



Georgia Marine Debris Emergency Response Guide: Comprehensive Guidance Document

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Georgia Marine Debris Emergency Response Guide

Comprehensive Guidance Document

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List of Acronyms

ACP	Area Contingency Plan
BMP	Best Management Practice
C&D	Construction and Demolition Debris
CBRA	Coastal Barrier Resources Act
CBRS	John H. Chafee Coastal Barrier Resources System
CMPA	Coastal Marshlands Protection Act
CRD	Coastal Resources Division (of DNR)
DCA	Georgia Department of Community Affairs
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
EWP	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 DCA)
LED	Law Enforcement Division (of DNR)
LIDAR	Light Detection and Ranging
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], 2007).

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, 2007).

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, 2007).

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, 2007).

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, 2007).

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], 2020b).

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, 2017). 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, 2019).

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, 2007).

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, 2007).

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, 2007).

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)).

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, 2007).

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 *Federal Region IV Regional Oil and Hazardous Substances Pollution Contingency Plan* (U.S. Environmental Protection Agency [EPA], 1994).

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 – 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 Great Lakes (33 U.S.C. § 1956(3)). For purposes of this document, the term marine debris may also refer to vegetative material that enters a waterway following a natural or anthropogenic incident and poses a threat to the natural or built environment. This also includes shoreline and wetland debris and debris in some inland, non-tidal waterways.

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

Mean higher high water – 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, 2020).

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, 2007).

Obstruction – Anything that restricts, endangers, or interferes with navigation (33 C.F.R. § 64.06).

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, 2007).

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 (33 U.S.C. § 245.5).

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, 2007).

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, 2019).

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, 2007).

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, 2007).

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)).

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, 2007).

1 Introduction

1.1 Purpose

The purpose of this document is to improve preparedness for response and recovery operations following a disaster that generates marine debris Georgia. This document outlines existing response structures at the local, state, and federal levels to facilitate a coordinated, well-managed, and immediate response to marine debris incidents impacting Georgia's coastal areas.

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 marine debris response. Organization jurisdictions are presented in a [map](#) in this document. A dynamic version of the jurisdiction map is also available [online](#) (NOAA, 2021a). The document also includes an overview of permitting and compliance requirements that must be met before marine debris removal work begins. This information is synthesized in a one-page reference [handout](#).

Determining responsibility for marine debris response and removal can be complicated and may involve multiple agencies and overlapping jurisdictions. Additionally, the lead organization may change depending on the type of incident and the debris location. Because all incidents are different, some aspects of marine 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 document 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 marine debris response. The [Field Reference Guide](#) includes an organization contact table and the most pertinent information for quick reference in the field and during emergency response operations.

1.2 Scope of Guide

The *Guide* addresses both natural and anthropogenic marine debris incidents affecting Georgia's coastal areas. 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 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. Therefore, in this document, the term marine debris is used more generally and includes vegetative material and debris that could be exposed to or release oil, hazardous substances, pollutants, or contaminants that enters a waterway following an acute incident and poses a threat to the natural or built environment. This also includes shoreline and wetland debris and debris in some inland, non-tidal waterways. This *Guide* specifically addresses marine debris resulting from episodic incidents, such as disaster debris, and may not apply to chronic marine debris issues.

1.3 Guide Maintenance

Response to marine debris after disasters is complex, and the development of this product benefited greatly from the collaboration, experience, and good will of marine debris response stakeholders in Georgia. The *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) Marine Debris Program in coordination with federal, state, and local stakeholders. Contact information in the [Field Reference Guide](#) will be verified annually, and the *Guide* will undergo a formal review as needed. The *Georgia Marine Debris Emergency Response Guide* and subsequent versions will be posted on the NOAA Marine Debris Program website at <https://marinedebris.noaa.gov/> (NOAA, 2021d).

2 Marine Debris in Georgia

2.1 Foreseeable Marine Debris Incidents in Georgia

Coastal Georgia is vulnerable to both natural and anthropogenic hazards that could generate large amounts of marine 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, 2019b). [Table 1](#) shows the hazards most likely to affect the state ranked by highest risk, as calculated by GEMA/HS and reported in the *Georgia Hazard Mitigation Strategy* (GEMA/HS, 2019b). Risk was determined by combining historical data with assessed vulnerability and potential impact. Each of the top five hazards have the potential to generate a large amount of marine debris.

Table 1. Hazards that pose the highest threat to the state of Georgia, scored and ranked by total risk. Data adapted from GEMA/HS (2019b).

Rank	Hazard	Score	Risk
1	Tornado	34	H
2	Inland Flooding	32	H
3	Hurricane Wind	30	H
4	Severe Weather	28	H
5	Coastal Hazards	27	H
6	Drought	26	M
7	Severe Winter Weather	26	M
8	Wildfire	24	M
9	Wind	17	M
10	Extreme Heat	17	M
11	Dam Failure	17	M
12	Seismic Hazards	10	L
13	Geologic Hazards	6	L

Risk Levels
High = >26
Medium = 16-26
Low = <16

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, 2019a). Since 1953, Georgia has had 70 declared disasters, with 37 of those related to hurricanes, flooding, and other severe tropical storms (FEMA, 2020a). The most recent disaster declaration that produced marine debris within coastal Georgia occurred as the result of Hurricane Irma, a high intensity hurricane that passed through the northern Caribbean Islands before making landfall along the southeastern coast of the United States in September of 2017. While Irma was losing strength as it moved across northeastern Florida, the southeastern coast of Georgia was still experiencing strong winds and flooding (NOAA, 2018b). The combined effect of Irma’s storm surge and tides produced maximum inundation levels of 3 to 5 feet above ground level along the coast of Georgia. [Figure 1](#) shows the analyzed storm surge inundation along the coasts of Florida, Georgia, and South Carolina. Fort Pulaski, Georgia recorded a water level of 4.7 feet above the mean higher high-water mark, only about 4.8 inches lower than the record-breaking levels recorded during Hurricane Matthew in 2016 (NOAA, n.d.).

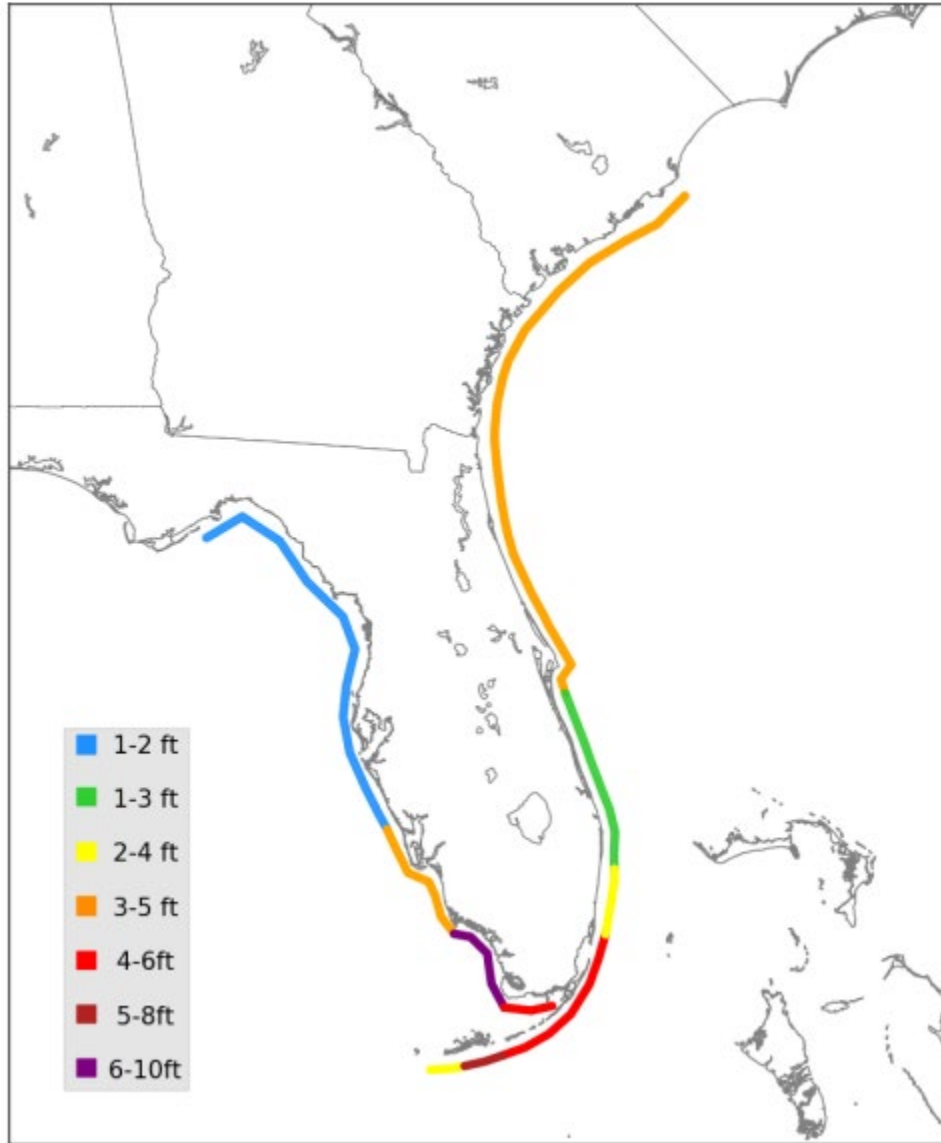


Figure 1. Analyzed storm surge inundation (feet above ground level) along the coasts of Florida, Georgia, and South Carolina from Hurricane Irma. Image retrieved from National Oceanic and Atmospheric Administration (2018b).

Within Georgia’s 11 coastal counties, tropical systems and associated storm surge pose the greatest threats to life and property (GEMA/HS, 2019a). Additionally, these threats can produce significant amounts of marine 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, 2021). 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 marine 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 (2007) 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 marine 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 marine debris released.

Table 2. Typical debris streams generated by natural hazards. Data adapted from Federal Emergency Management Agency (2007).

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

The type and quantity of marine 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 marine debris following a natural hazard event.



Figure 2. Land cover map for the coastal region of Georgia (National Oceanic and Atmospheric Agency, 2018c).

3 Georgia Marine Debris Response Flowchart

The “Georgia Marine 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 marine debris response with color-coded endpoints. Yellow endpoints represent response to marine debris that is exposed to or has the potential to release oil, hazardous substances, pollutants, or contaminants. Blue endpoints represent response to marine debris that is not exposed to and does not have the potential to release oil, hazardous substances, pollutants, or contaminants. The backside of this handout entitled, “Stafford Act Declaration Response” includes the response processes that 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 Waterway Debris Response Flowchart

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

Acronyms

CRD – Coastal Resources Division (of DNR)
 DNR – Georgia Department of Natural Resources
 DoD – U.S. Department of Defense
 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
 USACE – U.S. Army Corps of Engineers
 USCG – U.S. Coast Guard
 USFWS – U.S. Fish and Wildlife Service

Waterway Debris Definition

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.

START →

Is waterway debris in a USACE federally maintained waterway or channel, or immediately adjacent thereto?

Yes No

Is waterway debris on private property?

No Yes

Is waterway debris exposed to or does it have the potential to release oil or hazardous substances?

Yes No

Is waterway debris exposed to or does it have the potential to release oil or hazardous substances?

No Yes

Is waterway debris in federal waters (beyond 3 n. mi.) or on federal lands?

Yes No

Debris in federally maintained waterway (pollution threat)

- Report to NRC 1-800-424-8802
- Removal authorized under NCP. USCG oversees response by Responsible Party. If vessel with no Responsible Party, USCG removes pollution threat (battery, oil) and generally leaves vessel in place. USACE may remove vessel.

Debris in federally maintained waterway

Responsible Party removes debris (or) USACE oversees disposition of debris. If a hazard to navigation, USCG will mark debris or remove in some cases.

Debris on private property

Refer to homeowner insurance policy and check for NRCS EWP eligibility criteria in Section 4.3. After a Stafford Act declaration, FEMA typically does not provide funding unless debris threatens public health and safety and removal is in the public interest.

Pollution threat

- Report to NRC 1-800-424-8802 and State Warning Point 1-800-241-4113
- Response managed at lowest jurisdictional level capable of handling the removal: Local → State → Federal
 - If state-led response, DNR EPD leads response
 - If federal assistance required, USCG or EPA oversees response by Responsible Party. Generally, response led by USCG in coastal zone and by EPA in inland zone.
 - Under NCP, USCG/EPA may respond without a request from local, state, or tribal governments

Debris in federal waters or on federal lands

- Federal lands: Federal lands on Georgia's coast are owned by NPS, USFWS, and DoD who are responsible for debris removal on their lands. These agencies may coordinate with local or state governments to remove debris.
- Federal waters: No federal agency actively removes waterway debris in federal waters unless it is a pollution threat or determined to be a hazard to navigation in a USACE federally maintained waterway or channel.

Debris in Georgia waters or lands no pollution threat

- Submerged tidelands waterward of the ordinary high-water mark are owned by the state and managed by DNR
- DNR CRD is the lead state agency for waterway debris removal in Georgia
- Georgia does not have dedicated funding for the removal or disposal of abandoned or derelict vessels
- Local law enforcement and/or DNR LED may lead investigation to identify Responsible Party for abandoned or derelict vessels
- Non-governmental and private organizations may have volunteer groups able to assist with debris removal

Potential funding during declared disasters

In the event of a Stafford Act or NRCS State Conservationist declared disaster, some costs associated with debris removal from waterways or lands (non federal) may be reimbursed by FEMA or NRCS, if eligible. The response process during Stafford Act major disaster declarations can be found on the back of this handout and in Section 4.3. Information on debris removal funding through the NRCS EWP program can be found in Section 4.3.

Stafford Act Declaration Response

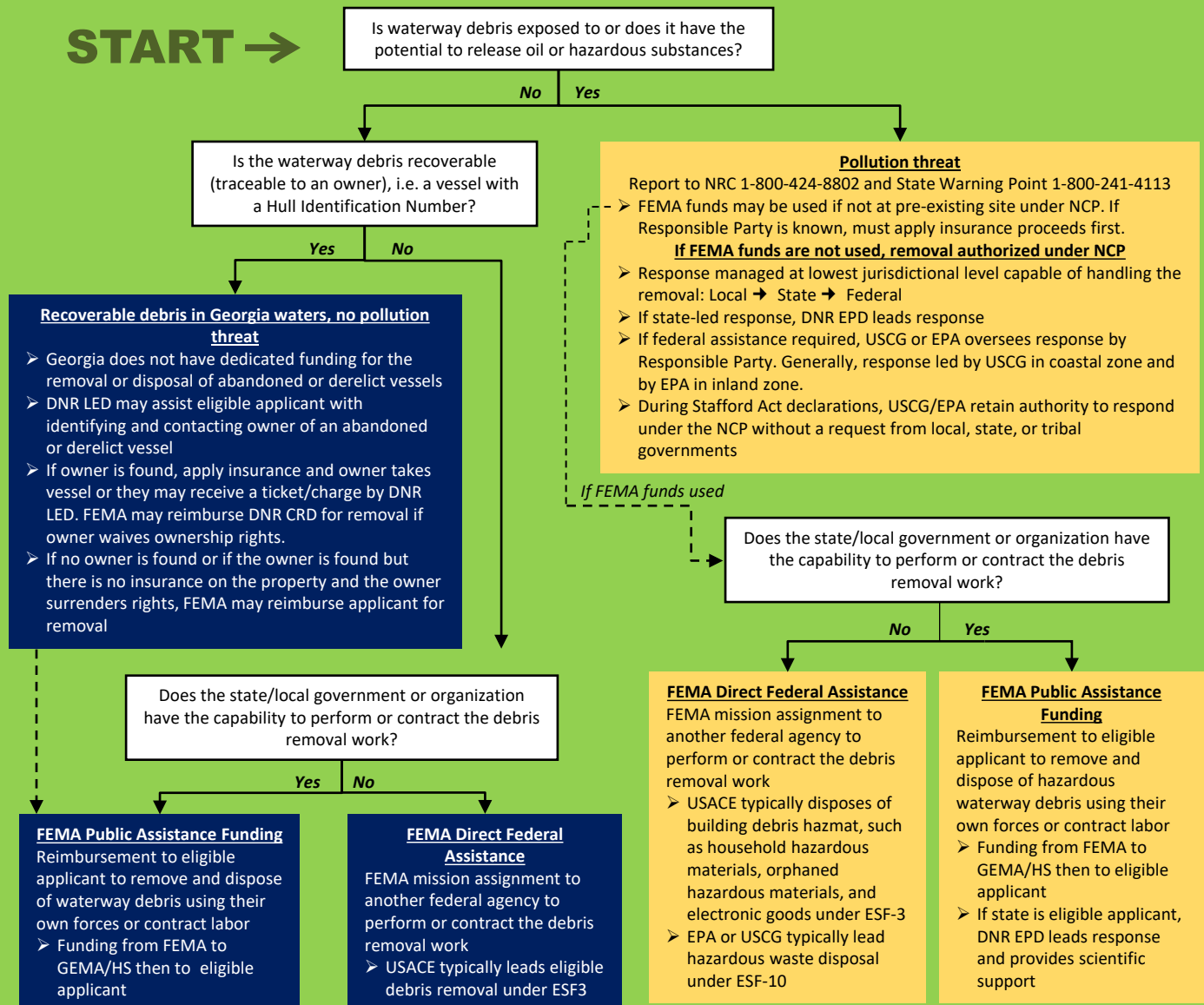
The process outlined in the flowchart below shows the likely response during a major disaster declaration

If waterway debris is located within the designated disaster area and the following criteria are met, proceed at the start arrow below.

Eligibility Determination by FEMA: Made on a case-by-case discretionary basis in coordination with eligible applicant, state, and other federal agencies. Removal **must be necessary** to eliminate the immediate threat to human lives, public health and safety, or improved property.

- Debris in federally maintained navigable channels and waterways is not eligible for FEMA reimbursement
- 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.
- 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 (See FEMA Recovery Policy FP 104-009-2)

START →



- ❖ FEMA provides funding but does not conduct debris removal work
- ❖ FEMA eligible applicants must have legal responsibility to remove the debris and include state and local governments, Indian tribes, and certain non-profits
- ❖ Public assistance cost share is typically 75% FEMA, 12.5% state, 12.5% applicant

4 Roles and Responsibilities

In Georgia, response to a marine debris incident is generally managed at the lowest jurisdictional level capable of handling the response and removal (GEMA/HS, 2017). 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, for coordinating 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 marine debris incident.

Local, state, and federal agency roles and responsibilities as they relate to marine 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 Marine Debris Response Flowchart” in [Section 3](#). For a map defining agency jurisdictional authorities, see [Section 4.6](#). Additionally, response capabilities of each agency and information on agency contacts can be found in Appendices [B](#) and [C](#), respectively.

4.1 Local Agency Responsibilities

- May act as first responders to reports of marine 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, 2017)
 - 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, 2017)
- Encouraged by GEMA/HS to construct pre-event contracts for debris removal operations, including salvage companies, and to generate debris management plans using FEMA guidelines (GEMA/HS, 2017)
- 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, 2017) 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, 2017) and appendices, which includes a complete list of agency roles and responsibilities

Georgia Department of Community Affairs (DCA)

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 Department of Natural Resources (DNR) 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)

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, 2017)
- 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, 2017)
- 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, 2019a)
- Maintains a toll-free 24-hour emergency response line for reporting oil or hazardous material spills.
- 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.)

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 *Georgia Hazard Mitigation Strategy* (GEMA/HS, 2019b) and the *Georgia Emergency Operations Plan* (GEMA/HS, 2017)
- 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, 2017)
- 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 Hazard Mitigation Strategy* (GEMA/HS, 2019b)

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, 2020b)
- 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, 2020b).
- 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, 2020b)
- 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 Program

- 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
- Manages the Environmental Response Management Application (ERMA), a web-based Geographic Information System (GIS) that includes an [online](#) dynamic version of the “Georgia Marine Debris Response Map”

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 marine 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 marine 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
- 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 *Federal Region IV Regional Oil and Hazardous Substances Pollution Contingency Plan* (EPA, 1994). 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 marine debris assessment and cleanup in NWRs
- May coordinate with federal, state, and local partners to remove 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, 2020)

4.4 Private Landowners

- May report marine debris incidents to local emergency management agency or state DNR CRD to begin a coordinated, proper response
- 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, 2020b)

4.5 Volunteer and Non-Governmental Organizations

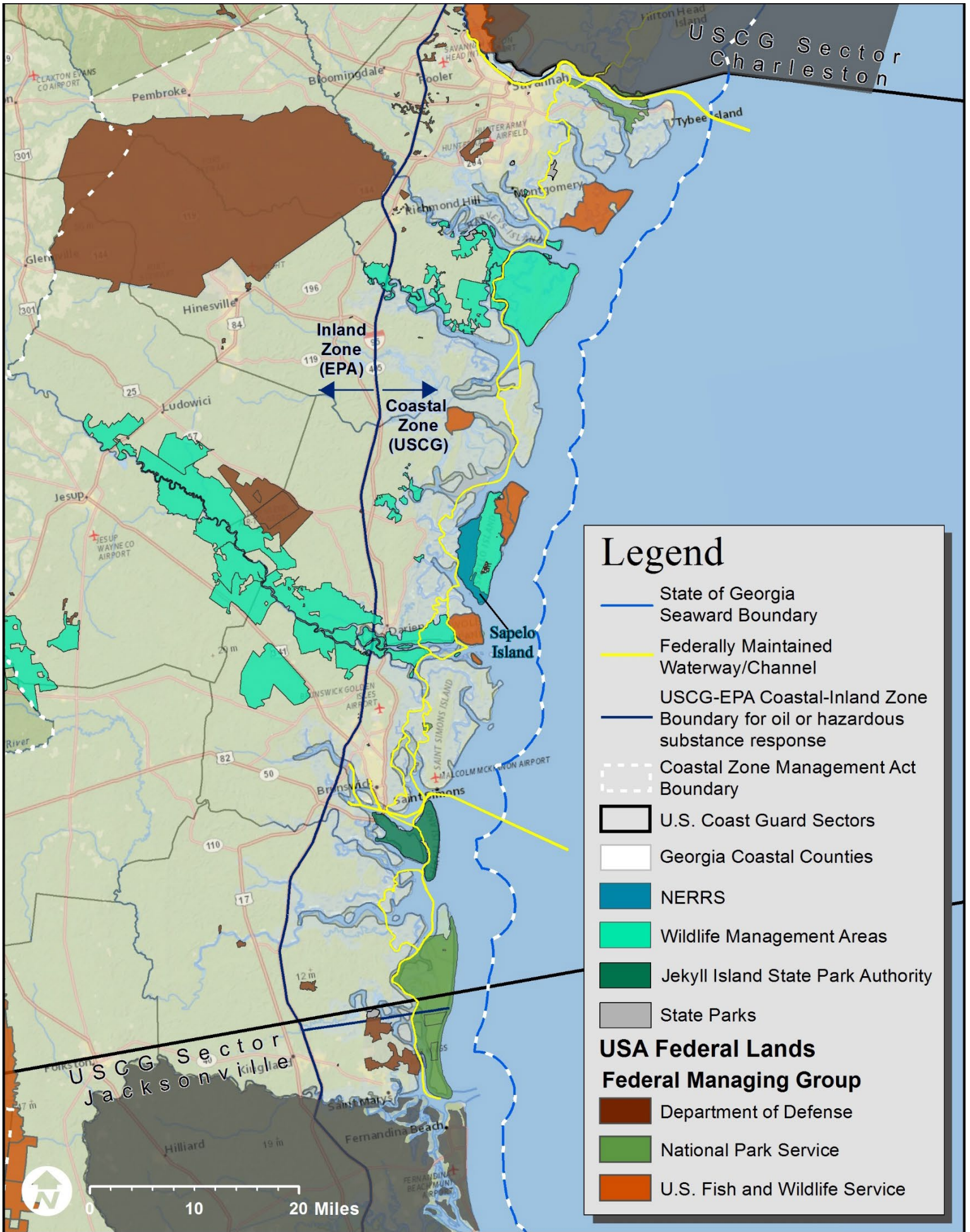
- Certain private nonprofit organizations that serve a public function and have the legal responsibility to remove the debris may serve as an eligible applicant and receive public assistance reimbursement funding from FEMA to perform or contract marine debris removal following a Stafford Act declaration (FEMA, 2020b)
- Volunteers may provide cleanup and debris removal services as outlined in the *Disaster Volunteer Coordination Manual* (GEMA/HS, 2018)
- Non-governmental organizations may provide debris removal assistance or logistical support through funded projects and programs

4.6 Agency Jurisdiction Map

The “Georgia Marine 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. A dynamic version of this map is also available [online](#) through ERMA (NOAA, 2021a).

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 Marine Debris Response Map



5. Permitting and Compliance Requirements in Georgia

Before marine 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 Community Affairs (DCA) Historic Preservation Division (HPD), Georgia Department of Natural Resources (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](#).

5.1 State Agency Requirements

Georgia Department of Community Affairs (DCA)

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 marine 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 DNR 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)

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 marine 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.)

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 marine 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 marine 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 marine 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 marine 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, 2020d). 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], n.d.).
 - 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, 2020b)
 - 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 (2020b).
- Additional information on ESA and EFH consultation during non-emergencies can be found in NOAA (2020a) and NOAA (2020c), 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

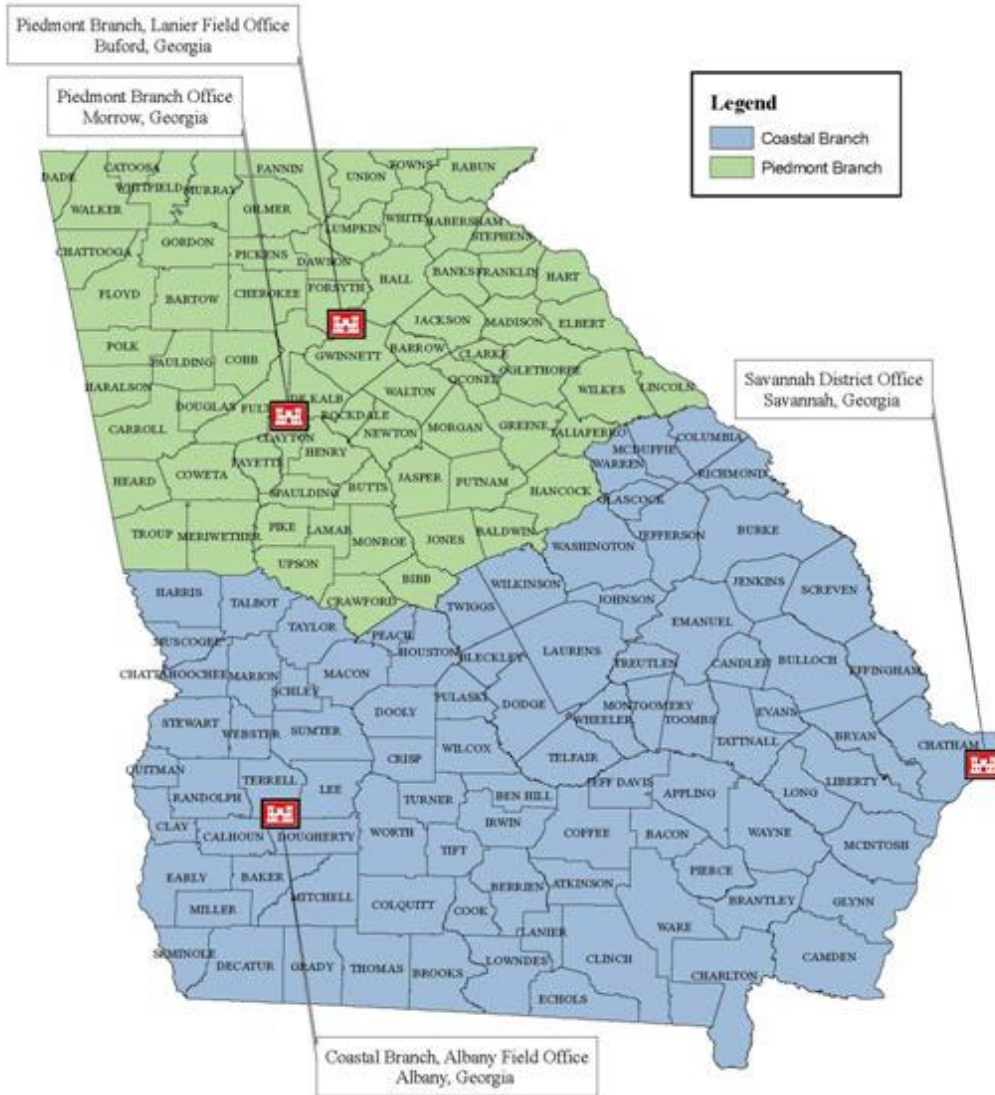


Figure 3. Map of U.S. Army Corps of Engineers (USACE) regulatory program offices. Map retrieved from USACE (n.d.).

U.S. Fish and Wildlife Service (USFWS) Ecological Services Program

- If a marine 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, n.d.). See NOAA Fisheries Southeast Regional Office’s endangered species web page for an up-to-date Georgia ESA-listed marine species list (NOAA, 2020d).

- 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 (2019).
- 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 Marine Debris Removal in Georgia One-Pager

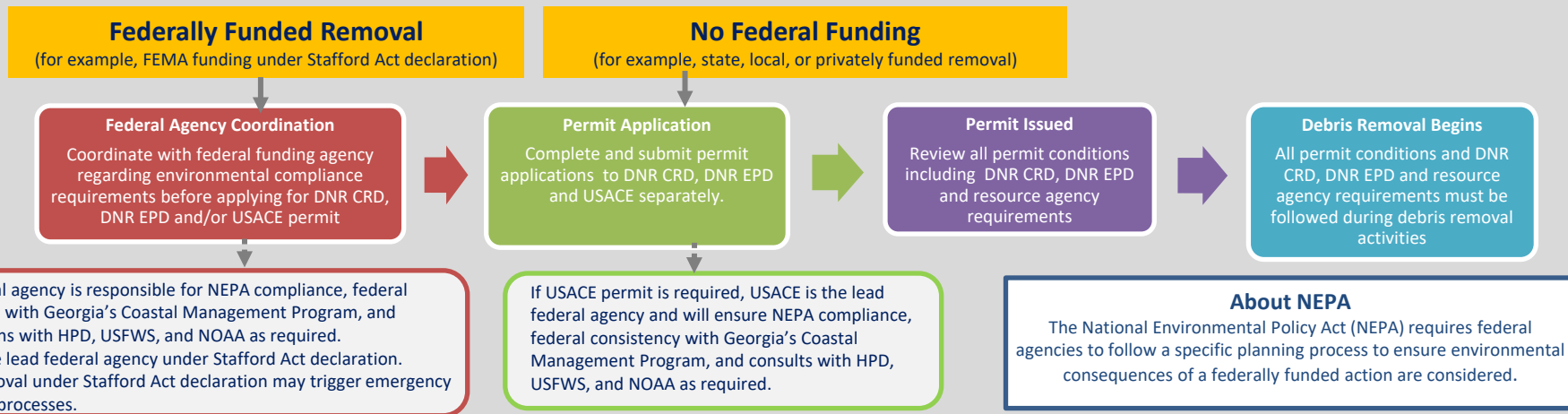
The “Permitting and Compliance for Marine Debris Removal in Georgia” one-pager on the following page synthesizes permitting and compliance requirements that must be met before marine debris removal operations begin. The top portion of the one-pager outlines the process to follow to stay in compliance, 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

- In Georgia, a Georgia Department of Natural Resources (DNR) Coastal Resources Division (CRD) permit, Environmental Protection Division (EPD) permit, and/or a U.S. Army Corps of Engineers (USACE) permit may be required if debris removal involves excavating, dredging, the discharge of fill or dredge material, or involves structures or work impacting navigable waterways or wetlands
- DNR and USACE do not have a joint permit application process. Applicants must apply through both DNR and USACE separately
- The **lead federal agency** is responsible for compliance with National Environmental Policy Act (NEPA), federal coastal consistency, consulting with resource agencies including Georgia Department of Community Affairs (DCA) Historic Preservation Division (HPD), DNR, U.S. Fish and Wildlife Service (USFWS), and the National Oceanic and Atmospheric Administration (NOAA) Fisheries as required

Compliance Process when Permit is Required



Agency Requirements and Legislation Details

<p>U.S. Army Corps of Engineers (USACE)</p> <p>Savannah District Regulatory Program 912-652-5050</p>	<ul style="list-style-type: none"> Permit(s) that may be required for debris removal work within waterways and wetlands: <ul style="list-style-type: none"> 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 	<p>GA Department of Natural Resources (DNR)</p> <p>Coastal Resources Division (CRD) 912-264-7218</p> <p>Environmental Protection Division (EPD) 912-264-7284</p>	<ul style="list-style-type: none"> CRD 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 <ul style="list-style-type: none"> 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 EPD requires a variance for any removal activities that have the potential to disturb soil within the 25-foot buffer along coastal marshlands or streams <ul style="list-style-type: none"> DNR CRD will establish a jurisdictional line from which to measure the buffer distance Applicants must apply for buffer variances separately to DNR EPD, even if a DNR CRD and/or USACE permit is required
<p>National Oceanic and Atmospheric Administration (NOAA)</p> <p>NOAA Fisheries ESA: 727-824-5312 EFH: 727-570-5317</p>	<ul style="list-style-type: none"> Consultation required if waterway debris response involves federal permits and/or funding (USACE permit, FEMA funding, etc.) to comply with: <ul style="list-style-type: none"> 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) 	<p>GA Department of Community Affairs (DCA)</p> <p>Historic Preservation Division (HPD) 770-389-7851</p>	<ul style="list-style-type: none"> Serves as the State Historic Preservation Office (SHPO) and ensures compliance with Section 106 of the National Historic Preservation Act Consultation with 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
<p>U.S. Fish and Wildlife Service (USFWS)</p> <p>Georgia Ecological Services Field Office 912-832-8739</p>	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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 		

6 Marine Debris Response Challenges in Georgia

Marine debris response challenges identified by stakeholders are outlined below, along with associated recommendations. These identified challenges will serve as future points of discussion and action for the Georgia marine 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 Challenges and Recommended Actions in Georgia

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

6.1.1 Removal Logistics

- **Challenge:** Limited resources—including the availability of time, education, communication, and training—hinder response and removal of marine 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 marine 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 the Marine Debris Program [website](#) (NOAA, 2021c)
 - **Action:** Support the integration of this *Guide* into existing exercises, plans, and emergency operations documents
- **Challenge:** There is a lack of exercises that include marine debris response scenarios
 - **Action:** Encourage the state to host marine debris-centric exercises in coordination with state agencies, counties, and municipalities
 - **Action:** Encourage entities hosting local planning meetings or conferences to invite relevant marine debris response agencies and organizations
- **Challenge:** There is a lack of personnel dedicated to marine 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

- **Challenge:** 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
- **Challenge:** 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
- **Challenge:** Historical resources are not always identified before an event occurs
- **Challenge:** Oftentimes, it is difficult to contact or identify the owner or responsible party for recoverable debris items, including abandoned vessels
- **Challenge:** There is a need to make sure that municipal debris removal contracts include debris located in waterways

6.1.2 Policy

- **Challenge:** 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 marine debris response agencies. This includes inter-agency discussions regarding what constitutes an emergency and eligible marine 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 marine debris planning and response
- **Challenge:** Agencies are limited to debris removal within their regulatory authority
 - **Action:** Always include citations for legal references in documents or materials used for marine debris planning and response to highlight applicable authorities
- **Challenge:** 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 marine debris events
 - For information about federal, state, and local roles and responsibilities during a marine debris incident, see [Section 4](#)
- **Challenge:** Local debris management plans do not always include information specific to marine debris response
 - **Action:** Encourage and incentivize counties and municipalities to develop debris management plans that include marine debris response information
- **Challenge:** There is currently no pre-approval process for debris staging areas in Georgia prior to an emergency

6.1.3 Funding

- **Challenge:** Because federal projects are annually funded, removal funds may already be depleted at the time of a marine debris incident
- **Challenge:** 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
- **Challenge:** There is a lack of competition for marine debris removal contractors which increases costs
 - **Action:** Use debris removal data from Hurricane Matthew to adjust contracts for future financial planning
- **Challenge:** 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
- **Challenge:** After a marine 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

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8 Appendices

APPENDIX A

Georgia Legislation Applicable to Marine 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 ¹	National Park Service	NOAA ⁵	NRCS	USFWS	DNR EPD	DNR LED	GDOT	GEMA/HS	Jekyll Island Authority	Savannah City EM	Savannah Riverkeeper
Contract - Contracted capability														
Technology	Aerial photography and video	Contract			Yes				Yes		Contract		Contract	
	Communication radios	Yes		Yes ^{2,4}					Yes	Yes	Yes	Yes	Yes	
	Geographic Information Systems (GIS)	Yes		Yes ^{2,4}	Yes						Yes	Yes	Yes	Contract
	Hazardous materials or unknown substance identification testing	Yes						Yes ¹¹					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 ^{2,4}	Yes ⁶					Yes			Yes	
	Environmental expertise (location of sensitive areas, endangered species present, etc.)	Yes	Yes	Yes ^{2,3}	Cont. ⁴	Yes ⁷	Yes	Yes	Yes	Yes		Yes	Yes	Contract
	GIS mapping and plotting of imagery expertise	Contract	Yes	Yes ^{2,4}	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 ³	Cont. ^{2,4}				Yes	Yes	Yes		Yes	
	Medical emergency response/site safety expertise			Yes ³								Yes		
	National Weather support			Contract ²	Yes						Yes			
	Technical expertise for removal operations (techniques, best management practices, etc.)	Yes	Yes	Contract ²	Yes	Yes		Yes		Yes				Contract
	Volunteer coordinator			Yes ^{2,4}							Yes	Yes		Yes
Volunteer manpower			Yes ^{2,4}								Yes		Yes	

	Yes - In-house Capability	EPA Region IV	FEMA Region IV ¹	National Park Service	NOAA ⁵	NRCS	USFWS	DNR EPD	DNR LED	GDOT	GEMA/HS	Jekyll Island Authority	Savannah City EM	Savannah Riverkeeper
	Contract - Contracted capability													
Equipment	Amateur radio capabilities/interoperability			Contract ²							Yes		Yes	
	Aircraft	Contract			Yes				Yes			Contract		
	Barge/Self-loading barge	Contract												
	Containment boom	Contract		Yes ³									Yes	Contract
	Crane/Knuckleboom crane	Contract											Yes	
	Debris clearance packages (Route clearance manpower teams and/or equipment)			Yes ³						Yes		Yes	Yes	
	Excavator	Contract		Yes ²						Yes		Yes	Yes	
	Hazardous materials response equipment	Contract											Yes	
	Heavy/Earth-moving machinery	Contract								Yes		Yes	Yes	
	Landing craft			Yes ³										Yes
	Portable power generation			Yes ^{2,3}					Yes			Yes	Yes	Contract
	Remotely Operated Vehicle (ROV)				Yes				Yes					
	Sharepoint site/common operating picture			Yes ³	Yes				Yes				Yes	
	Unmanned Aerial Vehicle (UAV)/Surveillance drones				Yes						Yes		Yes	
	Vessels	Contract		Yes ^{2,3}	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 ³					Yes			Contract	Yes	Contract
	Facility suitable for establishing an Emergency Operations Center (EOC)			Yes ^{2,4}							Yes	Yes	Yes	Yes
	Funding for marine debris removal	Yes		Contract ²	Yes ⁸	Yes ⁹								
	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 ²								Yes	Yes	Contract
	Staging/Off-Loading: Pre-designated staging, off-loading and special handling areas (already evaluated for suitability)			Yes ²									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 ¹	National Park Service	NOAA ⁵	NRCS	USFWS	DNR EPD	DNR LED	GDOT	GEMA/HS	Jekyll Island Authority	Savannah City EM	Savannah Riverkeeper
Contract - Contracted capability														
Preparedness	Contract authority and oversight capabilities	Yes		Yes ^{1,2} Cont. ⁴	Yes	Yes ¹⁰				Yes		Yes	Contract	
	Inter-jurisdictional agreements in place			Yes ^{2,3}						Yes			Yes	
	List of pre-approved programmatic agreements between agencies			Yes ³						Yes			Yes	
	List of qualified contractors							Yes ¹²		Yes			Yes	
	Pre-approved marine debris removal contractors													
	Pre-event contracts and staged agreements in place	Yes												Yes

Each organization self-reported capabilities which could be of use during marine 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.

¹FEMA – 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.

²NPS – Ft. Pulaski only

³NPS – Cumberland Island National Seashore only

⁴NPS – Ft. Frederica only

⁵NOAA – Some capabilities require contract support for staffing

⁶NOAA – Dive capabilities do not include sites with oil or hazardous pollutants

⁷NOAA – 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

⁸NOAA – Funding through grant program and possible Congressional supplemental funding

⁹NRCS – Funding for authorized EWP contracts only

¹⁰NRCS – Contract authority for EWP contracts only

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

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

APPENDIX C

Organization Contact Information

Contact information for local governments, state agencies, federal agencies, and nongovernmental organizations can be found in the *Field Reference Guide* on the NOAA Marine Debris Program website at <https://marinedebris.noaa.gov/>. Contact information included in the field guide is verified annually.



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