



Mississippi Marine Debris Emergency Response Guide: Comprehensive Guidance Document

NOAA Marine Debris Program
National Oceanic and Atmospheric Administration
U.S. Department of Commerce
April 2018

Original Publication: February 2017
Revision: February 2018

Table of Contents

| | |
|---|-----------|
| List of Acronyms | 4 |
| Definitions | 6 |
| 1. Introduction | 13 |
| 1.1. Purpose | 13 |
| 1.2. Scope of <i>Guide</i> | 13 |
| 1.3. <i>Guide</i> Maintenance | 14 |
| 2. Incident Waterway Debris in Mississippi..... | 15 |
| 2.1. Foreseeable Waterway Debris Incidents in Mississippi..... | 15 |
| 2.2. Prominent Debris Types..... | 16 |
| 3. Mississippi Incident Waterway Debris Response Flowchart..... | 19 |
| 4. Roles and Responsibilities | 21 |
| 4.1. Local Agency Responsibilities | 21 |
| 4.2. State Agency Responsibilities..... | 22 |
| 4.3. Federal Agency Responsibilities..... | 29 |
| 4.4. Private Landowners | 35 |
| 4.5. Volunteer and Non-Governmental Organizations..... | 35 |
| 4.6. Agency Jurisdiction Map | 35 |
| 5. Permitting and Compliance Requirements in Mississippi | 37 |
| 5.1. State Requirements..... | 37 |
| 5.2. Federal Requirements | 39 |
| 5.3. Permitting and Compliance for Waterway Debris Removal in Mississippi One-Pager | 42 |
| 6. Mississippi Waterway Debris Response Needs..... | 44 |
| 6.1. Response Gaps in Mississippi | 44 |
| 6.1.1. Funding and Resources Gaps..... | 44 |
| 6.1.2. Policy Gaps | 44 |
| 6.1.3. Education and Communication Gaps | 44 |
| 6.2. Recommended Actions..... | 45 |
| 6.2.1. Funding and Resources Actions | 45 |
| 6.2.2. Policy Actions..... | 45 |
| 6.2.3. Education and Communication Actions | 46 |
| 6.2.4. Data and Research Actions | 47 |
| 6.3. Additional Resources | 47 |
| 7. References | 48 |
| 8. Appendices | 52 |
| 8.1. Funding Sources and Support Programs for Waterway Debris Removal | 52 |
| 8.2. Response Capabilities | 55 |
| 8.3. Contact Information | 58 |
| 8.4. Mississippi Legislation Applicable to Waterway Debris Response | 62 |

List of Acronyms

| | |
|--------|---|
| ACP | Area Contingency Plan |
| BMP | Best Management Practice |
| BSEE | Bureau of Safety and Environmental Enforcement |
| CBRA | Coastal Barrier Resources Act |
| CBRS | John H. Chafee Coastal Barrier Resources System |
| C&D | Construction and Demolition Debris |
| CEMP | Comprehensive Emergency Management Plan |
| CERCLA | Comprehensive Environmental Response, Compensation, and Liability Act (Superfund) |
| DRAT | District Response Advisory Team (of USCG) |
| EFH | Essential Fish Habitat |
| EPA | U.S. Environmental Protection Agency |
| ESA | Endangered Species Act |
| ESF | Emergency Support Function |
| ESI | Environmental Sensitivity Index |
| EWP | Emergency Watershed Protection Program (of NRCS) |
| FEMA | Federal Emergency Management Agency |
| FOSC | Federal On-Scene Coordinator |
| GIS | Geographic Information Systems |
| GOMA | Gulf of Mexico Alliance |
| GRP | Geographic Response Plan |
| HHM | Household Hazardous Material |
| HHW | Household Hazardous Waste |
| LIDAR | Light Detection and Ranging |
| MDAH | Mississippi Department of Archives and History |
| MDEQ | Mississippi Department of Environmental Quality |
| MDMR | Mississippi Department of Marine Resources |
| MDWFP | Mississippi Department of Wildlife, Fisheries, and Parks |
| MEMA | Mississippi Emergency Management Agency |
| MSFO | Mississippi Ecological Services Field Office (of USFWS) |
| MSU-ES | Mississippi State University Extension Service |
| NCP | National Oil and Hazardous Substances Pollution Contingency Plan |
| NEPA | National Environmental Policy Act |
| NERR | National Estuarine Research Reserve |
| NMFS | NOAA's National Marine Fisheries Service (of NOAA, also known as NOAA Fisheries) |
| NOAA | National Oceanic and Atmospheric Administration |
| NOS | National Ocean Service (of NOAA) |
| 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 |
| ORR | Office of Response and Restoration (of NOAA) |
| OSC | On-Scene Coordinator |
| RCRA | Resource Conservation and Recovery Act |
| ROV | Remotely Operated Vehicle |

| | |
|---------|---|
| RP | Responsible Party |
| SHPO | State Historic Preservation Office |
| SOSC | State On-Scene Coordinator |
| SUPSALV | U.S. Navy Supervisory of Salvage and Diving |
| USACE | U.S. Army Corps of Engineers |
| USCG | U.S. Coast Guard |
| USFWS | U.S. Fish and Wildlife Service |

Definitions

Acute waterway debris incident – An incident that results in the release of large amounts of waterway debris. This may include natural incidents such as severe storms or anthropogenic incidents such as maritime disasters.

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. An ACP also encompasses the processes for development and management of Geographic Response Plans (GRPs). For Mississippi, this document is the *U.S. Coast Guard Sector Mobile Area Contingency Plan (ACP)* (USCG, 2013).

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

Coastal wetlands – All publicly owned lands subject to the ebb and flow of the tide; which are below the watermark of ordinary high tide; all publicly owned accretions above the watermark of ordinary high tide and all publicly owned submerged water-bottoms below the watermark of ordinary high tide. The term shall be interpreted to include the flora and fauna on the wetlands and in the wetlands (Miss. Code Ann. § 49-27-5(a)).

Coastal zone (ACP coastal zone) – U.S. Coast Guard area of responsibility for response under the National Contingency Plan (NCP), with geographic boundaries defined in the *U.S. Coast Guard Sector Mobile ACP* (USCG, 2013).

Coastal zone (under Mississippi Coastal Management Program) – Mississippi's coastal zone includes Hancock, Harrison, and Jackson counties – the three counties adjacent to the coast – as well as all adjacent coastal waters. Included in this definition are the barrier islands of the coast. The seaward boundary of the coastal zone is the 3 nautical mile territorial sea (National Oceanic and Atmospheric Administration [NOAA], 2012).

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

Derelict vessel – (i) grounded; (ii) allowed to remain in an unseaworthy or dilapidated condition; or (iii) submerged or in immediate danger of sinking. A ship submerged for 100 years or more is not derelict (Miss. Code Ann. § 49-27-71(1)(a)). Any vessel having remained submerged in or on the coastal wetlands in excess of 30 days as provided for in Miss. Code Ann. § 49-27-71(1)(a), as amended. Submerged in or on the coastal wetlands shall include vessels grounded on the coastal wetlands though not completely submerged (Miss. Admin. Code Title 22, Part 14, Chapter 3(101)).

Electronic waste (e-waste) – Electronics that contain hazardous materials, such as computer monitors, televisions, cell phones, and batteries (FEMA, 2016).

Eligible applicant – Entities who may receive Public Assistance reimbursement funding from FEMA under the Stafford Act. Eligible applicants include state and territorial governments, Indian Tribal Governments, local governments, and private nonprofit organizations that serve a public function and have the legal responsibility to remove the debris (FEMA, 2016).

Eligible debris – Debris that is a direct result of a major disaster declared by the President, in the designated disaster area, and whose removal is necessary to eliminate the immediate threat to life, public health and safety, or improved property (FEMA, 2016).

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 (NOAA, n.d.-a).

Emergency (Stafford Act 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 (USACE definition) – For emergency permitting, 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) – A grouping of government and certain private-sector capabilities into an organization structure to provide the support, resources, program implementation, and services that are most likely to be needed to save lives, protect property and the environment, restore essential services and critical infrastructure, and help victims and communities return to normal, when feasible, following domestic incidents. The ESFs serve as the primary operational-level mechanism to provide assistance to state, local, and tribal governments or to federal departments and agencies conducting missions of primary federal responsibility. The state of Mississippi uses the ESF concept to apply state resources and assigns corresponding state agencies to each ESF in the *Mississippi Comprehensive Emergency Management Plan (CEMP)* as prepared by the Mississippi Emergency Management Agency (MEMA; MEMA, 2015).

Environmental Sensitivity Index (ESI) 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 take action in the event of such a spill (USCG, 2013).

Federal On-Scene Coordinator (FOSC or OSC) – The federal official pre-designated by the U.S. Environmental Protection Agency (EPA) or USCG to coordinate responses under subpart D of the NCP, or the government official designated to coordinate and direct removal actions under subpart E of the NCP (MEMA, 2015).

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, 2012a).

Geographic Response Plan (GRP) – Geographic maps which are part of the Area Contingency Plans for oil spills to water. They include response strategies tailored to a specific beach, shore, or waterway and are designed to minimize impacts on sensitive resources threatened by a spill (USCG, 2013).

Hazard to navigation – 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 substance – (A) any substance designated pursuant to section 311(b)(2)(A) of the Federal Water Pollution Control Act, (B) any element, compound, mixture, solution, or substance designated pursuant to section 9602 of this title, (C) any hazardous waste having the characteristics identified under or listed pursuant to section 3001 of the Solid Waste Disposal Act (but not including any waste the regulation of which under the Solid Waste Disposal Act has been suspended by Act of Congress), (D) any toxic pollutant listed under section 307(a) of the Federal Water Pollution Control Act, (E) any hazardous air pollutant listed under section 112 of the Clean Air Act, and (F) any imminently hazardous chemical substance or mixture with respect to which the Administrator has taken action pursuant to section 7 of the Toxic Substances Control Act. The term does not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of this paragraph, and the term does not include natural gas, natural gas liquids, liquefied natural gas, or synthetic gas usable for fuel (or mixtures of natural gas and such synthetic gas; 42 U.S.C. § 9601(14)).

Hazardous waste – Regulated under the Resource Conservation and Recovery Act (RCRA) and contains properties that make it potentially harmful to human health or the environment. A RCRA hazardous waste is a waste that appears on one of the four hazardous waste lists in Title 40 of the Code of Federal Regulations Part 261 or exhibits at least one of the following four characteristics: ignitability, corrosivity, reactivity, or toxicity (FEMA, 2016).

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

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

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

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

Inland zone (ACP inland zone) – EPA area of responsibility for response under the NCP, with geographic boundaries defined in the *U.S. Coast Guard Sector Mobile ACP* (USCG, 2013).

Jurisdiction – A range or sphere of authority. Public agencies have jurisdiction at an incident related to their legal responsibilities and authorities. Jurisdictional authority at an incident can be political or geographical (e.g., city, county, tribal, state, or federal boundary lines) or functional (e.g., law enforcement, public health; MEMA, 2015).

Littoral – Pertaining to property abutting an ocean, sea or lake rather than a river or stream (see [Riparian](#); Miss. Admin. Code Title 1, Part 11, Chapter 2, Rule 2.2(0)).

Major disaster – 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)).

Marine waters or Marine environment – Any waters influenced by the ebb and flow of the tide and includes all rivers, streams, bays, sounds, and waters extending 3 miles south of the barrier islands within the State of Mississippi (Miss. Admin. Code Title 22, Part 10, Chapter 3(108)).

Mean high water – The arithmetic mean of all the high waters occurring in a particular 19 year tidal epoch period; or for a shorter period of time after corrections are applied to the short term observations to reduce these values to the equivalent 19 year value (Miss. Code Ann. § 29-15-1(c)).

Mean high water line – The intersection of the tidal datum plane of mean high water with the shore (Miss. Code Ann. § 29-15-1(d)).

Mission assignment – The vehicle used by FEMA to support federal operations in a Stafford Act major disaster or emergency declaration. It orders immediate, short-term emergency response assistance when an applicable state or local government is overwhelmed by the event and lacks the capability to perform or contract for the necessary work (MEMA, 2015).

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, 2016).

National Response Center (NRC) – A national communications center for activities related to oil and hazardous substance response actions. The NRC, located at U.S. Coast Guard Headquarters in Washington, DC, receives and relays notices of oil and hazardous substances releases to the appropriate FOSC (MEMA, 2015).

Natural waterway – A waterway that is not improved or maintained (FEMA, 2016).

Navigable waters (state definition) – Except as otherwise provided in Section 27-109-1, all rivers, creeks and bayous in this state, 25 miles in length, that have sufficient depth and width of

water for 30 consecutive days in the year for floating a steamboat with carrying capacity of 200 bales of cotton are hereby declared to be navigable waters of this state (Miss. Code Ann. § 51-1-1).

Navigable waterways (federal definition) – Navigable waterways include both those waterways which are federally maintained and those waterways which are not federally maintained. USACE defines navigable waters of the United States as 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, 33 C.F.R. § 2.36). 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, 2012a).

Oil – Oil of any kind or in any form, including, but not limited to, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil (33 U.S.C. § 1321(a)(1)).

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 or contaminant – Includes, but not be limited to, any element, substance, compound, or mixture, including disease-causing agents, which after release into the environment and upon exposure, ingestion, inhalation, or assimilation into any organism, either directly from the environment or indirectly by ingestion through food chains, will or may reasonably be anticipated to cause death, disease, behavioral abnormalities, cancer, genetic mutation, physiological malfunctions (including malfunctions in reproduction) or physical deformations, in such organisms or their offspring; except that the term “pollutant or contaminant” shall not include petroleum, including crude oil or any fraction thereof which is not otherwise specifically listed or designated as a hazardous substance under subparagraphs (A) through (F) of paragraph (14) and shall not include natural gas, liquefied natural gas, or synthetic gas of pipeline quality (or mixtures of natural gas and such synthetic gas; 42 U.S.C. § 9601(33)).

Public waterways – Those portions of all natural flowing streams in this state having a mean annual flow of not less than 100 cubic feet per second, as determined and designated on appropriate maps by the Mississippi Department of Environmental Quality (MDEQ), shall be public waterways of the state on which the citizens of this state and other states shall have the right of free transport in the stream and the right to fish and engage in water sports (Miss. Code Ann. § 51-1-4).

Public trust tidelands – See definition for [Tidelands](#).

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

Putrescible waste (state definition) – Solid wastes which are capable of being decomposed by micro-organisms with sufficient rapidity to cause nuisances from odors or gases (Miss. Admin. Code Title 11, Part 4, Rule 1.1(C)(84)).

Recoverable waterway debris – Generally any documented vessel, vehicle, recreational vehicle, or shipping container traceable to an owner (USACE, 2010).

Riparian – Pertaining to property abutting a river or stream rather than the ocean or sea (see [Littoral](#); Miss. Admin. Code Title 1, Part 11, Chapter 2, Rule 2.2(W)).

Severe marine debris event – 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)).

Shoreline – That area where the water contacts the land including the mainland and all offshore and barrier islands (Miss. Admin. Code Title 22, Part 13, Chapter 3(105)).

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

Stafford Act – The Robert T. Stafford Disaster Relief and Emergency Assistance Act, as amended, 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, 2013).

State Seaward Boundary – The seaward boundary of each original coastal state is approved and confirmed as a line 3 geographical miles distant from its coast line (43 U.S.C. § 1312). The limits and boundaries of the territorial waters of the State of Mississippi shall consist of all territory included within the boundaries described in the act of Congress of March 1, 1817, together with all territory ceded to the State of Mississippi by later acts of Congress or by compacts or agreements with other states, as such territory and boundaries may have been or may be modified by the United States Supreme Court which extends 3 miles of Cat Island, Ship Island, Horn Island and Petit Bois Island off shore to 3 Marine Leagues (Miss. Code Ann. § 3-3-1). Mississippi's seaward boundary is 3 miles south of the barrier islands (Mississippi Secretary of State, 2014).

State waters – See definition for [Waters of this state](#).

Submerged lands – Lands which remain covered by waters, where the tides ebb and flow, at ordinary low tides (Miss. Code Ann. § 29-15-1(g)). The seaward boundary is the state boundary, 3 miles south of the barrier islands (Mississippi Secretary of State, 2014). Tidelands and submerged lands are held by the state in trust for use of all the people (Miss. Code Ann. § 29-15-5(1)).

Tidelands (Public trust tidelands) – Those lands which are daily covered and uncovered by water by the action of the tides, up to the mean line of the ordinary high tides (Miss. Code Ann. § 29-15-1(h)). The inland boundary is the line of mean high tide and the seaward boundary is the state boundary, 3 miles south of the barrier islands (Mississippi Secretary of State, 2014). Tidelands and submerged lands are held by the state in trust for use of all the people (Miss. Code Ann. § 29-15-5(1)).

Vegetative debris – Whole trees, stumps, trunks, branches, limbs, and other leafy material (FEMA, 2016).

Vehicles and Vessels (FEMA definition) – Vehicles and vessels damaged, destroyed, displaced, or lost as a result of a disaster. These vehicles and vessels may eventually be abandoned because of the

damage incurred or because the original owners have relocated. Vehicles and vessels may be classified as debris if they block public access and critical facilities (FEMA, 2016).

Vessel – Means vessels and, for purposes of this section, also includes floatable buildings and structures, whether or not they are used for navigation (Miss. Code Ann. § 49-27-71(1)(b)). Any boat, barge, or other vehicle operating in the marine environment from the largest supertanker to the smallest recreational craft (Miss. Code Ann. § 51-2-3(2); Miss. Admin. Code Title 22, Part 10, Chapter 3(100)). Every description of watercraft, other than seaplane on the water, used or capable of being used as a means of transportation on the water (Miss. Code Ann. § 59-21-3(l)).

Waters of this state (State waters) – Any waters within the territorial limits of this state, and the marginal sea adjacent to this state and the high seas when navigated as a part of a journey or ride to or from the shore of the state; however, "waters of this state" does not mean any private pond or lake which is not used for boat rentals or the charging of fees for fishing therein (Miss. Code Ann. § 59-21-3(m)).

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

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

1. Introduction

1.1 Purpose

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

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

Because all incidents are different, some aspects of waterway debris response are subjective and not solely dependent on prevailing roles and authorities. This is especially true following a major, catastrophic, or unprecedented incident. This 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 *Mississippi Marine Debris Emergency Response Guide: Comprehensive Guidance Document (Guide)* serves as a complete reference for Mississippi incident waterway debris response. The accompanying *Field Reference Guide* only includes the most pertinent information for quick reference in the field and during emergency response operations.

1.2 Scope of Guide

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

1.3 *Guide* Maintenance

The *Mississippi Marine Debris Emergency Response Guide* is a living document subject to change as additional information becomes available and updates are needed. The *Guide* will be maintained by NOAA's Marine Debris Division in coordination with federal, state, and local stakeholders. Contact information will be verified annually, and the *Guide* will undergo a formal review every 3 years. The *Mississippi Marine Debris Emergency Response Guide* and subsequent versions will be posted on NOAA's Marine Debris Division website at <https://marinedebris.noaa.gov/> (NOAA, 2016a).

2. Incident Waterway Debris in Mississippi

2.1 Foreseeable Waterway Debris Incidents in Mississippi

In 2005, Hurricane Katrina was the sixth strongest Atlantic hurricane ever recorded and resulted in 238 deaths in Mississippi. The associated storm surge of over 20 feet caused catastrophic damage to the Mississippi coastline and likely caused most of the associated fatalities in the state (Knabb, Rhome, & Brown, 2011). Figure 1 depicts an estimate of the inland extent of flooding caused by Hurricane Katrina's storm surge. High rainfalls from the storm also led to devastating floods throughout Mississippi. An estimated 390,000 cubic yards of debris was removed from Mississippi's coastal waters following Hurricane Katrina – highlighting the importance of pre-event planning for waterway debris response and removal (FEMA, 2012b).

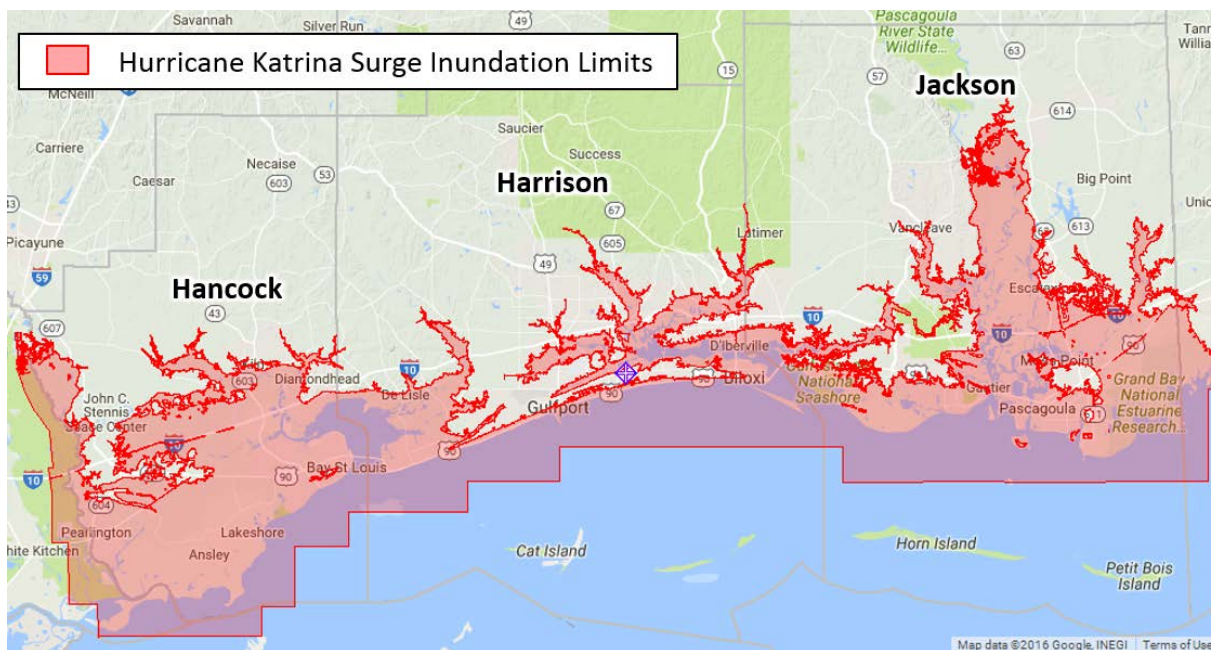


Figure 1. Estimate of the inland extent of flooding caused by Hurricane Katrina's storm surge based on coastal high water marks collected following the storm (FEMA, 2010).

Mississippi is vulnerable to both natural and technological hazards that could generate waterway debris. Because the Mississippi Gulf Coast is a key tourist destination and one of the state's more densely populated areas, disasters along the coast can have long lasting impacts. Table 1 includes an overview of the hazard ranking and risk level for select state-wide hazards that could result in a release of waterway debris. The state has identified tornadoes, dam and levee failures, floods, and tropical cyclones as hazards expected to occur on at least an annual basis (MEMA, 2013). Of Mississippi's 82 counties, the state's three coastal counties – Hancock, Harrison, and Jackson – are the highest risk areas for hurricanes and tropical storms because of storm surge and the initial impact of hurricane force winds (MEMA, 2015). Although maritime disasters are not included in Table 1, they are also a type of anthropogenic hazard that could generate waterway debris. Coastal Mississippi is home to two deepwater ports on the Gulf of Mexico including the Port of Pascagoula – the largest seaport in the state – which moves more than 35 million tons of cargo annually (Mississippi Development Authority, 2015).

Table 1. Overall hazard ranking and risk level description for select hazards that could result in a release of waterway debris in Mississippi (MEMA, 2013).

| Risk Level | Risk Level Description | Hazard (Ranked) |
|------------|--|---|
| High | <ul style="list-style-type: none"> Significant impact on state with high health and safety consequences May cause property to be damaged or destroyed Expected to occur at least annually, but can occur multiple times within a year | <i>Tornado</i> |
| | | <i>Dam/Levee Failure</i> |
| | | <i>Tropical Cyclone (Hurricane/Tropical Storm)</i> |
| | | <i>Flood</i> |
| Moderate | <ul style="list-style-type: none"> Minor health and safety consequences May cause some property injuries and few to no fatalities May cause some property to be damaged or destroyed. Likely at least once within the next 25 years | <i>Severe Weather (thunderstorm/hail/lightning/high wind)</i> |
| | | <i>Extreme Winter Weather</i> |
| Low | <ul style="list-style-type: none"> Minimal health and safety consequences Little to no property damage Occurrence is rare, but still possible and could cause significant damage based upon the magnitude of event | <i>Earthquake</i> |

2.2 Prominent Debris Types

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

- Chemical, Biological, Radiological, and Nuclear-Contaminated
- Construction and Demolition (C&D)
- Electronic Waste (e-waste)
- Hazardous Waste
- Household Hazardous Waste/Material (HHW/HHM)
- 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. While it is difficult to predict the exact mix of waterway debris that will be generated after a disaster, different types of hazard incidents generally result in different debris types. Table 2 includes an overview of typical debris streams for several natural hazards. Although Table 2 only covers natural hazards, man-made hazards such as an accident during waterway commerce are also concerns. Anthropogenic hazards are highly variable in both quantity and type of waterway debris released.

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

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

The type and quantity of waterway debris generated after a disaster is highly dependent on land use and existing infrastructure along Mississippi waterways. For example, protected undeveloped areas along Gulf Islands National Seashore are likely to generate vegetative debris, while developed beachfront casinos in Biloxi are likely to generate C&D debris. A land cover map for Mississippi's three coastal counties is depicted in Figure 2 and illustrates the distribution of land use types along the coast. Increased development in the floodplain will increase the likelihood of waterway debris following a natural hazard event.

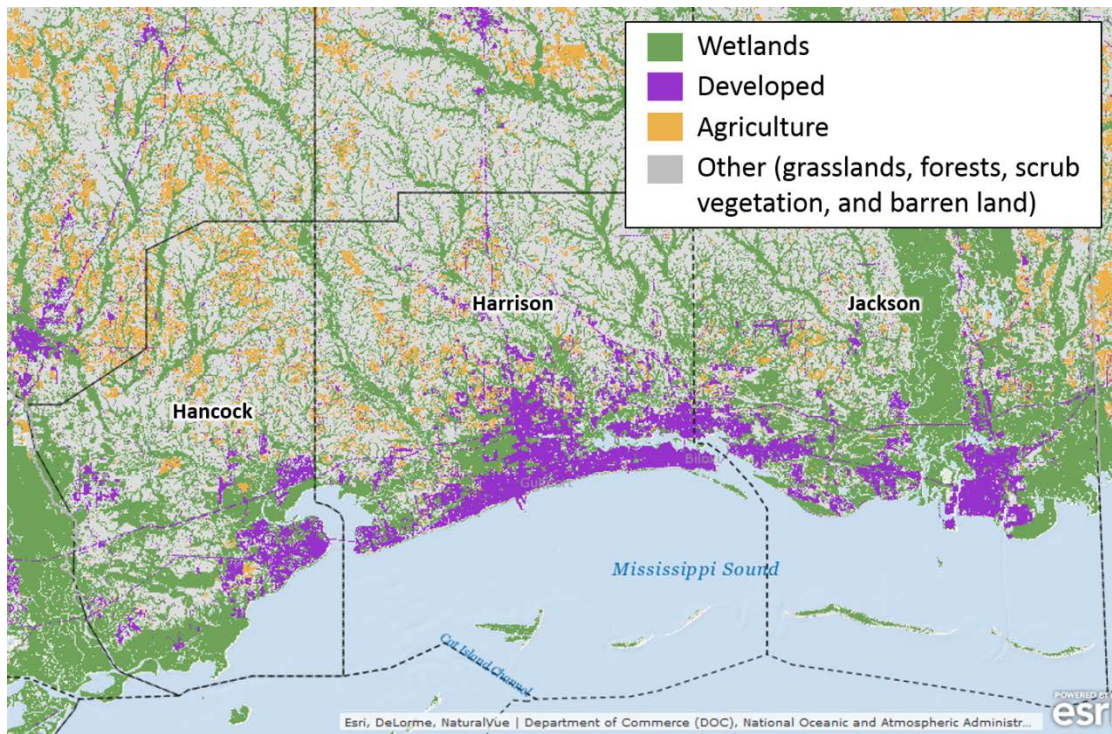


Figure 2. Land cover map for the state of Mississippi's three coastal counties (NOAA, 2016c).

Figure 3 depicts the relative marine debris risk (for storm-generated anthropogenic debris) for the Mississippi Gulf Coast based upon assumed storm wind speed and surge of a Category 3 hurricane, the distribution of on-shore infrastructure likely to generate debris, and the historical likelihood of tropical storm exposure (NOAA, 2013). This NOAA study shows a direct correlation between developed lands and relative marine debris risk; therefore, one can infer that areas with increased development have an increased risk of storm-generated marine debris.

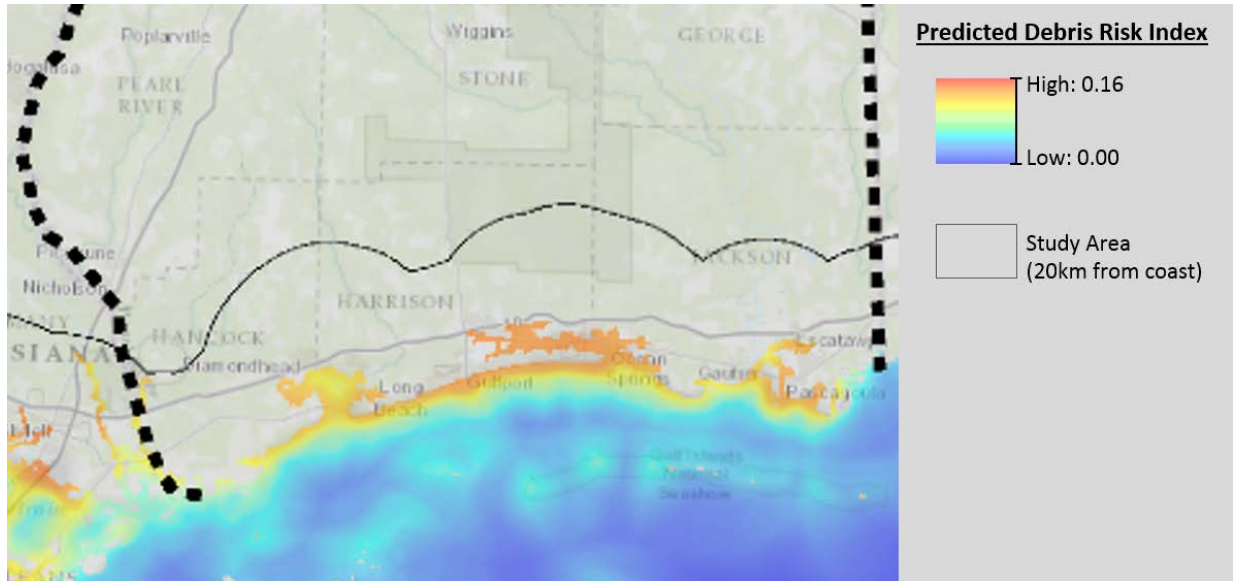


Figure 3. Relative marine debris risk for storm-generated anthropogenic waterway debris on the Mississippi Gulf Coast (NOAA, 2013).

3. Mississippi Incident Waterway Debris Response Flowchart

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

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

Mississippi Incident Waterway Debris Response Flowchart

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

Acronyms

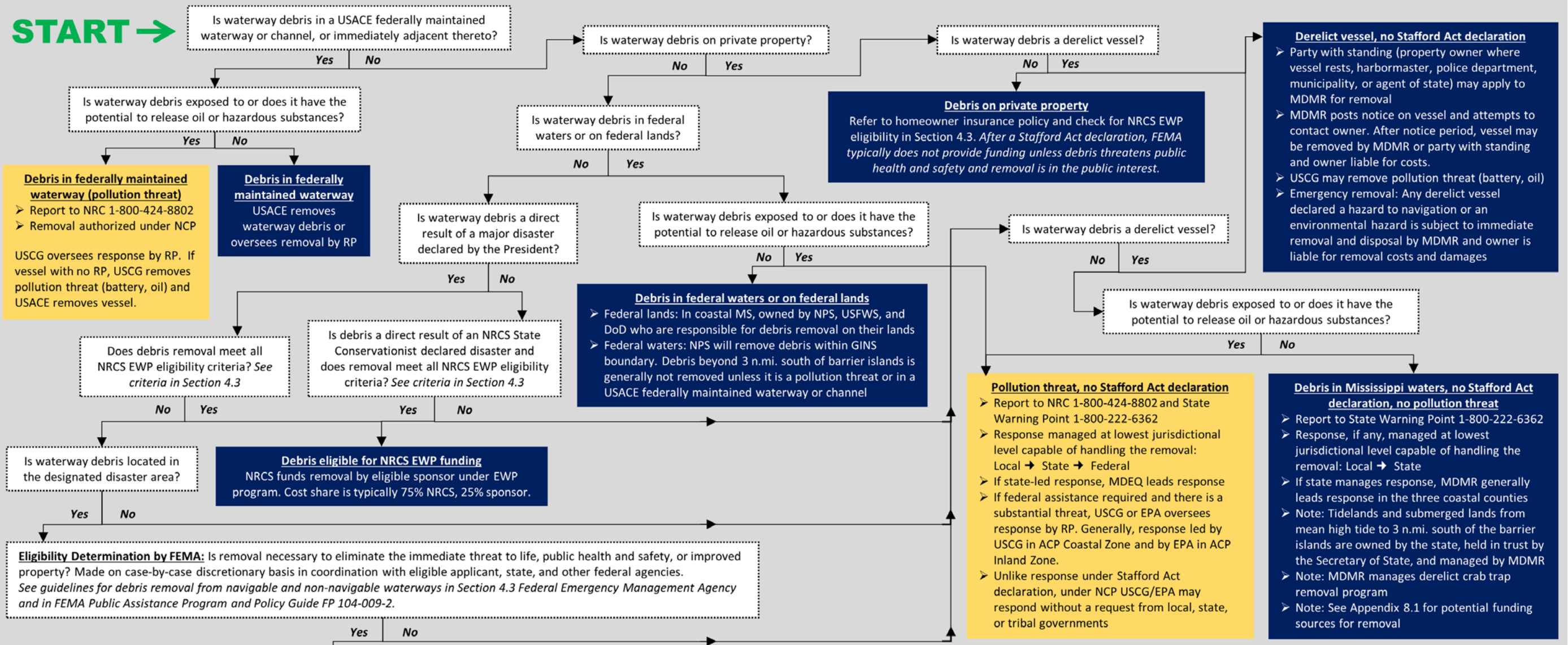
ACP – Area Contingency Plan
DoD – Department of Defense
EPA – U.S. Environmental Protection Agency
ESF – Emergency Support Function
EWP – Emergency Watershed Protection
FEMA – Federal Emergency Management Agency

GINs – Gulf Islands National Seashore
MDEQ – MS Department of Environmental Quality
MDMR – MS Department of Marine Resources
MEMA – MS Emergency Management Agency
NCP – National Oil & Hazardous Substances Contingency Plan
NPS – National Park Service

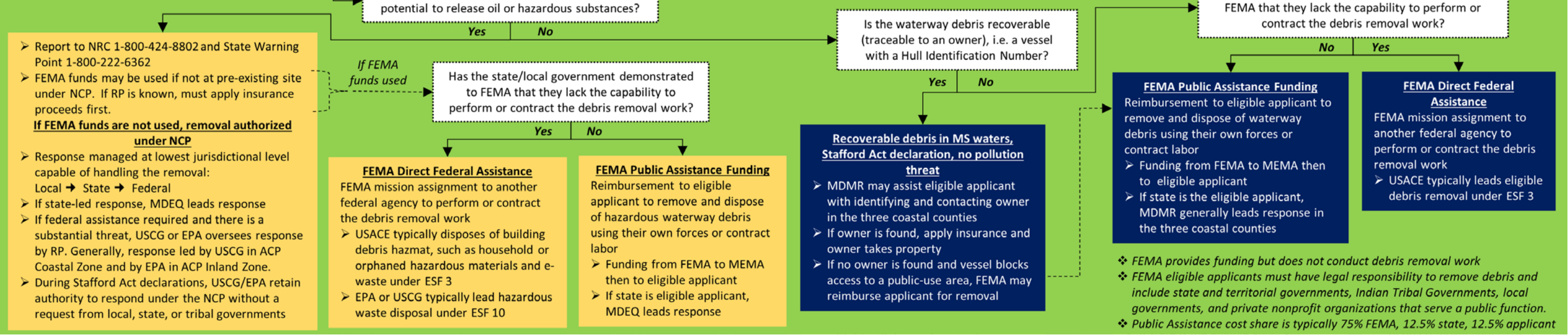
NRC – National Response Center
NRCS – Natural Resources Conservation Service
RP – Responsible Party (Owner, Operator, Lessee)
USACE – U.S. Army Corps of Engineers
USCG – U.S. Coast Guard
USFWS – U.S. Fish and Wildlife Service

Flowchart Key

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



Stafford Act Declaration



4. Roles and Responsibilities

In Mississippi, incidents typically begin and end locally and are managed at the lowest possible geographical and organizational level (MEMA, 2015). Additionally, the state's *Comprehensive Emergency Management Plan* (CEMP) adopts the concept of community-based planning in which all sectors of a community share responsibility to protect life and property (MEMA, 2015). Therefore, response to an acute waterway debris incident is generally managed at the lowest jurisdictional level capable of handling the response and removal. When local resources are exhausted, emergency managers depend on the involvement of multiple jurisdictions for support (MEMA, 2015). 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, Mississippi uses the Emergency Support Function (ESF) concept to apply state resources and assign state agency responsibilities. State ESF 3 Public Works and Engineering to coordinate the removal and disposal of debris from public property and state ESF 10 Oil and Hazardous Materials Response are the two most commonly applied ESFs during response to a waterway debris incident.

Local, state, and federal agency roles and responsibilities as they relate to waterway debris response are outlined in the following sections followed by responsibilities of private landowners and volunteer and non-governmental organizations. For a visual one-page representation of organization roles and responsibilities, see "Mississippi Incident Waterway Debris Response Flowchart" in [Section 3](#). For a map defining agency jurisdictional authorities, see [Section 4.6](#). Potential funding sources for debris removal are listed in [Appendix 8.1](#) for instances when either there is no clear party responsible for removal or when there is a lack of removal funding. Additionally, response capabilities of relevant organizations and corresponding contact information can be found in [Appendix 8.2](#) and [8.3](#), respectively.

4.1 Local Agency Responsibilities

- Acts as first responders to waterway debris incidents impacting Hancock, Harrison, and Jackson counties and their municipalities. Local government fire departments generally provide first response to oil and hazardous material incidents (MEMA, 2015).
- May proclaim a local emergency, employ their own resources, establish a local emergency operations center, implement the State Mutual Aid Compact and/or mutual aid agreements, and designate capable personnel to make requests to MEMA for additional resources if necessary. Municipalities must coordinate requests for state and federal emergency response assistance through the county emergency management agency (MEMA, 2015).
- Counties develop emergency management plans and programs consistent with Mississippi's CEMP and develop and maintain hazard mitigation plans that are reviewed by MEMA and approved by the FEMA.
- Develops and implements comprehensive local solid waste management plans which are updated at least every 5 years and includes provisions for management and disposal of disaster-related debris. Generally, county governments take the lead in developing these plans (MDEQ, 2012).
- Following a Stafford Act declaration, may serve as eligible applicant and receive Public Assistance reimbursement funding from FEMA to perform or contract waterway debris removal
 - County emergency management agency offices serve as the beginning point for contact with MEMA

- As applicant, responsible for identifying debris locations, types, and quantities; determining ownership of recoverable waterway debris; providing a staging area for temporary storage of recoverable waterway debris; and demonstrating the pre-disaster condition and capacity of waterways (FEMA, 2016)
- Under state ESF 3, responsible for obtaining properly executed right-of-entry agreements for debris removal from private property (MEMA, 2015)
- 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.
- May submit an emergency approval request to MDEQ for authorization to establish and operate a temporary emergency debris management site after a disaster (MDEQ, 2015b). For additional information on permitting and compliance requirements, see [Section 5](#).
- May initiate notice process for derelict vessel removal by filing an application with Mississippi Department of Marine Resources (MDMR) to remove the vessel. Vessel may be removed after 7 day notice period has expired (Miss. Code Ann. § 49-27-71).
 - Municipalities and counties may contract directly for the removal of derelict vessels in coordination with MDMR to determine permitting requirements prior to removal
 - A municipality or board of supervisors where the derelict vessel is located may request that the vessel be removed by MDMR (Miss. Admin. Code Title 22, Part 14, Chapter 3(102))

Select Local Authorities:

- Derelict vessel defined; jurisdiction; standing; notice; derelict vessel removal; emergency removal; cost recovery; court process; department authorities, Miss. Code Ann. § 49-27-71
- Mississippi Air and Water Pollution Control Law, Miss. Code Ann. § 49-17-1 et seq.
- *Mississippi Comprehensive Emergency Management Plan* (MEMA, 2015), which includes a complete list of references and authorities
- Mississippi Emergency Management Law, Miss. Code Ann. § 33-15-1 et seq.
 - Local organization of emergency management, Miss. Code Ann. § 33-15-17
- Solid Wastes Disposal Law of 1974, Miss. Code Ann. § 17-17-1 et seq.
- Restoration of sand beaches; leasing for development of port and related industrial facilities, Miss. Code Ann. § 59-9-21
- Rules and Regulations to Implement the Derelict Vessel Act in the State of Mississippi, Miss. Admin. Code Title 22, Part 14

4.2 State Agency Responsibilities

Select State Authorities:

- *Mississippi Comprehensive Emergency Management Plan* (MEMA, 2015), which includes a complete list of references and authorities

Mississippi Board of Animal Health

- Coordinates the Mississippi Animal Response Team to support disasters involving animals and agriculture (Mississippi Board of Animal Health, 2008)
- Identifies potential animal carcass disposal sites and methods of collection and disposal (MEMA, 2015)

Mississippi Commission for Volunteer Service

- Coordinates volunteer efforts and donations management during emergencies (MEMA, 2015)
- Activates Volunteer Response Centers which register and deploy volunteers and provide donation drop-off points

Mississippi Department of Archives and History (MDAH)

Historic Preservation Division

- Administers duties of the State Historic Preservation Office (SHPO) and ensures compliance with the National Historic Preservation Act and Antiquities Law of Mississippi
- Reviews proposed federally funded or permitted debris removal activities for impacts to cultural resources
- Reviews public construction and improvement projects and the transfer of public property to determine if potential Mississippi landmarks will be affected or if significant sites, buildings, or structures on nonpublic lands will be affected
- For additional information on MDAH compliance requirements, see [Section 5](#).

Select Historic Preservation Division Authorities:

- Antiquities Law of Mississippi, Miss. Code Ann. § 39-7-1 et seq.
- National Historic Preservation Act, 16 U.S.C § 470 et seq.

Mississippi Department of Environmental Quality (MDEQ)

- Serves as ESF coordinator and primary agency under state ESF 10 Oil and Hazardous Material Response and as support agency under state ESF 3 Public Works and Engineering (MEMA, 2015)
- Appointed by the Governor to serve as the state natural resource trustee responsible for natural resources impacted by an oil spill or hazardous substance release (MDEQ, 2007a)

Office of Pollution Control

Emergency Services Division

- Lead state agency during response to waterway debris that is exposed to oil, hazardous substances, or any pollutant that poses a threat or potential threat to human health and safety or the environment (MDEQ, 2007a)
- Serves as State On-Scene Coordinator (SOSC) under state ESF 10 responsible for coordinating and providing technical assistance for containment, operations, clean-up, and contractor support while assessing environmental and human health risks and suggesting approaches to minimize impacts (MDEQ, 2015c; MEMA, 2015)
- Coordinates with MEMA to provide 24-hour statewide on-site response and technical assistance for safety and environmental emergencies (MDEQ, 2015a)
- Assists MEMA and other state, local, or federal agencies in preparations and cleanup associated with natural disasters including decontamination and substance removal guidance and assistance (MDEQ, 2007a; MEMA, 2015)
- Provides state support to local governments in response to an actual or potential release of hazardous material following catastrophic disasters, transportation incidents, or other major events (MEMA, 2015)
- Maintains list of 24-hour emergency response contractors with oil or hazardous material expertise
- Provides training and technical support to cities, counties, tribes, and other state agencies in responding to hazardous emergencies and natural disasters (MDEQ, 2015c)

Environmental Permits Division, Water Quality Certification Branch

- Reviews and evaluates USACE permit applications for impacts to wetlands, streams, and open waters (MDEQ, 2007c)
- For additional information on MDEQ compliance requirements, see [Section 5](#).

Field Services Division, South Regional Office

- Investigates fish kills, spills, and accidents involving oil or hazardous materials
- Coordinates with state civil defense on national disasters and other emergency services during incidents involving substances dangerous to lives and property (MDEQ, 2007b)
- Provides investigative, logistical, and limited analytical support for the major MDEQ regulatory programs in southern Mississippi (MDEQ, 2007b)

Waste Division

- After a disaster, develops and issues emergency debris removal, management, and disposal guidance (MEMA, 2015)
- Authorizes the siting and operation of temporary emergency debris management sites by agencies and organizations that manage disaster debris for staging or chipping vegetative debris or for the temporary storage of debris (MDEQ, 2015b)
- Assists with identification of permitted non-hazardous disposal sites under state ESF 3 (MEMA, 2015)
- May deploy debris assistance specialists to impacted areas to assist local governments in planning and meeting disaster debris management needs (MDEQ, 2015a)
- Reviews and approves comprehensive local solid waste management plans which include provisions and plans for the management and disposal of disaster-related debris (MDEQ, 2012)
- For additional information on MDEQ compliance requirements, see [Section 5](#).

Select MDEQ Authorities:

- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 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.
 - Certification (Section 401), 33 U.S.C. § 1341
 - Permits for dredged or fill material (Section 404), 33 U.S.C. § 1344
- Mississippi Air and Water Pollution Control Law, Miss. Code Ann. § 49-17-1 et seq.
- National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. § 300
- Solid Wastes Disposal Law of 1974, Miss. Code Ann. § 17-17-1 et seq.

Mississippi Department of Marine Resources (MDMR)

- Tidelands and submerged lands from mean high tide to 3 nautical miles south of the barrier islands are owned by the state, held in trust by the Secretary of State, and managed by MDMR (Mississippi Secretary of State, 2014)
 - Manages all marine life, public trust wetlands, adjacent uplands, and waterfront areas known as the Mississippi coastal zone (MDMR, 2013)
 - Serves as the primary state agency to coordinate channel maintenance activities along the Mississippi Gulf Coast
- Serves as support agency under state ESF 3 Public Works and Engineering and ESF 10 Oil and Hazardous Material Response (MEMA, 2015)

- May identify and locate debris and serves as lead to assess damage to coastal preserves, public trust tidelands, beaches, ports, and harbors
- Assists in evaluating the extent of environmental damage to areas outside of coastal preserves and public trust tidelands
- Streamlines permit procedures for disaster-related coastal restoration activities
- Following a Stafford Act declaration, may serve as eligible applicant and receive Public Assistance reimbursement funding from FEMA to perform or contract waterway debris removal in the three coastal counties
 - As applicant, responsible for determining ownership of recoverable waterway debris, providing a staging area for temporary storage of recoverable waterway debris, and demonstrating the pre-disaster condition and capacity of waterways
 - Responsible for obtaining properly executed right-of-entry agreements for debris removal from private property

Office of Coastal Resources Management

- Implements the Mississippi Coastal Zone Management Program

Coastal Preserves Bureau

- Manages state-owned coastal preserves in cooperation with other applicable state and federal agencies (MDMR, 2013)
- Conducts waterway debris assessment and coordinates debris removal, when necessary, from Mississippi's coastal preserves

Wetlands Permitting Bureau

- Manages the coastal wetland permitting process in Mississippi's coastal zone, which includes Hancock, Harrison, and Jackson counties
- Ensures compliance with appropriate state and federal laws and regulations (MDMR, 2013)
- For additional information on MDMR permitting and compliance requirements, see [Section 5](#).

Office of Finance and Administration

Derelict Vessel Program

- May contract for the removal of vessels in the three coastal counties and maintains a list of removal contractors
- As funds are available, manages the derelict vessel program in Hancock, Harrison, and Jackson counties to remove and dispose of derelict vessels per Miss. Code Ann. § 49-27-71
 - Party with standing (property owner where vessel rests, harbormaster, police department, municipality, or agent of the state) may apply to MDMR for removal
 - MDMR posts notice on vessel requiring the vessel be removed within 7 days of the notice and attempts to contact owner. If vessel owner responds requesting a time extension, the owner has five additional days to remove the vessel.
 - After notice period the vessel is considered derelict and MDMR or party with standing may remove vessel and owner is liable for removal costs.
 - Prior to removal, MDMR or party with standing must consult with Mississippi Department of Wildlife, Fisheries and Parks (MDWFP) regarding vessel status and must also request a wetlands permit from MDMR for removal.
 - Any value retrieved from the sale or disposal of the vessel offsets the costs of removal and storage attributed to the original owner

- Any derelict vessel declared a hazard to navigation or an environmental hazard is subject to immediate removal and disposal by MDMR and owner is liable for removal costs and damages

Grand Bay National Estuarine Research Reserve (NERR)

- Manages reserve property in cooperation with partner agencies and organizations (MDMR, 2013)
- Conducts waterway debris assessment and coordinates debris removal, when necessary, from within the reserve boundaries

Tidelands Program

- Administers the Tidelands Trust Fund application process whereby funds from the lease of tidelands and submerged lands are disbursed for new and extra programs of tidelands management, such as conservation, reclamation, preservation, acquisition, education, or the enhancement of public access (Miss. Code Ann. § 29-15-9)

Office of Marine Fisheries

- Manages marine fisheries and supporting habitat in Mississippi's coastal waters and provides input on habitat restoration and conservation activities (MDMR, 2013)

Artificial Reef Bureau

- Monitors and increases essential fish habitat through artificial reef development in Mississippi coastal waters and adjacent federal waters (MDMR, 2013)
 - Derelict steel hull vessels have been used as artificial reef material
 - Artificial reef permit holders are required to conduct monitoring surveys immediately following major storms (MDMR, 1999)
- Employs side scan sonar technology to assist local, state, and federal entities in identifying hazards to navigation and to assist other MDMR programs with derelict vessel removal activities, derelict crab trap activities, and marine patrol recovery efforts (MDMR, 2013)

Shrimp and Crab Bureau

- Manages monofilament recycling program and Mississippi Derelict Crab Trap Removal Program to locate and recycle derelict traps in coordination with commercial fishermen and volunteers (MDMR, 2013)
- Ensures compliance with Endangered Species Act (ESA) for listed marine species (MDMR, 2013)

Office of Marine Patrol

- Enforces state and federal laws and the ordinances of the Commission on Marine Resources in the three coastal counties (MDMR, 2013)
- Conducts emergency response and search and rescue operations in marine waters and adjacent counties
- Maintains dive and recovery team
- Provides 24-hour radio dispatch and mechanism for reporting marine emergencies. See [Appendix 8.3](#) for contact information.

Select MDMR Authorities:

- Assumption of duties and responsibilities of Boat and Water Safety Commission, Miss. Code Ann. § 59-21-111 et seq.

- Channel Maintenance Act, Miss. Code Ann. § 49-26-1 et seq.
- Coastal Wetlands Protection Act, Miss. Code Ann. § 49-27-1 et seq.
 - Derelict vessel defined; jurisdiction; standing; notice; derelict vessel removal; emergency removal; cost recovery; court process; department authorities, Miss. Code Ann. § 49-27-71
- Coastal Zone Management Act of 1972, 16 U.S.C § 1451 et seq.
- Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. § 1801 et seq.
- Marine Resources Law, Miss. Code Ann. § 57-15-1 et seq.
- Mississippi Marine Litter Act, Miss. Code Ann. § 51-2-1 et seq.
- Public Trust Tidelands, Miss. Code Ann. § 29-15-1 et seq.
- Rules and Regulations for Boat and Water Safety on Marine Waters of the State of Mississippi, Miss. Admin. Code Title 22, Part 16
- Rules and Regulations to Implement the Derelict Vessel Act in the State of Mississippi, Miss. Admin. Code Title 22, Part 14
- Rules and Regulations to Prohibit the Disposal of Plastics and Other Garbage in Marine Waters of the State of Mississippi, Miss. Admin. Code Title 22, Part 10
- Submerged Lands Act, 43 U.S.C § 1301 et seq.

Mississippi Department of Transportation

- Serves as support agency under state ESF 3 Public Works and Engineering and ESF 10 Oil and Hazardous Material Response (MEMA, 2015)

Mississippi Department of Wildlife, Fisheries and Parks (MDWFP)

- Coordinates debris removal from all state parks, Wildlife Management Areas, and recreational facilities
- Serves as support agency under state ESF 3 Public Works and Engineering and ESF 10 Oil and Hazardous Material Response (MEMA, 2015)
- Provides available equipment for oil and hazardous materials events (MEMA, 2015)
- Provides emergency response to natural disasters such as hurricanes, tornados, and floods and assists other agencies in ensuring public safety (MDWFP, n.d.-a)
- Responsible for vessel registration statewide and for enforcement of boating rules and regulations except on marine waters under MDMR jurisdiction
- Serves on the MDEQ permit board and comments on construction and development activities which may affect the state's native species and their habitats (MDWFP, n.d.-b)

Select MDWFP Authorities:

- Mississippi Boating Law of 1960, Miss. Code Ann. § 59-21-1 et seq.
 - Assumption of duties and responsibilities of Boat and Water Safety Commission, Miss. Code Ann. § 59-21-111 et seq.

Mississippi Emergency Management Agency (MEMA)

- 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 Emergency Operations Center when an emergency or disaster situation develops within the state
- Initiates and coordinates debris removal process after a disaster as ESF 3 Public Works and Engineering coordinator and primary agency (MEMA, 2015)

- Authorized to request other state agencies complete tasks as appropriate for effective emergency management (MEMA, 2015)
- 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
- Operates the 24-hour State Warning Point as a statewide system of communications and warning. Acute waterway debris incidents and spills of any pollutant should be reported to State Warning Point to begin a coordinated response. See [Appendix 8.3](#) for contact information.
- Prepares, implements, and exercises the state CEMP and assists counties in preparing and maintaining local CEMPs (MEMA, 2015)
- Maintains the *Mississippi State Hazard Mitigation Plan* (MEMA, 2013)

Select MEMA Authorities:

- Mississippi Emergency Management Law, Miss. Code Ann. § 33-15-1 et seq.
- Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C § 5121 et seq.

Mississippi Forestry Commission

- Serves as support agency under state ESF 3 Public Works and Engineering and provides qualified personnel and equipment for debris clearance on state owned lands as necessary (MEMA, 2015)

Mississippi Ports

- Four water ports on the Mississippi Gulf Coast include the ports of Bienville, Gulfport, Biloxi, and Pascagoula
- 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

Mississippi Secretary of State's Office

- Trustee of tidelands and submerged lands which extend from mean high tide to 3 nautical miles south of the barrier islands and are owned by the state in trust for the public (Mississippi Secretary of State, 2014)
- Prepares a preliminary map of public trust tidelands in cooperation with other state agencies
- Issues boundary certificates to clarify boundary between public trust tidelands and privately owned lands as either the current mean high water line, the toe of a seawall, not subject to public trust tidelands, or other
- Issues tidelands leases to individuals who occupy public trust tidelands and whose activities are not eligible for a lease exemption such as activities for commercial and industrial use
 - Revenues from the lease of tidelands and submerged lands are deposited in the Tidelands Trust Fund
 - Mississippi Secretary of State administers the Tidelands Trust Fund and disburses funds to MDMR

Select Mississippi Secretary of State Authorities:

- Coastal Wetlands Protection Act, Miss. Code Ann. § 49-27-1 et seq.
- Leasing or renting of surface and submerged lands, Miss. Code Ann. § 29-1-107
- Public Trust Tidelands Act, Miss. Code Ann. § 29-15-1 et seq.
- Submerged Lands Act, 43 U.S.C § 1301 et seq.

4.3 Federal Agency Responsibilities

Animal, Plant and 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, Plant and 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 (BSEE)

- Manages a Marine Trash and Debris Program to eliminate debris associated with oil and gas operations on the 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

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 natural waterways during Presidential major disaster declarations when another federal agency does not have authority to fund the activity (FEMA, 2016)
 - Provides funding to eligible applicants at a typical cost share of 75 percent FEMA, 12.5 percent state, and 12.5 percent eligible applicant
 - Issues mission assignments to other federal agencies for technical assistance, federal operations support, or to perform or contract debris removal when local and state capabilities are exceeded
- Makes eligibility determinations for debris removal on a case-by-case discretionary basis in coordination with the eligible applicant, state, and other federal agencies
 - Debris removal must be necessary to eliminate the immediate threat to life, public health and safety, or improved property (FEMA, 2016)
 - For navigable waterways, debris removal is limited to a maximum depth of 2 feet below the low tide draft of the largest vessel that used the waterway prior to the incident. Any debris below this zone is not eligible unless it is necessary in order to remove debris extending upward into an eligible zone (FEMA, 2016).
 - For non-navigable waterways, including natural waterways, debris removal is only eligible to the extent that it is necessary to eliminate an immediate threat including the following: if the debris obstructs, or could obstruct, intake structures; if the debris could cause damage to structures; or if the debris is causing, or could cause,

flooding to property during the occurrence of a 5-year flood (a flood that has a 20 percent chance of occurring in any given year; FEMA, 2016)

- Employs debris specialists that can be mobilized to assist eligible applicants with debris management
- May reimburse costs for use of side scan sonar that identifies eligible submerged debris and sunken vessels

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 (NMFS or 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 ESA
- For additional information on NOAA Fisheries compliance requirements, see [Section 5](#).

National Ocean Service (NOS)

Office of Coast Survey

- Mobilizes the 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 Coordinators to coordinate application of NOAA assets and services during emergencies to help the FOSC make timely operational decisions

Office of Response and Restoration, Marine Debris Division

- Funds marine debris assessment and removal projects, through grants or congressional supplemental funding
- Facilitates inter-agency coordination of planning and execution of responses to marine debris events
- Provides scientific support for debris response planning and operations, including baseline information, debris behavior, debris impact, debris survey and detection protocols, removal best management practices (BMPs), disposal guidance, and information management
- Develops external communications such as talking points appropriate for the public, informational graphics, intuitive interactive web content, and educational videos to ensure the public and partner agencies understand and act on sound science and information critical to response and recovery operations

- For events determined by the NOAA Administrator to be severe marine debris events, may develop interagency plans, assess composition volume and trajectory of associated marine debris, and estimate potential impacts to the economy, human health, and navigation safety

Select NOAA Authorities:

- Coastal Zone Management Act of 1972, 16 U.S.C § 1451 et seq.
- Endangered Species Act, 16 U.S.C. § 1531 et seq.
- Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. § 1801 et seq.
- Marine Debris Research, Prevention, and Reduction Act, 33 U.S.C. § 1951 et seq.
- Marine Mammal Protection Act of 1972, 16 U.S.C § 1361 et seq.
- Marine Protection, Research, and Sanctuaries Act (Ocean Dumping Act), 33 U.S.C. § 1401 et seq.

National Park Service (NPS)

- Conducts waterway debris assessment and cleanup within Gulf Islands National Seashore in coordination with county, state, and other federal partners
- Organizes volunteer beach cleanups on NPS lands when possible
- Provides BMPs to protect NPS lands and associated resources
- For a map of Gulf Island National Seashore boundaries, see [Section 4.6](#).

Natural Resources Conservation Service (NRCS)

- When funding is available, provides emergency financial and technical assistance through the EWP Program for the following: to protect from additional flooding or soil erosion; to reduce threats to life or property from a 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 percent NRCS and 25 percent 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
- Assists in the location of burial pits for animal mortality

Select NRCS Authorities:

- Emergency Watershed Protection Program, 7 C.F.R. § 624

U.S. Army Corps of Engineers (USACE), Mobile District and Vicksburg District

- Maintains pre-event contracts regionally for all U.S. states and territories
- May request assistance from NOAA's NRT to survey ports and near-shore waterways

Emergency Operations

- Vicksburg District serves as lead federal agency in support of FEMA under ESF 3 Public Works and Engineering. Following a Stafford Act declaration, Vicksburg District may lead eligible debris removal from navigable waterways (non-federally maintained) and wetlands in Mississippi under a FEMA mission assignment to perform or contract debris removal and surveying.
- Mobile District serves as debris lead for USACE South Atlantic Division and responds under the Flood Control and Coastal Emergency Act (Public Law 84-99). In Mississippi, Mobile District may undertake disaster preparedness and emergency operations actions including response to flood and storm-related disasters.

Navigation

- Responsible for operation, maintenance, and debris removal from federally maintained waterways and channels within their districts. For a map of USACE federally maintained waterways and channels and the civil works boundary between Mobile and Vicksburg Districts, see [Section 4.6](#).
- May remove sunken vessels or other obstructions from navigable waterways if they are determined to be obstructions to navigation. May remove trees, brush, and other debris from navigable waterways if they are determined to promote flooding or be obstructions to navigation.
- May study and undertake projects to remove and dispose of derelict objects such as sunken vessels, waterfront debris and derelict structures, and other sources of drift that may damage vessels or threaten public health, recreation, or the environment at publicly maintained commercial boat harbors.

Regulatory Program

- Mobile District issues permits for debris removal within waterways and wetlands in watersheds that empty into Mississippi Sound, which includes all of Harrison and Jackson counties and most of Hancock County. Vicksburg District issues permits in watersheds that empty into the Pearl River, which includes some areas in Hancock County.
- For additional information on USACE permitting and compliance requirements, see [Section 5](#).

Select USACE Authorities:

- 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 and 1945, 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
 - Authorizes USACE to remove snags and debris in navigable waters (Section 3), 33 U.S.C. § 603a

- 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
- 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 8, Sector Mobile

- In most cases, removal of incident waterway debris by USCG is not authorized
- Responds to oil and hazardous material releases or threats of release that pose a substantial threat in waterways within the coastal zone as defined in the *USCG Sector Mobile ACP* (USCG, 2013)
 - Removal actions generally limited to removing oil and other hazardous substances while leaving vessels in place. May coordinate with state or local agencies to have vessel removed after abating pollution threat.
 - 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 Response in the ACP coastal zone
 - Directs response in accordance with the NCP
 - Coordinates with state, tribal, and territorial governments and oversees response by a responsible party (RP)
 - 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 NRC for reporting of oil and hazardous material releases. See [Appendix 8.3](#) for contact information.
- 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 wrecked vessels obstructing watercourse or creating hazards to navigation
- 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
- Sector Mobile is responsible for areas east of the west bank of the Pearl River. For a map of the USCG Sector boundaries and the ACP coastal-inland zone boundary, see [Section 4.6](#).

Select USCG Authorities:

- Abandoned Barge Act of 1992, 46 U.S.C. § 4701-4705
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 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.
- 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 *U.S. Coast Guard Sector Mobile ACP* (USCG, 2013). 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 Response 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 a RP
 - 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 (CERCLA), 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 the ESA and Coastal Barrier Resources Act (CBRA)
- For additional information on USFWS compliance requirements, see [Section 5](#).

National Wildlife Refuges

- Coordinates and manages waterway debris assessment and cleanup in National Wildlife Refuges (NWR) including Mississippi Sandhill Crane NWR and Grand Bay NWR, both of which are in Jackson County and part of the Gulf Coast Refuge Complex
- 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 Mississippi, 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.

U.S. Navy

Supervisor of Salvage and Diving (SUPSALV)

- 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 (ROVs), oil spill response, and salvage equipment

- Exercises and manages regional standing emergency salvage contracts to quickly draw upon resources of the commercial salvage industry (U.S. National Response Team, 2014)

4.4 Private Landowners

- May report acute waterway debris incidents to local emergency management agency or State Warning Point to begin a coordinated, proper response. See [Appendix 8.3](#) for contact information.
- May complete right-of-entry agreements with entities conducting private property debris removal or using private property as an access point. Agencies will not remove debris from private property without a properly executed right-of-entry agreement.
- Property owner where derelict vessel rests may initiate notice process for derelict vessel removal by filing an application with MDMR to remove the vessel. Vessel may be removed after 7-day notice period has expired (Miss. Code Ann. § 49-27-71).
- After a Stafford Act declaration, debris removal from private property or privately-owned waterways and banks is generally the responsibility of the property owner and not eligible for FEMA funding unless its removal is necessary to mitigate a health and safety threat and is in the public interest (FEMA, 2016)

4.5 Volunteer and Non-Governmental Organizations

- Certain private nonprofit organizations that serve a public function and have the legal responsibility to remove the debris may serve as an eligible applicant and receive Public Assistance reimbursement funding from FEMA to perform or contract waterway debris removal following a Stafford Act declaration (FEMA, 2016)
- May provide debris removal assistance through funded projects and programs
- Under state ESF 3, sponsors training and awareness of disaster operations so that individual members are better able to prepare for, respond to, and recover from all types of hazards (MEMA, 2015)

Mississippi Power

- Renew Our Rivers volunteer program conducts debris removal cleanups in Mississippi’s coastal and marsh areas in partnership with community volunteers, local organizations, and businesses (Mississippi Power, 2016)

Mississippi Voluntary Organizations Active in Disaster

- Partners with Mississippi Commission for Volunteer Service to assign unaffiliated volunteers to recognized response organizations and communicates state volunteer needs to national partners (MEMA, 2015)

4.6 Agency Jurisdiction Map

The “Mississippi Incident Waterway Debris Response Map” displays relevant agency jurisdiction boundaries in Mississippi’s three coastal counties. After an acute waterway debris incident, the agency (or agencies) with jurisdiction and authority for removing debris will vary depending on where the debris is located. This map includes information that stakeholders identified as important in determining jurisdiction within the state. For detailed information regarding local, state, and federal agency roles and responsibilities, see Sections [4.1](#), [4.2](#), and [4.3](#), respectively.

Mississippi Incident Waterway Debris Response Map

Legend

- State of Mississippi Seaward Boundary
- U.S. Army Corps of Engineers (USACE) Mobile-Vicksburg District Civil Works Boundary
- Federally Maintained Waterway/Channel (USACE Vicksburg District)
- Federally Maintained Waterway/Channel (USACE Mobile District)
- U.S. Coast Guard-EPA Coastal-Inland Zone Boundary for oil or hazardous substance response

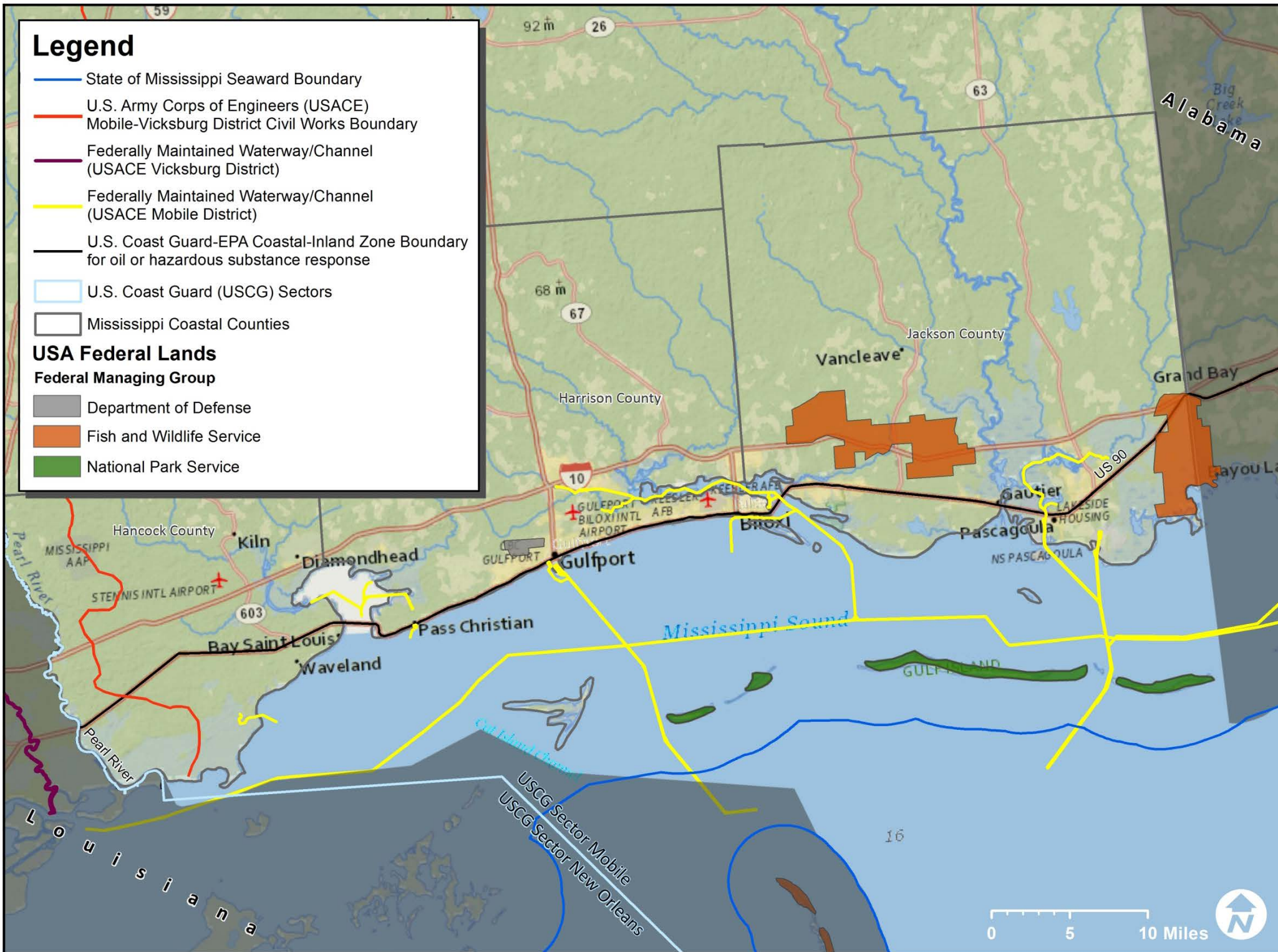
U.S. Coast Guard (USCG) Sectors

Mississippi Coastal Counties

USA Federal Lands

Federal Managing Group

- Department of Defense
- Fish and Wildlife Service
- National Park Service



5. Permitting and Compliance Requirements in Mississippi

Before waterway debris removal work can begin, organizations responsible for removal must meet certain permitting and compliance requirements. While the organization or individual conducting the debris removal work is responsible for obtaining necessary permits – such as a 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 MDAH Historic Preservation Division, USFWS, and 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. If waterway debris removal is conducted without federal funding and there are no federal agencies involved in removal activities, USACE is considered the lead federal agency as the permitting agency (if a permit is required).

A description of individual agency requirements and authorities is outlined below and is summarized in the “Permitting and Compliance for Waterway Debris Removal in Mississippi” handout in [Section 5.3](#). Organization contact information can be found in [Appendix 8.3](#).

5.1 State Requirements

Mississippi Department of Archives and History (MDAH)

Historic Preservation Division

- The National Historic Preservation Act requires federal agencies to take into account an undertaking’s potential to affect any district, site, building, structure, or object included in or eligible for the National Register of Historic Places.
- If a waterway debris removal project in Mississippi 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 consult with the Historic Preservation Division prior to beginning debris removal work to determine whether activities affect historic or cultural sites.
- The Antiquities Law of Mississippi requires state agencies, local governments, and all their political subdivisions to notify MDAH prior to public construction and improvement projects to determine if potential Mississippi landmarks will be affected or if significant sites, buildings, or structures on nonpublic lands will be affected. If MDAH determines there will be an adverse effect, a permit may be required before work can begin.

Select Historic Preservation Division Authorities:

- Antiquities Law of Mississippi, Miss. Code Ann. § 39-7-1 et seq.
- National Historic Preservation Act, 16 U.S.C § 470 et seq.

Mississippi Department of Environmental Quality (MDEQ)

Office of Pollution Control

Waste Division

- After a disaster, develops and issues emergency debris removal, management, and disposal guidance (MEMA, 2015)
- Authorizes the siting and operation of temporary emergency debris management sites by agencies and organizations that manage disaster debris (MDEQ, 2015b)

Environmental Permits Division, Water Quality Certification Branch

- Reviews and evaluates USACE permit applications for impacts to wetlands, streams, and open waters (MDEQ, 2007c)

Select MDEQ 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.
 - Certification (Section 401), 33 U.S.C. § 1341
 - Permits for dredged or fill material (Section 404), 33 U.S.C. § 1344
- Mississippi Air and Water Pollution Control Law, Miss. Code Ann. § 49-17-1 et seq.
- Solid Wastes Disposal Law of 1974, Miss. Code Ann. § 17-17-1 et seq.

Mississippi Department of Marine Resources (MDMR)

Office of Coastal Resources Management

Wetlands Permitting Bureau

- Manages the coastal wetland permitting process in Mississippi's coastal zone, which includes Hancock, Harrison, and Jackson counties (MDMR, 2015)
- A coastal wetland permit may be required for debris removal within waterways and wetlands in the Mississippi coastal zone if the activity involves a regulated activity such as the following: dredging, excavating, dumping, or filling in a coastal wetland; activity which damages flora or fauna on or in a coastal wetland; or erecting structures which affect the ebb and flow of the tide or the navigability of a waterway (Miss. Code Ann. § 49-27-5; Miss. Code Ann. § 49-27-9).
- MDMR and USACE Mobile and Vicksburg Districts have a joint permit application process in the Mississippi coastal zone (MDMR, 2015).
 - Applications are submitted to MDMR on the "Joint Application and Notification" form
 - MDMR evaluates applications for completeness and forwards copies to appropriate agencies including the USACE regulatory office if required
 - For minor activities at or below the watermark of ordinary high tide, MDMR may issue the joint USACE general permit in Mobile District's area of responsibility. MDMR does not currently issue permits on behalf of USACE Vicksburg District. See [Section 5.2](#) "Federal Requirements" for a list of applicable USACE general permits.
 - For major activities not covered by general permit guidelines, a separate permit is issued by MDMR and by USACE
- Emergency activities which are necessary to prevent loss of life, imminent destruction of property, or activities which eliminate hazards to the public well-being may be authorized through a certificate of waiver to waive or streamline various permitting requirements.
- Ensures compliance with appropriate state and federal laws and regulations (MDMR, 2013)

Select MDMR Authorities:

- Coastal Wetlands Protection Act, Miss. Code Ann. § 49-27-1 et seq.
- Coastal Zone Management Act of 1972, 16 U.S.C § 1451 et seq.
- Magnuson-Stevens Fishery Conservation and Management Act, 16 U.S.C. § 1801 et seq.
- Marine Resources Law, Miss. Code Ann. § 57-15-1 et seq.

5.2 Federal Requirements

National Environmental Policy Act (NEPA)

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

National Oceanic and Atmospheric Administration (NOAA)

National Marine Fisheries Service (NMFS or NOAA Fisheries)

- If a waterway debris removal project in Mississippi 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 Endangered Species Act (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 jeopardize the continued existence of any listed endangered or threatened species or result in the destruction or adverse modification of designated critical habitat unless an exemption has been granted. Generally, NOAA Fisheries manages marine and anadromous species while USFWS manages land and freshwater species and certain marine species such as manatee. 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 Mississippi ESA-listed marine species list (NOAA, 2016b).
 - Magnuson-Stevens Fisheries Conservation and Management Act directs all federal agencies to ensure the actions they take, including those they fund or authorize, do not adversely affect Essential Fish Habitat (EFH). If a federal agency determines their activities or actions may adversely affect EFH, they must consult with NOAA Fisheries. The Gulf of Mexico fishery management council is responsible for identifying EFH for federally managed species in Mississippi (Gulf of Mexico Fishery Management Council, 2010).
- Consultation during emergencies can be expedited so federal agencies can complete their critical missions in a timely manner while still providing protections to listed species and EFH.

- NOAA Fisheries defines an emergency as a situation involving an act of God, disasters, casualties, national defense, or security emergencies, etc., and includes response activities that must be taken to prevent imminent loss of human life or property (NOAA, n.d.-a).
- During emergency waterway debris removal operations, NOAA Fisheries Southeast Regional Office utilizes the same process for initiating contact for both ESA and EFH consultations. Steps to complete the emergency response consultation process are outlined in NOAA (n.d.-a).
- Additional information on ESA and EFH consultation during non-emergencies can be found in NOAA (n.d.-b) and NOAA (n.d.-c), 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 (USACE), Mobile District and Vicksburg District

- USACE permit may be required for debris removal within waterways and wetlands if the activity involves dredging, the discharge of dredge or fill material, or involves structures or work impacting the navigability of a waterway. One or multiple permits may be needed depending on the scope of work to be conducted.
- In the Mississippi coastal zone, which includes Hancock, Harrison and Jackson counties, MDMR and USACE Mobile and Vicksburg Districts have a joint permit application process (MDMR, 2015).
 - Applications are submitted to MDMR on the “Joint Application and Notification” form
 - MDMR evaluates applications for completeness and forwards copies to appropriate agencies including the USACE regulatory office
 - For minor activities at or below the watermark of ordinary high tide in Mobile District’s area of responsibility, MDMR may issue the joint USACE general permit. MDMR does not currently issue permits on behalf of the Vicksburg District.
 - For major activities not covered by general permit guidelines, a separate permit is issued by MDMR and by USACE
- Mobile District issues permits for activities in watersheds that empty into Mississippi Sound, which includes all of Harrison and Jackson counties and most of Hancock County. Vicksburg District issues permits in watersheds that empty into the Pearl River, which includes some areas in Hancock County. MDMR will distribute permit applications to the appropriate USACE District office.
- Permits that may be required include:
 - **Mississippi General Permit 10: Debris Removal.** Allows debris to be removed from any waterway for navigation, drainage, and/or pollution control. Debris includes, but is not limited to, non-imbedded stumps, tree limbs, appliances, lumber, metal objects, etc. (Note: Mississippi General Permit 10 is authorized in USACE Mobile District only and may not be used in areas outside the footprints of existing marinas in the Mississippi Sound south of the Highway 90 bridges over Biloxi Bay and St. Louis Bay; USACE, 2013)
 - **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.

- **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 the NRCS 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 CERCLA site are not required to obtain permits.
- In emergency situations, permitting procedures may be expedited and resource agency coordination may occur “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 designates 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)).

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
 - Permits for Structures or Work in or Affecting Navigable Waters of the United States, 33 C.F.R. § 322

U.S. Fish and Wildlife Service (USFWS)

Ecological Services Program

- If a waterway debris removal project in Mississippi 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 USFWS Mississippi Ecological Services Field Office (MSFO) prior to beginning debris removal work to ensure compliance with ESA and the Coastal Barrier Resources Act (CBRA)
 - ESA directs all federal agencies to ensure the actions they take, including those they fund or authorize, do not jeopardize the continued existence of any listed endangered or threatened species or result in the destruction or adverse modification of designated critical habitat unless an exemption has been granted. 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 endangered species web

page for an up to date Mississippi ESA-listed land and freshwater species list (USFWS, 2015).

- CBRA restricts federal expenditures and financial assistance that encourage development of coastal barriers so that damage to property, fish, wildlife, and other natural resources associated with the coastal barrier is minimized. 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 Mississippi can be downloaded from USFWS (2016).
- 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, when followed, provide necessary protections while allowing projects to go forward.
- If the proposed waterway debris removal project will not impact listed threatened or endangered species, or if the federal consulting agency agrees to implement USFWS's recommendations, the consultation process is completed at the "informal" stage. However, if debris removal operations will adversely affect a listed species or critical habitat, the federal consulting agency must initiate a "formal" consultation, a process which typically ends with the issuance of a biological opinion by USFWS (or NOAA Fisheries, if the ESA-listed species affected is under NOAA Fisheries' purview).

Select USFWS Authorities:

- Coastal Barrier Resources Act, 16 U.S.C. § 3501 et seq.
- Endangered Species Act, 16 U.S.C. § 1531 et seq.
- Marine Mammal Protection Act of 1972, 16 U.S.C § 1361 et seq.

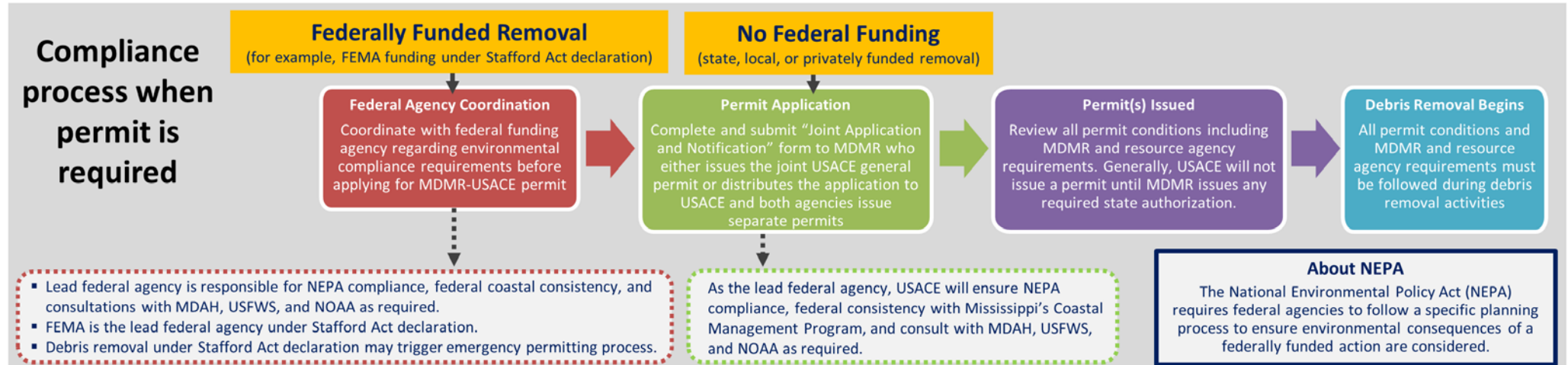
5.3 Permitting and Compliance for Waterway Debris Removal in Mississippi One-Pager

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

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

Permitting and Compliance for Waterway Debris Removal in Mississippi

- In Mississippi's coastal zone (Hancock, Harrison, and Jackson Counties), a MS Department of Marine Resources (MDMR) coastal wetland permit and/or U.S. Army Corps of Engineers (USACE) permit may be required if debris removal involves dredging, the discharge of dredge or fill material, or involves structures or work impacting the navigability of a waterway.
- MDMR and USACE's Mobile and Vicksburg Districts have a joint permit application process.
- The **lead federal agency** is responsible for compliance with National Environmental Policy Act (NEPA), federal coastal consistency, and consulting with tribal and resource agencies including Mississippi Department of Archives and History (MDAH), U.S. Fish and Wildlife Service (USFWS), and the National Oceanic and Atmospheric Administration (NOAA) as required.



Agency Requirements and Contact Numbers

| | | | |
|--|---|---|---|
| <p>MS Department of Marine Resources (MDMR)</p> <p>Wetlands Permitting Program 228-523-4106</p> | <ul style="list-style-type: none"> ▪ Serves as the initial agency to submit a permit application in Hancock, Harrison, and Jackson Counties ▪ Coastal wetland permit may be required if the activity involves dredging, the discharge of dredge or fill material, or involves structures or work impacting the navigability of a waterway ▪ MDMR forwards permit application to appropriate agencies including USACE if required ▪ For minor activities at or below the watermark of ordinary high tide, MDMR may issue the joint USACE Mobile District general permit. MDMR does not currently issue permits on behalf of USACE Vicksburg District. ▪ For major activities not covered by general permit guidelines, a separate permit is issued by MDMR and by USACE | <p>U.S. Army Corps of Engineers (USACE)</p> <p>Mobile District Regulatory Division 251-690-2658</p> <p>Vicksburg District Regulatory Division 601-631-7071</p> | <ul style="list-style-type: none"> ▪ Permit(s) that may be required for response work in waterways and wetlands <ul style="list-style-type: none"> ▪ MSGP-10 Debris Removal (Mobile District) for debris removal from any waterway for navigation, drainage, and/or pollution control ▪ NWP-3 Maintenance for removal/maintenance of culverts, sediments or debris accumulated around outfalls, bridges, etc. ▪ 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>MS Department of Archives and History (MDAH)</p> <p>Historic Preservation Division 601-576-6940</p> | <ul style="list-style-type: none"> ▪ Serves as the State Historic Preservation Office and ensures compliance with National Historic Preservation Act and Antiquities Law of Mississippi ▪ Consultation with MDAH required if waterway debris response involves federal permits and/or funding (USACE permit, FEMA funding, etc.) to evaluate whether activities affect historic or cultural sites included in or eligible for the National Register of Historic Places ▪ State agencies, local governments, and political subdivisions must notify MDAH prior to public construction or improvement projects and a permit may be required | <p>National Oceanic and Atmospheric Administration (NOAA)</p> <p>National Marine Fisheries Service (NMFS) ESA: 727-824-5312 EFH: 409-766-3699</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 jeopardize the continued existence of any listed endangered or threatened marine species or adversely modify designated critical habitat ▪ Magnuson-Stevens Fisheries Conservation and Management Act to ensure actions do not adversely affect Essential Fish Habitat (EFH) |
| <p>MS Department of Environmental Quality (MDEQ)</p> <p>601-961-5171</p> | <ul style="list-style-type: none"> ▪ Develops and issues emergency debris removal, management, and disposal guidance ▪ Authorizes the siting and operation of temporary emergency debris management sites by agencies and organizations that manage disaster debris ▪ Reviews and evaluates debris removal permit applications for impacts to wetlands, streams, and open waters | <p>U.S. Fish and Wildlife Service (USFWS)</p> <p>Mississippi Ecological Services Field Office (MSFO) 601-965-4900</p> | <ul style="list-style-type: none"> ▪ Consultation with MSFO 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 modify designated critical habitat or jeopardize the continued existence of any listed endangered or threatened land or freshwater species and certain marine species such as manatee ▪ Coastal Barrier Resources Act to ensure actions do not encourage development on coastal barriers along Mississippi's coast |

6. Mississippi Waterway Debris Response Needs

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

6.1 Response Gaps in Mississippi

The following issues and gaps in response have been reported by stakeholders engaged in waterway debris response in Mississippi.

6.1.1 Funding and Resources Gaps

- After an acute waterway debris incident that does not result in a Presidential major disaster declaration, there is a lack of funding for debris removal in state-owned waterways. This results in a lack of routine removal for large debris items including private vessels.
- Outside of annual operating budgets, there is limited funding for debris removal on federal lands or in federal waters.
- There is a lack of manpower at the state and local level to effectively address waterway debris.
- Most debris removal efforts focus on sand beaches and publicly accessible areas, but there is a need for removal in areas with harsh terrain including less accessible dune areas, streams, creeks, and bayous.

6.1.2 Policy Gaps

- Federal waterway debris removal programs and authorities can be narrow in scope. For example, debris may not meet FEMA or NRCS eligibility criteria, federal agencies tasked under a FEMA mission assignment are only allowed to work in authorized areas, Oil Spill Liability Trust Fund only provides funds to remove pollution threats but not debris, etc.
- Oftentimes, it is difficult to contact or identify the owner for recoverable debris items including abandoned vessels.
- Permitting for the removal of derelict vessels can be a lengthy process and delay response.
- Local solid waste management plans do not always include information regarding waterway debris response and removal.

6.1.3 Education and Communication Gaps

- There is a lack of understanding regarding compliance requirements that must be met prior to debris removal.

- There is a lack of information and guidance regarding debris removal from ecologically sensitive areas, historically significant areas, and specific habitat types.
- There is a lack of information regarding qualified debris removal contractors and vendors and a need to educate local contracts regarding how to become involved in waterway debris removal.
- There is a lack of public understanding regarding the waterway debris removal process and associated timelines after a disaster.

6.2 Recommended Actions

The following recommendations have been compiled based on stakeholder input to improve preparedness for response and recovery operations following an acute waterway debris incident in Mississippi. Recommended actions include funding and resources actions to address gaps in response, policy actions, education and communication actions, and data and research actions to meet pre- and post-event data needs. Potential funding sources and support programs for debris removal are listed in [Appendix 8.1](#) for instances when either there is no clear party responsible for removal or when there is a lack of removal funding.

6.2.1 Funding and Resources Actions

- Identify and compile a complete list of existing funding sources for debris removal including who is eligible to receive funding and where work may be conducted.
 - Note: See [Appendix 8.1](#) for a list of potential funding sources and support programs for waterway debris removal in Mississippi.
- Establish a trust fund for debris removal from areas with high conservation value and/or areas adjacent to but outside the scope of emergency removal projects to supplement existing programs and limited funding sources.
- Identify and establish partnerships with volunteer organizations and/or enlist the services of volunteers to effectively address waterway debris.
- Hold cleanup events specifically targeting harsh terrain areas including less accessible dune areas, streams, creeks, and bayous in need of debris removal.

6.2.2 Policy Actions

- Evaluate whether FEMA mission assignments can be modified to be based on debris fields rather than whether debris is in a waterway or on land.
- If owner of an abandoned vessel cannot be identified using local and state resources, contact USCG to report the vessel and possibly get assistance with identifying the owner. Reporting of derelict vessels to USCG also prevents the use of search and rescue resources when responding to a known derelict vessel.

- Establish coordination mechanism between USCG, state, and local agencies to potentially have derelict vessels removed after USCG has abated a pollution threat.
- Evaluate the feasibility of adopting a state non-reporting permit for derelict vessel removal similar to the USACE non-reporting Nationwide Permit for derelict vessel removal and/or shorten the Coastal Program Agency comment period to expedite permitting for derelict vessel removal.
- Encourage the incorporation of waterway debris response and removal information into local solid waste management plans.

6.2.3 Education and Communication Actions

- Create a summary sheet and/or checklist outlining laws, regulations, permit requirements, and BMPs related to debris removal activities for sensitive habitats categorized by habitat type.
 - Note: See [Section 5](#) for permitting and compliance requirements for waterway debris removal in Mississippi and [Section 5.3](#) for a one-page summary handout.
- Compile and/or develop debris removal techniques, methodology descriptions, and BMPs for a variety of habitat or management area types and disseminate to stakeholders such as federal, state, and local governments, non-governmental organizations, debris removal contractors, and private property owners.
 - Note: See [Section 6.3](#) “Additional Resources” for a source of information on BMP’s for debris removal from wetlands and intertidal areas.
 - Note: USCG Sector Geographic Response Plans (GRPs) and NOAA Environmental Sensitivity Index (ESI) maps contain information regarding shoreline sensitivity, biological resources, and human use resources.
- Develop and hold training workshop for responders and local officials regarding laws, regulations, permit requirements, and BMPs for waterway debris removal in sensitive habitats or historically significant areas.
- Compile a list of requirements for emergency waterway debris removal contractors and/or a list of pre-qualified contractors to supplement the Mississippi State Board of Contractors information.
- Develop and hold a training workshop for companies and individuals interested in becoming debris removal contractors for both waterway and land-based debris. The course should include information on the funding process after a Presidential major disaster declaration, documentation requirements, environmental and permitting considerations, removal operation BMPs, etc.
- Develop internal and inter-agency communication plans for disseminating information during an acute waterway debris incident in Mississippi. Plans should clearly define stakeholder audiences, identify trusted spokespeople and public information officers, and outline agency responsibilities. Advanced communication planning will allow responders to focus on removal operations.

6.2.4 Data and Research Actions

- Develop a prioritized inventory of waterway debris currently in need of removal in coastal Mississippi so that it can be matched to existing private or public cleanup programs and/or funding sources.
- Develop a pre-event inventory of priority areas for debris removal and/or priority debris types. Prioritization could be based on an agreed-upon set of conditions such as ecological sensitivity, commercial use, location of critical infrastructure, recreational use, etc.
 - Note: USCG Sector GRPs and NOAA ESI maps contain information that could be of use for waterway debris response prioritization planning, including shoreline sensitivity, biological resources, and human use resources.
- Conduct a risk assessment regarding what impact marine debris could have on critical infrastructure in coastal Mississippi to inform prioritization of debris removal areas.

6.3 Additional Resources

Barnea, N., Michel, J., Bray, B., Nixon, Z., Imahori, G., & Moegling, C. (2009). *Marine debris emergency response planning in the north-central Gulf of Mexico* (Technical Memorandum NOS-OR&R-31). Silver Spring, MD: National Oceanic and Atmospheric Administration. Retrieved from <http://marinedebris.noaa.gov/file/2162/download?token=OjWPoFW6>

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

7. References

- Bureau of Ocean Energy Management. (n.d.). *Outer continental shelf*. Retrieved from <https://www.boem.gov/Outer-Continental-Shelf/>
- Council on Environmental Quality. (2007). *A citizen's guide to the NEPA*. Retrieved from https://energy.gov/sites/prod/files/nepapub/nepa_documents/RedDont/G-CEQ-CitizensGuide.pdf
- Federal Emergency Management Agency. (2007). *FEMA 325: Public assistance debris management guide*. Washington, DC: U.S. Government Printing Office. Retrieved from <https://www.fema.gov/pdf/government/grant/pa/demagde.pdf>
- Federal Emergency Management Agency. (2010). *Hurricane Katrina flood recovery (Mississippi): Mapping methods and data sources*. Retrieved from [web.archive.org/web/20120702151621/http://www.fema.gov/hazard/flood/recoverydata/katrina/katrina_ms_mmds.shtm#sil](http://www.fema.gov/hazard/flood/recoverydata/katrina/katrina_ms_mmds.shtm#sil)
- Federal Emergency Management Agency. (2012a). *FEMA recovery policy RP 9523.5: Debris removal from waterways*. Washington, DC: U.S. Government Printing Office. Retrieved from https://www.fema.gov/media-library-data/20130726-1859-25045-8039/rp9523.5_debris_removal_from_waterways_final_103012_.pdf
- Federal Emergency Management Agency. (2012b). *Six years after Hurricane Katrina, Mississippi continues to recover and rebuild*. Retrieved from <https://www.fema.gov/news-release/2011/08/29/six-years-after-hurricane-katrina-mississippi-continues-recover-and-rebuild>
- Federal Emergency Management Agency. (2016). *Public assistance program and policy guide FP 104-009-2*. Washington, DC: U.S. Government Printing Office. Retrieved from https://www.fema.gov/media-library-data/1456167739485-75a028890345c6921d8d6ae473fbc8b3/PA_Program_and_Policy_Guide_2-21-2016_Fixes.pdf
- Gulf of Mexico Fishery Management Council. (2010). *Essential fish habitat amendments*. Retrieved from http://gulfcouncil.org/fishery_management_plans/essential_fish_habitat.php
- Knabb, R.D., Rhome, J.R., & Brown, D.P. (2011). *Tropical cyclone report: Hurricane Katrina*. Miami, FL: National Oceanic and Atmospheric Administration National Hurricane Center. Retrieved from http://www.nhc.noaa.gov/data/tcr/AL122005_Katrina.pdf
- Mississippi Board of Animal Health. (2008). *Mississippi animal response team (MART)*. Retrieved from http://www.mbah.state.ms.us/emergency_programs/mart.htm
- Mississippi Department of Environmental Quality. (2007a). *Emergency services*. Retrieved from http://www.deq.state.ms.us/MDEQ.nsf/page/Main_EmergencyServices?OpenDocument
- Mississippi Department of Environmental Quality. (2007b). *South regional office*. Retrieved from http://www.deq.state.ms.us/MDEQ.nsf/page/FS_Southregionaloffice?OpenDocument

- Mississippi Department of Environmental Quality. (2007c). *Wetlands protection*. Retrieved from http://www.deq.state.ms.us/mdeq.nsf/page/WQCB_Steam_Wetland_Alteration03
- Mississippi Department of Environmental Quality. (2012). *Local solid waste management planning: Guidance to local governments for preparing a comprehensive local solid waste management plan*. Retrieved from [https://www.deq.state.ms.us/mdeq.nsf/pdf/SW_PLANGUIDANCE112012/\\$File/PLANGUIDANCE%2011_12.pdf?OpenElement](https://www.deq.state.ms.us/mdeq.nsf/pdf/SW_PLANGUIDANCE112012/$File/PLANGUIDANCE%2011_12.pdf?OpenElement)
- Mississippi Department of Environmental Quality. (2015a). *Annual report fiscal year 2015*. Retrieved from [https://www.deq.state.ms.us/MDEQ.nsf/pdf/Main_2015AnnualReportMDEQ/\\$File/2015AnnualReport.pdf?OpenElement](https://www.deq.state.ms.us/MDEQ.nsf/pdf/Main_2015AnnualReportMDEQ/$File/2015AnnualReport.pdf?OpenElement)
- Mississippi Department of Environmental Quality. (2015b). *Mississippi Department of Environmental Quality emergency debris management guidance*. Retrieved from [http://www.deq.state.ms.us/mdeq.nsf/pdf/SW_01042016EmergencyDebrisGuidance/\\$File/EmDebrisGuide2016.pdf?OpenElement](http://www.deq.state.ms.us/mdeq.nsf/pdf/SW_01042016EmergencyDebrisGuidance/$File/EmDebrisGuide2016.pdf?OpenElement)
- Mississippi Department of Environmental Quality. (2015c). *Strategic plan for fiscal years 2017-2021*. Retrieved from [https://www.deq.state.ms.us/MDEQ.nsf/pdf/About_MDEQStrategicPlan2017_2021/\\$File/2015-08-17%20MDEQ%20Strategic%20Plan%202017-2021.pdf?OpenElement](https://www.deq.state.ms.us/MDEQ.nsf/pdf/About_MDEQStrategicPlan2017_2021/$File/2015-08-17%20MDEQ%20Strategic%20Plan%202017-2021.pdf?OpenElement)
- Mississippi Department of Marine Resources. (1999). *Artificial reef development plan for the state of Mississippi*. Retrieved from <http://www.dmr.ms.gov/images/fisheries/reef/artificial-reef-development.pdf>
- Mississippi Department of Marine Resources. (2013). *FY-2015-2019 strategic plan*. Retrieved from http://www.dmr.ms.gov/images/publications/Financial_Reports/MDMR2015-2019-Strategic-Plan.pdf
- Mississippi Department of Marine Resources. (2015). *Wetland permitting*. Retrieved from <http://www.dmr.ms.gov/index.php/coastal-resources-management/wetland-permitting>
- Mississippi Department of Wildlife, Fisheries and Parks. (n.d.-a). *Administration*. Retrieved from <https://www.mdwfp.com/administration.aspx>
- Mississippi Department of Wildlife, Fisheries and Parks. (n.d.-b). *Fishing & boating*. Retrieved from <https://www.mdwfp.com/fishing-boating/environmental.aspx>
- Mississippi Development Authority. (2015). *Infrastructure*. Retrieved from <https://www.mississippi.org/home-page/locate-here/infrastructure/>
- Mississippi Emergency Management Agency. (2013). *Mississippi state hazard mitigation plan*. Retrieved from <http://www.msema.org/wp-content/uploads/2012/06/State-Hazard-Mitigation-Plan-2013.pdf>
- Mississippi Emergency Management Agency. (2015). *Mississippi comprehensive emergency management plan*. Retrieved from <http://www.msema.org/emergency-plans/state-cemp/>

- Mississippi Power. (2016). *Renew our rivers*. Retrieved from <http://www.mississippipower.com/in-our-community/environmental-stewardship/renew-our-rivers/>
- Mississippi Secretary of State. (2014). *Public trust tidelands*. Retrieved from <http://www.sos.ms.gov/Public-Lands/Pages/Public-Trust-Tidelands.aspx>
- National Oceanic and Atmospheric Administration. (2012). *State coastal zone boundaries*. Retrieved from <https://coast.noaa.gov/czm/media/StateCZBoundaries.pdf>
- National Oceanic and Atmospheric Administration. (2013). *Storm-generated marine debris risk modeling in the Gulf of Mexico*.
- National Oceanic and Atmospheric Administration. (2016a). *Marine debris program*. Retrieved from <https://marinedebris.noaa.gov/>
- National Oceanic and Atmospheric Administration. (2016b). *NOAA Fisheries Southeast Regional Office Protected Resources Division*. Retrieved from http://sero.nmfs.noaa.gov/protected_resources/section_7/threatened_endangered/index.html
- National Oceanic and Atmospheric Administration. (2016c). [Web mapping tool presents spatial land cover data used in the water quality section of the wetland benefits coastal county snapshot]. *Wetland benefits snapshot map*. Retrieved from <http://www.arcgis.com/home/item.html?id=f19a213e1a2248ec9f6d3863908bdce9>
- National Oceanic and Atmospheric Administration. (n.d.-a). *NOAA Fisheries Southeast Regional Office emergency consultation*. Retrieved from http://sero.nmfs.noaa.gov/protected_resources/section_7/emergency_consultation/index.html
- National Oceanic and Atmospheric Administration. (n.d.-b). *NOAA Fisheries Southeast Regional Office ESA section 7: Interagency consultation*. Retrieved from http://sero.nmfs.noaa.gov/protected_resources/section_7/index.html
- National Oceanic and Atmospheric Administration. (n.d.-c). *NOAA Fisheries Southeast Regional Office essential fish habitat*. Retrieved from http://sero.nmfs.noaa.gov/habitat_conservation/efh/index.html
- U.S. Army Corps of Engineers. (2010). *Debris removal from waterways field operations guide*.
- U.S. Army Corps of Engineers. (2013). *General permits for minor structures and activities in the state of Mississippi and outer continental shelf waters off the coast of Mississippi within the regulatory boundaries of the Mobile District, U.S. Army Corps of Engineers*. Retrieved from <http://www.dmr.ms.gov/images/permitting/final-2013-msgp.pdf>
- U.S. Coast Guard. (2013). *Sector Mobile area contingency plan*. Mobile, AL: U.S. Coast Guard. Retrieved from https://homeport.uscg.mil/cgi-bin/st/portal/uscg_docs/MyCG/Editorial/20160629/SECMOB%20ACP%20revised%20July%202014_2.pdf?id=f392c7eaccb0d1434541c887fa7531389263abce

- U.S. Department of Homeland Security. (2013). *National response framework, second edition*. Retrieved from http://www.fema.gov/media-library-data/20130726-1914-25045-1246/final_national_response_framework_20130501.pdf
- U.S. Environmental Protection Agency. (2016). *National oil and hazardous substances pollution contingency plan (NCP) overview*. Retrieved from <https://www2.epa.gov/emergency-response/national-oil-and-hazardous-substances-pollution-contingency-plan-ncp-overview>
- U.S. Fish and Wildlife Service. (2015). *Mississippi Ecological Services Field Office*. Retrieved from <https://www.fws.gov/mississippiES/>
- U.S. Fish and Wildlife Service. (2016). *Coastal Barrier Resources System official CBRS maps*. Retrieved from <http://www.fws.gov/ecological-services/habitat-conservation/cbra/Maps/index.html>
- U.S. National Response Team. (2014). *Abandoned vessel authorities and best practices guidance*. Washington, DC: U.S. National Response Team. Retrieved from <https://marinedebris.noaa.gov/file/2626/download?token=2DRU0Ib5>

8. Appendices

8.1 Funding Sources and Support Programs for Waterway Debris Removal

| Program / Activity | Type of Assistance | Contact |
|--|---|---|
| <p>FEMA Public Assistance Program</p> | <ul style="list-style-type: none"> ▪ Provides reimbursement funding to eligible applicants for eligible debris removal from navigable waterways (non-federally maintained) or natural waterways during Presidential major disaster declarations when another federal agency does not have authority to fund the activity ▪ See Section 4.3 “FEMA” | <p>MEMA Office of Recovery Phone: 601-933-6886 http://www.msema.org/about/disaster-recovery/</p> <p>May contact local emergency management agency to initiate coordination with FEMA and MEMA</p> |
| <p>Gulf of Mexico Alliance (GOMA) Marine Debris Cross-Team Initiative and Gulf Star Funding Program</p> | <ul style="list-style-type: none"> ▪ Allows local, state, federal agency partners to focus funding priorities on the needs of the Gulf and provides a forum to share knowledge and reduce duplication of effort. ▪ Connects projects with funding sources and offers the Gulf Star funding opportunity | <p>Caitlin Wessel, NOAA Team Facilitator caitlin.wessel@noaa.gov Doug Jacobson, EPA Team Facilitator jacobson.doug@epa.gov</p> <p>Marine Debris Initiative: http://www.gulfofmexicoalliance.org/our-priorities/priority-issue-teams/marine-debris-cross-team-initiative/</p> <p>Gulf Star Funding: http://www.gulfofmexicoalliance.org/tools-and-resources/gulf-star-overview/</p> <p>Other Funding Sources: http://www.gulfofmexicoalliance.org/announcements/funding/</p> |
| <p>Mississippi Coastal Cleanup</p> | <ul style="list-style-type: none"> ▪ Partnership between Mississippi State University Extension Service (MSU-ES) and Mississippi Marine Debris Task Force ▪ Annual volunteer effort to clear trash from waterways in coastal Mississippi | <p>MSU-ES Eric Sparks, eric.sparks@msstate.edu http://www.mscoastalcleanup.org</p> |
| <p>Mississippi Power Renew Our Rivers Program</p> | <ul style="list-style-type: none"> ▪ Partner corporate, national, regional, and community volunteers to remove debris from waterways and beaches in Southeast Mississippi | <p>Courtney VanderSchaaf, Environmental Specialist Phone: 228-897-6402 cvander@southernco.com http://www.mississippipower.com/in-our-community/environmental-stewardship/renew-our-rivers/</p> |

| | | |
|---|--|--|
| <p>MDEQ Solid Waste Assistance Grants</p> | <ul style="list-style-type: none"> Provide grant funds to local and regional governments for projects involving certain solid waste management and recycling activities and provides other assistance for abatement of certain solid waste problems | <p>MDEQ Office of Pollution Control Solid Waste Policy, Planning, & Grants Branch P. O. Box 2261 Jackson, MS 39225 Phone: 601-961-5171 http://www.deq.state.ms.us/mdeq.nsf/page/SW_Grants_Program_Information?OpenDocument</p> |
| <p>MDMR Derelict Vessel Program</p> | <ul style="list-style-type: none"> Authorized to remove vessels determined to be a public safety or environmental hazard See Section 4.2 “Derelict Vessel Program” | <p>MDMR Derelict Vessel Program Jason Rider, Derelict Vessel Removal Coordinator jason.rider@dmr.ms.gov Phone: 228-374-5000 http://www.dmr.ms.gov/index.php/environment/derelict-vessels</p> |
| <p>MDMR Tidelands Trust Funds</p> | <ul style="list-style-type: none"> Provides grant funds for new and extra programs of tidelands management, such as conservation, reclamation, preservation, acquisition, education, or the enhancement of public access to tidelands or public improvement projects as they relate to those lands | <p>MDMR Tidelands Trust Funds Program Sonja Slater, Tidelands Coordinator sonja.slater@dmr.ms.gov Phone: 228-374-5000 http://www.dmr.ms.gov/index.php/programs/tidelands</p> |
| <p>National Fish and Wildlife Foundation Gulf Environmental Benefit Fund</p> | <ul style="list-style-type: none"> Funds projects that remedy harm to natural resources—habitats and species—of a type that were impacted by the Deepwater Horizon oil spill | <p>Gulf-wide: http://www.nfwf.org/gulf/Pages/Gulf-FAQ.aspx Mississippi: http://www.restore.ms/nfwf-faqs-new/</p> |
| <p>NOAA Community-based Marine Debris Removal</p> | <ul style="list-style-type: none"> Provides grant funds that support locally driven, community-based marine debris prevention and removal projects. Projects benefit coastal habitat, waterways, and wildlife including migratory fish. | <p>NOAA Marine Debris Program Caitlin Wessel, Gulf of Mexico Regional Coordinator caitlin.wessel@noaa.gov Phone: 251-544-5013 https://marinedebris.noaa.gov/funding/funding-opportunities</p> |
| <p>NRCS Emergency Watershed Protection Program</p> | <ul style="list-style-type: none"> Provides technical and financial assistance for relief from imminent hazards in small watersheds, and to reduce vulnerability of life and property in areas damaged by natural hazard events. See Section 4.3 “Natural Resource Conservation Service” | <p>USDA-NRCS Scott Culberson, State Conservation Engineer 601-965-5035 ext. 157 scott.culberson@ms.usda.gov https://www.nrcs.usda.gov/wps/portal/nrcs/main/ms/programs/planning/ewpp/</p> |

| | | |
|---------------------------------------|---|---|
| <p>RESTORE Act Funding</p> | <ul style="list-style-type: none"> ▪ Gulf Coast Restoration Trust Fund overseen by U.S. Treasury Department to fund projects and programs that generate investments in economic development, tourism promotion, and science-based natural resource restoration in states impacted by the Deepwater Horizon spill | <p>Gulf-wide: https://www.restorethegulf.gov/</p> <p>Mississippi: http://www.restore.ms/restore-faqs-new/</p> |
|---------------------------------------|---|---|

8.2 Response Capabilities

| Yes - Verified In-house Capability | | MDEQ | MDMR | MSU-ES /MS-AL Sea Grant Consortium | BSEE ¹ | FEMA Region IV ² | NOAA | NRCS | USACE | USCG Sector Mobile | U.S. EPA Region IV ¹¹ | USFWS |
|--|---|------|------|------------------------------------|-------------------|-----------------------------|------|------|------------------|--------------------|----------------------------------|-------|
| Contract - Contracted capability | | | | | | | | | | | | |
| Technology | Aerial photography and video | - | - | - | - | - | Yes | - | - | Yes | Contract | - |
| | IT support during response (server/storage space for data and information sharing) | - | - | - | - | - | Yes | - | Yes | - | Yes | - |
| | Remote sensing (LIDAR) | - | - | - | - | - | Yes | - | Contract | - | Contract | - |
| | Sub-Surface Detection: Multi-beam, side scan, and side scan sonar | - | Yes | - | - | - | Yes | - | Contract | - | Contract | - |
| Equipment | Aircraft | - | - | - | - | - | Yes | - | - | Yes | Contract | - |
| | Boom | - | - | - | - | - | - | - | Contract | Contract | Contract | - |
| | Heavy equipment: Barge, Self-loading barge, Crane, Knuckleboom Crane, Environmental clamshell dredge, Excavator | - | - | - | - | - | - | - | Contract | Contract | Contract | - |
| | Remotely Operated Vehicle (ROV) | - | - | - | - | - | - | - | Yes | - | Contract | - |
| | Unmanned Aerial Vehicle (UAV)/Surveillance drones with FAA trained operator | - | - | - | - | - | Yes | - | Yes ⁵ | - | Contract | - |
| | Vessels | - | Yes | - | - | - | Yes | - | Contract | Yes | Contract | Yes |
| | Other specialized equipment that cannot be readily procured immediately following a debris incident (from heavy equipment to electronics) | - | - | - | - | - | - | - | Contract | Yes | Contract | Yes |
| Workforce/Expertise | Communication/public information expertise (dedicated spokesperson/Public Information Officer) | - | - | - | - | - | - | - | Yes | Yes | Yes | - |
| | Compliance and permitting expertise | Yes | Yes | - | - | Yes | Yes | Yes | Yes | - | Yes | Yes |
| | Data/information management capabilities | - | - | Yes | - | - | - | - | Yes | - | Yes | - |
| | Debris modeling expertise (volume, transport, hindcasting, etc.) | - | - | - | - | - | Yes | - | Yes | - | Contract | - |
| | Dedicated waterway/marine debris staff (responders, response team, regional coordination, etc.) | - | - | - | - | - | Yes | - | Yes | Yes | - | - |
| | Dive support (scientific, technical, commercial, etc.) | - | Yes | - | - | - | Yes | - | - | Contract | Contract | - |
| Environmental or cultural resource expertise (location of sensitive areas, endangered species present, etc.) | Yes | Yes | Yes | Yes | Yes | Yes ³ | Yes | Yes | Yes | Yes | Yes | |

| Yes - In-house Capability | | MDEQ | MDMR | MSU-ES/MS-AL Sea Grant Consortium | BSEE ¹ | FEMA Region IV ² | NOAA | NRCS | USACE | USCG Sector Mobile | U.S. EPA Region IV ¹¹ | USFWS |
|--|--|------|------|-----------------------------------|-------------------|-----------------------------|------------------|------|------------------|--------------------|----------------------------------|-------|
| Contract - Contracted capability | | | | | | | | | | | | |
| Workforce/Expertise continued | Geographic Information System (GIS) mapping and plotting of imagery | - | Yes | Yes | - | Yes | Yes | - | Yes ⁶ | - | Yes | - |
| | Hazardous substance and/or oiled debris expertise | Yes | - | - | - | - | Yes | - | Yes | Yes | Yes | - |
| | Incident Command System (ICS) trained staff | Yes | - | - | - | Yes | Yes | - | Yes | Yes | Yes | - |
| | Local expertise | Yes | Yes | Yes | - | - | Yes | Yes | Yes | Yes | Yes | Yes |
| | Post-storm damage assessment teams | - | - | Yes | - | Yes | - | - | - | Yes | Yes | - |
| | Technical expertise for removal operations (techniques, best management practices, etc.) | - | - | Yes | - | Yes | Yes | Yes | Yes ⁷ | Yes | Yes | - |
| | Volunteer manpower/Volunteer coordination | - | - | Yes | - | - | - | - | - | Yes | - | Yes |
| | Waterway management authority (law enforcement officers) | - | Yes | - | - | - | - | - | - | Yes | - | - |
| Logistics | Contracting: Contract authority and oversight capabilities | Yes | Yes | - | - | - | Yes | - | Yes | Yes ⁹ | Yes | - |
| | Contracting: Pre-approved removal contractors | Yes | - | - | - | - | - | - | Yes | Yes ⁹ | - | - |
| | Contracting: Pre-event contracts and staged agreements in place | - | - | - | - | - | - | - | Yes | Yes ⁹ | Yes | - |
| | Docks for wet storage of vessels | - | Yes | - | - | - | - | - | - | Yes ¹⁰ | - | - |
| | Facility suitable for establishing an emergency operations center | - | - | - | - | - | Yes | - | Yes | Yes | - | - |
| | Funding for waterway debris removal | - | Yes | - | - | - | Yes ⁴ | Yes | Yes ³ | Yes | Yes | - |
| | Pre-designated landfill/disposal sites | Yes | - | - | - | - | - | - | - | - | - | - |
| | Research program established to analyze long-term trends, impacts, etc. | - | - | Yes | - | - | Yes | - | Yes | - | - | - |
| | Staging/Off-Loading: Land with water access to stage, offload debris (has not been evaluated for suitability or officially pre-designated) | - | Yes | - | - | - | - | - | - | - | - | - |
| | Staging/Off-Loading: Pre-designated staging, off-loading and special handling areas (already evaluated for suitability) | - | - | - | - | - | - | - | - | Yes | - | - |
| | Staging area for dry storage of vessels | - | Yes | - | - | - | Yes | - | Yes | Yes ¹⁰ | - | Yes |
| Other logistical support, including fuel, housing, food, dumpsters, roll-off containers, trucks to haul debris, etc. | - | Yes | - | - | - | - | - | - | - | Contract | - | |

Note: Capabilities which could be used during waterway debris response in Mississippi were either identified through research or were self-reported by an organization. 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. While not included in this table, local jurisdictions may also possess capabilities listed above and should be included in all phases of response to maximize utilization of local expertise and resources.

- ¹BSEE BSEE may have other capabilities, but agency mission does not directly support debris response.
- ²FEMA 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.
- ³NOAA 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
- ⁴NOAA Funding through grant program and possible Congressional supplemental funding
- ⁵USACE Surveillance drone housed at USACE District, Jacksonville
- ⁶USACE Have GIS cadre for response
- ⁷USACE Have planning response teams
- ⁸USACE Funding in place for federal projects only
- ⁹USCG USCG contracts only
- ¹⁰USCG Limited space
- ¹¹EPA EPA routinely conducts removal operations of hazardous substances and oil, including debris. EPA resources would be tasked by the EPA personnel operating in the Unified Command or by EPA's FOOSC/Duty Officer in Region IV.

8.3 Contact Information

Local/State Agencies

| Agency | Division | Topic | Point of Contact | Phone | Email |
|---|---|--|--|-----------------------|--------------------------------|
| County Emergency Management Agencies | - | - | See http://www.msema.org/local-ema/ for a complete list of local emergency management contacts | - | - |
| MS Department of Archives and History (MDAH) | Historic Preservation Division | National Historic Preservation Act and Antiquities Law of Mississippi compliance | Main Number | 601-576-6940 | - |
| | | | Jim Woodrick, Historic Preservation Division Director | 601-576-6908 | jwoodrick@mdah.state.ms.us |
| MS Department of Environmental Quality (MDEQ) | - | - | Main Number | 601-961-5171 | - |
| | Office of Pollution Control, Emergency Services Division | ESF 10 Oil and Hazardous Material Response lead | Nick Hatten | 601-961-5171 | nhatten@mdeq.ms.gov |
| | | | Cody Fisher, Chief, Emergency Services Division | 601-961-5065 | cfisher@mdeq.ms.gov |
| | Office of Pollution Control, Field Services Division, South Regional Office | Planning and coordination | Barbara Viskup, Supervisor | 228-432-3452 | barbara_viskup@deq.state.ms.us |
| | Office of Pollution Control, Waste Division | Debris management and disposal | Trent Jones, Solid Waste Permitting Branch Chief | 601-961-5726 | tjones@mdeq.ms.gov |
| Mark Williams, Chief, Waste Division | | | 601-961-5304 | mwilliams@mdeq.ms.gov | |
| MS Department of Marine Resources (MDMR) | Office of Coastal Resources Management | Coastal Preserves Bureau – response in MS Coastal Preserves | Jennifer Wittmann, Coastal Preserves Bureau Director | 228-523-4111 | jennifer.wittmann@dmr.ms.gov |
| | | Wetlands and Permitting Bureau – permitting and compliance | Main number | 228-523-4106 | - |
| | | | Willa Brantley, Director Bureau of Wetlands Permitting | 228-523-4108 | willa.brantley@dmr.ms.gov |
| | Office of Finance and Administration | Derelict Vessel Program | Jason Rider, Derelict Vessel Removal Coordinator | 228-374-5000 | jason.rider@dmr.ms.gov |
| | | Grand Bay NERR – response in Grad Bay NERR | Dr. Ayesha Gray, Manager | 228-475-7047 | ayesha.gray@dmr.ms.gov |
| | | Tidelands Program | Sonja Slater, Tidelands Coordinator | 228-523-4138 | sonja.slater@dmr.ms.gov |
| | Office of Marine Fisheries | Mississippi Derelict Crab Trap Removal Program | Rick Burris, Director Shrimp and Crab Bureau | 228-523-4139 | rick.burris@dmr.ms.gov |
| | | | Traci Floyd, Deputy Director Marine Fisheries | 228-523-4068 | traci.floyd@dmr.ms.gov |
| Office of Marine Patrol | Report boating emergencies | - | 1-844-WE-R-DMR (1-844-937-6367) | - | |

State Agencies Continued

| Agency | Division | Topic | Point of Contact | Phone | Email |
|--|---------------------------------------|---|---|----------------|---------------------------|
| MS Emergency Management Agency (MEMA) | - | Report emergencies including hazardous material, marine, petroleum or weather incidents | State Warning Point | 1-800-222-6362 | - |
| | Office of Preparedness | Planning and coordination | Bryan Olier, Preparedness Office Director | 601-933-6601 | bolier@mema.ms.gov |
| | Office of Recovery | | Clayton French, Recovery Office Director | 601-933-6702 | cfrench@mema.ms.gov |
| | Office of Response | | Diane Sager, Public Assistance Bureau Director | 228-594-3343 | dsager@mema.ms.gov |
| | Planning Bureau | | Dave Snider, Response Office Director | 601-933-6376 | dsnider@mema.ms.gov |
| MS Secretary of State's Office | - | Trustee of tidelands and submerged lands | Raymond Carter, Assistant Secretary of State - Gulf Coast | 228-864-0254 | raymond.carter@sos.ms.gov |
| MS State University Extension Service (MSU-ES) | Coastal Research and Extension Center | Mississippi Coastal Cleanup | Eric Sparks | 228-388-4710 | eric.sparks@msstate.edu |

Federal Agencies

| Agency | Division | Topic | Point of Contact | Phone | Email |
|--|--|--|---|--|-------------------------------------|
| Bureau of Safety and Environmental Enforcement (BSEE) | Marine Trash and Debris Program | Planning and coordination | James Sinclair, Marine Ecologist | 504-736-2789 | james.sinclair@bsee.gov |
| Federal Emergency Management Agency (FEMA) | Region IV | Funding following Presidential disaster declaration | Contact local emergency management agency. See http://www.msema.org/local-ema/ for a complete list of contacts. | - | - |
| | | Capability contact for GIS mapping and plotting of imagery | David Lawson, Region IV GIS Coordinator | 770-220-5504 | david.lawson@fema.dhs.gov |
| | | Capability contact for technical expertise for removal operations and environmental, compliance and permitting expertise | Valerie Rhoads, Public Assistance Branch Chief | 770-220-5618 | valerie.rhoads@fema.dhs.gov |
| National Oceanic and Atmospheric Administration (NOAA) | National Marine Fisheries Service (NMFS or NOAA Fisheries) | Emergency ESA/EFH consultation | - | - | nmfs.ser.emergency.consult@noaa.gov |
| | | EFH information | David Dale | 727-551-5736 | david.dale@noaa.gov |
| | | | Brandon Howard | 561-282-7088 | brandon.howard@noaa.gov |
| | | | Rusty Swafford | 409-766-3699 | rusty.swafford@noaa.gov |
| | ESA information | Rachel Sweeney | 727-824-5312 | rachel.sweeney@noaa.gov | |
| | NOS, Office of Coast Survey | Navigation preparation and response | Tim Osborn, Regional Navigation Manager – Central Gulf Coast | 337-291-2111 | tim.osborn@noaa.gov |
| | NOS, ORR, Emergency Response Division | Potential to release oil or hazardous substance | Adam Davis, Scientific Support Coordinator for USCG District 8 and backup for RRT IV | 206-549-7759 (C), 206-526-4911 (24hr) | adam.davis@noaa.gov |
| NOS, ORR, Marine Debris Division | Planning and coordination for marine debris issues | Caitlin Wessel, Gulf of Mexico Regional Coordinator | 251-544-5013 (O), 251-222-0276 (C) | caitlin.wessel@noaa.gov | |

Federal Agencies Continued

| Agency | Division | Topic | Point of Contact | Phone | Email |
|--|---|--|--|---------------------------------|-------------------------------------|
| National Park Service (NPS) | Gulf Islands National Seashore | Response in Gulf Islands National Seashore | Jolene Williams, Environmental Protection Specialist | 228-230-4132 | jolene_williams@nps.gov |
| | | | Daniel Brown, Superintendent | 850-934-2613 | daniel_r_brown@nps.gov |
| | - | Response on NPS-owned lands | C. Anna Toline, Marine Scientist, Oceans Program Coordinator | 843-518-1939 | catherine_toline@nps.gov |
| Natural Resource Conservation Service (NRCS) | - | Emergency Watershed Protection (EWP) Program Information | Scott Culberson, State Conservation Engineer | 601-965-5205 ext. 157 | scott.culberson@ms.usda.gov |
| | Hancock County Soil and Water Conservation District | EWP Information – Hancock County | - | 601-255-3225 ext. 3 | - |
| | Harrison County Field Office | EWP Information – Harrison County | - | 228-831-0881 ext. 3 | - |
| | Jackson County Soil and Water Conservation District | EWP Information – Jackson County | - | 228-826-2482 ext. 3 | - |
| U.S. Army Corps of Engineers (USACE) | Emergency Operations | Mississippi Valley Division | Eddie LeBlanc, Debris Program Manager | 337-332-6757 | edward.l.leblanc.iii@usace.army.mil |
| | | Vicksburg District – Primary District following Stafford Act Declaration | Donald Walker, Chief Emergency Management | 601-631-5367 | donald.s.walker@usace.army.mil |
| | | | Lamar Jenkins, Area Engineer | 662-455-0244 | lamar.jenkins@usace.army.mil |
| | | Mobile District – Support | Bo Ansley, Chief Emergency Management | 251-690-2027 | hubert.r.ansley@usace.army.mil |
| | Navigation | Mobile District – Federally maintained waterway or channel | Duane Poiroux, Operations Division | 251-694-3720 | duane.b.poiroux@usace.army.mil |
| | | Vicksburg District – Federally maintained waterway or channel | Chad Bounds, Chief of Navigation Section | 601-631-5267 | chad.r.bounds2@usace.army.mil |
| | | | Joel Brown, Chief of River Operations | 601-631-5600 | joel.t.brown@usace.army.mil |
| | Regulatory Program | John Mark Henderson | 601-631-7222 | john.m.henderson@usace.army.mil | |
| | | Mobile District – Compliance and permitting | - | 251-690-2658 | cesam-rd@usace.army.mil |
| Vicksburg District – Compliance and permitting | - | 601-631-7071 | regulatory@usace.army.mil | | |
| U.S. Coast Guard (USCG) <i>continued on next page</i> | - | Report potential to release oil or hazardous substance | National Response Center (NRC) | 800-424-8802 | - |
| | District 8 | Planning and coordination | LCDR Paul Mangini, DRAT Supervisor | 504-671-2236 | paul.j.mangini@uscg.mil |
| | | | LT Chris Miller, DRAT Environmental Specialist | 504-671-2235 | chris.j.miller@uscg.mil |
| | | | Dee Oos, Area Contingency Plan Program Manager | 504-671-2233 | damara.a.oos@uscg.mil |
| | | | Mike Sams, Incident Management Preparedness Advisor | 504-671-2234 | michael.k.sams@uscg.mil |
| | | | Adam Tyndale, Response Equipment Coordinator | 504-671-2063 | adam.j.tyndale@uscg.mil |

Federal Agencies Continued

| Agency | Division | Topic | Point of Contact | Phone | Email |
|--|---|---|--|-----------------------|-----------------------------|
| <i>continued from previous page</i> U.S. Coast Guard (USCG) | District 8, Sector Mobile | Capability contact | USCG Sector Mobile Command Center | 251-441-5976 | - |
| | | | Station Gulfport | 228-868-3743 | - |
| | | | Station Pascagoula | 228-769-5601 | - |
| | | Planning and coordination | LT Carolyn Bigos | 251-321-4276 | carolyn.m.bigos@uscg.mil |
| | | | LT Ben Cariddi, Incident Management Division | 251-545-2662 | benjamin.p.cariddi@uscg.mil |
| | | | LT Kyle Berry, Waterways Management | 251-441-5940 | kyle.d.berry@uscg.mil |
| U.S. Environmental Protection Agency (EPA) | Region IV | Report potential to release oil or hazardous substance | National Response Center (NRC) | 800-424-8802 | - |
| | | Planning and coordination | Gary Andrew, RRT IV and ESF 10 Coordinator | 678-733-1621 | andrew.gary@epa.gov |
| | | | Leo Francendese, On-Scene Coordinator | 404-606-2223 | francendese.leo@epa.gov |
| | | Capability contact | EPA Region IV Duty Officer | 404-562-8700 | - |
| U.S. Fish and Wildlife Service (USFWS) | Coastal Program | Northern Gulf Coastal Program | Patric Harper, Coastal Program Coordinator | 251-802-3154 | patric_harper@fws.gov |
| | Gulf Coast National Wildlife Refuge (NWR) Complex | Response in Mississippi Sandhill Crane and Grand Bay NWRs | Jereme Phillips, Project Leader | 228-497-6322 ext. 105 | jereme_phillips@fws.gov |
| | | Response in Mississippi Sandhill Crane NWR | Danny Moss, Refuge Manager | 228-497-6322 | daniel_moss@fws.gov |
| | Mississippi Ecological Services Field Office | Compliance and permitting | - | 601-965-4900 | - |

8.4 Mississippi Legislation Applicable to Waterway Debris Response

- Antiquities Law of Mississippi, Miss. Code Ann. § 39-7-1 et seq.
- Channel Maintenance Act, Miss. Code Ann. § 49-26-1 et seq.
- Coastal Wetlands Protection Act, Miss. Code Ann. § 49-27-1 et seq.
 - Derelict vessel defined; jurisdiction; standing; notice; derelict vessel removal; emergency removal; cost recovery; court process; department authorities, Miss. Code Ann. § 49-27-71
- Leasing or renting of surface and submerged lands, Miss. Code Ann. § 29-1-107
- Limits and boundaries of the territorial waters of the State of Mississippi, Miss. Code Ann. § 3-3-1
- Marine Resources Law, Miss. Code Ann. § 57-15-1 et seq.
- Mississippi Air and Water Pollution Control Law, Miss. Code Ann. § 49-17-1 et seq.
- Mississippi Boating Law of 1960, Miss. Code Ann. § 59-21-1 et seq.
 - Boat and Water Safety Act, Miss. Code Ann. § 59-21-111 et seq.
- Mississippi Emergency Management Law, Miss. Code Ann. § 33-15-1 et seq.
 - Local organization of emergency management, Miss. Code Ann. § 33-15-17
- Mississippi Marine Litter Act, Miss. Code Ann. § 51-2-1 et seq.
- Navigable waters, Miss. Code Ann. § 51-1-1 et seq.
 - Removal of obstructions, Miss. Code Ann. § 51-1-5
 - What constitutes public waterways; rights thereon; prohibited activities; penalties, Miss. Code Ann. § 51-1-4
- Solid Wastes Disposal Law of 1974, Miss. Code Ann. § 17-17-1 et seq.
- Public Trust Tidelands Act, Miss. Code Ann. § 29-15-1 et seq.
 - Tidelands and submerged lands held in public trust; rights of littoral and riparian property owners, Miss. Code Ann. § 29-15-5 et seq.
- Restoration of sand beaches; leasing for development of port and related industrial facilities, Miss. Code Ann. § 59-9-21
- Rules and Regulations to Implement the Derelict Vessel Act in the State of Mississippi, Miss. Admin. Code Title 22, Part 14
- Rules and Regulations to Prohibit the Disposal of Plastics and Other Garbage in Marine Waters of the State of Mississippi, Miss. Admin. Code Title 22, Part 10
- Tidelands, Miss. Admin. Code Title 1, Part 11, Chapter 2



Wilbur L. Ross, Jr.
United States Secretary of Commerce

RDML Tim Gallaudet, Ph.D., USN Ret.
Assistant Secretary of Commerce for Oceans and Atmosphere and
Acting Under Secretary of Commerce for Oceans and Atmosphere

W. Russell Callender, Ph.D.
Assistant Administrator for Ocean Services
and Coastal Zone Management