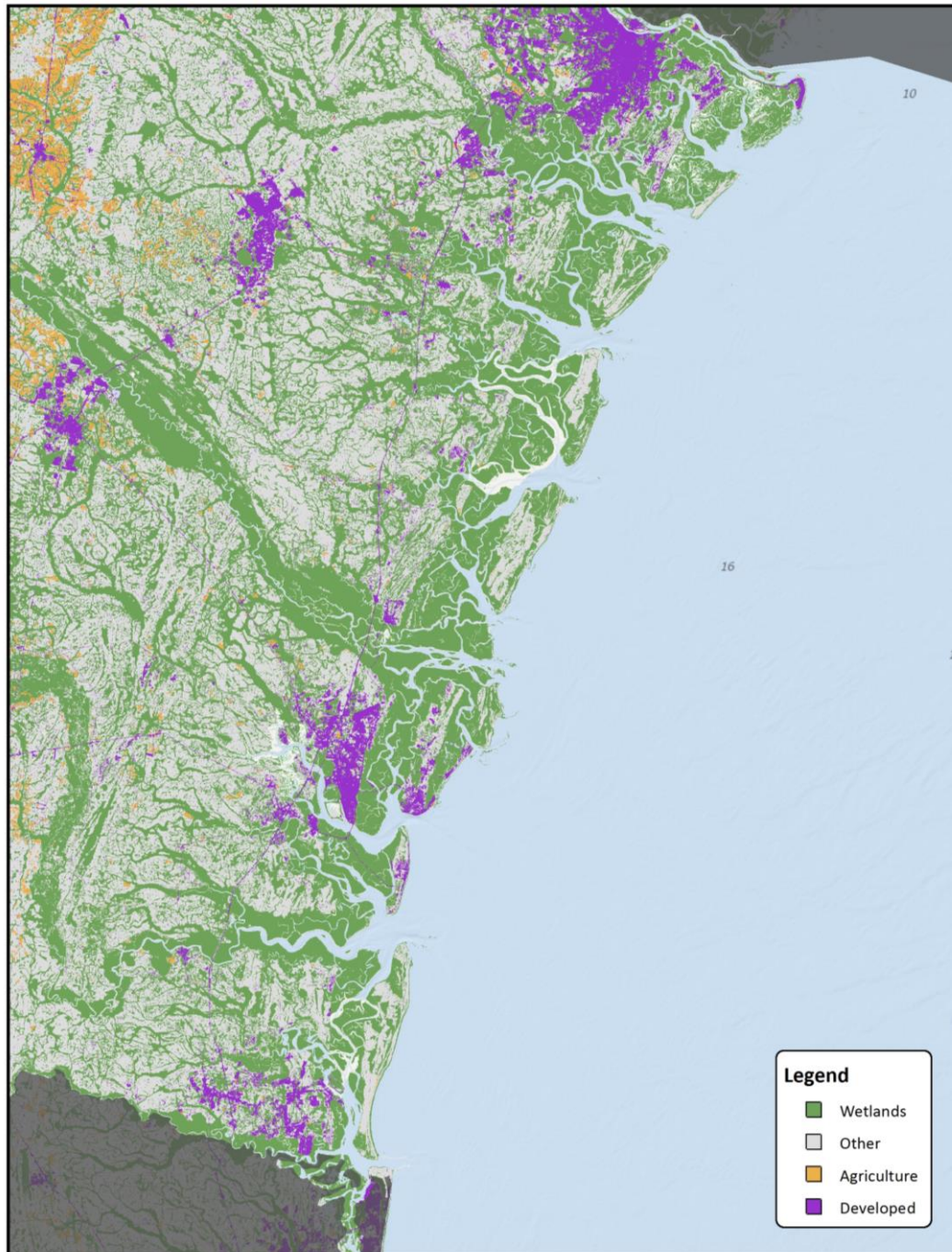


Figure 2. Land cover map for the coastal region of Georgia (NOAA, 2016d).

### 3. Georgia Incident Waterway Debris Response Flowchart

The *Georgia Incident Waterway Debris Response Flowchart* included in this section provides a visual one-page representation of organization roles and responsibilities. The flowchart functions as a decision tree for waterway debris response with color-coded endpoints. Yellow endpoints represent response to waterway debris that is exposed to or has the potential to release oil, hazardous substances, pollutants, or contaminants. Blue endpoints represent response to waterway debris that is not exposed to and does not have the potential to release oil, hazardous substances, pollutants, or contaminants. Endpoints within the green shaded area indicate that response may occur under Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) authorities and/or funding.

For detailed information regarding individual organization roles, responsibilities, and authorities, see [Section 4](#).



Georgia Incident Waterway Debris Response Flowchart

**Waterway Debris/Incident Waterway Debris**  
Any solid material, including but not limited to vegetative debris and debris exposed to or that has the potential to release oil, hazardous substances, pollutants, or contaminants, that enters a waterway following an acute incident and poses a threat to the natural or man-made environment. This may include shoreline and wetland debris and debris in some inland, non-tidal waterways.

Acronyms

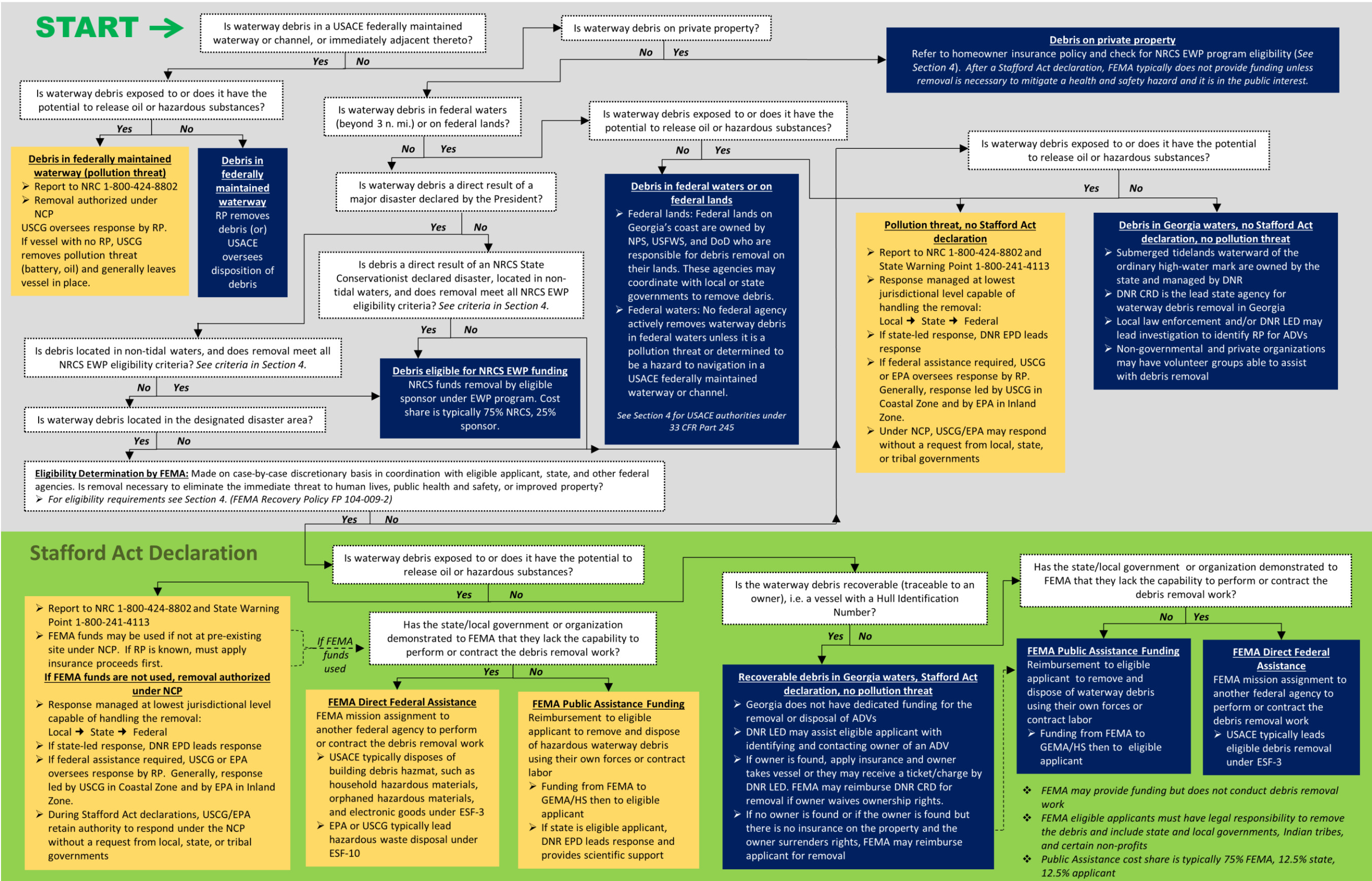
ADV – Abandoned and Derelict Vessel  
CRD – Coastal Resources Division (of DNR)  
DoD – U.S. Department of Defense  
DNR – Georgia Department of Natural Resources  
EPA – U.S. Environmental Protection Agency  
EPD – Environmental Protection Division (of DNR)  
ESF – Emergency Support Function

EWP – Emergency Watershed Protection  
FEMA – Federal Emergency Management Agency  
GEMA/HS – Georgia Emergency Management and Homeland Security Agency  
LED – Law Enforcement Division (of DNR)  
NCP – National Oil & Hazardous Substances Pollution Contingency Plan  
NPS – National Park Service

NRC – National Response Center  
NRCS – Natural Resources Conservation Service  
RP – Responsible Party (Owner, Operator, Lessee)  
USACE – U.S. Army Corps of Engineers  
USCG – U.S. Coast Guard  
USFWS – U.S. Fish and Wildlife Service

Flowchart Key

- Response to waterway debris that is exposed to or has the potential to release oil, hazardous substances, pollutants, or contaminants
- Response to waterway debris that is not exposed to and does not have the potential to release oil, hazardous substances, pollutants, or contaminants
- Response occurring under Stafford Act authorities and/or funds





## 4. Roles and Responsibilities

In Georgia, response to an acute waterway debris incident is generally managed at the lowest jurisdictional level capable of handling the response and removal (GEMA/HS, 2015b). Each county in Georgia is responsible for emergency management within its jurisdictional boundaries and will conduct emergency operations according to established plans and procedures. Should a disaster or emergency be beyond the capabilities of local government, requests for state and/or federal assistance are made to the State Operations Center. The federal government may supplement state and local response efforts when their resources have been exceeded or when unique capabilities are needed. Like the federal government, Georgia uses the Emergency Support Function (ESF) concept to apply state resources and assign state agency responsibilities. State ESF-3, Public Works and Engineering, to coordinate the removal and disposal of debris from public property and state ESF-10, Hazardous Materials, are the two most commonly applied ESFs during response to a waterway debris incident.

Local, state, and federal agency roles and responsibilities as they relate to waterway debris response are outlined in the following sections followed by responsibilities of private landowners, volunteer, and non-governmental organizations (NGOs). For a visual one-page representation of agency roles and responsibilities, see *Georgia Incident Waterway Debris Response Flowchart* in [Section 3](#). For a map defining agency jurisdictional authorities, see [Section 4.6](#). Additionally, response capabilities of each agency and corresponding agency contact information can be found in Appendices [B](#) and [C](#), respectively.

### 4.1 Local Agency Responsibilities

- May act as first responders to reports of waterway debris incidents which impact any of Georgia's 11 coastal counties and their municipalities
- County emergency management agencies are the lead local agencies for emergency planning, preparedness, response, and recovery
  - Following a Stafford Act declaration, local emergency management agency offices serve as the first point for contact with Georgia Emergency Management and Homeland Security Agency (GEMA/HS)
  - Provides resource coordination and support to on-scene incident commanders during response and recovery, including the ability to request external resources from GEMA/HS
  - In coordination with designated response agencies, will respond to hazardous material incidents, make initial assessments as to the severity and magnitude of the situation, and take appropriate first responder protection measures (GEMA/HS, 2015b)
  - Establishes and conducts emergency preparedness exercises and training programs
- May declare a local emergency, employ their own resources, establish a local emergency operations center, implement mutual aid agreements, and designate capable personnel to make requests to GEMA/HS for additional resources if necessary (GEMA/HS, 2015b)
- Encouraged by GEMA/HS to construct pre-event contracts for debris removal operations and to generate debris management plans using FEMA guidelines (GEMA/HS, 2015b)
- Local law enforcement officers may lead investigation to identify the owner of a vessel that appears to be abandoned
- May serve as project sponsor and/or receive debris removal funding from the Natural Resources Conservation Service (NRCS) Emergency Watershed Protection (EWP) Program

if specific criteria are met. See [Section 4.3](#) Natural Resource Conservation Service for EWP eligibility criteria

Select local authorities:

- Georgia Emergency Operations Plan (GEMA/HS, 2015b) which includes a list of local responsibilities
- Littering public or private property or waters; enforcing personnel (O.C.G.A. § 16-7-43(d))
- Local, multijurisdictional, or regional solid waste plans; reporting by cities and counties; annual reporting requirements for landfill owners and operators (O.C.G.A. § 12-8-31.1 et. seq.)
- Local organizations for emergency management; creation; structure; powers; directors; appointment, qualifications, and compensation; state to provide financial assistance; entitlement for funding (O.C.G.A. § 38-3-27)

## 4.2 State Agency Responsibilities

Select state authorities:

- Georgia Emergency Operations Plan (GEMA/HS, 2015b) and appendices, which includes a complete list of agency roles and responsibilities

### **Georgia Department of Natural Resources (DNR) Coastal Resources Division (CRD)**

- Serves as agency coordinator for ESF-10, Hazardous Materials
- Serves as the lead state agency division for marine debris response within the 11 county coastal zone
- Serves as the state agency division entrusted to manage Georgia's coastal marshes, beaches, waters, and marine fisheries resources extending from the inland reach of the tidal waters to 3 miles offshore
- Responsible for implementation of the state's Coastal Management Program, including the direct regulation of impacts to resources within the coastal service areas of the state including coastal waters, tidelands, beaches and beach dune systems and indirect certification authority over federal actions and state permit decisions within the 11 coastal counties
- Surveys marshlands and waterways using aerial imagery to locate sunken and floating debris after a severe incident or storm
- Documents and catalogs sunken or derelict vessels and has historically received funding to remove vessels, including commercial and recreational vessels, barges, and cranes
- Assists the Environmental Protection Division (EPD) with investigation of hazardous material releases or oil spills from vessels as necessary or during coastal pollutant releases (GEMA/HS, 2015b)
- The Marsh and Shore Permitting program administers the regulatory work, including federal consistency reviews, and manages activities that fall under the authority of the Coastal Marshlands Protection Act (CMPA) and the Shore Protection Act (SPA)
  - A CMPA or SPA permit may be required for debris removal projects that have the potential to alter or damage lands or structures within the jurisdictional shores, beaches or marshland areas
  - Reviews federal funding assistance applications submitted by state and local government entities for consistency with the Coastal Zone Management Program
  - For more information about permitting and compliance requirements see [Section 5](#)

Select CRD authorities:

- Georgia Coastal Management Act (O.C.G.A. § 12-5-320 et seq.)
- Coastal Marshlands Protection Act of 1970 (O.C.G.A. § 12-5-280 et seq.)
- Protection of Tidewaters Act (O.C.G.A. § 52-1-1)
- Shore Protection Act (O.C.G.A. § 12-5-230 et seq.)

### **Environmental Protection Division (EPD)**

- Serves as lead state agency and division for both ESF-3, Public Works and Engineering, and ESF-10, Hazardous Materials, as outlined in the *Georgia Emergency Operations Plan* (GEMA/HS, 2015b)
- Provides overall guidance for solid waste disposal
- Coordinates with local municipalities for debris management and engineering requirements
- Provides expertise on environmental effects, pollutants, contaminants, environmental pollution control techniques for oil discharges, hazardous substance releases and chemical, biological, radiological, and nuclear defense weapons releases (GEMA/HS, 2016)
- Maintains a toll-free 24-hour emergency response line for reporting oil or hazardous material spills. For contact information, see [Appendix C](#).
- Coordinates, integrates, and manages overall state efforts to detect, characterize, contain, clean up, dispose of, or minimize releases of oil and hazardous substances
- Provides technical assistance concerning the disposal of waste materials, including household hazardous waste, agricultural waste, and debris containing or consisting of animal carcasses

### *Watershed Protection Branch*

- The Watershed Protection Branch administers variances for projects that have the potential to disturb soil within the 25-foot marsh buffer. For more information on variance requirements, see [Section 5](#).

Select EPD authorities:

- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq.
- Environmental Policy Act (O.C.G.A. § 12-16-1 et seq.)
- Environmental Protection Division; Environmental Advisory Council; duties of council and its members and director; appeal procedures generally; permit applications; inspections (O.C.G.A. § 12-2-2 et seq.)
- Federal Water Pollution Control Act (commonly known as Clean Water Act) as amended by the Oil Pollution Act of 1990, 33 U.S.C. § 1251 et seq.
  - Certification (Section 401), 33 U.S.C. § 1341
  - Permits for dredged or fill material (Section 404), 33 U.S.C. § 1344
- Georgia Comprehensive Solid Waste Management Act (O.C.G.A. § 12-8-20 et seq.)
- Georgia Hazardous Waste Management Act (O.C.G.A. § 12-8-60 et seq.)
- Georgia Water Quality Control Act (O.C.G.A. § 12-5-20 et seq.)
- Littering Public and Private Property (O.C.G.A. § 16-7-40 et seq.)
- National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. § 300
- Permit required; application; notice; public hearing; issuance; denial; dynamic dune fields (O.C.G.A. § 12-5-286)
- Waste Control (O.C.G.A. § 16-7-50 et seq.)

### **Historic Preservation Division (HPD)**

- Serves as Georgia's State Historic Preservation Office (SHPO)
- Section 106 of the National Historic Preservation Act requires federal agencies to consider an undertaking's potential to affect any district, site, building, structure, or object included in or eligible for the National Register of Historic Places ("historic properties")
- Reviews proposed federally funded or permitted debris removal activities to evaluate potential impacts to historic or cultural sites to ensure compliance with the National Historic Preservation Act
- Advises CRD regarding potential impacts of permitted activities on historical and archaeological sites within the 11-county coastal service area as per Georgia's Coastal Management Program
- For additional information on HPD compliance requirements, see [Section 5](#)

Select HPD authorities:

- Environmental Policy Act (O.C.G.A. § 12-61-1)
- Georgia Register of Historic Places (O.C.G.A. § 12-3-50.2)
- National Historic Preservation Act, Section 106 (16 U.S.C. § 470f)

### **Law Enforcement Division (LED)**

- Responsible for the enforcement of state and federal laws that govern recreational and commercial fishing, recreational boating, and other natural resource conservation concerns including litter and waste control
- Issues citations or tickets for vessels that are deemed abandoned or illegally moored
- May lead or assist in investigation to identify the owner of a vessel that appears to be abandoned
- May coordinate with CRD and local agencies to remove abandoned or derelict vessels

Select LED authorities:

- Abandoned Vessels (O.C.G.A. § 52-7-70 through § 52-7-77)
- Discharge of Substances Dangerous to Navigation or Property (O.C.G.A. § 52-8-1 through § 52-8-5)
- Littering Public and Private Property (O.C.G.A. § 16-7-40 et seq.)

### **Georgia Department of Transportation (GDOT)**

- Serves as a primary agency for ESF-3, Public Works and Engineering and a support agency for ESF-10, Hazardous Materials
- Coordinates and assists with the containment and cleanup of any discharge that occurs on a state maintained road or right-of-way
- Provides vehicles and drivers for transporting hazardous materials from the scene of the discharge to staging or disposal sites
- Removes or assists in the removal and disposal of debris, as appropriate, to provide emergency access to disaster areas or to assist in eliminating health and safety problems associated with debris
- Assists local governments with emergency repairs to roadways to restore essential travel in the disaster area, when appropriate
- Responsible for maintenance, repairs and damage assessment of bridges and other coastal transportation infrastructure, including sub-surface diving inspections of bridge damage
- Removes or coordinates the removal of waterway debris that obstructs a bridge or other GDOT maintained infrastructure

Select GDOT authorities:

- Department of Transportation (O.C.G.A. § 32-2-1 et seq.)

#### **Georgia Emergency Management and Homeland Security Agency (GEMA/HS)**

- Maintains a comprehensive statewide program of emergency management and coordinates with federal, state, county, and municipal governments, nonprofit organizations, and private agencies that have a role in emergency management
- Activates and staffs the State Operations Center when an emergency or disaster situation develops within the state
- Conducts comprehensive assessments of threats to the state to eliminate or reduce risk and vulnerability
- Maintains the *State of Georgia Hazard Mitigation Strategy* (GEMA/HS, 2014) and the *Georgia Emergency Operations Plan* (GEMA/HS, 2015b)
- Following a Stafford Act declaration, serves as coordination point between FEMA and state and local eligible applicants
  - Serves as FEMA grantee and administers public assistance funding to eligible applicants
  - Coordinates damage assessment and needs assessment process with local and federal assessment teams
  - Assists state agencies and local governments in the preparation and submission of federal disaster assistance applications
- Provides guidelines for debris operations under programs such as FEMA's public assistance program (GEMA/HS, 2015b)
- Reviews debris management plans for compliance with FEMA pilot program guidelines, debris removal contracts, and private property ordinances prior to or after an event
- Manages the 24-hour State Warning Point line to receive and transmit emergency and nonemergency information to and from state partners, responders, and local governments

Select GEMA/HS authorities:

- Emergency Management (O.C.G.A. § 38-3)
- Georgia Emergency Management and Homeland Security Agency Nomenclature Act of 2008 (O.C.G.A. § 38-3-140 et seq.)
- Georgia Emergency Operations Plan (GEMA/HS, 2015b)
- State of Georgia Hazard Mitigation Strategy (GEMA/HS, 2014)

#### **Georgia Ports Authority**

- Owns and operates five deep-water terminals at the Port of Savannah and the Port of Brunswick
- May request assistance from NOAA's Navigation Response Team (NRT) to survey ports and near-shore waterways to identify dangerous objects or changes in water depth following a disaster

Select Georgia Ports Authority authorities:

- Georgia Ports Authority Act (O.C.G.A. § 52-2-1 et seq.)



### 4.3 Federal Agency Responsibilities

#### **Animal and Plant Health Inspection Service**

- Veterinary Services program provides for removal and burial of diseased animal carcasses
- Manages Plant Protection and Quarantine program to reduce the risk of introduction and spread of invasive species through planning, surveillance, quick detection, and containment

Select Animal and Plant Health Inspection Service authorities:

- Animal Health Protection Act (7 U.S.C § 8301 et seq.)
- Plant Protection Act (7 U.S.C § 7701 et seq.)

#### **Bureau of Safety and Environmental Enforcement**

- Manages a Marine Trash and Debris Program to eliminate debris associated with oil and gas operations on the Outer Continental Shelf (OCS)
- Regulates marine trash and debris for oil and gas operations and renewable energy development on the OCS
- Enforces requirement that items be clearly marked to identify the owner and items lost overboard be recorded, reported, and retrieved if possible
- Requires annual training of offshore oil and gas workers to reduce marine debris

#### **Farm Service Agency (FSA)**

- Emergency Conservation Program (ECP) helps farmers repair damage to farmland caused by natural disasters, such as:
  - Debris removal from farmland
  - Grading, shaping, or leveling damaged land
- Up to 75% of the cost to implement emergency conservation practices can be provided to farmers. Qualified limited resource producers may earn up to 90% cost-share.
- Locally-elected FSA County Committee is authorized to implement ECP and determine if land is eligible for ECP
- Farmers should inquire with their local FSA county office regarding ECP enrollment periods, which are established by FSA county committees

Select FSA authorities:

- Agricultural Credit Act of 1978 (92 Stat. 420-434), as amended by the Disaster Assistance Act of 1989, Section 502 and 7CFR, 701, Subpart B

#### **Federal Emergency Management Agency (FEMA), Region IV**

- Under the Stafford Act, provides reimbursement funding for eligible debris removal from navigable waterways (non-federally maintained) or wetlands during Presidential major disaster declarations when another federal agency does not have authority to fund the activity
  - Provides funding to eligible applicants at a typical cost share of 75% FEMA, 12.5% state, and 12.5% eligible applicant
  - Issues mission assignments to other federal agencies for technical assistance, federal operations support, or to perform or contract debris removal when local and state capabilities are exceeded
- Makes eligibility determinations for debris removal on a case-by-case discretionary basis in coordination with the eligible applicant, state, and other federal agencies

- Debris removal must be necessary to eliminate the immediate threat to life, public health and safety, or improved property (FEMA, 2016)
- For navigable waterways, debris removal is limited to a max depth of 2 feet below the low tide draft of the largest vessel that utilized the waterway prior to the incident. Any debris below this zone is not eligible unless it is necessary in order to remove debris extending upward into an eligible zone (FEMA, 2016).
- For non-navigable waterways, including natural waterways, debris removal is only eligible to the extent that it is necessary to eliminate an immediate threat including the following: if the debris obstructs, or could obstruct, intake structures; if the debris could cause damage to structures; or if the debris is causing, or could cause, flooding to property during the occurrence of a 5-year flood (a flood that has a 20% chance of occurring in any given year; FEMA, 2016)
- Employs debris specialists that can be mobilized to assist eligible applicants with debris management
- May reimburse costs for use of side scan sonar that identifies eligible submerged debris and sunken vessels
- Provides geospatial support as well as hosts data, paper maps, and live data collection with interactive mapping through a shared group on ArcGIS Online

Select FEMA authorities:

- Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C § 5121 et seq.)
  - Debris Removal (42 U.S.C. § 5173)
  - Essential Assistance (42 U.S.C. § 5170b)
  - Federal Emergency Assistance (42 U.S.C. § 5192)

## **National Oceanic and Atmospheric Administration (NOAA)**

### **National Marine Fisheries Service (NOAA Fisheries)**

*Office of Habitat Conservation and Office of Protected Resources*

- Reviews proposed debris removal activities that involve a federal agency (directly or through funding and/or issuance of a federal permit) for compliance with Magnuson-Stevens Fisheries Conservation and Management Act and Endangered Species Act (ESA)
- For additional information on NOAA Fisheries compliance requirements, see [Section 5](#)

### **National Ocean Service**

*Office of Coast Survey*

- Mobilizes Navigation Response Team (NRT) to survey ports and near-shore waterways for sunken debris, changes in water depth, and hazards to navigation following a disaster

*Office of National Geodetic Survey*

- Acquires and rapidly disseminates a variety of spatially-referenced remote-sensing datasets to support national emergency response. Imagery is obtained using high resolution digital cameras, film-based aerial camera systems, LIDAR, and thermal and hyperspectral imagers.

*Office of Response and Restoration, Emergency Response Division*

- Serves as Scientific Support Coordinator (SSC) to coordinate application of NOAA assets and services during emergencies to help the Federal On-Scene Coordinator (FOSC) make timely operational decisions

- In the event of an oil spill, the SSC will provide technical support, chemical hazard analyses, assessments of the sensitivity of biological and human-use resources, and recommend best actions moving forward.

#### *Office of Response and Restoration, Marine Debris Division*

- Funds marine debris assessment and removal projects, through grants or congressional supplemental funding
- Facilitates inter-agency coordination of planning and execution of responses to marine debris events
- Provides scientific support for debris response planning and operations, including baseline information, debris behavior, debris impact, debris survey and detection protocols, removal best management practices (BMPs), disposal guidance, and information management
- Develops external communications such as talking points appropriate for the public, informational graphics, intuitive interactive web content, and educational videos to ensure the public and partner agencies understand and act on sound science and information critical to response and recovery operations
- For events determined by the NOAA Administrator to be severe marine debris events, may develop interagency plans, assess composition volume and trajectory of associated marine debris, and estimate potential impacts to the economy, human health, and navigation safety

#### Select NOAA authorities:

- Coastal Zone Management Act of 1972 (16 U.S.C § 1451 et seq.)
- Endangered Species Act (16 U.S.C. § 1531 et seq.)
- Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801 et seq.)
- Marine Debris Research, Prevention, and Reduction Act (33 U.S.C. § 1951 et seq.)
- Marine Mammal Protection Act of 1972 (16 U.S.C § 1361 et seq.)

#### **National Park Service (NPS)**

- Manages 11 national areas in the state of Georgia, including three coastal sites: Fort Pulaski National Monument, Fort Frederica National Monument, and Cumberland Island National Seashore (CINS)
- May conduct incident waterway debris assessment and cleanup within their jurisdiction in coordination with county, state, and other federal partners
- For a map of areas managed by NPS in Georgia, see [Section 4.6](#)

#### Select NPS authorities:

- National Park Service and Related Programs (54 U.S.C § 100101)

#### **Natural Resource Conservation Service (NRCS)**

- When funding is available, provides emergency financial and technical assistance through the Emergency Watershed Protection (EWP) program for the following: to protect from additional flooding or soil erosion; to reduce threats to life or property from watershed impairment, including sediment and debris removal in floodplains and uplands; and to restore the hydraulic capacity to the natural environment to the maximum extent practical.
  - Help communities address watershed impairments that pose imminent threats to lives and property as a result of natural disasters
  - Typical cost share of 75% NRCS and 25% project sponsor
  - Public and private landowners are eligible for assistance but must be represented by a project sponsor, including state government, legal subdivisions of the state,

such as a city, county, water management district, drainage district or any Native American tribe or tribal organization

- EWP program eligibility criteria include the following:
  - Waterway debris is a direct result of either a major disaster declared by the President or of an NRCS State Conservationist declared natural disaster
  - Waterway debris is a threat to life and/or property
  - Imminent threat was created by this event
  - Recovery measures are for runoff retardation or erosion prevention
  - Event caused a sudden impairment in the watershed
  - Have economic, environmental, and social documentation adequate to warrant removal action
  - Proposed removal action is technically viable and environmentally defensible

Select NRCS authorities:

- Emergency Watershed Protection (7 C.F.R. § 624)

#### **U.S. Army Corps of Engineers (USACE), Savannah District**

- Serves as coordinating and primary federal agency for ESF-3, Public Works and Engineering, in the National Response Framework

#### **Emergency Operations**

- Following a Stafford Act declaration, may lead eligible debris removal from navigable waterways (non-federally maintained) and wetlands if mission assigned by FEMA to perform or contract debris removal and surveying

#### **Navigation**

- Serves as lead federal agency for conducting surveys within the federally authorized channel for changes in water depth and hazards to navigation for commercial, recreational, and military use
- Responsible for operation, maintenance, and debris removal from federally maintained waterways and channels within Savannah District
  - For a map of USACE federally authorized and maintained waterways and channels in Georgia, see [Section 4.6](#)
- May use side-scan, multi, or single beam sonar to identify sunken debris
- May remove abandoned vessels or other debris from federally maintained navigable channels if an owner or responsible party cannot be identified and debris items are determined to be obstructions to navigation
- Maintains pre-event contracts for activities within the Savannah District area of responsibility and has the ability to access contract vehicles maintained by other USACE districts
- May request assistance from NOAA's NRT to survey ports and near-shore waterways

#### **Regulatory Program**

- Savannah District issues permits for debris removal within waterways and wetlands throughout the state
- For additional information on USACE permitting and compliance requirements, see [Section 5](#)

Select USACE authorities:

- Federal Water Pollution Control Act (commonly known as Clean Water Act) as amended by the Oil Pollution Act of 1990 (33 U.S.C. § 1251 et seq.)
  - Permits for dredged or fill material (Section 404, 33 U.S.C. § 1344)
- Flood Control and Coastal Emergency Act, 33 U.S.C. § 701n (Public Law 84-99)
- Permits for Structures or Work in or Affecting Navigable Waters of the United States (33 C.F.R. § 322)
- Rivers and Harbors Appropriation Act of 1899 (33 U.S.C. § 401 et seq.)
  - Prohibits the unauthorized obstruction or alteration of any navigable water of the United States (Section 10, 33 U.S.C. § 403)
  - Authorizes USACE to remove sunken vessels or other obstructions from navigable waterways under emergency conditions (Sections 15, 19 and 20, 33 U.S.C. § 409, 414, 415) in coordination with U.S. Coast Guard (USCG) Marine Safety Unit (MSU) Savannah
  - Authorizes USACE to remove snags and debris in navigable waters (Section 3, 33 U.S.C. § 603a)
- Removal of Wrecks and Other Obstructions (33 C.F.R. § 245)
- Robert T. Stafford Disaster Relief and Emergency Assistance Act (42 U.S.C. § 5121 et seq.)
- Water Resources Development Act (33 U.S.C. § 426m)

#### **U.S. Coast Guard (USCG) District 7, Marine Safety Unit (MSU) Savannah**

- In most cases, removal of incident waterway debris by USCG is not authorized unless contaminated debris is causing a health or environmental threat
- Responds to oil and hazardous material releases or threats of release in waterways within the coastal zone as defined in *the USCG MSU Savannah Area Contingency Plan (ACP; USCG, 2016)*
  - Removal actions generally limited to removing oil and other hazardous substances while leaving vessels in place. If a vessel appears abandoned, an attempt will be made to contact the owner. Oil will be extracted and the vessel will remain in place unless it is so contaminated that it is declared a hazard to the environment, in which case, the USCG will seek approval from the Commandant to take temporary custodianship of the vessel and fund removal with cooperation from local and state counterparts (USCG, 1996).
  - Responds to pollution threats in federally maintained waterways in coordination with USACE
- Serves as lead federal agency (FOSC) under ESF-10, Oil and Hazardous Materials in the ACP coastal zone
  - Directs response in accordance with the National Oil and Hazardous Substances Pollution Contingency Plan (NCP)
  - Coordinates with state, tribal, and territorial governments and oversees response by a responsible party
  - Unlike response under a Stafford Act declaration, USCG may respond without a request from local, state, or tribal governments under the NCP. During Stafford Act declarations, USCG retains the authority to take action under the NCP.
- Maintains a year-round, 24-hour telephone watch through the National Response Center (NRC) for reporting of oil and hazardous material releases
  - NRC hotline: 1-800-424-8802
  - Contact information can also be found in [Appendix C](#)



- Establishes a safety zone around hazards to navigation and broadcasts maritime safety warnings including the Broadcast Notice to Mariners and the Local Notice to Mariners to warn of debris obstructing watercourse or creating hazards to navigation within federally maintained waterways. USCG also notifies USACE of any hazards to navigation within federally maintained waterways.
- Following a Stafford Act declaration, may lead removal of contaminated waterway debris under a FEMA mission assignment to perform or contract the work
- May request assistance from NOAA's NRT to survey ports and near-shore waterways
- The Captain of the Port sets conditions used to alert the maritime community and affects changes in port operations necessary to prepare for tropical cyclone activity. This may include restricting or closing all port traffic.
- For a map of USCG boundaries and the ACP coastal-inland zone boundary in Georgia, see [Section 4.6](#)

Select USCG authorities:

- Abandoned Barge Act of 1992 (46 U.S.C. § 4701-4705)
- Abandoned Vessels, Commandant Instruction (M16465.43; USCG, 1996)
- Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. § 9601 et seq.)
- Federal Water Pollution Control Act (commonly known as Clean Water Act) as amended by the Oil Pollution Act of 1990 (33 U.S.C. § 1251 et seq.)
- Marking of structures, sunken vessels and other obstructions (33 C.F.R. § 64)
- National Oil and Hazardous Substances Pollution Contingency Plan (40 C.F.R. § 300)
- Ports and Waterways Safety Act (33 U.S.C. §1221 et seq.)
- Protection and security of vessels, harbors, and waterfront facilities (33 C.F.R. Part 6)
- Saving life and property (14 C.F.R. § 88)

#### **U.S. Environmental Protection Agency (EPA), Region IV**

- Responds to oil and hazardous substance releases or threats of release in waterways within the inland zone as defined in the *EPA Region 4 Regional Contingency Plan* (EPA, 2016a). For a map of the ACP coastal-inland zone boundary, see [Section 4.6](#).
- Serves as lead federal agency (FOSC) under ESF-10 Oil and Hazardous Materials in the ACP inland zone and in incidents affecting both inland and coastal zones
  - Directs response in accordance with the NCP
  - Coordinates with state, tribal, and territorial governments and oversees response by responsible party
  - Unlike response under a Stafford Act declaration, EPA may respond without a request from local, state, or tribal governments under the NCP. During Stafford Act declarations, EPA retains the authority to take action under the NCP.
- Following a Stafford Act declaration, may lead removal of contaminated waterway debris under a FEMA mission assignment to perform or contract the work

Select EPA authorities:

- Comprehensive Environmental Response, Compensation, and Liability Act (42 U.S.C. § 9601 et seq.)
- Federal Water Pollution Control Act (commonly known as Clean Water Act) as amended by the Oil Pollution Act of 1990 (33 U.S.C. § 1251 et seq.)
- National Oil and Hazardous Substances Pollution Contingency Plan (40 C.F.R. § 300)

## **U.S. Fish and Wildlife Service (USFWS)**

### **Ecological Services Program**

- Reviews proposed debris removal activities that involve a federal agency (directly or through funding and/or issuance of a federal permit) for compliance with ESA, Coastal Barrier Resources Act (CBRA), and other applicable federal wildlife laws
- Provides technical assistance to non-federal entities to avoid impacts to federally threatened and endangered species
- For additional information on USFWS compliance requirements, see [Section 5](#)

### **National Wildlife Refuges (NWR)**

- Manages nine NWRs in Georgia, five of which are within Georgia's coastal zone
- Coordinates and manages waterway debris assessment and cleanup in NWRs
- May coordinate with federal, state, and local partners to remove incident waterway debris within their jurisdiction
- Provides BMPs to protect listed threatened or endangered land and freshwater species, certain marine species, and their critical habitat
- For a map of NWRs in Georgia, see [Section 4.6](#)

Select USFWS authorities:

- Coastal Barrier Resources Act (16 U.S.C. § 3501 et seq.)
- Endangered Species Act (16 U.S.C. § 1531 et seq.)
- Fish and Wildlife Coordination Act (16 U.S.C. § 661 et seq.)
- Marine Mammal Protection Act of 1972 (16 U.S.C. § 1361 et seq.)
- Migratory Bird Treaty Act (16 U.S.C. § 703-712)

## **U.S. Navy**

### **Supervisor of Salvage and Diving**

- Manages and provides technical assistance for salvage, deep search and recovery, towing, and oil spill response operations
- Accesses and coordinates the U.S. Navy's hydrographic survey assets and capabilities
- Maintains an array of remotely operated vehicles, oil spill response, and salvage equipment
- Exercises and manages regional standing emergency salvage contracts to quickly draw upon the required resources of the commercial salvage industry (U.S. National Response Team, 2014)

## **4.4 Private Landowners**

- May report acute waterway debris incidents to local emergency management agency or state DNR CRD to begin a coordinated, proper response
  - See [Appendix C](#) for contact information
- May complete right-of-entry agreements with entities conducting private property debris removal or using private property as an access point. Agencies will not remove debris from private property without a properly executed right-of-entry agreement.
- After a Stafford Act declaration, debris removal from private property or privately-owned waterways and banks is generally the responsibility of the property owner and not eligible for FEMA funding, unless its removal is necessary to mitigate a health and safety threat and is in the public interest (FEMA, 2016)

## 4.5 Volunteer and Non-Governmental Organizations

- Certain private nonprofit organizations that serve a public function and have the legal responsibility to remove the debris may serve as an eligible applicant and receive Public Assistance reimbursement funding from FEMA to perform or contract waterway debris removal following a Stafford Act declaration (FEMA, 2016)
- Volunteers may provide cleanup and debris removal services as outlined in the *Disaster Volunteer Coordination Manual* (GEMA/HS, 2015a)
- Non-governmental organizations may provide debris removal assistance or logistical support through funded projects and programs

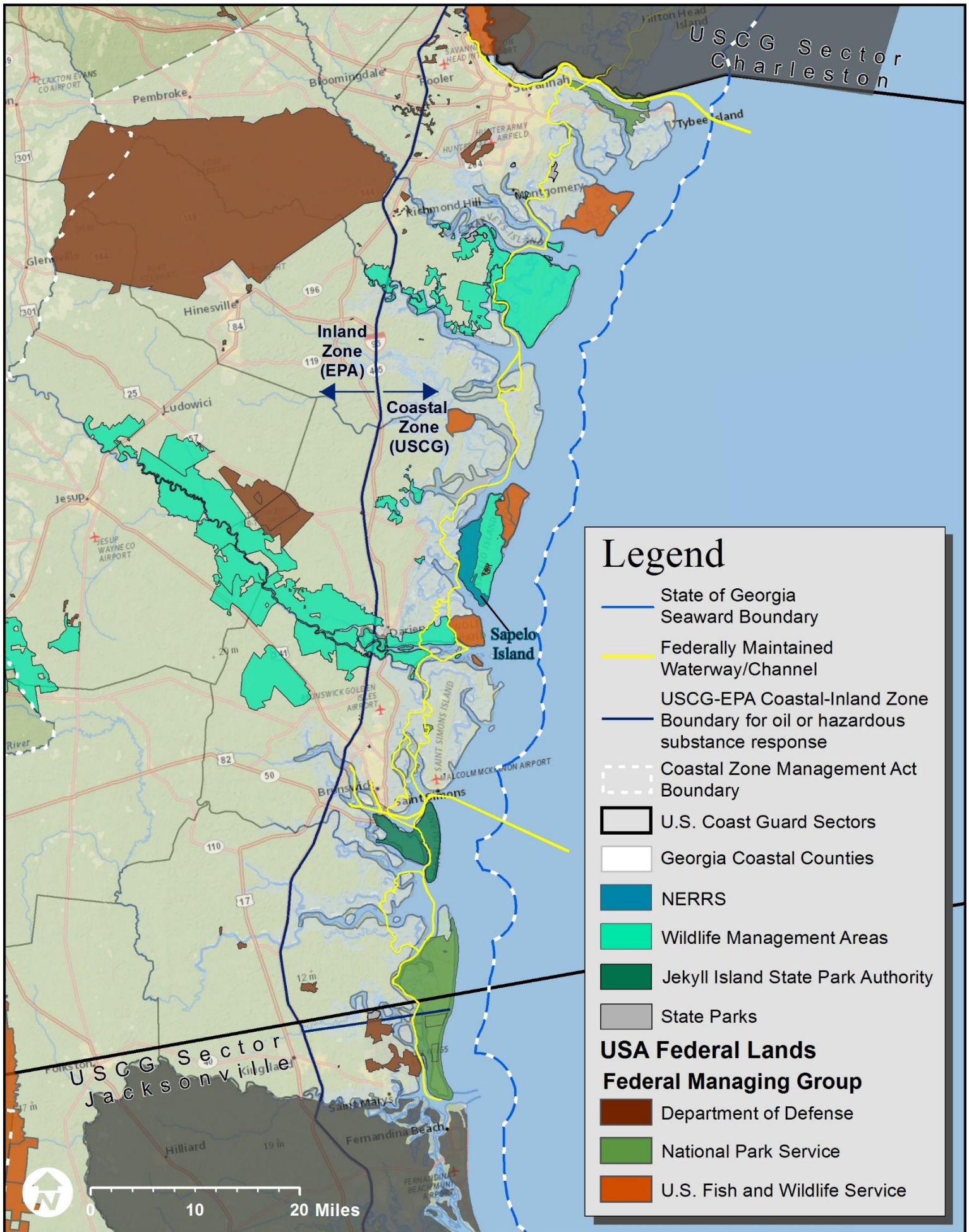
## 4.6 Agency Jurisdiction Map

The *Georgia Incident Waterway Debris Response Map* on the following page displays relevant agency jurisdiction boundaries in Georgia's 11 coastal counties. After an acute waterway debris incident, the agency (or agencies) responsible for removing debris will vary depending on where the debris is located. This map includes information that stakeholders identified as important in determining jurisdiction within the state.

For detailed information regarding local, state, and federal agency roles and responsibilities, see Sections [4.1](#), [4.2](#), and [4.3](#), respectively. For a visual one-page representation of agency roles and responsibilities, see [Section 3](#).



# Georgia Incident Waterway Debris Response Map



## 5. Permitting and Compliance Requirements in Georgia

Before waterway debris removal work can begin, organizations responsible for removal must meet certain permitting and compliance requirements. While the organization or individual conducting the debris removal work is responsible for obtaining necessary permits – such as a U.S. Army Corps of Engineers (USACE) permit – it is the responsibility of the lead federal agency to ensure compliance with the National Environmental Policy Act (NEPA) and to consult with tribal and resource agencies including Georgia Department of Natural Resources (DNR) Historic Preservation Division (HPD), DNR Coastal Resources Division (CRD), U.S. Fish and Wildlife Service (USFWS) and National Oceanic and Atmospheric Administration (NOAA) Fisheries.

During response under a Stafford Act declaration, FEMA provides funding to applicants for debris removal and is therefore considered the lead federal agency responsible for tribal and resource agency coordination. GEMA/HS serves as liaison between FEMA and eligible applicants during declared events. If waterway debris removal is conducted without federal funding and there are no federal agencies involved in removal activities, permits may still be required by the state and/or USACE.

A description of individual agency requirements and authorities is outlined below and is summarized in the “Permitting and Compliance for Waterway Debris Removal in Georgia” handout in [Section 5.3](#). Organization contact information can be found in [Appendix C](#).

### 5.1 State Agency Requirements

#### Georgia Department of Natural Resources (DNR)

##### Coastal Resources Division (CRD)

- The Marsh and Shore Permitting program administers regulatory work, including federal consistency reviews, and manages activities that fall under the authority of the CMPA and the SPA
- A CMPA or SPA permit may be required for debris removal projects that have the potential to alter or damage lands or structures within the jurisdictional shores, beaches, or marshland areas
- If a project also requires a permit through USACE, the applicant must apply separately to both agencies and the state and federal review will occur independently
- If a waterway debris removal project in Georgia involves a federal agency (directly or through funding and/or issuance of a federal permit), it is the responsibility of the lead federal agency to coordinate with CRD prior to beginning debris removal work to determine whether activities are fully consistent with the enforceable policies of the CMPA and SPA
- For debris removal projects that are temporary in nature, a letter of permission might be authorized in lieu of a permit
  - Letter of permission applications are not concurrent with federal review; therefore, if a project also requires a USACE permit, applications must be submitted separately to both agencies
- Under CMPA, jurisdictional determinations are made for salt marsh activities. If a project requires a marsh buffer variance through EPD, CRD will first establish the jurisdictional line from which the 25-foot buffer will extend.
  - The boundary line between marsh and upland areas are determined either by elevation 5.6 feet above mean tide level or by presence of the 14 jurisdictional marsh species

Select CRD authorities:

- Georgia Coastal Management Act (O.C.G.A. § 12-5-320 et seq.)
- Coastal Marshlands Protection Act of 1970 (O.C.G.A. § 12-5-280 et seq.)
- Protection of Tidewaters Act (O.C.G.A. § 52-1-1)
- Shore Protection Act (O.C.G.A. § 12-5-230 et seq.)

### **Environmental Protection Division (EPD)**

- The Watershed Protection Branch administers variances for projects that have the potential to disturb soil within the 25-foot marsh buffer
- If a project requires a buffer variance, CRD must first establish the jurisdictional line from which the 25-foot buffer will extend. This line remains permanent for one year, or until the project is finished.
- Applications for buffer variances must be submitted independently to EPD, even if a CRD and/or USACE permit is required
- If a CMPA permit is required by CRD, which includes alteration within the buffer, then the project is exempt from buffer variance requirements
- In the event of an emergency, applicants may be issued a consent order, on a case by case basis, if the project is necessary to reduce the threat to property, life, or human health. A consent order must be authorized by the Director of EPD.

Select EPD authorities:

- Environmental Protection Division; Environmental Advisory Council; duties of council and its members and director; appeal procedures generally; permit applications; inspections (O.C.G.A. § 12-2-2 et seq.)
- Environmental Policy Act (O.C.G.A. § 12-16-1 et seq.)
- Permit required; application; notice; public hearing; issuance; denial; dynamic dune fields (O.C.G.A. § 12-5-286)
- Georgia Water Quality Control Act (O.C.G.A. § 12-5-20 et seq.)

### **Historic Preservation Division (HPD)**

- Section 106 of the National Historic Preservation Act requires federal agencies to consider an undertaking's potential to affect any district, site, building, structure, or object included in or eligible for the National Register of Historic Places ("historic properties")
- If a waterway debris removal project in Georgia involves a federal agency (directly or through funding and/or issuance of a federal permit), it is the responsibility of the lead federal agency to coordinate with HPD prior to beginning debris removal work to determine whether activities will affect historic properties
- Advises CRD regarding potential impacts of permitted activities on historical and archaeological sites within the eleven-county coastal service area as per Georgia's Coastal Management Program

Select HPD authorities:

- Environmental Policy Act (O.C.G.A. § 12-61-1)
- Georgia Register of Historic Places (O.C.G.A. § 12-3-50.2)
- National Historic Preservation Act, Section 106 (16 U.S.C. § 470f)



## 5.2 Federal Agency Requirements

### **National Environmental Policy Act (NEPA)**

- NEPA requires federal agencies to follow a specific planning process to ensure environmental consequences of a federally funded action have been considered
- If a waterway debris removal project involves a federal agency (directly or through funding and/or issuance of a federal permit), it is the responsibility of the lead federal agency to ensure NEPA compliance. If multiple federal agencies play a major role in the debris removal, then there may be a joint lead agency which shares the lead agency's responsibility for management of the NEPA process (Council on Environmental Quality, 2007).
  - FEMA is provided with statutory exclusions under Section 316 of the Stafford Act, which exempts debris removal from NEPA review process
  - Therefore, the NEPA review process is not required when FEMA is providing funding for waterway debris removal under a Stafford Act declaration. However, compliance with all other federal, state, and local environmental laws and regulations is still required even when a project is statutorily excluded from NEPA review.
- For waterway debris removal operations, the impact of removal must be evaluated to minimize environmental and ecological damage to the maximum practical extent. In some cases, debris removal may be more environmentally damaging than leaving the debris in place.

### **National Oceanic and Atmospheric Administration (NOAA)**

#### **National Marine Fisheries Service (NOAA Fisheries)**

- If a waterway debris removal project in Georgia involves a federal agency (directly or through funding and/or issuance of a federal permit), it is the responsibility of the lead federal agency to coordinate with NOAA Fisheries Southeast Regional Office prior to beginning debris removal work to ensure compliance with the ESA and Magnuson-Stevens Fisheries Conservation and Management Act
  - ESA directs all federal agencies to ensure the actions they take, including those they fund or authorize, do not adversely affect listed threatened or endangered species or critical habitat. Generally, NOAA Fisheries manages marine and anadromous species while USFWS manages land and freshwater species. If a federal agency determines their activities or actions will affect listed species or designated critical habitat—even if the effects are expected to be beneficial—they must consult with NOAA Fisheries or USFWS. See NOAA Fisheries Southeast Regional Office's endangered species [web page](#) for an up to date Georgia ESA-listed marine species list (NOAA, 2016c). See USFWS's endangered species [web page](#) for an up to date Georgia ESA-listed land and freshwater species list (U.S. Fish and Wildlife Service [USFWS], 2016b)
  - Magnuson-Stevens Fisheries Conservation and Management Act directs all federal agencies to ensure the actions they take, including those they fund or authorize, do not adversely affect Essential Fish Habitat (EFH). If a federal agency determines their activities or actions may adversely affect EFH, they must consult with NOAA Fisheries. The South Atlantic Fishery Management Council is responsible for identifying EFH for federally managed species in Georgia (South Atlantic Fishery Management Council, 2016).

- Consultation during emergencies can be expedited so federal agencies can complete their critical missions in a timely manner while still providing protections to listed species and EFH
  - NOAA Fisheries defines an emergency as a situation involving an act of God, disasters, casualties, national defense, or security emergencies, etc., and includes response activities that must be taken to prevent imminent loss of human life or property (NOAA, n.d.-b)
  - During emergency waterway debris removal operations, NOAA Fisheries Southeast Regional Office utilizes the same process for initiating contact for both ESA and EFH consultations. Steps to complete the emergency response consultation process are outlined in NOAA (n.d.-b).
- Additional information on ESA and EFH consultation during non-emergencies can be found in NOAA (n.d.-c) and NOAA (n.d.-d), respectively

Select NOAA authorities:

- Endangered Species Act (16 U.S.C. § 1531 et seq.)
- Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. § 1801 et seq.)
- Marine Mammal Protection Act of 1972 (16 U.S.C § 1361 et seq.)

## **U.S. Army Corps of Engineers, Savannah District (USACE)**

### **Regulatory Program**

- A USACE permit may be required for debris removal activities within waters of the United States regulated under Section 404 of the Clean Water Act and/or Section 10 of the Rivers and Harbors Act. Activities that may require a USACE permit include (but are not limited to): a) the physical removal of debris from waters; b) the discharge of dredged or fill material into waters associated with temporary access or other debris removal work; and c) dredging of material from waters to facilitate debris removal.
- Savannah District Regulatory Program has jurisdiction over the entire state and is geographically aligned into two branch offices that cover each region of the state, with the Coastal Branch covering the entire coast of Georgia ([Figure 3](#)).
- Nationwide permits that may be required to facilitate debris removal:
  - **Nationwide Permit 3: Maintenance.** Authorizes repair, rehabilitation, or replacement structures or fills destroyed or damaged by storms, floods, fires, or other discrete events. This permit may be issued for removal or maintenance of culverts, sediments, or debris accumulated around outfalls, bridges, etc. in wetland areas.
  - **Nationwide Permit 22: Removal of Vessels.** Authorizes temporary structures or minor discharges of dredged or fill material required for the removal of wrecked, abandoned, or disabled vessels or the removal of man-made obstructions to navigation
  - **Nationwide Permit 37: Emergency Watershed Protection and Rehabilitation.** Issued for work conducted under NRCS's EWP program
  - **Nationwide Permit 38: Cleanup of Hazardous and Toxic Waste.** Issued for the containment, stabilization, or removal of hazardous or toxic waste materials that are performed, ordered, or sponsored by a government agency with legal or regulatory authority. Activities undertaken entirely on a Comprehensive Environmental Response, Compensation, and Liability Act site are not required to obtain permits.
- In emergency situations, permitting procedures may be expedited and resource agency coordination (or completion of coordination/consultation) occurs "after the fact" as

opposed to before a permit is issued. This may result in additional work by the applicant once the emergency and immediate threat has been mitigated.

- USACE defines an emergency as a situation which would result in an unacceptable hazard to life, a significant loss of property, or an immediate, unforeseen, and significant economic hardship if corrective action requiring a permit is not undertaken within a time period less than the normal time needed to process the application under standard procedures (33 C.F.R. § 325.2(e)(4))
- Under 33 C.F.R. § 325.2 (e)(4), emergency permitting procedures may be authorized by the Division Commander for activities not qualifying for a nationwide permit

Select USACE authorities:

- Federal Water Pollution Control Act (commonly known as Clean Water Act) as amended by the Oil Pollution Act of 1990 (33 U.S.C. § 1251 et seq.)
  - Permits for dredged or fill material (Section 404, 33 U.S.C. § 1344)
- Rivers and Harbors Appropriation Act of 1899 (33 U.S.C. § 401 et seq.)
  - Prohibits the unauthorized obstruction or alteration of any navigable water of the United States (Section 10, 33 U.S.C. § 403)
  - Authorize USACE to remove sunken vessels or other obstructions from navigable waterways under emergency conditions (Sections 15, 19 and 20, 33 U.S.C. § 409, 414, 415) in coordination with USCG MSU Savannah

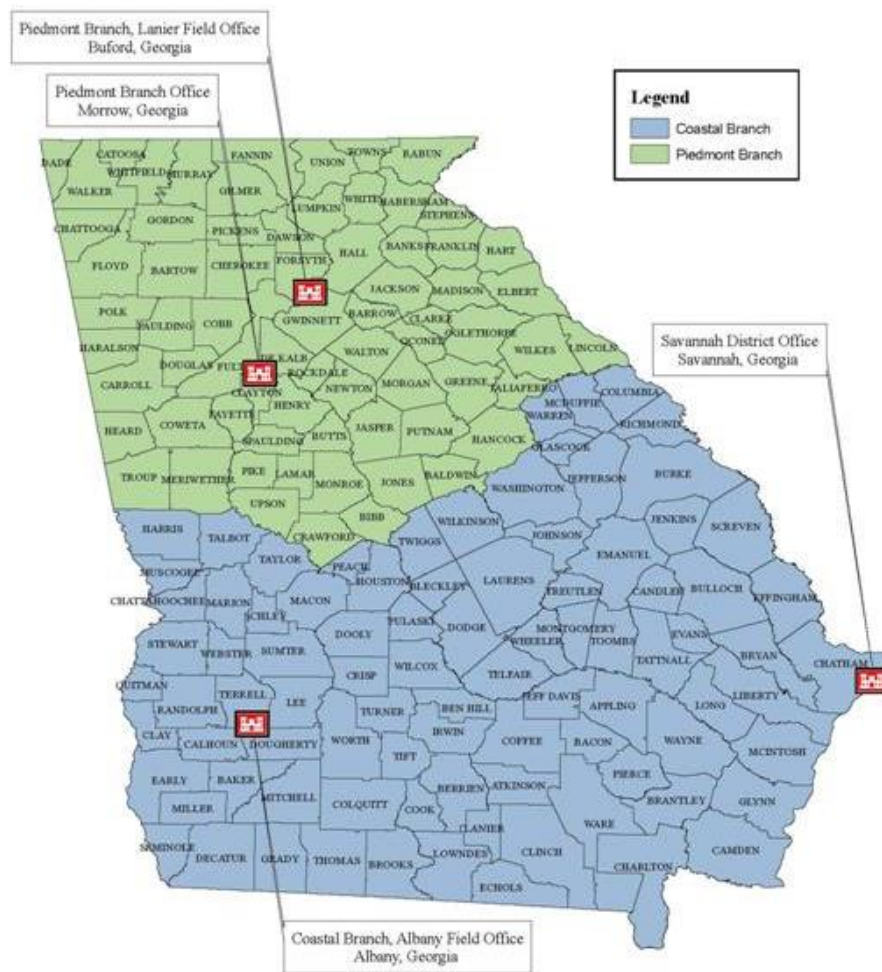


Figure 3. Map of U.S. Army Corps of Engineers (USACE) regulatory program offices. Map retrieved from USACE (n.d.).

## U.S. Fish and Wildlife Service (USFWS)

### Ecological Services Program

- If a waterway debris removal project in Georgia involves a federal agency (directly or through funding and/or issuance of a federal permit), it is the responsibility of the lead federal agency to coordinate with the USFWS Coastal Georgia Ecological Services Field Office in Townsend prior to beginning debris removal work to ensure compliance with ESA and CBRA
  - ESA directs all federal agencies to ensure the actions they take, including those they fund or authorize, do not adversely affect listed threatened or endangered species or critical habitat. Generally, USFWS manages land and freshwater species and certain marine species such as manatee, while NOAA Fisheries manages marine and anadromous species. If a federal agency determines their activities or actions may affect listed species or designated critical habitat—even if the effects are expected to be beneficial—they must consult with USFWS or NOAA Fisheries. See USFWS's Information for Planning and Conservation [web page](#) to generate a preliminary list of federally threatened and endangered species in a project area (USFWS,

2016b). See NOAA Fisheries Southeast Regional Office's endangered [species web page](#) for an up to date Georgia ESA-listed marine species list (NOAA, 2016c).

- CBRA makes designated coastal barriers ineligible for most federal expenditures and financial assistance and was developed to minimize development of coastal barriers and damage to property, fish, wildlife, and other natural resources. The John H. Chafee Coastal Barrier Resources System (CBRS) is a collection of specific units of land and associated aquatic habitats that serve as barriers protecting the Atlantic, Gulf, and Great Lakes coasts. After a Stafford Act declaration, costs for debris removal and emergency protective measures in designated CBRS units may be eligible for reimbursement under FEMA's Public Assistance Program provided the actions eliminate an immediate threat to lives, public health and safety, or protect improved property. A map of CBRS units in Georgia can be accessed from USFWS (2016a).
- For projects that do not involve federal permits or funding, USFWS consultation is not required, but is recommended. Harassing or harming ("taking") an endangered or threatened species or significantly modifying their habitat is still prohibited under ESA regardless of federal nexus involvement.
- Reviews may be expedited in emergencies, and USFWS staff may embed in response teams
- Each debris removal project is reviewed individually unless USFWS prepares a programmatic consultation. Under a programmatic consultation, all parties agree on certain conservation measures that must be implemented. If a waterway debris removal project arises that does not fit the programmatic measures, then it must be reviewed individually.
- Generally, USFWS will provide BMPs that provide necessary protections while allowing projects to go forward

Select USFWS authorities:

- Coastal Barrier Resources Act (16 U.S.C. § 3501 et seq.)
- Endangered Species Act (16 U.S.C. § 1531 et seq.)
- Fish and Wildlife Coordination Act (16 U.S.C. § 661 et seq.)
- Marine Mammal Protection Act of 1972 (16 U.S.C § 1361 et seq.)
- Migratory Bird Treaty Act (16 U.S.C § 703-712)

### **5.3 Permitting and Compliance for Waterway Debris Removal in Georgia One-Pager**

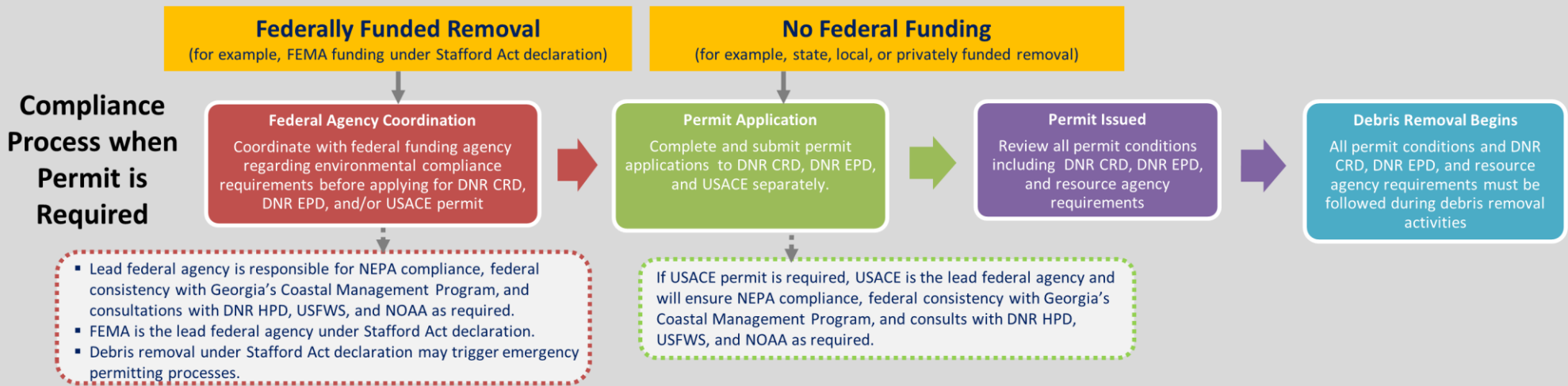
The *Permitting and Compliance for Waterway Debris Removal in Georgia* one-pager on the following page synthesizes permitting and compliance requirements that must be met before waterway debris removal operations begin. The top portion of the one-pager outlines the process to follow to stay in compliance, while the bottom portion highlights specific state and federal agency requirements with general contact information.

For detailed information regarding individual state and federal agency requirements, see [Sections 5.1](#) and [5.2](#), respectively.



# Permitting and Compliance for Waterway Debris Removal in Georgia

- U.S. Army Corps of Engineers (USACE) permit(s) may be required for debris removal within waterways and wetlands. One or multiple permits may be needed.
- If a project requires both a federal permit and a permit through the Georgia Department of Natural Resources (DNR) Coastal Resources Division (CRD), the applicant must apply to DNR CRD and USACE separately
- It is the responsibility of the **lead federal agency** to ensure compliance with National Environmental Policy Act (NEPA), federal coastal consistency, and consult with resource agencies including DNR Historic Preservation Division (HPD), DNR CRD, U.S. Fish and Wildlife Service (USFWS), and the National Oceanic and Atmospheric Administration (NOAA) as required.



## Agency Requirements and Legislation Details

### U.S. Army Corps of Engineers (USACE)

**Savannah District  
Regulatory Program**  
912-652-5050

- Permit(s) that may be required for debris removal work within waterways and wetlands:
  - NWP-3 Maintenance** for removal/maintenance of culverts, sediments, or debris accumulated around outfalls, bridges, etc. in wetland areas
  - NWP-22 Removal of Vessels** for removal of wrecked, abandoned, or disabled vessels or other man-made obstructions to navigation
  - NWP-37 Emergency Watershed Protection & Rehabilitation** for work done under NRCS's Emergency Watershed Protection program
  - NWP-38 Cleanup Hazardous/Toxic Waste** for containment, stabilization, or removal of hazardous or toxic waste not under CERCLA/NCP

### National Oceanic and Atmospheric Administration (NOAA)

**NOAA Fisheries**  
ESA: 727-824-5312  
EFH: 727-570-5317

- Consultation required if waterway debris response involves federal permits and/or funding (USACE permit, FEMA funding, etc.) to comply with:
  - Endangered Species Act (ESA) to ensure actions do not adversely affect listed threatened or endangered species or critical habitat for marine species
  - Magnuson-Stevens Fisheries Conservation and Management Act to ensure actions do not adversely affect Essential Fish Habitat (EFH)

### U.S. Fish and Wildlife Service (USFWS)

**Georgia Ecological  
Services Field Office**  
912-832-8739

- Consultation with Ecological Services Field Office required if waterway debris response involves federal permits and/or funding (USACE permit, FEMA funding, etc.) to comply with:
  - Endangered Species Act (ESA) to ensure actions do not adversely affect listed threatened or endangered species or critical habitat for land and freshwater species and certain marine species such as manatee
  - Coastal Barrier Resources Act (CBRA) to ensure actions do not encourage development on coastal barriers along the Atlantic coast

### National Environmental Policy Act (NEPA)

- Requires federal agencies to follow a specific planning process to ensure environmental consequences of federally funded actions are considered

### GA Department of Natural Resources (DNR) Coastal Resources Division (CRD)

912-264-7218

- Reviews project applications for consistency with the Coastal Marshlands Protection Act and the Shore Protection Act
- Debris removal projects that have the potential to impact areas below the ordinary high water mark may require a Coastal Marshlands Protection Permit or a Shore Protection Act Permit
  - For activities that are temporary in nature, a letter of permission may be authorized in lieu of a permit
  - Letter of permission applications are not concurrent with federal review, so USACE permit applications must be submitted separately

### GA Department of Natural Resources (DNR) Environmental Protection Division (EPD)

912-264-7284

- Requires a variance for any removal activities that have the potential to disturb soil within the 25-foot buffer along coastal marshlands or streams
  - DNR CRD will establish a jurisdictional line from which to measure the buffer distance
- Applicants must apply for buffer variances with DNR EPD, even if a DNR CRD and/or USACE permit is required

### GA Department of Natural Resources (DNR) Historic Preservation Division (HPD)

770-389-7844

- Serves as the State Historic Preservation Office (SHPO) and ensures compliance with Section 106 of the National Historic Preservation Act
- Consultation with DNR HPD required if waterway debris response involves federal permits and/or funding (USACE permit, FEMA funding, etc.) or has the potential to affect historic or cultural sites included in or eligible for the National Register of Historic Places

## 6. Georgia Waterway Debris Response Needs

Waterway debris response gaps identified by stakeholders are outlined below, along with associated recommendations. These identified gaps will serve as future points of discussion and action for the Georgia waterway debris response community. Potential opportunities for addressing response needs include table-top activities to exercise this *Guide*, response exercises that incorporate debris scenarios, and coordination meetings associated with this document's formal review.

### 6.1 Response Gaps and Recommended Actions in Georgia

The following gaps in response and associated recommendations are compiled based on stakeholder input to improve preparedness for response and recovery operations following an acute waterway debris incident in Georgia. Recommended actions include logistics, policy, and funding actions to address gaps in response and meet pre- and post-event data needs.

#### 6.1.1 Removal Logistics

- **Gap:** Limited resources—including the availability of time, education, communication, and training—hinder response and removal of waterway debris.
  - **Action:** Before an event, develop a list of resources that an agency is likely to need to perform debris removal operations.
    - See [Appendix B](#) for a capabilities matrix featuring a list of waterway debris response resources and corresponding organizations that either possess those capabilities in house or have the ability to contract them out through a third party
  - **Action:** Draft resource requests before an event occurs to reduce time constraints during a response.
  - **Action:** Encourage state and local governments and NGOs to provide education and outreach to local communities about how to prepare for an emergency and reduce the potential for debris in waterways.
    - For a printable fact sheet that features basic steps for homeowners to prepare for a hurricane or storm, visit this [website](#)
  - **Action:** Support the integration of this *Guide* into existing exercises, plans, and emergency operations documents.
- **Gap:** There is a lack of exercises that include waterway debris response scenarios.
  - **Action:** Encourage the state to host waterway debris-centric exercises in coordination with state agencies, counties, and municipalities.
  - **Action:** Encourage entities hosting local planning meetings or conferences to invite relevant waterway debris response agencies and organizations.
- **Gap:** There is a lack of personnel dedicated to waterway debris issues.
  - **Action:** Encourage all counties in Georgia to hire full-time emergency management directors.
  - **Action:** Reach out to NGOs and private organizations that do beach sweeps or have established volunteer resources for outreach and education support.
- **Gap:** There is a lack of mapping system database availability.

- **Action:** Engage state Geographic Information Systems (GIS) planners in identifying and managing data that can be utilized throughout the state.
- **Gap:** There is a need for more communication between handlers of NRC and State Warning Point calls.
  - **Action:** Review the current processes for reporting oil or hazardous materials spills to identify areas for improvement.
- **Gap:** Historical resources are not always identified before an event occurs.
- **Gap:** Oftentimes, it is difficult to contact or identify the owner or responsible party for recoverable debris items, including abandoned vessels.
- **Gap:** There is a need to make sure that municipal debris removal contracts include debris located in waterways.

### 6.1.2 Policy

- **Gap:** There is a need to standardize definitions between the state and relevant federal agencies.
  - **Action:** Establish an agreed upon consistent set of terminology and definitions among federal, state, and local waterway debris response agencies. This includes inter-agency discussions regarding what constitutes an emergency and eligible waterway debris.
    - See [Definitions](#) section for terminology used by federal and state agencies
  - **Action:** Always include citations for legal references in documents or materials used for incident waterway debris planning and response.
- **Gap:** Agencies are limited to debris removal within their regulatory authority.
  - **Action:** Always include citations for legal references in documents or materials used for incident waterway debris planning and response to highlight applicable authorities.
- **Gap:** There is a lack of inter-jurisdictional communication and coordination that may result in a federally-led response in which debris is not removed.
  - **Action:** Identify a state agency or organization to clarify roles of other agencies during incident waterway debris events.
    - For information about federal, state and local roles and responsibilities during an acute waterway debris incident, see [Section 4](#).
- **Gap:** Local debris management plans do not always include information specific to waterway debris response.
  - **Action:** Encourage and incentivize counties and municipalities to develop debris management plans that include waterway debris response information.
- **Gap:** There is currently no pre-approval process for debris staging areas in Georgia prior to an emergency.

### 6.1.3 Funding

- **Gap:** Because federal projects are annually funded, removal funds may already be depleted at the time of an acute waterway debris incident.
- **Gap:** Mitigation costs for oiled or hazardous waterway debris are expensive.
  - **Action:** Consider offering incentives (i.e. media advertising or tax deductions) for boat owners and landfill managers to prevent vessel abandonment and make disposal easier.
- **Gap:** There is a lack of competition for waterway debris removal contractors which increases costs.
  - **Action:** Use debris removal data from Hurricane Matthew to adjust contracts for future financial planning.
- **Gap:** There is a lack of information regarding non-federal sources of funding for debris removal.
  - **Action:** Develop a clearinghouse that identifies existing Memorandums of Understanding or Agreement within the state of Georgia.
  - **Action:** Develop a list of potential non-federal funding sources in the state of Georgia.
- **Gap:** After an acute waterway debris incident that does not result in a Presidential major disaster declaration, there are limited funding sources for debris removal in state waters.
  - **Action:** Consider offering incentives (i.e. media advertising or tax deductions) for boat owners and landfill managers to prevent vessel abandonment and make disposal easier.
  - **Action:** Establish partnerships with private organizations and NGOs to assist with fundraising and contracting for debris removal in emergency situations.
  - **Action:** Develop a list of potential funding sources in the state of Georgia.

## 6.2 Additional Resources

National Oceanic and Atmospheric Administration. (2018). *Storm Preparedness & Marine Debris Fact Sheet*. Retrieved from <https://marinedebris.noaa.gov/fact-sheets/storm-preparedness-marine-debris>

National Oceanic and Atmospheric Administration. (2014). *Best management practices for removal of debris from wetlands and other intertidal areas*. Retrieved from [https://marinedebris.noaa.gov/sites/default/files/MDP\\_Debris\\_Removal\\_Intertidal\\_Areas.pdf](https://marinedebris.noaa.gov/sites/default/files/MDP_Debris_Removal_Intertidal_Areas.pdf)

## 7. References

- Bureau of Ocean Energy Management. (n.d.). *Outer continental shelf*. Retrieved from <https://www.boem.gov/Outer-Continental-Shelf/>
- Council on Environmental Quality. (2007). *A citizen's guide to the NEPA*. Retrieved from [https://energy.gov/sites/prod/files/nepapub/nepa\\_documents/RedDont/G-CEQ-CitizensGuide.pdf](https://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-CitizensGuide.pdf)
- Federal Emergency Management Agency. (2007). *FEMA 325: Public assistance debris management guide*. Washington, DC: U.S. Government Printing Office. Retrieved from <https://www.fema.gov/pdf/government/grant/pa/demagde.pdf>
- Federal Emergency Management Agency. (2010). *FEMA Recovery Policy 9523.5: Debris Removal from Waterways*. Washington, DC: U.S. Government Printing Office. Retrieved from [https://www.fema.gov/pdf/government/grant/pa/9523\\_5.pdf](https://www.fema.gov/pdf/government/grant/pa/9523_5.pdf)
- Federal Emergency Management Agency. (2016). *Public assistance program and policy guide FP 104-009-2*. Washington, DC: U.S. Government Printing Office. Retrieved from [https://www.fema.gov/media-library-data/1456167739485-75a028890345c6921d8d6ae473fbc8b3/PA\\_Program\\_and\\_Policy\\_Guide\\_2-21-2016\\_Fixes.pdf](https://www.fema.gov/media-library-data/1456167739485-75a028890345c6921d8d6ae473fbc8b3/PA_Program_and_Policy_Guide_2-21-2016_Fixes.pdf)
- Federal Emergency Management Agency. (n.d.). *Disaster declarations for Georgia*. Retrieved from <https://www.fema.gov/disasters/grid/state-tribal-government/48>
- Georgia Department of Natural Resources. (1997). *Georgia Coastal Management Program. Program Document*. Retrieved from <https://coastalgadnr.org/GCMPProgramDocuments>
- Georgia Emergency Management and Homeland Security Agency. (2006). *Georgia Emergency Operations Plan, Debris Management Annex*. Retrieved from <https://gema.georgia.gov/what-we-do/planning>
- Georgia Emergency Management and Homeland Security Agency. (2014). *State of Georgia Hazard Mitigation Strategy*. Retrieved from <https://gema.georgia.gov/hazard-mitigation-resources>
- Georgia Emergency Management and Homeland Security Agency. (2015a). *Disaster Volunteer Coordination Manual*. Retrieved from <https://gema.georgia.gov/what-we-do/planning>
- Georgia Emergency Management and Homeland Security Agency. (2015b). *Georgia Emergency Operations Plan*. Retrieved from [https://gema.georgia.gov/sites/gema.georgia.gov/files/related\\_files/document/GEOP%20-%20Base%20Plan%20%282015%29.pdf](https://gema.georgia.gov/sites/gema.georgia.gov/files/related_files/document/GEOP%20-%20Base%20Plan%20%282015%29.pdf)
- Georgia Emergency Management and Homeland Security Agency. (2016). *Georgia Emergency Operations Plan Annex ESF-10 Hazardous Materials*. Retrieved from <https://gema.georgia.gov/what-we-do/planning>



- Georgia Ports Authority. (n.d.). *Port of Savannah*. Retrieved from <http://www.gaports.com/PortofSavannah.aspx>
- National Oceanic and Atmospheric Administration. (2000). *Tidal datums and their applications*. Silver Spring, MD: U.S. Department of Commerce. Retrieved from [http://tidesandcurrents.noaa.gov/publications/tidal\\_datums\\_and\\_their\\_applications.pdf](http://tidesandcurrents.noaa.gov/publications/tidal_datums_and_their_applications.pdf)
- National Oceanic and Atmospheric Administration. (2016a). *Environmental Sensitivity Index (ESI) maps*. Retrieved from <https://response.restoration.noaa.gov/resources/environmental-sensitivity-index-esi-maps>
- National Oceanic and Atmospheric Administration. (2016b). *Marine debris program*. Retrieved from <https://marinedebris.noaa.gov/>
- National Oceanic and Atmospheric Administration. (2016c). *NOAA Fisheries Southeast Regional Office Protecting Marine Life*. Retrieved from <https://www.fisheries.noaa.gov/protecting-marine-life>
- National Oceanic and Atmospheric Administration. (2016d). [Web mapping tool presents spatial land cover data used in the water quality section of the wetland benefits coastal county snapshot]. *Wetland benefits snapshot map*. Retrieved from <http://www.arcgis.com/home/item.html?id=f19a213e1a2248ec9f6d3863908bdce9>
- National Oceanic and Atmospheric Administration. (n.d.-a). *Hurricane Matthew's effect on the Atlantic coast*. Retrieved from <http://noaa.maps.arcgis.com/apps/MapJournal/index.html?appid=1f97a4aac6614428aa928cf6aeb580b0>
- National Oceanic and Atmospheric Administration. (n.d.-b). *NOAA Fisheries Southeast Regional Office emergency consultation*. Retrieved from <https://www.fisheries.noaa.gov/content/emergency-consultations-southeast>
- National Oceanic and Atmospheric Administration. (n.d.-c). *NOAA Fisheries Southeast Regional Office Endangered Species Act Consultations*. Retrieved from <https://www.fisheries.noaa.gov/topic/consultations#endangered-species-act-consultations>
- National Oceanic and Atmospheric Administration. (n.d.-d). *NOAA Fisheries Southeast Regional Office Conserving Habitat in the Southeast*. Retrieved from <https://www.fisheries.noaa.gov/southeast/about-us/conserving-habitat-southeast>
- South Atlantic Fishery Management Council. (2016). *Mapping and GIS data*. Retrieved from <http://www.safmc.net/ecosystem-management/mapping-and-gis-data>
- U.S. Army Corps of Engineers. (2010). *Debris removal from waterways field operations guide*.
- U.S. Army Corps of Engineers. (n.d.). *US Army Corps of Engineers Savannah District, Regulatory Division Office Location Map*. Retrieved from <http://www.sas.usace.army.mil/Missions/Regulatory/Contacts.aspx>

- U.S. Coast Guard. (1996). *United States Coast Guard Commandant Instruction M16465.43. Abandoned Vessels*.
- U.S. Coast Guard. (2016). *United States Coast Guard Marine Safety Unit Savannah Area Contingency Plan*. Retrieved from <https://homeport.uscg.mil/Lists/Content/Attachments/2431/MSU%20Savannah%20ACP%20-%202016%20revision.pdf>
- U.S. Department of Homeland Security. (2016). *National Response Framework, third edition*. Retrieved from [https://www.fema.gov/media-library-data/1466014682982-9bcf8245ba4c60c120aa915abe74e15d/National\\_Response\\_Framework3rd.pdf](https://www.fema.gov/media-library-data/1466014682982-9bcf8245ba4c60c120aa915abe74e15d/National_Response_Framework3rd.pdf)
- U.S. Environmental Protection Agency. (2016a). *EPA Region 4 Regional Contingency Plan*.
- U.S. Environmental Protection Agency. (2016b). *National oil and hazardous substances pollution contingency plan (NCP) overview*. Retrieved from <https://www2.epa.gov/emergency-response/national-oil-and-hazardous-substances-pollution-contingency-plan-ncp-overview>
- U.S. Fish and Wildlife Service. (2016a). *Coastal Barrier Resources System official CBRS maps*. Retrieved from <http://www.fws.gov/ecological-services/habitat-conservation/cbra/Maps/index.html>
- U.S. Fish and Wildlife Service. (2016b). *Information for Planning and Conservation*. Retrieved from <https://ecos.fws.gov/ipac/>
- U.S. National Response Team. (2014). *Abandoned vessel authorities and best practices guidance*. Washington, DC: U.S. National Response Team. Retrieved from <https://marinedebris.noaa.gov/adv-document/abandoned-vessel-authorities-and-best-practices-guidance>

## 8. Appendices

### APPENDIX A

#### Georgia Legislation Applicable to Waterway Debris Response

- Abandoned Vessels (O.C.G.A. § 52-7-70 through § 52-7-77)
- Coastal Marshlands Protection Act of 1970 (O.C.G.A. § 12-5-280 et seq.)
- Discharge of Substances Dangerous to Navigation or Property (O.C.G.A. § 52-8-1 through § 52-8-5)
- Environmental Policy Act (O.C.G.A. § 12-16-1 et seq.)
- Georgia Coastal Management Act (O.C.G.A. § 12-5-320 et seq.)
- Georgia Comprehensive Solid Waste Management Act (O.C.G.A. § 12-8-20 et seq.)
- Georgia Hazardous Waste Management Act (O.C.G.A. § 12-8-60 et seq.)
- Georgia Register of Historic Places (O.C.G.A. § 12-3-50.2)
- Georgia Water Quality Control Act (O.C.G.A. § 12-5-20 et seq.)
- Littering Public and Private Property (O.C.G.A. § 16-7-40 et seq.)
- Permit required; application; notice; public hearing; issuance; denial; dynamic dune fields (O.C.G.A. § 12-5-286)
- Protection of Tidewaters Act (O.C.G.A. § 52-1-1)
- Shore Protection Act (O.C.G.A. § 12-5-230 et seq.)
- Waste Control (O.C.G.A. § 16-7-50 et seq.)

## APPENDIX B

### Organization Response Capabilities

Yes - In-house Capability		EPA Region IV	FEMA Region IV <sup>1</sup>	National Park Service	NOAA <sup>5</sup>	NRCS	USFWS	DNR EPD	DNR LED	GDOT	GEMA/HS	Jekyll Island Authority	Savannah EM	Savannah Riverkeepers
Contract - Contracted capability														
Technology	Aerial photography and video	Contract			Yes				Yes		Contract		Contract	
	Communication radios	Yes		Yes <sup>2,4</sup>					Yes	Yes	Yes	Yes	Yes	
	Geographic Information Systems (GIS)	Yes		Yes <sup>2,4</sup>	Yes						Yes	Yes	Yes	Contract
	Hazardous materials or unknown substance identification testing	Yes						Yes <sup>11</sup>					Yes	
	Mobile applications for reporting													
	Remote sensing (with IT support and management available)				Yes									
	Multi-beam sonar				Yes									
	Side-scan sonar				Yes				Yes					
	Single-beam sonar				Yes									
Manpower/Expertise	Compliance and permitting expertise	Yes	Yes	Yes	Yes		Yes	Yes		Yes			Yes	
	Dedicated spokesperson/Media personnel	Yes		Yes	Yes			Yes	Yes	Yes	Yes	Yes	Yes	Yes
	Dive support	Contract		Contract <sup>2,4</sup>	Yes <sup>6</sup>					Yes			Yes	
	Environmental expertise (location of sensitive areas, endangered species present, etc.)	Yes	Yes	Yes <sup>2,3</sup>	Cont. <sup>4</sup>	Yes <sup>7</sup>	Yes	Yes	Yes	Yes		Yes	Yes	Contract
	GIS mapping and plotting of imagery expertise	Contract	Yes	Yes <sup>2,4</sup>	Yes						Yes	Yes	Yes	Contract
	Hazardous materials response	Yes						Yes					Yes	
	Incident Command System (ICS) staff/training	Yes	Yes	Yes	Yes		Yes	Yes	Yes		Yes	Yes	Yes	
	Incident Management team	Yes		Yes <sup>3</sup>	Cont. <sup>2,4</sup>				Yes	Yes	Yes		Yes	
	Medical emergency response/site safety expertise			Yes <sup>3</sup>								Yes		
	National Weather support			Contract <sup>2</sup>	Yes						Yes			
	Technical expertise for removal operations (techniques, best management practices, etc.)	Yes	Yes	Contract <sup>2</sup>	Yes	Yes		Yes		Yes				Contract
	Volunteer coordinator			Yes <sup>2,4</sup>							Yes	Yes		Yes
	Volunteer manpower			Yes <sup>2,4</sup>								Yes		Yes

Yes - In-house Capability		EPA Region IV	FEMA Region IV <sup>1</sup>	National Park Service	NOAA <sup>5</sup>	NRCS	USFWS	DNR EPD	DNR LED	GDOT	GEMA/HS	Jekyll Island Authority	Savannah EM	Savannah Riverkeepers
Contract - Contracted capability														
Equipment	Amateur radio capabilities/interoperability			Contract <sup>2</sup>							Yes		Yes	
	Aircraft	Contract			Yes				Yes			Contract		
	Barge/Self-loading barge	Contract												
	Containment boom	Contract		Yes <sup>3</sup>									Yes	Contract
	Crane/Knuckleboom crane	Contract											Yes	
	Debris clearance packages (Route clearance manpower teams and/or equipment)			Yes <sup>3</sup>						Yes		Yes	Yes	
	Excavator	Contract		Yes <sup>2</sup>						Yes		Yes	Yes	
	Hazardous materials response equipment	Contract											Yes	
	Heavy/Earth-moving machinery	Contract								Yes		Yes	Yes	
	Landing craft			Yes <sup>3</sup>										Yes
	Portable power generation			Yes <sup>2,3</sup>					Yes			Yes	Yes	Contract
	Remotely Operated Vehicle (ROV)				Yes				Yes					
	Sharepoint site/common operating picture			Yes <sup>3</sup>	Yes				Yes				Yes	
	Unmanned Aerial Vehicle (UAV)/Surveillance drones				Yes						Yes			
	Vessels	Contract		Yes <sup>2,3</sup>	Yes				Yes				Yes	
	Other specialized equipment that cannot be readily procured immediately following a debris incident	Contract							Yes					
Logistics	Docks for wet storage of vessels			Yes <sup>3</sup>					Yes			Contract	Yes	Contract
	Facility suitable for establishing an Emergency Operations Center (EOC)			Yes <sup>2,4</sup>							Yes	Yes	Yes	Yes
	Funding for waterway debris removal	Yes		Contract <sup>2</sup>	Yes <sup>8</sup>	Yes <sup>9</sup>								
	Pre-designated landfill/disposal sites (to include vegetative and animal carcasses)											Yes	Yes	
	Staging/Off-Loading: Land with water access to stage, offload debris (has not been evaluated for suitability or officially pre-designated)			Yes <sup>2</sup>								Yes	Yes	Contract
	Staging/Off-Loading: Pre-designated staging, off-loading and special handling areas (already evaluated for suitability)			Yes <sup>2</sup>									Yes	
	Staging area for dry storage of vessels								Yes			Contract		Yes
	Other logistical support, including fuel, housing, food, etc.								Yes			Contract	Yes	Contract



	Yes - In-house Capability	EPA Region IV	FEMA Region IV <sup>1</sup>	National Park Service	NOAA <sup>5</sup>	NRCS	USFWS	DNR EPD	DNR LED	GDOT	GEMA/HS	Jekyll Island Authority	Savannah EM	Savannah Riverkeepers
	Contract - Contracted capability													
Preparedness	Contract authority and oversight capabilities	Yes		Yes <sup>1</sup> 2 Co nt. <sup>4</sup>	Yes	Yes <sup>10</sup>				Yes		Yes	Contract	
	Inter-jurisdictional agreements in place			Yes <sup>2,3</sup>						Yes			Yes	
	List of pre-approved programmatic agreements between agencies			Yes <sup>3</sup>						Yes			Yes	
	List of qualified contractors							Yes <sup>12</sup>		Yes			Yes	
	Pre-approved waterway debris removal contractors													
	Pre-event contracts and staged agreements in place	Yes											Yes	

Each organization self-reported capabilities which could be of use during waterway debris response. Organizations were asked to indicate whether capabilities were in-house or were contracted through a third party. Footnotes refer to additional information provided for a particular capability.

<sup>1</sup>FEMA – Capabilities contingent upon a Presidential major disaster declaration. FEMA capable of mission-assigning other federal support to increase capabilities. FEMA has interactive live collection and mapping capabilities and a template wet debris collector map for Region IV.

<sup>2</sup>NPS – Ft. Pulaski only

<sup>3</sup>NPS – Cumberland Island National Seashore only

<sup>4</sup>NPS – Ft. Frederica only

<sup>5</sup>NOAA – Some capabilities require contract support for staffing

<sup>6</sup>NOAA – Dive capabilities do not include sites with oil or hazardous pollutants

<sup>7</sup>NOAA – Coordinates marine mammal and sea turtle stranding response and reviews proposed debris removal activities for compliance with ESA and Magnuson-Stevens Fisheries Conservation and Management Act

<sup>8</sup>NOAA – Funding through grant program and possible Congressional supplemental funding

<sup>9</sup>NRCS – Funding for authorized EWP contracts only

<sup>10</sup>NRCS – Contract authority for EWP contracts only

<sup>11</sup>DNR EPD – Can provide limited water/soil/sediment testing

<sup>12</sup>DNR EPD – Maintains a list of spill response contractors but does not verify or qualify them

**APPENDIX C**  
**Organization Contact Information**

**Local Agencies/Organizations**

Agency	Division	Topic	Point of Contact	Phone	Email
GA Coastal Zone Management Act Coastal Counties	Brantley County	Emergency Management	Michelle Lee, Director	912-276-0041	brantleyema@btconline.net
	Bryan County	Emergency Management	Freddy Howell, Director	912-585-2799	fhowell@bryan-county.org
	Camden County	Emergency Preparedness	Charles White, Director	912-464-4054	cnwhite@co.camden.ga.us
	Charlton County	Emergency Preparedness	Bruce C. Young, Director	912-486-1081	byoung@charltoncountyga.gov
	Chatham County	City of Savannah	Jessica Thompson, GIS Analyst	912-651-6510x1845	jthompson@savannahga.gov
			James Conner, Tele-electronic Tech	912-351-3440	jconner@savannahga.gov
			David Donnelly, Director, Emergency Management	912.652.3812	ddonnelly@savannahga.gov
			Shawn Emerson, Dockmaster	912-651-3634	semerson@savannahga.gov
			David Maxwell, CFO	912-652-6434	dmaxwell@savannahga.gov
			Tom McDonald, Permitting/Floodplain Administrator	912-651-6530	tmcdonald@savannahga.gov
			Gene Prevatt, Sanitation Director	912-651-6579	gprevatt@savannahga.gov
			John Sawyer, Public Works Director	912-651-4241	jsawyer@savannahga.gov
			Joseph Bandy, Special Ops Chief	912-658-0430	jbandy@savannahha.gov
		Emergency Management	Dennis T. Jones, Director	912-201-4500	dtjones@chathamcounty.org
	Effingham County	Emergency Management	Clinton Hodges, Director	912-754-8200	chodges@EffinghamCounty.org
	Glynn County	Emergency Management	Jay Wiggins, Director	912-554-7826	jwiggins@glynncounty-ga.gov
	Liberty County	Emergency Management	Larry Logan, Director	912-977-3427	larry.logan@libertycountyga.com
	Long County	Emergency Management	Edward M. Brewer, Director	912-302-4432	lcema@outlook.com
	McIntosh County	Emergency Management	Ty S. Poppell, Director	912-258-1343	Ty.poppell@mcintoshcounty-ga.gov
	Wayne County	Emergency Management	Donald Ray, Director	912-427-5979	dray@waynecountyga.us

## Local Organizations Continued

Agency	Division	Topic	Point of Contact	Phone	Email
Savannah Riverkeepers	-	Volunteer Coordination	-	-	info@savannahriverkeeper.org

## State Agencies

Agency	Division	Topic	Point of Contact	Phone	Email
GA Department of Natural Resources (DNR)	Coastal Resources Division	Coastal Management Program	Jill Andrews, Section Chief	912-264-7218	jill.andrews@dnr.ga.gov
		Marsh and Shore Management Program	Josh Noble, Program Manager	912-264-7218	josh.noble@dnr.ga.gov
		Compliance and Enforcement	Charles "Buck" Bennett, Compliance and Enforcement Manager	912-262-3132	buck.bennett@dnr.ga.gov
	Environmental Protection Division	Reporting Oil or Hazardous Material Releases	State Warning Point	1-800-241-4113	-
		Emergency Response Section	Jerry Campbell, Emergency Response Manager	404-387-4900	jerry.campbell@dnr.ga.gov
			Eric Dykes, State On-Scene Coordinator	770-387-4900	eric.dykes@dnr.ga.gov
		Coastal District	Bruce M. Foisy, District Manager	912-264-7284	bruce.foisy@dnr.ga.gov
		Watershed Protection Branch	Shannon Winsness, Environmental Specialist	912-554-3492	shannon.winsness@dnr.ga.gov
	Historic Preservation Division	National Historic Preservation Act Compliance, Section 106	Jennifer Dixon, Program Manager	770-389-7851	jennifer.dixon@dnr.ga.gov
			Caitylyn Hungate	770-389-7852	caitylyn.hungate@dnr.ga.gov
			Emma Mason, Compliance Archaeologist	770-389-7878	emma.mason@dnr.ga.gov
	Law Enforcement Division	Debris Response Capabilities	Sgt. Mark Carson	912-262-3165	mark.carson@dnr.ga.gov
			Captain Bob Lynn, Region VII Supervisor	912-264-7237	bob.lynn@dnr.ga.gov
GA Department of Transportation (GDOT)	-	Waterways Program	Ralph B. "Trey" Daniell III, Waterways Program Manager	478-357-7651	rdaniell@dot.ga.gov
			Claude R. Jackson, Waterways Project Manager	404-673-9119	cjackson@dot.ga.gov
		Engineering/Maintenance	Mike Keene, Maintenance Liaison Engineer/Emergency Specialist	478-553-3381	mkeene@dot.ga.gov

## State Agencies Continued

Agency	Division	Topic	Point of Contact	Phone	Email
GA Emergency Management and Homeland Security Agency (GEMA/HS)	Operations Chief of Staff Hazard Mitigation	Operations National Weather Support	David Fite, Business Operations Division Manager	404-635-7024	david.fite@gema.ga.gov
			Lamar McEwen, State Operations & Warning Center Manager	404-635-4208	lamar.mcewen@gema.ga.gov
			Woody Radcliffe, Business Operations Division Planning Manager	404-635-7512	woody.radcliffe@gema.ga.gov
			Chuck Ray, Field Operations Manager	912-687-2399	chuck.ray@gema.ga.gov
			Will Lanxton, Meteorologist	404-635-4269	will.lanxton@gema.ga.gov
		Volunteer Coordination Geographic Information System Capabilities	Sarah Jackson, Community Partnership	470-225-3816	sarah.jackson@gema.ga.gov
			Robbie Bagby, GIS Coordinator	404-635-7212	robbie.bagby@gema.ga.gov
		Public Affairs Capabilities	Catherine Howden, Chief of Staff	404-635-7225	catherine.howden@gema.ga.gov
		Hazard Mitigation	Terry Lunn, Hazard Mitigation Manager	404-635-7016	terry.lunn@gema.ga.gov
	Public Assistance	Public Assistance	Valarie Grooms, Public Assistance Manager	404-635-7062	valarie.grooms@gema.ga.gov
	-	Aerial Photography & Video Capabilities	Kevin Thompson, Captain, Georgia State Patrol	706-410-6813	kthompson2@gsp.net
	Homeland Security	State Homeland Security	Harlan Proveaux, Homeland Security Deputy Director	404-635-7080	harlan.proveaux@gema.ga.gov
GA Ports Authority	Police Department	-	Ed Westbrook, Training and Exercise Manager	404-624-2265	ed.westbrook@gema.ga.gov
			David Fite, Business Operations Division Manager	404-635-7024	david.fite@gema.ga.gov
GA Ports Authority	Police Department	-	Eric Hampton, Captain	912-963-5576	ehampton@gaports.com

## State Agencies Continued

Agency	Division	Topic	Point of Contact	Phone	Email
Jekyll Island Authority	Georgia Sea Turtle Center	Debris Response Capabilities	Breanna Ondich, Research Specialist	912-635-4137	bondich@jekyllisland.com
			David Steen, Research Ecologist	912-635-4014	dsteen@jekyllisland.com
	Conservation	Debris Response Capabilities	Ben Carswell, Director of Conservation	912-635-9834	bcarswell@jekyllisland.com
		Geographic Information Systems Capabilities	Yank Moore, Conservation Coordinator	912-635-4178	ymore@jekyllisland.com
	Public Services	Debris Response Capabilities	Noel Jenson, Chief Operations Officer	912-635-4091	njensen@jekyllisland.com
	Public Safety	Debris Response Capabilities	Dennis Gailey, Director of Public Safety	912-635-2930	dgailey@jekyllisland.com

## Federal Agencies

Agency	Division	Topic	Point of Contact	Phone	Email
Bureau of Safety and Environmental Enforcement (BSEE)	Marine Trash and Debris Program	Planning and coordination	James Sinclair, Marine Ecologist	504-736-2789	james.sinclair@bsee.gov
Federal Emergency Management Agency (FEMA)	Region IV	Funding following Presidential disaster declaration	Contact local Emergency Management Agency	-	-
		GIS mapping and plotting of imagery	Brandon Bolinski, Region IV GIS Coordinator	770-220-5430	brandon.bolinski@fema.dhs.gov
		Technical expertise for removal operations and environmental, compliance and permitting expertise	Stephanie Madson, Region IV Environmental Officer	404-561-9503	stephanie.madson@fema.dhs.gov
			Saidat Thomas, Public Assistance Branch Chief	770-220-5248	saidat.thomas@fema.dhs.gov
			Eric Thurston, Sr Environmental Protection Specialist	770-220-8817	eric.thurston@fema.dhs.gov
			Chelsea Klein, Sr Environmental Protection Specialist	770-220-5418	chelsea.klein@fema.dhs.gov
			Paul Wilson	770-220-5621	paul.wilson2@fema.dhs.gov



## Federal Agencies Continued

Agency	Division	Topic	Point of Contact	Phone	Email
National Oceanic and Atmospheric Administration (NOAA)	NOAA Fisheries	Emergency EFH Consultation	Pace Wilber	843-460-9926	pace.wilber@noaa.gov
		Emergency ESA Consultation	General Contact	727-824-5312	nmfs.ser.emergency.consult@noaa.gov
	NOS, ORR, Emergency Response Division	Potential to release oil or hazardous material	Bradford Benggio, USCG District 7 Scientific Support Coordinator (SSC)	305-530-7931	bradford.benggio@noaa.gov
	NOS, ORR, Marine Debris Division	Response capabilities and coordination	Sarah Latshaw, Southeast Regional Coordinator, Marine Debris Program	843-740-1154 (O), 843-697-7416 (C)	sarah.latshaw@noaa.gov
	NOS, Office of Coast Survey	Navigation and preparation response	Kyle Ward, Southeast Regional Navigation Manager	301-651-4852 (C) 843-740-1153 (O)	kyle.ward@noaa.gov
	National Weather Service, Jacksonville, FL	Weather and Marine Forecasts, Glynn and Camden Counties	Al Sandrik, Warning Coordinator Meteorologist	904-741-4411 x1	al.sandrik@noaa.gov
National Park Service (NPS)	National Sites	Fort Pulaski National Monument	Melissa Memory, Superintendent	912-786-8182x1107	melissa_memory@nps.gov
		Fort Frederica National Monument	David W. Morgan, Director, Southeast Archeological Center	850-580-8423	david_morgan@nps.gov
			Michael Seibert, Integrated Resource Manager	912-638-3639	michael_seibert@nps.gov
		Cumberland Island National Seashore	John F. Fry, Chief, Resource Management	912-882-4336x262	john_fry@nps.gov
			Gary Ingram, Superintendent	912-882-4336x221	-
	Southeast Region	Ocean Programs	Catherine (Anna) Toline, Marine Scientist - Oceans Program Coordinator	843-518-1939	catherine_toline@nps.gov
Natural Resource Conservation Service (NRCS)	-	Emergency Watershed Protection (EWP) Program Information	Diane Guthrie, State Conservation Engineer	706-546-2310	diane.guthrie@ga.usda.gov

## Federal Agencies Continued

Agency	Division	Topic	Point of Contact	Phone	Email
U.S. Army Corps of Engineers (USACE), Savannah District	Regulatory	Compliance and permitting expertise	Kimberly Garvey, Deputy Chief	912-652-5968	kimberly.l.garvey@usace.army.mil
			William Rutlin, Chief, Coastal Branch	912-652-5893	william.m.rutlin@usace.army.mil
	Navigation	Federally maintained waterway or channel	Jason O'Kane, Chief	912-652-5276	jason.d.okane@usace.army.mil
	Emergency Management	Response capabilities	David Peterson, Chief, Emergency Management Division	912-652-5433	david.h.peterson@usace.army.mil
		-	Emergency Management Division Direct Line	912-652-5431	-
U.S. Coast Guard (USCG)	District 7, Marine Safety Unit Savannah	Potential to release oil or hazardous material	National Response Center (NRC)	1-800-424-8802	-
		-	Main Line	912-652-4353	-
		-	Command Duty Officer	912-247-0073	-
		Response capabilities	James Keith Jones, Preparedness Specialist	912-652-4353x229	james.k.jones@uscg.mil
	District 7, Sector Charleston	-	Command Center	843-724-7600	-
U.S. Environmental Protection Agency (EPA)	Region IV	Potential to release oil or hazardous substance	National Response Center (NRC)	800-424-8802	-
		Planning and coordination	Gary Andrew, RRT IV and ESF 10 Coordinator	678-733-1621	andrew.gary@epa.gov
		Capability contact	EPA Region IV Duty Officer	404-562-8700	-
U.S. Fish and Wildlife Service (USFWS)	National Wildlife Refuges (NWR)	Savannah Coastal Refuges Complex	Kimberly Hayes, Refuge Manager	912-313-1364	kimberly_hayes@fws.gov
		Savannah NWR	Russ Webb, Refuge Manager	912-313-1366	russell_webb@fws.gov
	Ecological Services Program	-	Anthony Sowers, Toxicologist	912-832-8739x3	anthony_sowers@fws.gov
		Compliance, permitting and environmental/species expertise	Donald Imm, Field Supervisor	706-208-7501	donald_imm@fws.gov
			Bill Wikoff, Fish and Wildlife Biologist	912-832-8739x5	bill_wikoff@fws.gov



Wilbur L. Ross, Jr.  
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