

Louisiana Marine Debris Emergency Response Guide: Comprehensive Guidance Document

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Table of Contents

Li	st of Acronyms	4
De	efinitions	6
1.	Introduction	15
	1.1. Purpose	
	1.2. Scope of <i>Guide</i>	15
	1.3. Guide Maintenance	16
2.	Incident Waterway Debris in Louisiana	17
	2.1. Foreseeable Waterway Debris Incidents in Louisiana	
	2.2. Prominent Debris Types	
3.	Louisiana Waterway Debris Response Flowchart	21
4.	Roles and Responsibilities	23
	4.1. Local Governments	25
	4.2. State Agencies	26
	4.3. Federal Agencies	32
	4.4. Tribal Governments	
	4.5. Private Landowners	37
	4.6. Volunteer and Non-Governmental Organizations	38
	4.7. Louisiana Waterway Debris Response Map	38
5.	Permitting and Compliance Requirements in Louisiana	
	5.1. Local and State Requirements	
	5.2. Federal Requirements	
	5.3. Permitting and Compliance for Waterway Debris Removal in Louisiana One-Pager	45
6.	Louisiana Waterway Debris Response Needs	
	6.1. Response Challenges and Recommended Actions	47
Def 1. 1 2. 1 3. 1 4. 1 7. 1 8. 4	6.1.1. Policy and Programs	47
	6.1.2. Funding and Resources	48
	6.1.3. Pre-event Planning and Coordination	
	6.1.4. Education and Communication	
	6.2. Additional Resources	52
7.	References	54
8.	Appendices	59
	8.1. Contact Information	59
	8.2. Response Capabilities	
	8.3. Select Agency Authorities	
	8.3.1. Local Government Authorities	
	8.3.2. State Agency Authorities	66
	8.3.3. Federal Agency Authorities	
	8.4 Louisiana Legislation Applicable to Waterway Debris Response	71

List of Acronyms

ACP Area Contingency Plan
BMP Best Management Practice
CBRA Coastal Barrier Resources Act

CBRS John H. Chafee Coastal Barrier Resources System

C&D Construction and Demolition Debris

CERCLA Comprehensive Environmental Response, Compensation, and Liability Act

(Superfund)

COTP Captain of the Port (of USCG)

CPRA Coastal Protection and Restoration Authority

CRT Louisiana Department of Culture, Recreation and Tourism

DNR Louisiana Department of Natural Resources

DOA Louisiana Division of Administration

DOTD Louisiana Department of Transportation and Development
DPS Louisiana Department of Public Safety and Corrections

EFH Essential Fish Habitat

EMAC Emergency Management Assistance Compact

EOC Emergency Operations Center EOP Emergency Operations Plan

EPA U.S. Environmental Protection Agency

ESA Endangered Species Act
ESF Emergency Support Function
ESI Environmental Sensitivity Index

EWP Emergency Watershed Protection (of NRCS)
FEMA Federal Emergency Management Agency

FOSC Federal On-Scene Coordinator
GIS Geographic Information Systems

GOHSEP Governor's Office of Homeland Security and Emergency Preparedness

HHM Household Hazardous Material HHW Household Hazardous Waste IMAC Intrastate Mutual Aid Compact

LAVOAD Louisiana Voluntary Organizations Active in Disaster
LCRP Louisiana Coastal Resources Program (of DNR)
LDAF Louisiana Department of Agriculture and Forestry
LDEQ Louisiana Department of Environmental Quality
LDWF Louisiana Department of Wildlife and Fisheries

LIDAR Light Detection and Ranging

LOSCO Louisiana Oil Spill Coordinator's Office (of DPS)

LSP Louisiana State Police (of DPS)

NCP National Oil and Hazardous Substances Pollution Contingency Plan

NEPA National Environmental Policy Act

NMFS NOAA's National Marine Fisheries Service (also known as NOAA Fisheries)

NOAA National Oceanic and Atmospheric Administration

NPS National Park Service NRC National Response Center

NRCS Natural Resources Conservation Service
NRT Navigation Response Team (of NOAA)
NWR National Wildlife Refuge (of USFWS)

OCM Office of Coastal Management (of DNR)

OHSEP Office of Homeland Security and Emergency Preparedness

ROV Remotely Operated Vehicle

RP Responsible Party

RSF Recovery Support Function

SHPO State Historic Preservation Office (of CRT)

SOSC State On-Scene Coordinator

SUPSALV U.S. Navy Supervisor of Salvage and Diving

USACE U.S. Army Corps of Engineers

USCG U.S. Coast Guard

USFWS U.S. Fish and Wildlife Service

Definitions

<u>Acute waterway debris incident</u> – 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. For Louisiana, these documents are the *New Orleans ACP*, *Southeast Louisiana ACP*, and *Southeast Texas and Southwest Louisiana ACP* (U.S. Coast Guard [USCG], 2015; USCG, 2016a; USCG, 2016b).

<u>Captain of the Port (COTP)</u> – U.S. Coast Guard Captains of the Port and their representatives enforce within their respective areas port safety and security and marine environmental protection regulations, including, without limitation, regulations for the protection and security of vessels, harbors, and waterfront facilities; anchorages; security zones; safety zones; regulated navigation areas; deepwater ports; water pollution; and ports and waterways safety (33 C.F.R. § 1.01-30). U.S. Coast Guard COTP Zones in Louisiana include COTP New Orleans and COTP Houma in Sector New Orleans and COTP Port Arthur in Sector Houston-Galveston.

<u>Coastal area</u> – The Louisiana <u>Coastal Zone</u> and contiguous areas subject to storm or tidal surge and the area comprising the Louisiana Coastal Ecosystem as defined in Section 7001 of P.L. 110-114 (La. R.S. 49:214.2(4)).

<u>Coastal waters</u> – The waters and bed of the Gulf of Mexico within the jurisdiction of the state of Louisiana, including the arms of the Gulf of Mexico subject to tidal influence, estuaries, and any other waters within the state if such other waters are navigated by vessels with a capacity to carry ten thousand gallons or more of oil as fuel or cargo (La. R.S. 30:2454(2)). Those bays, lakes, inlets, estuaries, rivers, bayous, and other bodies of water within the boundaries of the coastal zone which have measurable seawater content (under normal weather conditions over a period of years; La. Admin. Code 43:I.700; La. R.S. 49:214.23(4)).

<u>Coastal waters of Louisiana</u> – Those waters extending three nautical miles from the coastline, or beyond to the extent of the jurisdiction of the state of Louisiana (La. R.S. 34:3102(3); La. R.S. 34:3492(3)).

<u>Coastal zone (Area Contingency Plan coastal zone)</u> – U.S. Coast Guard area of responsibility for response under the National Contingency Plan, with geographic boundaries defined in the *New Orleans Area Contingency Plan (ACP)*, *Southeast Louisiana ACP*, and *Southeast Texas and Southwest Louisiana ACP* (USCG, 2015; USCG, 2016a; USCG, 2016b).

<u>Coastal Zone (under Louisiana Coastal Resources Program)</u> – The Coastal Zone (Coastal Zone Management Act Boundary) varies from 16 to 32 miles inland from the Gulf coast and generally follows the Intracoastal Waterway running from the Texas-Louisiana state line then follows highways and/or parish lines through Vermilion, Iberia, St. Martin, Assumption, St. James, and Ascension parishes, then turning northward to take in Lake Maurepas and Lake Pontchartrain and ending at the Mississippi-Louisiana border. The seaward boundary of the Coastal Zone is the three-

nautical mile territorial sea (La. R.S. 214.24; National Oceanic and Atmospheric Administration [NOAA], 2012). Louisiana's Coastal Zone includes either all or part of the following 20 parishes: Ascension, Assumption, Calcasieu, Cameron, Iberia, Jefferson, Lafourche, Livingston, Orleans, Plaquemines, St. Bernard, St. Charles, St. James, St. John the Baptist, St. Martin, St. Mary, St. Tammany, Tangipahoa, Terrebonne, and Vermilion (Louisiana Department of Natural Resources [DNR], 2015). The coastal waters and adjacent shorelands within the boundaries of the coastal zone established in R.S. 49:214.24, which are strongly influenced by each other, and in proximity to the shorelines, and uses of which have a direct and significant impact on coastal waters (La. Admin. Code 33:VII.115; La. R.S. 49:214.23(4)).

Construction and Demolition debris (C&D) – Nonhazardous waste generally considered not water-soluble, including but not limited to, metal, concrete, brick, asphalt, roofing materials (shingles, sheet rock, plaster), or lumber from a construction, remodeling, repair, renovation, or demolition project that is authorized by the government to be necessary for a disaster (Louisiana Department of Environmental Quality [LDEQ], 2017a). 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 (Federal Emergency Management Agency [FEMA], 2017).

Electronic waste (e-waste) – Devices or components thereof that contain one or more circuit boards and are used primarily for data transfer or storage, communication, or entertainment purposes (LDEQ, 2017a). Electronics that contain hazardous materials, such as computer monitors, televisions, cell phones, and batteries (FEMA, 2017).

Eligible applicant – Entities who may receive public assistance reimbursement funding from the Federal Emergency Management Agency 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 (44 C.F.R. § 206.222; FEMA, 2017).

Eligible debris – Debris must: be a direct result of a presidentially declared disaster; occur within the designated disaster area; and be the responsibility of the applicant at the time of the disaster. Debris removal work must be necessary to: eliminate an immediate threat to lives, public health and safety; eliminate immediate threats of significant damage to improved public or private property; or ensure the economic recovery of the affected community to the benefit of the community-at-large. The Federal Emergency Management Agency, not Louisiana Department of Environmental Quality, determines eligibility (LDEQ, 2017a). 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, 2017).

Emergency (Louisiana Department of Natural Resources Office of Coastal Management definition) – Emergency situations are those brought about by natural or man-made causes, such as storms, floods, fires, wrecks, explosions, spills, which would result in hazard to life, loss of property, or damage to the environment if immediate corrective action were not taken.

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.-b).

Emergency (Stafford Act definition) – In regards to an emergency declaration, 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 (state definition) – (a) The actual or threatened condition which has been or may be created by a disaster; or (b)(i) Any natural or man-made event which results in an interruption in the delivery of utility services to any consumer of such services and which affects the safety, health, or welfare of a Louisiana resident; or (ii) Any instance in which a utility's property is damaged and such damage creates a dangerous condition to the public. (iii) Any national or state emergency, including acts of terrorism or a congressional authorization or presidential declaration pursuant to the War Powers Resolution (50 U.S.C. 1541 et seq.; La. R.S. 29:723(3)).

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 debris site – A location that has been identified by the local government or state agency and has been evaluated and approved by Louisiana Department of Environmental Quality for the purposes of staging, reduction, or final disposal of disaster-generated debris. Emergency debris sites do not include the staging or other processing of municipal solid waste or putrescible waste and may not be used unless approved by Louisiana Department of Environmental Quality (LDEQ, 2017a).

Emergency Management Assistance Compact (EMAC) – Provides for mutual assistance between the states in managing any emergency disaster that may be duly declared by the governor of the affected state, whether arising from natural disaster, technological hazard, man-made disaster, civil emergency aspects of resources shortages, community disorders, insurgency, or enemy attack (La. R.S. 29:733).

Emergency Operations Center (EOC) – A protected site from which public officials issue warnings and exercise direction and control during an emergency/disaster. It is equipped and staffed to provide support in coordinating and guiding emergency/disaster operations (Governor's Office of Homeland Security and Emergency Preparedness [GOHSEP], 2014a).

Emergency Support Function (ESF) – Mechanism for grouping functions most frequently used to provide federal support to states and federal-to-federal support, both for declared disasters and emergencies under the Stafford Act and for non-Stafford Act incidents. The state of Louisiana uses the ESF concept to apply state resources and assigns corresponding state agencies to each ESF in the *State of Louisiana Emergency Operations Plan* (GOHSEP, 2014a; FEMA, 2008).

Environmental Sensitivity Index (ESI) map – Maps produced by the National Oceanic and Atmospheric Administration that provide a concise summary of coastal resources that are at risk if an oil spill occurs nearby. Examples of at-risk resources include biological resources (such as birds and shellfish beds), sensitive shorelines (such as marshes and tidal flats), and human-use resources (such as public beaches and parks; NOAA 2017a).

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

<u>Geographic Response Plan</u> – Geographic maps which are part of the Area Contingency Plans for oil spills to water. They provide a description of sensitive biological, cultural, and economic resources that must be addressed and guide responder in the first 24-48 hours of a spill. They also provide a prioritized list of tactical response strategies to be implemented during the early hours of an oil spill and detailed information for booming strategies that could be utilized to minimize impacts to predetermined sensitive resources (USCG, 2015).

Gulfward boundary - See definition for **State seaward boundary**.

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

Hazardous substance - Any gaseous, liquid, or solid material which because of its quantity, concentration, or physical, chemical, or biological composition when released into the environment poses a substantial present or potential hazard to human health, the environment, or property, and which material is identified or designated as being hazardous by rules and regulations adopted and promulgated by the secretaries of the Department of Environmental Quality or of the Department of Public Safety and Corrections, regardless of whether it is intended for use, reuse, or is to be discarded (La. R.S. 30:2272 (6)(a)). (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)).

<u>Hazardous waste</u> – Regulated under the Resource Conservation and Recovery Act and contains properties that make it potentially harmful to human health or the environment. A Resource Conservation and Recovery Act 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, 2017).

Household Hazardous Waste/Material (HHW/HHM) – Waste that can catch fire, react, explode, is corrosive or toxic that is generated by individuals on the premises of a residence for individuals (a household) and composed primarily of materials found in the wastes generated from homes (LDEQ, 2017a). 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, 2017).

<u>Improved property</u> – 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 (44 C.F.R. § 206.221(d)).

Incident waterway debris – See definition for Waterway debris.

<u>Ineligible debris</u> – Debris from a previous disaster; debris from unimproved property or undeveloped land; debris from a facility that is not eligible for funding under the public assistance program, such as public golf courses or cemeteries; and debris from federal lands or facility that are the authority of another federal agency or department (LDEQ, 2017a).

<u>Infectious waste</u> – 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, 2017).

Inland zone (Area Contingency Plan inland zone) – U.S. Environmental Protection Agency area of responsibility for response under the National Contingency Plan, with geographic boundaries defined in the *New Orleans Area Contingency Plan (ACP)*, *Southeast Louisiana ACP*, and *Southeast Texas and Southwest Louisiana ACP* (USCG, 2015; USCG, 2016a; USCG, 2016b).

<u>Intrastate Mutual Aid Compact (IMAC)</u> – Allows for intrastate mutual aid between parishes within the state, to provide and promote mutual assistance in the prevention of, response to, and recovery from an emergency or disaster. System of parish-to-parish mutual aid for those parishes that do not have a current mutual aid agreement in place (GOHSEP, 2013).

<u>Levees</u> – Any use or activity which creates an embankment to control or prevent water movement, to retain water or other material, or to raise a road or other lineal use above normal or flood water levels. Examples include levees, dikes, and embankments of any sort. Hurricane or flood protection levees are those levees and associated water control structures whose primary purpose is to prevent occasional surges of flood or storm generated high water (La. Admin. Code 43:1.700).

Major disaster (Stafford Act definition) – In regards to a major disaster declaration, 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)).

<u>Marine debris</u> – 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)).

<u>Marsh</u> – Wetlands subject to frequent inundation in which the dominant vegetation consists of reeds, sedges, grasses, cattails, and other low growth (La. Admin. Code 43:I.700).

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 (U.S. Environmental Protection Agency, 2017).

Natural waterway – A waterway that is not improved or maintained (FEMA, 2017).

<u>Navigable waterways</u> – Navigable waterways include both those waterways which are federally maintained and those waterways which are not federally maintained. U.S. Army Corps of Engineers 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. § 2.36; 33 C.F.R. § 329.4).

Non-navigable water bottoms (Inland) – Those which are not navigable in fact and are not sea, arms of the sea, or seashore. Inland non-navigable water beds or bottom are private things and may be owned by private persons or by the state and its political subdivisions in their capacity as private persons (La. R.S. 9:1115.2).

<u>Obstruction</u> – Anything that restricts, endangers, or interferes with navigation (33 C.F.R. § 64.06). In relation to the Fisherman's Gear Compensation Fund, any object, obstacle, equipment or device located in state water within the geographical boundary of the fund, set forth in R.S. 49:214.24 whether natural or man-made; provided that this definition shall not be applied to obstructions floating on the surface which could be avoided by a reasonably prudent fisherman (La. Admin. Code 43:I.1501). See definition for <u>Underwater obstruction</u>.

<u>Oil</u> – 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)). Any of numerous smooth, greasy, combustible hydrocarbons that are liquid or at least easily liquefiable on warming, are soluble in ether but not in water, including but not limited to crude oil, petroleum, fuel oil, sludge, oil refuse, and oil mixed with wastes other than dredged spoil (La. Admin. Code 33:I.3905). Oil of any kind or in any form including, but not limited to, crude oil, petroleum, fuel oil, sludge, oil refuse, oil mixed with wastes other than dredged spoil, but does not include petroleum, including crude oil or any fraction thereof, which is specifically listed or designated as a hazardous substance under the Comprehensive Environmental Response, Compensation and Liability Act 42 U.S.C. §9601(14)(A)-(F), effective as of the date of the adoption of this rule and which is subject to the provisions of that Act (La. Admin. Code 43:XXIX.109).

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

Pollutant – Any substance introduced into the environment of the state by any means that would tend to degrade the chemical, physical, biological, or radiological integrity of such environment (La. Admin. Code 33:I.3905).

<u>Pollutant or contaminant</u> – Includes, but not 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 lands – The beds and bottoms of all navigable waters and the banks or shores of bays, arms of the sea, the Gulf of Mexico, and navigable lakes belong to the state of Louisiana (La. R.S. 41:1701).

<u>Putrescent debris</u> – Waste susceptible to rapid decomposition by bacteria, fungi, or oxidation, creating noxious odors (LDEQ, 2017a). Debris that will decompose or rot, such as animal carcasses and other fleshy organic matter (FEMA, 2017).

<u>Recoverable waterway debris</u> – Generally any documented vessel, vehicle, recreational vehicle, or shipping container traceable to an owner (U.S. Army Corps of Engineers, 2010).

Responsible Party(ies) (RP) – (a) The owner(s) and/or operator(s) of a vessel or terminal facility from which an unauthorized discharge of oil emanates or threatens to emanate; and (b) In the case of an abandoned vessel or facility, the party who would have been responsible immediately prior to the abandonment; and (c) Any other person, but not including a person or entity who is rendering care, assistance, or advice in response to an unauthorized discharge or threatened unauthorized discharge of another person, who causes, allows, or permits an unauthorized discharge of oil or threatened unauthorized discharge of oil (La. Admin. Code 43:XXIX.109).

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)).

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, 2017).

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 (42 U.S.C § 5121 et seq.).

State On-Scene Coordinator (SOSC) – The Louisiana Oil Spill Coordinator or state official designated by the coordinator to coordinate and direct response actions under the State Oil Spill Contingency Plan pursuant to R.S. 30:2464 (La. Admin. Code 43:XXIX.109).

State-owned lands (Lands belonging to the state of Louisiana) – All public lands within the limits of the state, including tidelands, submerged lands, and the bed of the sea within the jurisdiction of the state of Louisiana, other than lands title to which is vested in: (1) The United States of America or any of its agencies, departments, or instrumentalities; (2) local political subdivisions of the state of Louisiana including, but not limited to, municipalities, parishes, and special taxing districts; and (3) The three management boards for higher education created pursuant to Article VIII, Sections 6 and 7 of the 1974 Constitution (La. Admin. Code 25:I.101). The state of Louisiana owns the water, beds, and bottoms of all navigable waters and the banks or

shores of bays, arms of the sea, the Gulf of Mexico, and navigable lakes that were not under the direct ownership of any person on August 12, 1910 (La. R.S. 9:1101; La. R.S. 41:1701). State water bottoms generally extend from the mean (ordinary) low water line in natural navigable rivers and streams, from the mean (ordinary) high water line in lakes and bays, and from the mean higher high water line to 3 n.mi. in the Gulf of Mexico (highest tide in the winter season of 1812 as well as the accretion or to the furthest extent of erosion; Louisiana Division of Administration, n.d.; La. Civ. Code art. 456; La. R.S. 49:1)

State seaward boundary (Gulfward boundary) – Extends a distance into the Gulf of Mexico three marine leagues from the coastline. For the purposes of this Part, "three marine leagues" is equal to nine geographic miles or 10.357 statute miles (La. R.S. 49.1). The seaward boundary of each original coastal State is approved and confirmed as a line three geographical miles distant from its coast line (43 U.S.C. § 1312).

State waters - See definition for Waters of the state.

<u>Underwater obstruction</u> – Any obstacle, whether natural or manmade, which impedes normal navigation and commercial fishing on the navigable waters of the state (La. Admin. Code 43:XI.301; La. R.S. 30:101.3(6)). See definition for <u>Obstruction</u>.

<u>Vegetative debris</u> – Vegetative matter resulting from landscaping, maintenance, right-of-way or land-clearing operations, including trees and shrubbery, leaves and limbs, stumps, grass clippings, and flowers (LDEQ, 2017a). Whole trees, stumps, trunks, branches, limbs, and other leafy material (FEMA, 2017).

<u>Vehicles and vessels (FEMA definition)</u> – 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, 2017).

Vessel(s) – Any type of watercraft used, or capable of being used, as a means of transportation on the water (La. Admin. Code 33:IX.107; LDEQ, 2017a). Includes every description of watercraft or other contrivance used or capable of being used as a means of transportation on water, whether self-propelled or otherwise, including barges (La. R.S. 30:2454(29)). Means and includes any steamship, steamboat, tug, towboat, barge, water craft, ship or vessel of any kind or description, whether foreign or domestic (La. R.S. 34:801(1)). Watercraft and air boats of every description, other than a seaplane on the water, used or capable of being used as a means of transportation on water (La. R.S. 34:851.2(10)). Every description of watercraft and air boats, including homemade boats, other than a seaplane on the water, used or capable of being used as a means of transportation on water, valued in excess of two thousand five hundred dollars, to be principally operated on the waters of this state, required to be numbered, not held as inventory for sale or lease, and transferred for the first time on or after July 1, 2008 (La. R.S. 34:852.2(17)).

<u>Virtual Louisiana (Virtual LA)</u> – Common operational picture currently used as the mandated software and visualization tool for all state agencies during disasters (GOHSEP, 2013).

<u>Watercraft</u> - Any contrivance used or designated for navigation on water (La. R.S. 34:851.2(11)).

<u>Waters of the state (State waters)</u> – Both the surface and underground waters within the state of Louisiana including all rivers, streams, lakes, estuaries, ground waters and all other water courses

and waters within the confines of the state, and all bordering waters and the Gulf of Mexico (La. Admin. Code 33:IX.107). Both the surface and underground waters within the state of Louisiana including all rivers, streams, lakes, groundwaters, and all other water courses and waters within the confines of the state, and all bordering waters and the Gulf of Mexico (La. R.S. 30:2073(7)). 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 this state (La. R.S. 34:851.2(12)). Any waters within the jurisdiction of the state (La. R.S. 34:852.2(18)).

<u>Waterway debris</u> (<u>Incident waterway debris</u>) – 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.

<u>WebEOC</u> – An Internet-based emergency information management application that provides operational details from various government and public safety groups in response to an imminent threat, emergency, or disaster. WebEOC is the primary channel for parishes to request assistance during and after an emergency or disaster (GOHSEP, 2013).

<u>Wetlands</u> – Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions (La. Admin. Code 33:VII.115; La. Admin. Code 33:IX.107; La. Admin. Code 43:I.700).

<u>White goods</u> – Discarded domestic appliances including, but not limited to, refrigerators, ranges, washers, freezers, dryers, air conditioning and heating units, freestanding ice makers, built-in stove surface units and oven units, and water heaters. White goods do not include small household appliances, such as, stand mixers, toasters, blenders, etc. (LDEQ, 2017a). 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, 2017).

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 Louisiana. 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 coastal areas in the state of Louisiana.

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 Louisiana Marine Debris Emergency Response Guide: Comprehensive Guidance Document (Guide) serves as a complete reference for waterway debris response in Louisiana. 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 Louisiana's coastal areas with a focus on the 20 parishes within the Louisiana Coastal Zone boundary. 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 to describe 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. The intent of this *Guide* is to address waterway debris resulting from acute episodic incidents, such as disaster debris, rather than chronic waterway debris issues.

1.3 *Guide* Maintenance

The Louisiana 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 the National Oceanic and Atmospheric Administration's (NOAA) Marine Debris Division in coordination with Louisiana stakeholders. Contact information will be verified annually, and the Guide will undergo a formal review every three years. The Louisiana Marine Debris Emergency Response Guide and subsequent versions will be posted on NOAA's Marine Debris Division website (National Oceanic and Atmospheric Administration [NOAA], 2017b).

2. Incident Waterway Debris in Louisiana

2.1 Foreseeable Waterway Debris Incidents in Louisiana

When Hurricane Katrina made landfall in Louisiana on August 29, 2005 it became one of the most devastating hurricanes in history. Katrina resulted in up to 20 feet of storm surge in southeastern Louisiana and was responsible for over 1,500 deaths in the state (Cable News Network, 2017; NOAA, n.d.-a). Eighty percent of the New Orleans metropolitan area was flooded as storm surge overtopped and breached levees. Just one month later, Hurricane Rita devastated portions of southwestern Louisiana. These two storms resulted in over 60 million cubic yards of disaster debris in Louisiana, including 60,000 vessels that were damaged or destroyed (Federal Emergency Management Agency [FEMA], 2015; Louisiana Department of Environmental Quality [LDEQ], 2008). Eleven years after the devastating 2005 hurricane season, 20 to 30 inches of rainfall fell in parts of Southeast Louisiana leading to historic flooding that killed 13 people and flooded over 100,000 homes (Louisiana Economic Development, 2016).

The Louisiana Coastal Zone includes 15,000 miles of coastline and 41 percent of coastal wetlands found in the continental United States (Louisiana Department of Natural Resources [DNR], 2015). As a high-risk state for natural disasters and the home of sensitive ecosystems, critical navigation routes, and energy production resources, pre-event planning for waterway debris response is vital for an effective recovery after a disaster strikes (Governor's Office of Homeland Security and Emergency Preparedness [GOHSEP], 2013). Figure 1 illustrates the number of federally declared disasters in each parish from 1953-2011, with the highest number of federally declared disasters occurring along the coast or coastal waterways.

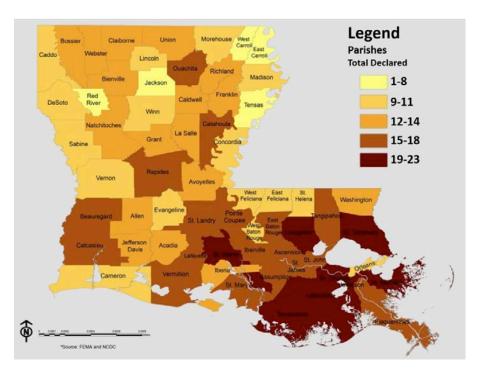


Figure 1. Number of federally declared disasters from 1953-2011 in each Louisiana parish. Data adapted from Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), 2014a.

Louisiana is situated at the mouth of the Mississippi River and is bordered to the south by the Gulf of Mexico, making the state vulnerable to both natural and technological hazards that could generate waterway debris. Because Louisiana is the second leading energy producer in the country and the coastal area is home to nearly one-third of the state's population, disasters along the coast can have long lasting impacts (DNR, 2015). Table 1 includes an overview of the annual likelihood of select natural hazards as described in the *State of Louisiana Hazard Mitigation Plan* (GOHSEP, 2014b). Natural hazards outlined below are those with the potential to generate waterway debris. Table 1 also includes a description of the key sources of risk from these hazards for both coastal and inland southern parishes. Although maritime disasters are not included in Table 1, they are a type of anthropogenic hazard that could generate waterway debris. Louisiana is home to over 30 ports statewide and six deep draft ports, including the Port of South Louisiana – the largest tonnage port in the western hemisphere (Ports Association of Louisiana, n.d.).

Table 1. Annual future likelihood of natural hazards that could generate waterway debris in Louisiana, where low is 0-30%, medium is 31-70%, and high is 71-100%. Data adapted from Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), 2014b.

	Annual	Key Sources of Risk from Natural Hazards					
Natural Hazard	Future Likelihood	Coastal Parishes	Inland Southern Parishes				
Flooding (Riverine, Flash, Backwater, Urban, and Ponding)	High		to riverine and backwater oding				
Thunderstorms (Hail, High Wind, and Lightning)	Insufficient data	Low risk o	f hailstorms				
Tornadoes	High	High risk of direct wind damage	Moderate-high risk of direct wind damage				
Tropical Cyclones (Hurricanes and Tropical Storms, including Storm Surges)	Medium	High risk of direct wind damage and loss of life, injury, and property damage from storm surge	Moderate-high risk of direct wind damage				
Dam Failure	Low	-	-				
Earthquake	Low	-	-				
Levee Failure	Low	_	pastal parishes and along drainage systems				

2.2 Prominent Debris Types

Some agency authorities are dependent on both the location and type of debris. Therefore, response to debris in Louisiana's coastal waterways may vary depending on the debris type to be removed. Primary debris types generated after a disaster as defined by FEMA (2017) 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 <u>Definitions</u> 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.

Table 2. Typical debris streams for different types of hazard incidents. Data adapted from Federal Emergency Management Agency (FEMA), 2007.

		Versi	taline Consti	Jendition and Leading the second seco	adous waste	od Hazardol Mastelli		Debris S		escent.	d Acadetal, teus
	Floods	х	Х	х	х	х	Х	х	Х	х	
rds	Hurricanes/Tropical Storms	х	Х	х	х	х	Х	х	Х	х	
Hazards	Tornadoes/Wind Storms	х	х	х	х	х		х	Х	х	
Natural	Winter/Ice Storms	х			х						
Nat	Earthquakes		Х	х	х	х	Х			х	
	Tsunamis	х	Х	х	Х	х	Х	Х	Х	Х	

The type and quantity of waterway debris generated after a disaster is highly dependent on land use and existing infrastructure along Louisiana's waterways. For example, protected undeveloped areas within Cameron Prairie National Wildlife Refuge are likely to generate vegetative debris, while developed areas along Lake Pontchartrain are likely to generate C&D debris. A land cover map for Louisiana's Coastal Zone is depicted in Figure 2 and illustrates the distribution of land use types in southern parishes. Increased development in the floodplain will increase the likelihood of waterway debris following a natural hazard event.

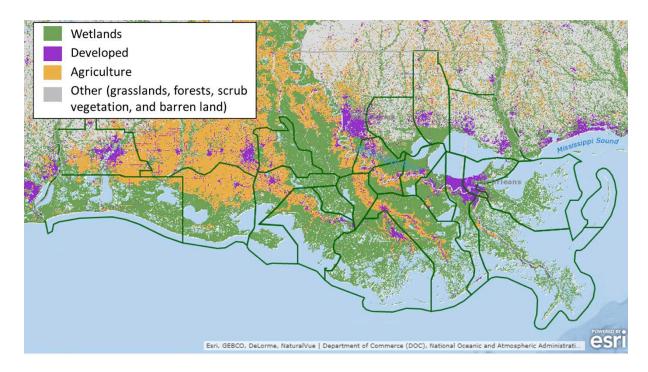


Figure 2. Land cover map for the state of Louisiana's Coastal Zone (National Oceanic and Atmospheric Administration [NOAA], 2017c).

Figure 3 depicts the relative marine debris risk (for storm-generated anthropogenic debris) for the Louisiana coast based upon assumed storm wind speed and surge, the distribution of on-shore infrastructure likely to generate debris, and the historical likelihood of tropical storm exposure. 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.

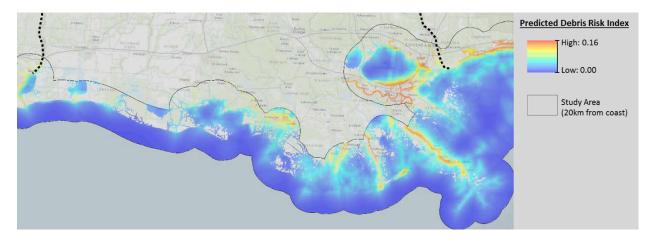


Figure 3. Relative marine debris risk for storm-generated anthropogenic waterway debris on Louisiana's coast (National Oceanic and Atmospheric Administration [NOAA], 2013).

3. Louisiana Waterway Debris Response Flowchart

The "Louisiana Waterway Debris Response Flowchart" 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.

The intent of the flowchart is to outline the most likely response structure with the understanding that flexibility is an inherent component of an effective response. For detailed information regarding individual organization roles and responsibilities, see Section 4. Select agency authorities are presented in Appendix 8.3.

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.

from local, state, or tribal governments

Louisiana Waterway Debris Response Flowchart

ACP – Area Contingency Plan

CPRA – Coastal Protection and Restoration Authority
DNR – LA Department of Natural Resources

waste disposal under ESF 10

DoD – Department of Defense

DOTD – LA Department of Transportation and Development EPA – U.S. Environmental Protection Agency

ESF – Emergency Support Function

EWP – Emergency Watershed Protection

FEMA – Federal Emergency Management Agency GOHSEP – Governor's Office of Homeland Security and Emergency

GOHSEP – Governor's Office of Homeland Security and Emergency Preparedness LDEQ – LA Department of Environmental Quality

LDWF – LA Department of Wildlife and Fisheries LOSCO – LA Oil Spill Coordinator's Office LSP – LA State Police

 $\label{eq:NCP-National} \mbox{Oil and Hazardous Substances Contingency Plan}$

NPS – National Park Service

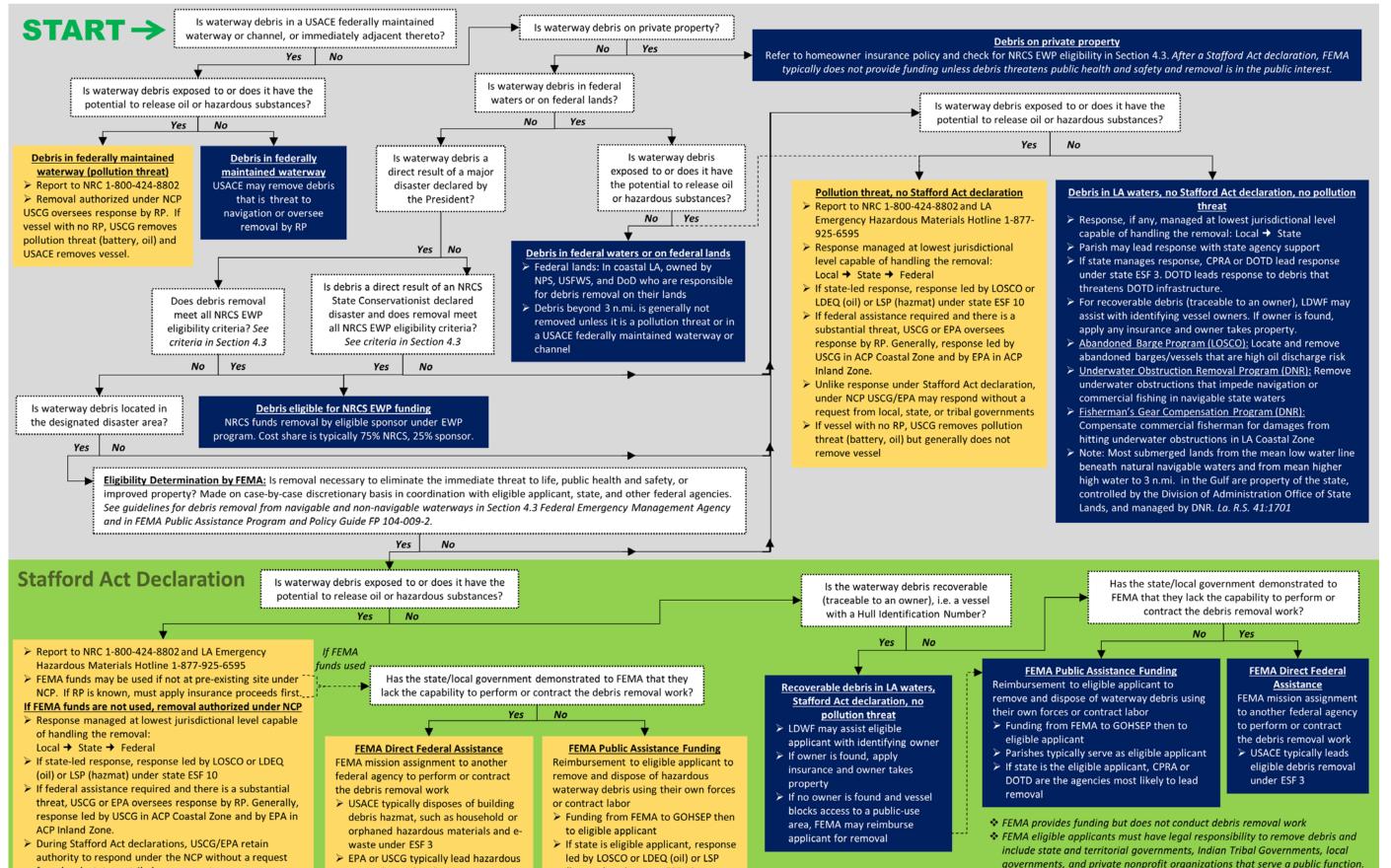
NRC – National Response Center NRCS – Natural Resources Conservation Service RP – Responsible Party (Owner, Operator, Lessee) USACE – U.S. Army Corps of Engineers

USCG – U.S. Coast Guard USFWS – U.S. Fish and Wildlife Service 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

❖ Public Assistance cost share is typically 75% FEMA, 25% applicant



(hazmat) under state ESF 10

4. Roles and Responsibilities

When possible, response to an emergency or disaster in Louisiana is managed at the local level. Parish resources, including parish-to-parish resources, are used before requesting assistance from the state (GOHSEP, 2013). Therefore, waterway debris response is generally managed at the lowest jurisdictional level capable of handling the response and removal. When local resources are exhausted, parish Offices of Homeland Security and Emergency Preparedness (OHSEPs) may request state assistance (GOHSEP, 2013). The Federal Government may supplement state and local response efforts when their resources have been exceeded or when unique capabilities are needed. Under the Stafford Act, the Governor may request a Presidential disaster declaration if the state's capabilities are exceeded. After the President issues a declaration that a major disaster exists, it authorizes the Federal Emergency Management Agency (FEMA) to provide financial assistance to the state, local governments, and private nonprofit organizations that serve a public function.

Because of the extent of debris throughout Louisiana's waterways following Hurricanes Katrina and Rita in 2005, U.S. Coast Guard (USCG) was mission assigned by FEMA to lead marine debris removal efforts. Additionally, Louisiana Department of Natural Resources (DNR) served as the state's official applicant (subgrantee) receiving FEMA public assistance funding for management and support of the marine debris removal program (IEM, 2011). Public assistance funding for marine debris removal was also provided to parishes, cities, ports, and Louisiana Department of Wildlife and Fisheries (LDWF; IEM, 2011). Because all incidents are different and state agency structures and responsibilities have changed since 2005, marine debris response and removal following future disasters may be led by different state and federal agencies.

The *State of Louisiana Emergency Operations Plan* (EOP) is an all-hazards plan that establishes the policies and structure for management of emergencies and disasters in the state (GOHSEP, 2014a). Louisiana uses the Emergency Support Function (ESF) and Recovery Support Function (RSF) concept to organize and coordinate state resources (GOHSEP, 2014a). ESFs most commonly applied during response to a waterway debris incident are state ESF 3 Public Works and Engineering to coordinate the removal of debris and wreckage from state owned lands and waterways and state ESF 10 Oil Spill, Hazardous Materials and Radiation. Additionally, the mission of state RSF 6 Natural and Cultural Resources is to help local and tribal governments and communities address long-term environmental and cultural resource recovery needs after large-scale and catastrophic incidents (GOHSEP, 2014a). Tables 3 and 4 outline individual organization responsibilities in support of state ESF 3 and ESF 10, respectively.

Table 3. State ESF 3 Public Works and Engineering responsibility chart. Data adapted from Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), 2014a.

Agency support to ESF 3 Primary Agencies: Louisiana Department of Transportation and Development (DOTD) and Coastal Protection and Restoration Authority (CPRA)	Engineering Personnel and Equipment	Debris Removal	Debris Disposal	Coastal Restoration	Watershed Protection
LA Department of Environmental Quality (LDEQ)		Х	Х		
LA Department of Health and Hospitals			Х		
LA Department of Natural Resources (DNR)			Х	Х	Х
LA Division of Administration (DOA)	Х	Х	Х		
LA National Guard	Х	Х			Х
Non-Governmental Organizations (private relief organizations, private industry, professional associations, etc.)		Х	Х	Х	

Table 4. State ESF 10 Oil Spill, Hazardous Materials and Radiation responsibility chart. Data adapted from Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), 2014a.

Agency support to ESF 10 Primary Agencies: Louisiana Oil Spill Coordinator's Office (LOSCO - Oil Spill), Louisiana State Police (LSP - Hazardous Materials), and Louisiana Department of Environmental Quality (LDEQ - Radiological)	Coordination	Analysis Support	Personnel	Equipment	Communications	Remediation
Coastal Protection and Restoration Authority (CPRA)	Х	Χ	Χ			
Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP)	Х				Х	
LA Department of Agriculture and Forestry (LDAF)		Х	Х	Х	Χ	Х
LA Department of Health and Hospitals		Χ	Χ			
LA Department of Natural Resources (DNR)		Χ	Χ			Х
LA Department of Transportation and Development (DOTD)		Χ	Х	Х	Х	Х
LA Department of Wildlife and Fisheries (LDWF)			Х	Х	Х	Х
Louisiana National Guard			Х	Х	Х	
Louisiana State University System		Х	Х			
Non-Governmental Organizations (private relief organizations, private industry, professional associations, etc.)		Х	Х	Х	Х	
State Fire Marshal			Х	Х	Χ	

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 tribal governments,

private landowners, and volunteer and non-governmental organizations. For a visual one-page representation of the most likely response structure, see "Louisiana Waterway Debris Response Flowchart" in <u>Section 3</u>. A list of select agency authorities applicable to waterway debris response is presented in <u>Appendix 8.3</u>, and a map of agency jurisdictional authorities can be found in <u>Section 4.7</u>. Additionally, contact information and response capabilities of key organizations is included in <u>Appendix 8.1</u> and <u>Appendix 8.2</u>, respectively.

4.1 Local Governments

- Act as first responders to waterway debris incidents impacting coastal parishes and municipalities (GOHSEP, 2014a; LDEQ, 2017a)
- May develop and implement local debris management plans
- Parishes are responsible for
 - o homeland security and emergency preparedness in the parish including establishing a parish OHSEP (GOHSEP, 2013; La. R.S. 29:729),
 - o preparing and maintaining a parish-level all-hazards EOP that is periodically reviewed by Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP; La. R.S. 29:729),
 - o developing and maintaining a parish hazard mitigation plan that is updated every five years (GOHSEP, 2013),
 - establishing interjurisdictional emergency preparedness agreements and/or requesting parish-to-parish aid through the Intrastate Mutual Aid Compact (IMAC),
 - o surveying public and private assets that can be called upon during emergencies and establishing a register of trained and skilled persons (GOHSEP, 2013),
 - o declaring a disaster or state of emergency for the parish (GOHSEP, 2014a),
 - o requesting assistance from GOHSEP through WebEOC when disaster response and recovery are beyond the capability of the parish to address (GOHSEP, 2013), and
 - issuing permits for projects of local concern in the Louisiana Coastal Zone for parishes with approved Local Coastal Management Programs (DNR, 2015; DNR, n.d.-a).
 - For additional information on permitting and compliance requirements, see
 Section 5.
- Municipalities within a parish are responsible for
 - o responding with personnel and services when available during emergencies (La. R.S. 29:730.2),
 - o declaring a state of emergency for the municipality (GOHSEP, 2013), and
 - o taking emergency response measures and requesting aid from the parish OHSEP or GOHSEP when a disaster or emergency is beyond the capabilities of local government (La. R.S. 29:737).
- 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
 - o Parish OHSEP offices serve as the beginning point for contact with GOHSEP.
 - As applicant (subgrantee), responsible for identifying debris locations, types, and quantities; demonstrating the pre-disaster condition and capacity of waterways; determining ownership of recoverable waterway debris; and providing a staging area for temporary storage of recoverable waterway debris (FEMA, 2017)
 - Responsible for identifying a Louisiana Department of Environmental Quality (LDEQ) permitted debris management site; prequalifying and maintaining a list of

- debris removal, monitoring, and/or operations contractors; and developing a request for proposals template for the solicitation of debris removal and monitoring contractors (LDEQ, 2017a; GOHSEP, 2013)
- 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 <u>Section 4.3 Natural Resource Conservation Service</u> for EWP eligibility criteria.

4.2 State Agencies

Coastal Protection and Restoration Authority (CPRA)

- Created by Louisiana Legislature in 2005 following Hurricanes Katrina and Rita to coordinate local, state, and federal efforts to achieve comprehensive coastal protection and restoration (Coastal Protection and Restoration Authority [CPRA], 2013)
- Primary agency under state ESF 3 Public Works and Engineering with the Louisiana Department of Transportation and Development (DOTD)
 - Coordinates the assessment of damages to coastal zones and the planning and accomplishment of restoration work (GOHSEP, 2014a)
- Support agency under state ESF 10 Oil Spill, Hazardous Materials and Radiation (GOHSEP, 2014a)
- Primary agency under RSF 6 Natural and Cultural Resources with Louisiana Department of Wildlife and Fisheries (LDWF; GOHSEP, 2014a)
- Following a Stafford Act declaration,
 - provides technical support to public assistance applicants for debris removal and to federal agencies operating under a mission assignment to remove debris from navigable waterways
 - o may coordinate with parishes to identify and document debris
 - o may serve as eligible applicant and receive public assistance reimbursement funding from FEMA to perform or contract waterway debris removal from state water bottoms
- Implements and enforces *Louisiana's Comprehensive Master Plan for a Sustainable Coast* including projects that protect, conserve, enhance, and restore the coastal area (CPRA, 2017; La. R.S. 49:214.6.2)
- Provides oversight and coordination of all matters related to hurricane protection and flood control systems, including levees (La. R.S. 49:214.6.3(B)(1))

Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP)

- Lead agency responsible for state-wide homeland security and emergency management (GOHSEP, 2013)
- Develops and maintains the *State of Louisiana Emergency Operations Plan* and assists in the development of local and interjurisdictional emergency plans (GOHSEP, 2014a; La. R.S. 29:726)
- Manages and responds to requests from local and state agencies for resources through WebEOC (GOHSEP, 2013)
- Gives directives to other state agencies and departments related to emergency planning and operations and activates and staffs the State Emergency Operations Center (EOC) to manage the state response to natural disasters (GOHSEP, 2013)
- Coordinates state and federal ESFs and serves as support agency under state ESF 10 Oil Spill, Hazardous Materials and Radiation (GOHSEP, 2013; GOHSEP, 2014a)

- Following a Stafford Act declaration, serves as coordination point between FEMA and state and local eligible applicants
 - o serves as FEMA grantee and administers public assistance funding to eligible applicants (subgrantees)
 - o coordinates damage assessment and needs assessment process with local and federal assessment teams
 - o assists state agencies and local governments in the preparation and submission of federal disaster assistance applications
- Maintains regional coordinators in nine regions who act as a liaison between the parishes within the region (GOHSEP, 2013)
- Provides training, exercises, and technical assistance to local authorities and first responders (GOHSEP, 2013)
- Creates and maintains the *State of Louisiana Hazard Mitigation Plan*, which is approved by FEMA and updated every five years (GOHSEP, 2014b)
- Reviews local debris management plans

Louisiana Department of Agriculture and Forestry (LDAF)

- Support agency under state ESF 10 Oil Spill, Hazardous Materials and Radiation and under RSF 6 Natural and Cultural Resources (GOHSEP, 2014a)
- Approves the burning or burial of animal carcasses after a disaster in coordination with LDEQ (LDEQ, 2017a)

Louisiana Department of Culture, Recreation and Tourism (CRT)

• Support agency under state RSF 6 Natural and Cultural Resources (GOHSEP, 2014a)

Office of Cultural Development

- Administers duties of the State Historic Preservation Office (SHPO) and ensures compliance with the National Historic Preservation Act
- Reviews proposed federally funded or permitted debris removal activities for impacts to archaeological properties, above-ground structures, and cultural resources (Louisiana Department of Culture, Recreation and Tourism [CRT], 2017a; CRT, 2017b)
- For additional information on compliance requirements, see <u>Section 5</u>.

Office of State Parks

- May develop and provide best management practices (BMPs) and guidelines for responders to protect cultural, archaeological, and natural resources
- May conduct debris removal within state parks

Louisiana Department of Environmental Quality (LDEQ)

- Primary agency under state ESF 10 Oil Spill, Hazardous Materials and Radiation
 - o Responsible for incidents involving radioactive material (GOHSEP, 2014a)
 - State on-scene coordinator (SOSC) for oil spill incidents in lieu of the Louisiana Oil Spill Coordinator's Office (LOSCO)
- Support agency under state ESF 3 Public Works and Engineering
 - Provides debris removal and disposal support to primary agencies (GOHSEP, 2014a)
- Support agency under RSF 6 Natural and Cultural Resources (GOHSEP, 2014a)

- Publishes the *Natural and Catastrophic Disaster Parish Resource Book* which includes LDEQ and parish contacts, a list of pre-approved emergency debris sites, an emergency debris site request form, and permit information (LDEQ, 2017b)
- May petition LOSCO for the removal of any vessel or structure that poses an actual or threatened unauthorized discharge of oil in coastal waters or on public or private land (La. R.S. 30:2469)
- Provides guidance regarding the disposal of vessels contaminated with oil or gasoline (LDEQ, 2017a)

Office of Environmental Compliance

Emergency and Radiological Services Division

- Authorized to provide immediate response to any environmental problem or emergency incident which threatens human health or the environment (La. R.S. 30:2011 et seq.)
- Lead state agency for incidents involving radioactive materials, lead technical agency for oil spills, and may serve as SOSC for oil spill incidents in lieu of LOSCO (La. R.S. 30:2462; La. R.S. 30:2464; Louisiana Oil Spill Coordinator's Office [LOSCO], 1996)
- Staffs regional offices capable of providing 24-hour response and technical assistance

Office of Environmental Services

Waste Permits Division

- Publishes the Comprehensive Plan for Disaster Clean-up and Debris Management, the state's
 debris management plan, to provide guidance to local governments and state agencies in
 planning, mobilizing, operating, and deactivating disaster debris sites (LDEQ, 2017a)
- Pre-approves emergency disaster debris sites and issues approvals for temporary emergency debris sites, site deactivation, site closure, and open burning (LDEQ, 2017a)
- Approves the burning or burial of animal carcasses after a disaster in coordination with Louisiana Department of Agriculture and Forestry (LDAF; LDEQ, 2017a)

Water Permits Division

- Reviews federal permit applications for impacts to established site-specific water quality standards (LDEQ, n.d.)
- For additional information on LDEQ compliance requirements, see Section 5.

Louisiana Department of Natural Resources (DNR)

- Support agency under ESF 3 Public Works and Engineering
 - Provides debris disposal support to primary agencies, Coastal Protection and Restoration Authority (CPRA) and Louisiana Department of Transportation and Development (DOTD; GOHSEP, 2014a)
- Support agency under state ESF 10 Oil Spill, Hazardous Materials and Radiation and RSF 6 Natural and Cultural Resources (GOHSEP, 2014a)
- 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
- Provides for the protection and management of the beds and bottoms of all navigable waters and the banks or shores of bays, arms of the sea, the Gulf of Mexico, and navigable lakes (La. R.S. 41:1701; La. R.S. 56.4)
 - Note: The Louisiana Division of Administration (DOA) Office of State Lands is responsible for the administration and management of state water bottoms (La. R.S. 41:1701.1(B)(2); Louisiana Division of Administration [DOA], 2015b).

Office of Coastal Management (OCM)

Interagency Affairs and Field Services Division

- Administers the Fisherman's Gear Compensation Program
 - Utilizes the Fisherman's Gear Compensation Fund to compensate commercial fisherman whose fishing gear, equipment, or vessels are damaged by underwater obstructions in the Louisiana Coastal Zone (DNR, n.d.-c)
 - o Funded through fees on state mineral leases and grantees of state pipeline rights-of-way in the Coastal Zone
 - Maintains Geographic Information Systems (GIS) map data layer of reported incident locations entitled "Fisherman's Gear Hang Points" in the "Reference Layers" category of DNR's Strategic Online Natural Resources Information System (DNR, n.d.-e)
- Supports coastal parishes in implementing approved Local Coastal Management Programs and determines whether activities of federal agencies are consistent with the Louisiana Coastal Resources Program (LCRP; DNR, 2015; DNR, n.d.-a)

Permits and Mitigation Division

- Implements the LCRP, regulates development activities, and manages the resources of the Coastal Zone (DNR, 2015)
- Issues Coastal Use Permits to ensure activities affecting the Coastal Zone are performed in accordance with LCRP guidelines (DNR, n.d.-b)
- Issues emergency approvals for activities related to preparation for and response to emergency situations, including debris disposal sites
- For additional information on DNR compliance requirements, see <u>Section 5</u>.

Office of Conservation

Engineering Regulatory Division

- Administers and manages the Underwater Obstruction Removal Program
 - o Identifies, inventories, and removes underwater obstructions in the navigable coastal waters of the state using the Underwater Removal Obstruction Fund (La. R.S. 30.101.6; DNR, n.d.-d)
 - May identify obstructions using incident reports from the Fisherman's Gear Compensation Program
 - o Removes prioritized underwater obstructions (typically oil and gas debris) which pose an impediment to navigation and commercial fishing in navigable state waters
 - o Obstruction verification and removal tasks are contracted to approved contractors
 - o Financed through unused funds of the Fisherman's Gear Compensation Fund

Office of Mineral Resources

 Grants and administers leases on state-owned lands and water bottoms for developing and producing oil and gas

Louisiana Department of Public Safety and Corrections (DPS) Louisiana Oil Spill Coordinator's Office (LOSCO)

- Primary agency under state ESF 10 Oil Spill, Hazardous Materials and Radiation
 - o SOSC for oil spill incidents (GOHSEP, 2014a; U.S. Coast Guard [USCG], 2015)
 - o Coordinates state agencies that are involved in oil spill response and cleanup
- Maintains the State of Louisiana Oil Spill Contingency Plan (LOSCO, 1996)
- Manages Abandoned Barge Program

- o Maintains inventory of abandoned vessels and barges in the state's coastal waters and a priority ranking for removal based on pollution potential (LOSCO, 2010)
- o Authorized up to one million dollars per year for removals if the owner or operator cannot be located (La. R.S. 30:2469)
- Established partnership with the U.S. Coast Guard (USCG) and U.S. Environmental
 Protection Agency (EPA) to implement the program

Louisiana State Police (LSP)

Emergency Services Unit

- Primary agency under state ESF 10 Oil Spill, Hazardous Materials and Radiation
 - SOSC for hazardous substance releases and responsible for hazardous material response and recovery (GOHSEP, 2014a; USCG, 2015)
- Operates the 24-hour Louisiana Emergency Hazardous Materials Hotline for reporting chemical spills or hazardous material emergencies and threats to public safety. See Appendix 8.1 for contact information.

Louisiana Department of Transportation and Development (DOTD)

- Primary agency under state ESF 3 Public Works and Engineering (GOHSEP, 2014a)
 - o Leads response to debris that threatens DOTD infrastructure
- Support agency under ESF 10 Oil Spill, Hazardous Materials and Radiation (GOHSEP, 2014a)
- 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

Louisiana Department of Wildlife and Fisheries (LDWF)

- Support agency under state ESF 10 Oil Spill, Hazardous Materials and Radiation and primary agency under RSF 6 Natural and Cultural Resources (GOHSEP, 2014a)
- May provide BMPs for debris removal from state property and sensitive habitats

Law Enforcement Division

- Provides emergency response services for search and rescue and maritime security operations (Louisiana Department of Wildlife and Fisheries [LDWF], 2016)
- Conducts vessel patrols of in-shore and off-shore waters
- Ensures compliance with state and federal laws associated with wildlife, fisheries, and boating safety
- Administers state's mandatory boating education program

Office of Fisheries

- Manages living aquatic resources and their habitat (LDWF, 2016)
- Oyster Lease Section manages water bottom leases for oyster production.

Office of Management and Finance

- Issues vessel registrations and titles (LDWF, 2016)
- May assist with identifying owners of state registered vessels (LDEQ, 2015)

Office of Wildlife

Manages the state's wildlife management areas and refuges (LDWF, 2016)

- May conduct waterway debris assessment and cleanup within the state's wildlife management areas and refuges
- Maintains the state of Louisiana threatened and endangered species list

Louisiana Division of Administration (DOA)

- Support agency under state ESF 3 Public Works and Engineering
 - o Provides engineering personnel and equipment, debris removal, and debris disposal support to primary agencies (GOHSEP, 2014a)

Office of Community Development

Disaster Recovery Unit

• State's central point for disaster recovery and assists Louisiana's citizens to recover from hurricanes Katrina, Rita, Gustav, Ike, Isaac, and the floods of 2016 (DOA, 2017)

Office of State Lands

- Responsible for the identification, administration, and management of state public lands and water bottoms (Louisiana Division of Administration, 2015b)
 - o The state of Louisiana owns the water, beds, and bottoms of all navigable waters and the banks or shores of bays, arms of the sea, the Gulf of Mexico, and navigable lakes that were not under the direct ownership of any person on August 12, 1910 (La. R.S. 9:1101; La. R.S. 41:1701).
 - O State water bottoms generally extend from the mean (ordinary) low water line in natural navigable rivers and streams, from the mean (ordinary) high water line in lakes and bays, and from the mean higher high water line to 3 n.mi. in the Gulf of Mexico (highest tide in the winter season of 1812 as well as the accretion or to the furthest extent of erosion; DOA, n.d.; La. Civ. Code art. 456; La. R.S. 49:1).
- Identifies and maintains a master list of all public lands and water bottoms within the state (La. R.S. 39:13; La. R.S. 41.13; La. R.S. 41:1701.1(D))
 - o Maintains GIS map data layer of state water bottoms information as an initial reference for research (DNR, n.d.-f)
- Maintains a comprehensive state master plan for the administration of state lands and water bottoms (La. R.S. 41:1701.1(C))

Land and Waterbottom Management Section

- Manages programs relating to the beds and bottoms of navigable waters and the banks or shores of the bays, arms of the sea, the Gulf of Mexico, and navigable lakes which belong to the state of Louisiana (La. R.S. 41:1701.1(B)(2))
- Issues permits and leases for encroachments upon public lands (DOA, 2015a; La. R.S. 41:1701)
- For additional information on permitting and compliance requirements, see Section 5.

Titles and Surveys Section

- Responsible for the determination of titles and surveys pertaining to state lands and water bottoms using records and field assets (La. R.S. 41:1701.1(B)(4))
- Title and Boundaries Sub-Program conducts water bottom title investigations to determine whether water bottoms are state owned based on navigability at the time of statehood (DOA, 2015c; La. R.S. 41:1131 et seq.).
- Field Surveys Sub-Program gathers field data necessary for title and boundary determinations (DOA, 2015c; La. R.S. 50:121 et seq.).

Louisiana National Guard

- Support agency under state ESF 3 Public Works and Engineering
 - o Provides engineering personnel, equipment, and debris removal support to primary agencies (GOHSEP, 2014a)

Louisiana Ports

- Over 30 ports statewide carry 25% of U.S. waterborne commerce (Ports Association of Louisiana, n.d.).
- Six deep draft ports, including the Port of South Louisiana which is the largest tonnage port in the western hemisphere
- May remove debris to ensure safe navigation
- 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

4.3 Federal Agencies

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

Bureau of Safety and Environmental Enforcement

- Manages Marine Trash and Debris Program to eliminate debris associated with oil and gas operations on the Outer Continental Shelf
- Regulates marine trash and debris for oil and gas operations and renewable energy development on the Outer Continental Shelf
- 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)

- 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, 2017)
 - o Provides funding to eligible applicants at a typical cost share of 75% FEMA, 25% 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
 - O Debris removal must be necessary to eliminate the immediate threat to life, public health and safety, or improved property (FEMA, 2017).
 - For navigable waterways, debris removal is limited to a max 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 to remove debris extending upward into an eligible zone (FEMA, 2017).

- o For non-navigable waterways, including natural waterways, debris removal is only eligible to the extent that it is necessary to eliminate an immediate threat including the following: if the debris obstructs, or could obstruct, intake structures; if the debris could cause damage to structures; or if the debris is causing, or could cause, flooding to property during the occurrence of a 5-year flood (a flood that has a 20% chance of occurring in any given year; FEMA, 2017).
- Employs debris specialists that can be mobilized to assist eligible applicants with debris management

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 Endangered Species Act (ESA)
- For additional information on NOAA Fisheries compliance requirements, see <u>Section 5</u>.

National Ocean Service

Office of Coast Survey

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

Office of National Geodetic Survey

Acquires and rapidly disseminates spatially-referenced remote-sensing datasets to support
national emergency response. Imagery is obtained using high resolution digital cameras,
film-based aerial camera systems, Light Detection and Ranging (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 Federal On-Scene Coordinator (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 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

National Weather Service

- Predicts, forecasts, and issues official watches and warnings of severe weather, including hurricanes
- Provides operational tools and briefings to federal, state, and local officials for emergency management awareness and preparedness and to provide decision support services

National Park Service (NPS)

- Conducts waterway debris assessment and cleanup within Jean Lafitte National Historical Park and Preserve, including Barataria Preserve and Chalmette Battlefield, in coordination with parish, state, and other federal partners
- Organizes volunteer cleanups on National Park Service (NPS) lands when possible
- Provides BMPs to protect NPS lands and associated resources
- For a map of Jean Lafitte National Historical Park and Preserve boundaries, see <u>Section 4.7</u>.

Natural Resources Conservation Service (NRCS)

- When funding is available, provides emergency financial and technical assistance through
 the Emergency Watershed Protection (EWP) program for the following: to protect from
 additional flooding or soil erosion; to reduce threats to life or property from 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
 - o Helps communities address watershed impairments that pose imminent threats to lives and property as a result of natural disasters
 - o Typical cost share of 75% NRCS and 25% project sponsor
 - Public and private landowners are eligible for assistance but must be represented by a project sponsor, including state government, legal subdivisions of the state, such as a city, parish, water management district, drainage district or any Native American tribe or tribal organization.
 - o 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 the 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

U.S. Army Corps of Engineers (USACE)

- USACE districts operating in Louisiana include Galveston, New Orleans, Vicksburg, and Memphis Districts. For a map of USACE civil works boundaries between districts, see Section 4.7.
- Maintains regional pre-event contracting capabilities for all U.S. states and territories
- May request assistance from NOAA's NRT to survey ports and near-shore waterways

Emergency Operations

- Memphis District serves as lead federal agency in support of FEMA under ESF 3 Public
 Works and Engineering in Louisiana. Following a Stafford Act declaration, Memphis District
 may provide technical support or lead eligible debris removal from navigable waterways
 (non-federally maintained) and wetlands in Louisiana under a FEMA mission assignment to
 perform or contract debris removal and surveying.
- Galveston, Vicksburg, and New Orleans Districts all respond within their areas of authority in Louisiana under the Flood Control and Coastal Emergency Act (33 U.S.C. § 701n).

Navigation

- Responsible for operation, maintenance, and debris removal from authorized federally
 maintained waterways and channels within their districts. For a map of USACE federally
 maintained waterways and channels, see <u>Section 4.7</u>.
- May remove or oversee removal by a responsible party (RP) of sunken vessels (wrecks) or
 other obstructions if they are determined by USACE and USCG to be hazards to navigation
 on or near a federal waterway (33 C.F.R. § 245). May remove trees, brush, and other debris
 from navigable waterways if they are determined to promote flooding or be obstructions to
 navigation.
- Authorized to clear snags in specified small waterways (33 C.F.R. § 263.24)
- May provide assistance for debris removal from flood control structures (33 U.S.C. § 701n)
- 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 (33 U.S.C § 426m)
- Reviews permit applications when activities intersect with federally maintained waterways and channels, including levee systems

Regulatory Program

- USACE regulatory offices operating in Louisiana include Galveston, New Orleans, and Vicksburg Districts. New Orleans District is comprised of three permitting sections which include the eastern, central, and western evaluation sections.
- New Orleans District issues permits for debris removal within waterways and wetlands in most of coastal Louisiana. Vicksburg District issues permits in watersheds that empty into the Pearl River, which includes some areas in St. Tammany and Tangipahoa parishes, and Galveston District issues permits in portions of Cameron and Calcasieu parishes.
- For additional information on USACE permitting and compliance requirements, see <u>Section</u>
 5.

U.S. Coast Guard (USCG), District 8, Sector New Orleans and Sector Houston-Galveston

- USCG Captain of the Port (COTP) Zones in Louisiana include COTP New Orleans and COTP Houma in Sector New Orleans and COTP Port Arthur in Sector Houston-Galveston.
- In most cases, removal of 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 Area Contingency Plans (ACP; USCG, 2015; USCG, 2016a; USCG, 2016b)
 - o 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
 - o Directs response in accordance with the National Contingency Plan (NCP)
 - Coordinates with state, tribal, and territorial governments and oversees response by 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 National Response Center (NRC) for reporting of oil and hazardous material releases. See Appendix 8.1 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 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
- For a map of the USCG Sector boundaries, COTP boundaries, and the ACP coastal-inland zone boundary, see <u>Section 4.7</u>.

U.S. Environmental Protection Agency (EPA)

- Responds to oil and hazardous substance releases or threats of release in waterways within the inland zone as defined in the USCG ACPs (USCG, 2015; USCG, 2016a; USCG, 2016b). For a map of the ACP coastal-inland zone boundary, see Section 4.7.
- Serves as lead federal agency (FOSC) under ESF 10 Oil and Hazardous Materials Response in the ACP inland zone and during incidents affecting both inland and coastal zones
 - o Directs response in accordance with the NCP
 - Coordinates with state, tribal, and territorial governments and oversees response by 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

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 Endangered Species Act (ESA) and Coastal Barrier Resources Act (CBRA)
- For additional information on USFWS compliance requirements, see <u>Section 5</u>.

National Wildlife Refuges (NWR)

 Coordinates and manages waterway debris assessment and cleanup in National Wildlife Refuges (NWR) including the Southeast Louisiana NWR Complex comprised of Atchafalaya, Bayou Sauvage, Bayou Teche, Big Branch Marsh, Bogue Chitto, Breton, Delta, and Mandalay

- NWRs and the Southwest Louisiana NWR Complex comprised of Cameron Prairie, Lacassine, Sabine, and Shell Keys NWRs
- 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 coastal Louisiana, see <u>Section 4.7</u>.

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 Tribal Governments

Chitimacha Tribe, Coushatta Tribe, Jena Band of Choctaw, and Tunica-Biloxi Tribe

- Federally recognized tribes in Louisiana include
 - o Chitimacha Tribe in St. Mary Parish (in Louisiana Coastal Zone)
 - o Coushatta Tribe in Allen Parish and Jefferson Davis Parish
 - o Jena Band of Choctaw in Catahoula Parish, Grant Parish, and La Salle Parish
 - o Tunica-Biloxi Tribe in Avoyelles Parish
- As landowners, coordinate and manage waterway debris assessment and cleanup in the area of their jurisdiction
- May coordinate directly with state and local governments for emergency operations planning (GOHSEP, 2014a)
- 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
- May coordinate with EPA and USCG for removal of waterway debris contaminated with or with the potential to release oil and hazardous substances

4.5 Private Landowners

- May report acute waterway debris incidents to local OHSEPs to begin a coordinated, proper response. See Appendix 8.1 for contact information.
- May complete right-of-entry agreements with entities conducting private property debris removal or using private property as an access point
- In limited circumstances, based on the severity of the impact of an incident, FEMA may determine that debris removal from private property or privately-owned waterways and banks is eligible for public assistance funding (FEMA, 2017).
 - o FEMA evaluates whether the impacts of debris on private property affect the general public in that community and whether the applicant has legal authority to perform the work.
 - o If debris on private property is so widespread that it threatens public health and safety or the economic recovery of the community, FEMA may provide public assistance funding.

o In such cases, FEMA works with the state, territorial, tribal, and local governments to designate specific areas where debris removal from private property, including private waterways, is eligible.

4.6 Volunteer and Non-Governmental Organizations

- May provide debris removal assistance through funded projects and programs
- Non-governmental organizations serve as support under state ESF 3 Public Works and Engineering, ESF 10 Oil Spill, Hazardous Materials and Radiological, and RSF 6 Natural and Cultural Resources (GOHSEP, 2014a)
 - o Provide debris removal and disposal support to primary agencies under state ESF 3
- Following a Stafford Act declaration, 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 (FEMA, 2017)
- See <u>Section 4.5</u> for information on debris removal from private land owned by non-governmental organizations.

Barataria-Terrebonne National Estuary Program

Coordinates volunteers for coastal and inland debris cleanups

Louisiana Voluntary Organizations Active in Disaster (LAVOAD)

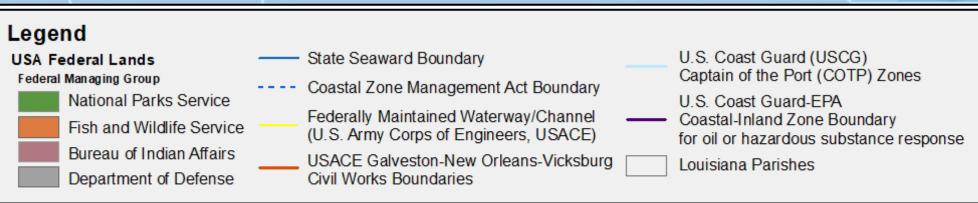
 Provides training and information to assist members in effectively delivering services after disasters (GOHSEP, 2013)

4.7 Louisiana Waterway Debris Response Map

The "Louisiana Waterway Debris Response Map" displays relevant agency jurisdiction boundaries in Louisiana's Coastal Zone. 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 <u>4.1</u>, <u>4.2</u>, and <u>4.3</u>, respectively. Select agency authorities applicable to waterway debris response are presented in <u>Appendix 8.3</u>.

Louisiana Waterway Debris Response Map





5. Permitting and Compliance Requirements in Louisiana

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

During response under a Stafford Act declaration, FEMA provides funding to applicants for eligible 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 Louisiana" handout in <u>Section 5.3</u>. Organization contact information can be found in <u>Appendix 8.1</u>, and select agency authorities are presented in <u>Appendix 8.3</u>.

5.1 Local and State Requirements

Local Government

- Parishes with approved Local Coastal Management Programs issue permits for projects of local concern in the Louisiana Coastal Zone (DNR, 2015; DNR, n.d.-a).
- Coastal parishes with local programs include Calcasieu, Cameron, Jefferson, Lafourche, Orleans, Plaquemines, St. Bernard, St. Charles, St. James, St. Tammany, and Terrebonne (DNR, n.d.-a).

Louisiana Department of Culture, Recreation and Tourism (CRT) Office of Cultural Development

- Administers duties of the State Historic Preservation Office (SHPO) and ensures compliance
 with the National Historic Preservation Act (NEPA), which 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 Louisiana 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 SHPO prior to beginning debris removal work to determine whether activities affect historic or cultural sites.
- Reviews proposed federally funded or permitted debris removal activities for impacts to archaeological properties, above-ground structures, and cultural resources (CRT, 2017a; CRT, 2017b)

Louisiana Department of Environmental Quality (LDEQ)

• LDEQ Secretary may issue an Emergency Declaration and Administrative Order if an incident requires immediate action to prevent irreparable damage to the environment and serious threats to life or safety (LDEQ, 2017a).

Office of Environmental Services

Waste Permits Division

• Pre-approves emergency disaster debris sites and issues approvals for temporary emergency debris sites, site deactivation, site closure, and open burning (LDEQ, 2017a)

Water Permits Division

- Issues water quality certifications to certify that the discharge of fill material into navigable waters will comply with site specific water quality standards (LDEQ, n.d.)
 - o If a water quality certification is required, permitting agency (USACE) sends copy of application to LDEQ.
 - o LDEQ reviews the application submitted by the permitting agency and provides instructions to the applicant as necessary.
 - A copy of the water quality certification is always forwarded to USACE. A copy is also forwarded to Louisiana Department of Natural Resources (DNR) Office of Coastal Management (OCM) if the activity is in the Coastal Zone.

Louisiana Department of Natural Resources (DNR)

Office of Coastal Management (OCM)

Interagency Affairs and Field Services Division

- Supports coastal parishes in implementing approved Local Coastal Management Programs (DNR, n.d.-a)
- Determines whether activities of federal agencies are consistent with the Louisiana Coastal Resources Program (DNR, 2015)

Permits and Mitigation Division

- Issues Coastal Use Permits in Louisiana's Coastal Zone to ensure activities are performed in accordance with Louisiana Coastal Resources Program (LCRP) guidelines (DNR, n.d.-b). For a map of Louisiana's Coastal Zone (Coastal Zone Management Act Boundary), see Section 4.7.
- Coastal Use Permit application required for debris removal within waterways and wetlands in the Louisiana Coastal Zone if the project may impact coastal waters, such as any project involving dredge or fill
- In the Louisiana Coastal Zone, DNR and USACE New Orleans and Vicksburg Districts have a joint permit application process (DNR, 2015).
 - Applications for a Coastal Use Permit are submitted to DNR on the "Joint Permit and Application" online form. An application for an activity in a parish with an approved Local Coastal Management Program may be submitted to either the parish or to DNR.
 - DNR evaluates applications for completeness and forwards copies to appropriate agencies including the USACE New Orleans or Vicksburg District Regulatory Office if required.
 - o DNR and USACE independently process the application, including separate requests for additional information and separate evaluation processes.
- For work in the Louisiana Coastal Zone in USACE Galveston District, separate applications are submitted to DNR and to the USACE Regulatory Office.
- DNR's Coastal Use Permit process will be expedited after an emergency.

Louisiana Division of Administration (DOA)

Office of State Lands

Land and Waterbottom Management Section

• Waterbottom Permits and Leases Sub-Program issues permits and leases for encroachments upon public lands (DOA, 2015a; La. R.S. 41:1701).

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).
 - o 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 Louisiana 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 Louisiana ESA-listed marine species list (NOAA, n.d.-e).
 - 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 Louisiana (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.-b).
 - During emergency waterway debris removal operations, NOAA Fisheries Southeast Regional Office utilizes the same process for initiating contact for both ESA and EFH consultations. Steps to complete the emergency response consultation process are outlined in NOAA (n.d.-b).
- Additional information on ESA and EFH consultation during non-emergencies can be found in NOAA (n.d.-c) and NOAA (n.d.-d), respectively.

U.S. Army Corps of Engineers (USACE)

- USACE Regulatory permit(s) (Section 404 and/or Section 10) may be required for debris removal within waterways and wetlands if the activity involves dredging, the discharge of dredged or fill material, or involves structures or work impacting those waters or wetlands. One or multiple permits may be needed depending on the scope of work to be conducted.
- USACE New Orleans District Regulatory Office issues permits for activities within
 waterways and wetlands in most of coastal Louisiana. Vicksburg District Regulatory Office
 issues permits in watersheds that empty into the Pearl River, which includes some areas in
 St. Tammany and Tangipahoa parishes, and Galveston District Regulatory Office issues
 permits in portions of Cameron and Calcasieu parishes.
- In the Louisiana Coastal Zone, DNR and USACE New Orleans and Vicksburg Districts have a joint permit application process (DNR, 2015). For a map of Louisiana's Coastal Zone (Coastal Zone Management Act Boundary), see Section 4.7.
 - Applications for a Coastal Use Permit are submitted to DNR on the "Joint Permit Application for Work Within the Louisiana Coastal Zone" online form. An application for an activity in a parish with an approved Local Coastal Management Program may be submitted to either the parish or to DNR.
 - DNR evaluates applications for completeness and forwards copies to appropriate agencies including the USACE New Orleans or Vicksburg District Regulatory Office if required.
 - o DNR and USACE independently process the application, including separate requests for additional information and separate evaluation processes.
- For work in the Louisiana Coastal Zone in USACE Galveston District, separate applications are submitted to DNR and to the USACE Regulatory Office.
- For work outside the Louisiana Coastal Zone, permit applications may be submitted directly to the appropriate USACE Regulatory Office.
- Permits that may be required include:
 - Programmatic General Permit: For work within the Louisiana Coastal Zone (New Orleans District)
 - General Permit 20: Hazardous Condition Response Activities (New Orleans District)

- 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 18: Minor Discharges. Authorizes minor discharges of dredged or fill material
- o **Nationwide Permit 19: Minor Dredging.** Dredging of no more than 25 cubic yards below the plane of the ordinary high water mark or the mean high water mark
- 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, other than activities undertaken entirely on a Superfund site
- In emergency situations, expedited permitting procedures may be instituted to facilitate timely implementation of response activities to mitigate risk to public safety and the environment. Emergency authorizations may require additional work by the applicant, such as submission of a formal permit application to maintain permitted structures/fills or a site restoration plan, once the immediate threat has passed. Should a follow-up permit application be required, normal permit review procedures will be adhered to, as appropriate for the specific work performed under the emergency authorization.
- In addition to USACE Regulatory Office review, other USACE offices may review permit applications to assist in the evaluation of compliance with permit conditions. In circumstances where the proposed activity may alter, occupy, or otherwise affect structures or works built by the United States (such as navigation channels and levee systems), permission must be obtained from the Secretary of the Army (authority has been delegated to USACE) as per 33 U.S.C. §408.

U.S. Fish and Wildlife Service (USFWS)

Ecological Services Program

- If a waterway debris removal project in Louisiana 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 Louisiana Ecological Services Field Office prior to beginning debris removal work to ensure compliance with Endangered Species Act (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 list of Louisiana's threatened and endangered land and freshwater species (U.S. Fish and Wildlife Service [USFWS], 2017b).

- o 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 Louisiana can be downloaded from USFWS (2017a).
- 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.
- USFWS may provide BMPs that 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).

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

The "Permitting and Compliance for Waterway Debris Removal in Louisiana" 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 local/state and federal requirements, see <u>Sections 5.1</u> and <u>5.2</u>, respectively.

Permitting and Compliance for Waterway Debris Removal in Louisiana

- In Louisiana's Coastal Zone, a LA Department of Natural Resources (DNR) Coastal Use Permit and/or U.S. Army Corps of Engineers (USACE) permit may be required if debris removal involves dredging, the discharge of dredged or fill material, or involves structures or work impacting those waters or wetlands.
- DNR and USACE New Orleans and Vicksburg Districts have a joint permit application process. Applications in Galveston District must be submitted to USACE and DNR separately.
- The <u>lead federal agency</u> is responsible for compliance with National Environmental Policy Act (NEPA), federal coastal consistency, and consulting with tribal and resource agencies including Louisiana State Historic Preservation Office (SHPO), U.S. Fish and Wildlife Service (USFWS), and the National Oceanic and Atmospheric Administration (NOAA) as required.

Compliance process when permit is required

Federally Funded Removal

(for example, FEMA funding under Stafford Act declaration)

Federal Agency Coordination

Coordinate with federal

funding agency regarding

environmental compliance

requirements before

applying for DNR and USACE

permits

No Federal Funding

(state, local, or privately funded removal)

Permit Application

In USACE New Orleans and Vicksburg Districts, complete and submit Joint Permit Application form to DNR who distributes the application to USACE and both agencies issue separate permits. In USACE Galveston District, submit separate permit applications to DNR and USACE and both agencies issue separate permits.

Permit(s) Issued

Review all permit conditions including DNR and resource agency requirements.
Generally, USACE will not issue a permit until DNR issues any required state authorization.

Debris Removal Begins

All permit conditions and DNR and resource agency requirements must be followed during debris removal activities

- Lead federal agency is responsible for NEPA compliance, federal coastal consistency, and consultations with tribal agencies, LA SHPO, USFWS, and NOAA as required.
- FEMA is the lead federal agency under Stafford Act declaration.
- Debris removal under Stafford Act declaration may trigger emergency permitting process.

As the lead federal agency, USACE will ensure NEPA compliance, federal consistency with Louisiana's Coastal Resources Program, and consult with tribal agencies, LA SHPO, USFWS, and NOAA as required.

About NEPA

The National Environmental Policy Act (NEPA) requires federal agencies to follow a specific planning process to ensure environmental consequences of a federally funded action are considered.

Agency Requirements and Contact Numbers

LA Department of Natural Resources (DNR)

Office of Coastal Management 800-267-4019

U.S. Army Corps of

Engineers (USACE)

Regulatory Offices

New Orleans District

504-862-2255

Vicksburg District

601-631-7071

Galveston District 409-766-3869

- Serves as the initial agency to submit a permit application in Louisiana's Coastal Zone (for USACE New Orleans and Vicksburg Districts). In a parish with an approved Local Coastal Management Program, may submit to either the parish or to DNR.
- Coastal Use 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
- DNR forwards permit application to appropriate agencies including USACE Regulatory Office (in New Orleans and Vicksburg Districts) if required
- In LA Coastal Zone, USACE New Orleans and Vicksburg Districts and DNR have a joint permit application process
- Some permits that may be required for debris removal in waterways and wetlands
 - NWP-3 Maintenance for removal/maintenance of culverts, sediments or debris accumulated around outfalls, bridges, etc.
 - NWP-18 Minor Discharges of dredge or fill material
 - NWP-19 Minor Dredging of no more than 25 cubic yards
 - NWP-22 Removal of Vessels for removal of wrecked, abandoned, or disabled vessels or other man-made obstructions to navigation
- Other USACE offices may review permit applications, such as when activities intersect with federally maintained waterways, including levee systems
- Conducts water quality certifications and reviews federal permit applications for impacts to wetlands, streams, and open waters
- Provides emergency debris removal, management, and disposal guidance
- Pre-approves emergency disaster debris sites and authorizes the siting and operation of temporary emergency debris management sites

LA Department of Culture, Recreation and Tourism

LA State Historic Preservation Office (SHPO) 225-342-8200

- Serves as the State Historic Preservation Office and ensures compliance with National Historic Preservation Act
- Consultation with LA SHPO 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
- Reviews proposed federally funded or permitted debris removal activities for impacts to archaeological properties, above-ground structures, and cultural resources

National Oceanic and Atmospheric Administration (NOAA)

National Marine Fisheries Service (NMFS)

ESA: 727-824-5312 EFH: 225-389-0508

- Consultation required if waterway debris response involves federal permits and/or funding (USACE permit, FEMA funding, etc.) to comply with:
 - Endangered Species Act (ESA) to ensure actions do not 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)

U.S. Fish and Wildlife Service (USFWS)

LA Ecological Services Field Office 337-291-3100

- Consultation required if waterway debris response involves federal permits and/or funding (USACE permit, FEMA funding, etc.) to comply with:
 - Endangered Species Act (ESA) to ensure actions do not adversely 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 Louisiana's coast

LA Department of Environmental Quality (LDEQ)

Waste Permits Division 225-219-3070 Water Permits Division 225-219-3225

6. Louisiana Waterway Debris Response Needs

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

6.1 Response Challenges and Recommended Actions

The following challenges and recommendations have been compiled based on stakeholder input to improve preparedness for response and recovery operations following an acute waterway debris incident in Louisiana.

6.1.1 Policy and Programs

- Challenge: The state has not designated a responsible agency for supporting waterway integrity in regards to waterway debris removal.
- Challenge: There is a need for improved legislation and a formal statewide program for removal of abandoned and derelict vessels.
- Challenge: Federal waterway debris removal programs and authorities can be narrow in scope. For example, debris may not meet NRCS eligibility criteria, debris in a USACE federally maintained channel may not be removed if it is not a hazard to navigation, and the Oil Spill Liability Trust Fund only provides funds to remove pollution threats but not debris.
 - Action 1: Communicate to NRCS EWP project sponsors that non-event related impairments and work completed prior to signing an agreement is not eligible for reimbursement.
 - Action 2: Evaluate whether state Oil Spill Contingency Fund can be used for marine debris removal.
- Challenge: After a Presidential declaration (under the Stafford Act), there are limitations on mitigation funding and on what work may be reimbursed, and some debris removal work may not be eligible for FEMA public assistance funding. For example, debris may not meet FEMA eligibility criteria, debris may be in a federal waterway or on federal lands, or debris may be outside of authorized work areas or may pre-date the disaster.
 - Action 3: Communicate (possibly via a website or online decision program) to potential FEMA applicants before a storm that they should be prepared to:
 - Describe in detail the importance of small bayous and canals. For example, small waterways may be used for navigation to offshore platforms by oilfield workers and by commercial fisherman.
 - Provide information on the pre-event condition of waterways including any debris present and water depth. FEMA should include information regarding the type of documentation needed and how recent data provided must be.

- Action 4: Develop and offer debris recovery training that includes FEMA's public assistance program and requirements specific to waterway debris removal for all personnel with a role in response.
- Action 5: Loosen applicable federal laws (including Stafford Act requirements) to allow for more mitigation funding so that all technically feasible mitigation is funded up to 100% regardless of benefit cost analysis.
- Challenge: FEMA eligibility criteria for waterway debris removal is not applied uniformly from state to state and disaster to disaster.
 - Action 4: Develop and offer debris recovery training that includes FEMA's public assistance program and requirements specific to waterway debris removal for all personnel with a role in response.
- Challenge: There is a need for uniform assessment criteria that overarches multiple federal programs.
 - Action 6: Communicate to FEMA applicants about the Unified Federal Environmental and Historic Preservation Review process for presidentially declared disasters. Under this process, there may be opportunities to combine environmental and historic preservation reviews or share environmental and historic preservation information to reduce the burden on FEMA applicants and agencies.
 - See FEMA (2017) in <u>Section 6.2</u>.
- Challenge: There is no established procedure or mechanism for reporting a waterway debris incident.
 - Action 7: Establish a procedure for reporting of waterway debris and a mechanism for disseminating this information to local authorities and the public in coastal Louisiana.
 - o Action 8: Establish a platform for sharing waterway debris response and removal information and resources.
- Challenge: There is little salvage value associated with fiberglass vessels and no program for vessel retirement.

6.1.2 Funding and Resources

- Challenge: After an acute waterway debris incident that results in a Presidential declaration, there is a lack of funding for the state's cost share for debris removal.
 - Action 9: Encourage state legislature to establish a Louisiana emergency debris removal trust fund, possibly from fees tied to boat registration, fishing licenses, or insurance policies.

- Action 10: Identify and establish a standing source(s) of funds for debris removal from public waterways to supplement existing programs and limited funding sources.
 - Funding source could be shared among Gulf of Mexico states, possibly through the Gulf of Mexico Alliance's Gulf Star funding opportunity.
 - Compile Gulf-wide debris statistics, including amounts and costs based on recent events, and lobby Congress for a Gulf-wide or coastal emergency debris removal fund.
- Action 11: Encourage state and local agencies to budget for emergency removal of debris.
- Challenge: After an acute waterway debris incident that does not result in a Presidential 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.
 - Action 10: Identify and establish a standing source(s) of funds for debris removal from public waterways to supplement existing programs and limited funding sources.
 - Funding source could be shared among Gulf of Mexico states, possibly through the Gulf of Mexico Alliance's Gulf Star funding opportunity.
 - Compile Gulf-wide debris statistics, including amounts and costs based on recent events, and lobby Congress for a Gulf-wide emergency debris removal fund.
 - Action 11: Encourage state and local agencies to budget for emergency removal of debris.
 - Action 12: 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.
 - Action 13: Expand publicity surrounding NOAA Marine Debris Program's funding opportunities, including the Marine Debris Prevention, Education and Outreach Partnership Grants and Community-based Marine Debris Removal Grants.
- Challenge: Outside of annual operating budgets, there is limited funding for debris removal on federal lands and in federal waters. This may result in the adoption of conservative approaches to debris removal or in a lack of removal.
 - Action 14: If debris removal on federal lands or in federal waters remains unfunded for a certain period of time, evaluate the possibility of allowing another agency to serve as debris removal lead in that area.
 - o Action 15: Establish mechanism by which federal agencies set aside funds which are pooled specifically for marine debris removal.
- Other proposed resource actions:

- Action 16: Increase NRCS direct funding for improving and maintaining devices that decrease flooding, and/or increase direct funding to local governments to improve and maintain drainage to mitigate against flooding.
- Action 17: Expand products available under mitigation programs to help with waterway debris prevention. For example, mitigation programs could include actions and funding intended to prevent disaster debris, such as education campaigns or pre-event land-based debris removal clean-ups.
- Action 18: Hold all responsible parties financially accountable and responsible for removal and damage costs.

6.1.3 Pre-event Planning and Coordination

- Challenge: There is a need for a comprehensive framework for marine salvage across all types of authorities, hazards, and funding.
 - o Action 19: Establish a coordination mechanism between USCG, state, and local agencies to have derelict vessels removed after USCG has abated a pollution threat.
 - o See U.S. National Response Team, 2014 in <u>Section 6.2</u>.
- Challenge: There is a need for increased coordination between responding agencies with different authorities and priorities. For example, some agencies are primarily focused on hazard mitigation or abating a pollution threat while others are focused on debris removal.
 - o Action 19: Establish coordination mechanism between USCG, state, and local agencies to have derelict vessels removed after USCG has abated a pollution threat.
 - o Action 20: Establish a Louisiana waterway debris task force.
- Challenge: There is a lack of information regarding pre-event debris locations and waterway
 maintenance. There is little tracking or monitoring of debris, even though pre-event
 conditions are needed for FEMA public assistance reimbursement.
 - See Public Assistance Program and Policy Guide (FEMA, 2017) for FEMA public assistance reimbursement requirements.
- Challenge: There is a lack of information and/or awareness regarding the typical (or potential) cost of debris removal per event and the type of debris expected.
 - Action 21: Compile historic debris removal cost data and share with interested stakeholders.

6.1.4 Education and Communication

• Challenge: There is a lack of understanding regarding waterway debris removal process and associated timelines after a disaster. For example, the fact that USCG vessel destruction removal must be approved at headquarters and is a lengthy process, confusion between

response process under the Stafford Act (natural disaster) and under the National Contingency Plan (oil/chemical spill), and a lack of understanding regarding FEMA and NRCS's reimbursement policies.

- Action 1: Communicate to NRCS EWP project sponsors that non-event related impairments and work completed prior to signing an agreement is not eligible for reimbursement.
- o Action 3: Communicate (possibly via a website or online decision program) to potential FEMA applicants before a storm that they should be prepared to:
 - Describe in detail the importance of small bayous and canals. For example, small waterways may be used for navigation to offshore platforms by oilfield workers and by commercial fisherman.
 - Provide information on the pre-event condition of waterways including any debris present and water depth. FEMA should include information regarding the type of documentation needed and how recent data provided must be.
- Action 4: Develop and offer debris recovery training that includes FEMA's public assistance program and requirements specific to waterway debris removal for all personnel with a role in response.
- Action 22: Better incorporate waterway debris response and removal information into existing trainings and exercises.
- Action 23: Increase the number of state and parish table-top exercises that are conducted and incorporate waterway debris response scenarios. Include FEMA, local decision-makers, and coordinators in these exercises.
- o Action 24: Ensure Regional Response Teams (USCG and EPA chairs) are involved in debris response planning efforts.
- Challenge: It is difficult for state and local governmental entities to navigate numerous federal programs with a debris response and/or removal component (i.e., USACE, USCG, EPA, NRCS).
 - o Action 8: Establish a platform for sharing waterway debris response and removal information and resources.
 - Action 13: Expand publicity surrounding NOAA Marine Debris Program's funding opportunities, including the Marine Debris Prevention, Education and Outreach Partnership Grants and Community-based Marine Debris Removal Grants.
 - Action 22: Better incorporate waterway debris response and removal information into existing trainings and exercises.
 - Action 23: Increase the number of state and parish table-top exercises that are conducted and incorporate waterway debris response scenarios. Include FEMA, local decision-makers, and coordinators in these exercises.

- Challenge: High turnover rates within agencies result in a lack of debris response knowledge and there are few training opportunities.
 - Action 4: Develop and offer debris recovery training that includes FEMA's public assistance program and requirements specific to waterway debris removal for all personnel with a role in response.
 - o Action 8: Establish a platform for sharing waterway debris response and removal information and resources.
 - Action 22: Better incorporate waterway debris response and removal information into existing trainings and exercises.
 - Action 23: Increase the number of state and parish table-top exercises that are conducted and incorporate waterway debris response scenarios. Include FEMA, local decision-makers, and coordinators in these exercises.
- Challenge: There is a lack of clarity regarding the definition for the term "navigable waterway".
- Challenge: There is a lack of public awareness regarding private property owner removal responsibilities, participatory activities, and pre-storm preparations to prevent waterway debris—such as the fact that boats on strap lifts will become debris in a storm.
 - Action 25: Include information on pre-storm preparedness actions and property owner's removal responsibilities in water bills, boat trailer renewal forms, hunting/fishing license renewals, on TV and/or radio, in flyers at boat launches, through homeowner's associations, etc.
 - See NOAA, 2016 in <u>Section 6.2</u> for ways to protect people and belongings from storm season and prevent marine debris
 - Action 26: Provide information to safe boating training providers, such as LDWF and USCG Auxiliary.
 - Action 27: Publicize post-storm marine debris images as a mechanism to encourage prevention.

6.2 Additional Resources

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8. Appendices

8.1 Contact Information

Non-Governmental Organizations

Organization	Division	Topic	Point of Contact	Phone	Email
Barataria-Terrebonne		Planning and coordination	Sucan Tastraat Bargaran Director	095 447 0969	susan@htnon.org
National Estuary Program	-	Planning and coordination	Susan Testroet-Bergeron, Director	985-447-0868	susan@btnep.org

Local Agencies

Note: Contact information is only included for those local organizations who have provided and/or approved information in the following table. A complete list of parish OHSEP points of contact can be found at the web address in the first entry.

Agency	Division	Topic	Point of Contact	Phone	Email
Parish Office of Homeland Security and Emergency Preparedness (OHSEP)	-	-	See http://gohsep.la.gov/ABOUT/PARISHPA for a complete list of parish contacts	-	-
Cameron Parish OHSEP	-	Planning and coordination	Danny Lavergne, Director	337-775-7048	cameron_oep@camtel.net
		Capability contact (equipment, technological)	Chris Boudreaux	985-537-7603	chrisb@lafourchegov.org
Lafourche Parish	-	Capability contact (logistics, workforce)	Jerome Danos	985-537-7603	-
		Capability contact (technological, workforce)	Jeff Leuenberger	-	leuenbergerjl@lafourchegov.org
	Communication	Capability contact (public outreach)	Lisa Martin	504-655-1358	lmartin@swbno.org
	Emergency Management	Capability contact (ICS trained staff)	Jason Higginbotham	504-218-3235	jhigginbotham@swbno.org
	Engineering	Capability contact (technical expertise for removal operations)	Ron Spooner	504-433-3888	rspooner@swbno.org
Sewerage and Water Board of New Orleans	Environmental Affairs	Capability contact (environmental or cultural resource expertise)	Ann Wilson	504-252-9707	awilson@swbno.org
	Information System GIS Team	Capability contact (GIS)	Melinda Nelson	504-218-3612	mnelson@swbno.org
	Legal	Capability contact (legal assistance)	Yolanda Grinstead	504-270-7556	ygrinstead@swbno.org
	-	Capability contact (vessels, air boat)	Randy Catchot	504-812-7687	rcatchot@swbno.org
St. Mary Parish	-	Planning and coordination	Duval Arthur, Emergency Preparedness Coordinator	337-828-4100 x 135	darthur@stmaryparishla.gov
		Capability contact	Dawson Primes LEM	985-974-7977	-
Tangipahoa Parish OHSEP	-	Capability contact (sonar)	CPT Robert Bel	985-507-4870	-
		Capability contact (drone)	Chief Bruce Cutrer	985-969-6040	-
Terrebonne Parish OHSEP	-	Capability contact	Earl Eues	985-873-6357	-

State Agencies

Agency	Division	Topic	Point of Contact	Phone	Email
			Lynne Browning, Assistant Deputy Director	225-338-7342	lynne.browning@la.gov
			Daniel Crothers, Group Lead	225-267-2761	daniel.crother@la.gov
	Public Assistance	Planning and coordination	John Gonzales, Section Chief, Public Assistance Technical Services	225-573-0473	john.gonzales@la.gov
			James Richard, Resolution Officer	225-315-7227	James.Richard2@la.gov
Governor's Office of Homeland Security and		Region 1	Darryl Delatte	-	darryl.delatte@la.gov
Emergency Preparedness		Region 2	Darren Guidry	225-916-4905	darren.guidry@la.gov
(GOHSEP)	Regional Coordination	Region 4	Lee John III	-	lee.johnIII@la.gov
		Region 3	Pam Roussel	225-439-2047	pam.roussel@la.gov
		Region 5	Doug Zettlemoyer	-	doug.zettlemoyer@la.gov
	Training and Exercise Branch	Exercises	Michael Zaruba, Exercise Officer	225-284-6570	michael.zaruba@la.gov
	Disaster Recovery Legal Services	Legal	Danielle Aymond, Executive Counsel	225-925-7541	danielle.aymond@la.gov
LA Coastal Protection and	-	Planning and coordination	Sam Martin, Executive Management Officer	225-252-9913	sam.martin@la.gov
Restoration Authority (CPRA)	-	Capability contact (vessels)	Glen Ledet		glen.ledet@la.gov
	-	-	Lt. Governor Billy Nungesser	225-342-7009	ltgov@crt.la.gov
		National Historic Preservation Act	-	225-342-8200	section106@crt.la.gov
LA Department of Culture, Recreation and Tourism (CRT)	LA State Historic Preservation Office (SHPO, Office of Cultural Development)	compliance, capability contact	Chip McGimsey, LA State Archeologist	225-219-4598 (O) 225-454-9274 (C)	cmcgimsey@crt.la.gov
	Development)	Capability contact (GIS)	Rachel Watson	225-342-8165	rwatson@crt.la.gov
	Office of State Parks	Response in state parks	Ray Berthelot	-	rberthelot@crt.la.gov
	Office of Environmental Compliance, Emergency and	Report oiled or hazardous substances to LDEQ	24 Hour Emergency Response Hotline	225-342-1234	-
	Radiological Services	Planning and Coordination	Jeff Dauzat, Senior Environmental Scientist	504-736-7714	jeff.dauzat@la.gov
LA Department of			-	225-219-3070	-
Environmental Quality (LDEQ)	Office of Environmental Services, Waste Permits Division	Debris management and disposal	Mike Hahn, Senior Environmental Scientist	225-219-3464	mike.hahn@la.gov
	Waste Fermits Bivision		Karla Vidrine, Staff Environmental Scientist	225-219-3047	karla.vidrine@la.gov
	Office of Environmental Services, Water Permits Division	Water Quality Certification	Elizabeth Hill	225-219-3225	elizabeth.hill@la.gov
	Office of Coastal Management	Fisherman's Gear Compensation Program	Jessica Diez, Coastal Resources Scientist	225-342-7268	jessica.diez@la.gov
		Coastal Use Permitting	-	800-267-4019	
LA Department of Natural Resources (DNR)	Office of Coastal Management, Permits and Mitigation Division	Coastal Ose relillittillg	Christine Charrier, Coastal Resources Manager	225-342-7953	christine.charrier@la.gov
nesources (DINN)	Termina and windgation Division	Capability contact	Karl Morgan, Administrator	225-342-6470	karl.morgan@la.gov
	Office of Conservation	Underwater Obstruction Removal Program	Matt Simon	225-342-6089	matt.simon@la.gov

State Agencies Continued

Agency	Division	Topic	Point of Contact	Phone	Email	
LA Department of Public Safety and Corrections (DPS)	LA State Police (LSP)	Report emergency incidents, including oiled or hazardous substances	LA Emergency Hazardous Materials Hotline	877-925-6595	-	
LA Department of		ESF 3 Public Works and Engineering lead	Mark Benton	225-806-4273	mark.benton3@la.gov	
Transportation and Development (DOTD)	-	-	Skip Breeden, Director Emergency Operations	-	skip.breeden@la.gov	
		Capability contact	Jeff Marx, Biologist	225-765-2917	jmarx@wlf.la.gov	
LA Department of Wildlife and Fisheries (LDWF)	Office of Fisheries	Planning and Coordination	Ty Lindsey	225-765-2387 x 1344	tlindsey@wlf.la.gov	
	Office of Wildlife	Planning and Coordination	Todd Baker	225-765-2814	tbaker@wlf.la.gov	
LA Division of Administration (DOA)	Office of State Lands, Land and Waterbottom Management Section	Identification and management of state public lands and water bottoms	Les Rosso, Section Manager	225-342-4600	les.rosso@la.gov	
	Office of State Lands	Capability contact	Cheston Hill, Public Lands Utilization Manager	225-219-9454	cheston.hill@la.gov	
LA Sea Grant	Law and Policy Program	Planning and Coordination	Melissa Daigle, Research Associate	225-578-9968	mtrosc2@lsu.edu	
LA Sea Grant	Law and Foncy Flogram	Figuring and Coordination	Niki Pace, Sustainability Coordinator	225-578-6342	nlpace@lsu.edu	

Federal Agencies

Agency	Division	Topic	Point of Contact	Phone	Email
Bureau of Safety and Environmental Enforcement	Marine Trash and Debris Program	Planning and coordination	James Sinclair, Marine Ecologist	504-736-2789	james.sinclair@bsee.gov
Estade success		Funding following Presidential disaster declaration	Contact parish OHSEP. See http://gohsep.la.gov/ABOUT/PARISHPA for a complete list of contacts.	-	-
Federal Emergency	Region 6	Environmental and Historic Preservation	Kevin Jaynes, Regional Environmental Officer	940-383-7224	kevin.jaynes@fema.dhs.gov
Management Agency (FEMA)	region o	Public Assistance	William "Bill" Boone, Public Assistance Branch Chief	940-898-5353	william.boone@fema.dhs.gov
		Public Assistance	Tony Furr, Public Assistance Debris Subject Matter Expert	-	tony.furr@fema.dhs.gov
		Emergency ESA/EFH consultation	-	=	nmfs.ser.emergency.consult@noaa.gov
National Oceanic and	National Marine Fisheries		Twyla Cheatwood	225-389-0508 x 209	twyla.cheatwood@noaa.gov
Atmospheric Administration	Service (NMFS or NOAA	EFH information	David Dale	727-551-5736	david.dale@noaa.gov
(NOAA)	Fisheries)		Rusty Swafford	409-766-3699	rusty.swafford@noaa.gov
		ESA information	Rachel Sweeney	727-824-5312	rachel.sweeney@noaa.gov
continued on next page	National Ocean Service, Office of Coast Survey	Navigation preparation and response	Tim Osborn, Regional Navigation Manager – Central Gulf Coast	337-291-2111	tim.osborn@noaa.gov

Federal Agencies Continued

Agency	Division	Topic	Point of Contact	Phone	Email
continued from previous page	National Ocean Service, Office of Response and	Potential to release oil or hazardous	Brandi Todd, Scientific Support Coordinator for USCG Sector New Orleans	504-589-4414	brandi.todd@noaa.gov
National Oceanic and	Restoration, Emergency Response Division	substance	LTJG Steve Wall, Regional Response Officer	206-556-1604	steven.j.wall@noaa.gov
Atmospheric Administration (NOAA)	National Ocean Service, Office of Response and Restoration, 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
	Jean Lafitte National	Response in Jean Lafitte National Historical Park and Preserve	Dusty Pate, Natural Resource Program Manager	504-382-4937	haigler_pate@nps.gov
	Historical Park and	Capability contact (ICS trained staff)	Ross Dykman	504-382-6398	ross_dykman@nps.gov
National Park Service	Preserve	Capability contact (vessels)	John Herrod	504-382-0301	john_herrod@nps.gov
(NPS)		Capability contact (public outreach)	Kristy Wallisch, PIO	504-382-0296	kristy_wallisch@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	-	Emergency Watershed Protection (EWP) Program Information	Britt Paul, Assistant State Conservationist for Water Resources	318-473-7756	britt.paul@la.usda.gov
(NRCS)		` ' '	Alton James, Natural Resources Specialist	985-331-9084 x 102	alton.james@la.usda.gov
		New Orleans District	Heath Jones, Chief Emergency Management	504-862-2426	heath.e.jones@usace.army.mil
		Galveston District	Mike DeMasi, Chief Emergency Management	-	michael.j.demasi@usace.army.mil
	Emergency Management		Donald Walker, Chief Emergency Management	601-631-5367	donald.s.walker@usace.army.mil
		Vicksburg District	Lamar Jenkins, Area Engineer	662-455-0244	lamar.jenkins@usace.army.mil
			John Mark Henderson, Emergency Management Specialist	601-631-7222	john.m.henderson@usace.army.mil
		Memphis District	Steve Barry	-	steven.l.barry@usace.army.mil
		Mississippi Valley Division	Eddie LeBlanc, Debris Program Manager	337-332-6757	edward.l.leblanc.iii@usace.army.mil
			Jane Brown, Asst. Operations Manager	-	jane.l.brown@usace.army.mil
		New Orleans District – Federally	Ray Newman, Operations Manager, SE Waterways	504-862-2050	raymond.c.newman@usace.army.mil
U.S. Army Corps of		maintained waterway or channel	Amy Powell, Operations Manager, Completed Works	-	amy.e.powell@usace.army.mil
Engineers (USACE)	Navigation and River	,	Renee Scholl, Lead Engineer CEMVN Wrecks and Obstructions	504-862-1080	renee.s.scholl@usace.army.mil
	Operations	Galveston District – Federally maintained waterway or channel	Christopher Frabotta, Chief of Navigation	-	christopher.c.frabotta@usace.army.mil
		Vicksburg District – Federally	Chad Bounds, Chief of Navigation	-	chad.r.bounds@usace.army.mil
		maintained waterway or channel	Joel Brown, Chief of River Operations	-	joel.t.brown@usace.army.mil
		maintained waterway or chaffiel	Neal Lewis, Section 14 (408) Review Team Lead	-	neal.lewis@usace.army.mil
		New Orleans District – Compliance and permitting	Martin Mayer, Chief Regulatory Branch	504-862-2255	martin.s.mayer@usace.army.mil
	Regulatory Program	Galveston District – Compliance and permitting	-	409-766-3869	ceswg-pe-r@usace.army.mil
		Vicksburg District – Compliance and permitting	-	601-631-7071	regulatory@usace.army.mil

Federal Agencies Continued

Agency	Division	Topic	Point of Contact	Phone	Email
	-	Report potential to release oil or hazardous substance	National Response Center (NRC)	800-424-8802	-
			LCDR Paul Mangini, District Response Advisory Team Supervisor	504-671-2236	paul.j.mangini@uscg.mil
			LT Chris Miller, District Response Advisory Team Environmental Specialist	504-671-2235	chris.j.miller@uscg.mil
	District 8	Planning and coordination	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
U.S. Coast Guard			Adam Tyndale, Response Equipment Coordinator	504-671-2063	adam.j.tyndale@uscg.mil
(USCG)		Capability contact	USCG Sector New Orleans Command Center	504-365-2200	-
	District 8, Sector New Orleans	Contingency Planning	LT Anne Duffus	504-365-2102	anne.m.duffus@uscg.mil
		Incident Management	LCDR Michael Wolfe, Chief Incident Management	504-365-2417	SECNOLAIMD@uscg.mil
		Waterways Management	LCDR Howard Vacco, Chief Waterways Management	504-365-2280	SECNOLA-WPM@uscg.mil
	District 8, Sector New Orleans, COTP Houma	Capability contact	USCG Sector New Orleans, MSU Morgan City OOD	985-397-3277	-
	District 8, Sector Houston-Galveston	Capability contact	USCG Sector Houston-Galveston Command Center	281-464-4840	-
U.S. Environmental Protection Agency	Region 6	Report potential to release oil or hazardous substance	National Response Center (NRC)	800-424-8802	-
(EPA)	, and the second	Capability contact	EPA Region 6 Duty Officer	866-372-7745	-
		Response in Southeast NWRs	Barret Fortier, Regional Energy Coordinator	985-882-2011	barret_fortier@fws.gov
	National Wildlife Refuges (NWR)	Response in Southeast LA NWR Complex	Neil Lalonde, Project Leader	-	neil_lalonde@fws.gov
U.S. Fish and Wildlife Service (USFWS)		Response in Southwest LA NWR Complex	Chris Eggleston	337-598-2216	christian_eggleston@fws.gov
	Louisiana Ecological	Compliance and permitting	-	337-291-3100	lafayette@fws.gov
	Services Field Office	Compliance and permitting	Amy Trahan, Fish and Wildlife Biologist	337-291-3126	amy_trahan@fws.gov

8.2 Response Capabilities

	Yes - Verified In-house Capability Contract (Contr.) - Contracted capability	Lafourche Parish	Tangipahoa Parish	Terrebonne Parish OHSEP	Sewerage and Water Board of New Orleans	CPRA ¹	CRT, SHPO	DNR, OCM ²	DOA, Office of State Lands	LDWF	FEMA Region 6 ⁵	NOAA	NPS ⁹	NRCS	USACE, New Orleans District ¹¹	USFWS, Ecological Services Program
S	Aerial photography and video	Yes	Yes	-	-	-	-	-	-	-	-	Yes	-	-	Y C	-
olog	Remote sensing (LIDAR)	-	-	-	-	-	ı	-	-	-	-	Yes	-	1	Contract	-
Techr	Sub-Surface Detection: Side scan, Single-beam, or Multi-beam sonar	Yes	Yes	-	ı	Contract	ı	ı	-	Yes	-	Yes	ı	i	Yes	-
	Aircraft	-	-	-	-	-	ı	-	-	Yes	-	Yes	-	1	-	-
ment	Heavy equipment: Barge, Self-loading barge, Crane, Knuckleboom Crane, Environmental clamshell dredge, Excavator	-	-	-	Contract	-	-	-	-	-	-	-	-	-	Yes	-
퍨	Remotely Operated Vehicle (ROV)	-	-	-	-	-	-	-	-	-	-	Yes	-	-	-	-
Eg	Unmanned Aerial Vehicle (UAV)/Surveillance drones with FAA trained operator	Yes	Yes	-	-	-	-	-	-	-	-	Yes	ı	i	Yes	-
	Vessels	-	Yes	-	Yes	Yes	1	-	Yes	Yes	-	Yes	Yes	Yes	Yes	-
	Debris modeling expertise (volume, transport, hindcasting, etc.)	Contract	Contract	-	ı	•	ı	-	-	-	-	Yes	ı	1	-	-
	Dedicated waterway/marine debris staff (responders, response team, regional coordination, etc.)	-	Contract	-	1	Contract	ı	-	-	-	-	Yes	ı	ı	-	-
tise	Dive support (scientific, technical, commercial, etc.)	-	-	-	-	Contract	-	-	-	-	-	Yes	-	-	Contract	-
ce/Exper	Environmental or cultural resource expertise (location of sensitive areas, endangered species present, etc.)	-	Yes	-	Yes	Yes	Yes	Yes	-	Yes	Yes	Yes ⁷	Yes	-	Yes	Yes
orkfor	Geographic Information System (GIS) mapping and plotting of imagery	Yes	Yes	Yes	Yes	Contract	Yes	Yes	-	-	Yes	Yes	Yes	Yes	Y C	-
3	Incident Command System (ICS) trained staff	Yes	Yes	Yes	Yes	Yes	-	-	-	Yes	Yes	Yes	Yes	Yes	Yes	-
	Legal assistance	Yes	Yes	-	Yes	Yes	-	-	-	Yes	-	-	-	-	Yes	-
	Public outreach processes in place	Yes	Yes	Yes	Yes	Yes	-	-	-	Yes	-	-	Yes	Yes	Yes	-
	Technical expertise for removal operations (techniques, best management practices, etc.)	Contract	Contract	-	Yes	Contract	Yes	-	-	-	Yes	Yes	-	Yes	-	-
	Volunteer manpower/Volunteer coordination	-	Yes	Yes	-	-	-	-	Yes	-	-	-	Yes	-	-	-
ics	Contracting: Pre-approved waterway debris removal contractors	Contract	Contract	-	-	-	-	-	-	Yes	-	-	-	-	-	-
Logist	Contracting: Pre-event contracts and staged agreements in place	Contract	Contract	-	-	-	-	-	-	-	-	-	-	-	-	-
	Docks for wet storage of vessels	-	Yes	-	-	-	-	-	-	-	-	-	-	-	-	-

	Yes - In-house Capability Contract - Contracted capability	Lafourche Parish	Tangipahoa Parish	Terrebonne Parish OHSEP	Sewerage and Water Board of New Orleans	CPRA ¹	CRT, SHPO	DNR, OCM ²	DOA, Office of State Lands	LDWF	FEMA Region 6 ⁵	NOAA	NPS ⁹	NRCS	USACE, New Orleans District ¹¹	USFWS, Ecological Services Program
	Funding for waterway debris removal	-	-	-	-	-	-	_3	-	-	Yes ⁶	Yes ⁸	-	Yes ¹⁰	Yes	-
	Process or team in place to identify responsible parties (for debris that can be traced to an owner)	Yes	-	-	-	-	-	Yes ⁴	-	-		-	-	-	Yes	-
ogistics	Staging/Off-Loading: Land with water access to stage, offload debris (has not been evaluated for suitability or officially pre-designated)	-	Yes	Yes	1	1	1	ı	-	Yes	1	1	Yes	ı	Yes	-
7	Staging/Off-Loading: Pre-designated (pre- approved) staging, off-loading and special handling areas (already evaluated for suitability)	Contract	Yes	-	-	-	-	-	-	-	-	-	Yes	-	-	-

Note: Capabilities which could be used during waterway debris response in Louisiana 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.

¹ CPRA	For capabilities that are not in-house, CPRA could potentially contract for them as part of ESF 3 support to the state's response.
^{2}DNR	Potentially has permitting authority over all marine debris removal activities occurring in the LA Coastal Zone.
³ DNR	Office of Conservation manages the Underwater Removal Obstruction Fund.
⁴ DNR	For debris related to an Office of Coastal Management permitted activity in the LA Coastal Zone, may be able to identify an
	obstruction using database of permitted projects, which includes flowlines/pipelines and other activities.
5FEMA	Capabilities contingent upon a Presidential major disaster declaration. FEMA capable of mission-assigning other federal
	support to increase capabilities.
⁶ FEMA	May provide reimbursement public assistance funding for eligible debris removal during Presidential major disaster
	declarations when another federal agency does not have authority to fund the activity.
7NOAA	Coordinates marine mammal and sea turtle stranding response and reviews proposed debris removal activities for compliance
	with ESA and Magnuson-Stevens Fisheries Conservation and Management Act.
8NOAA	Funding through grant program and possible Congressional supplemental funding.
⁹ NPS	Capabilities are subject to support from park management.
¹⁰ NRCS	When funding is available, provides emergency financial and technical assistance through the EWP program eligible projects.
¹¹ USACE	Other USACE districts may have additional capabilities. Funding, when available, for federal projects only.

8.3 Select Agency Authorities

8.3.1 Local Government Authorities

- Development, Approval, Modification, and Periodic Review of Local Coastal Management Programs, La. Admin. Code 43:I.725
- Gulfward boundary of coastal parishes, La. R.S. 49.6
- Louisiana Homeland Security and Emergency Assistance and Disaster Act (Louisiana Disaster Act), La. R.S. 29:721-739
 - o Powers of the parish president; penalties for violations, La. R.S. 29:727
 - o Parish homeland security and emergency preparedness agency, La. R.S. 29:728
 - Parish homeland security and emergency preparedness agency authorities and responsibilities, La. R.S. 29:729
 - o Municipality providing assistance within parish, La. R.S. 29:730.2
 - o Municipalities; authority to respond to emergencies, La. R.S. 29:737
- Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C § 5121 et seq.
- State and Local Coastal Resources Management Act of 1978, La. R.S. 49:214.21 et seq.
 - o Local coastal management programs, La. R.S. 49:214.28
 - o Types of uses, La. R.S. 49:214.25(A)(2)

8.3.2 State Agency Authorities

See *State of Louisiana Emergency Operations Plan* (GOHSEP, 2014a), which includes a complete list of authorities.

Coastal Protection and Restoration Authority (CPRA)

- Coastal Protection and Restoration Authority, La. R.S. 49:214.6.1 et seg.
- Coastal Protection and Restoration Authority Board, La. R.S. 49:214.5.1 et seq.

Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP)

- Louisiana Homeland Security and Emergency Assistance and Disaster Act (Louisiana Disaster Act), La. R.S. 29:721-739
 - o State emergency and disaster agency; powers of director, La. R.S. 29:725
 - o Governor's Office of Homeland Security and Emergency Preparedness; authority and responsibilities, La. R.S. 29:726
- Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C § 5121 et seq.

Louisiana Department of Culture, Recreation and Tourism (CRT)

- Abandoned Shipwreck Act, 43 U.S.C § 2101 et seq.
- National Historic Preservation Act, 16 U.S.C § 470 et seg.
- Office of state parks; purpose, La. R.S. 56:1682
- Responsibilities of the division, La. R.S. 41:1604

Louisiana Department of Environmental Quality (LDEQ)

- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq.
- Debris management plan, La. R.S. 30:2413.1
- Department of Environmental Quality created; duties; powers; structure, La. R.S. 30:2011
- Derelict vessels and structures, La. R.S. 30:2469
- Environmental Quality, La. Admin. Code 33

- o Hazardous Waste and Hazardous Materials, La. Admin. Code 33:V
- o Solid Waste, La. Admin. Code 33:VII
- o Water Quality, La. Admin. Code 33:IX
 - Water Quality Certification Procedures, La. Admin. Code 33:IX.Chapter 15
- 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.
 - o Certification (Section 401), 33 U.S.C. § 1341
 - o Oil Pollution Liability and Compensation, 33 U.S.C. § 2701 et seq.
 - o Permits for dredged or fill material (Section 404), 33 U.S.C. § 1344
- Hazardous Waste Control Law, La. R.S. 30:2171 et seq.
- Louisiana Environmental Quality Act, La. R.S. 30:2011 et seq.
- Louisiana Water Control Law, La. R.S. 30:2071 et seq.
- Louisiana Solid Waste Management and Resource Recovery Law, La. R.S. 30:2151 et seq.
- National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. § 300
- Oil Spill Prevention and Response Act, La. R.S. 30:2451 et seq.

Louisiana Department of Natural Resources (DNR)

- Authority of Department of Natural Resources over navigable water bottoms, La. R.S. 56.4
- Coastal Zone Management Act of 1972, 16 U.S.C § 1451 et seq.
- Department of Natural Resources, La. R.S. 36:351
- Fishermen's Gear Compensation Fund, La. R.S. 56:700.1 et seq.
- Louisiana Underwater Obstruction Removal Program, La. R.S. 30:101.1 et seq.
- Natural Resources, La. Admin. Code 43
 - o Coastal Management, La. Admin. Code 43:I.Chapter 7
 - Administration of the Fisherman's Gear Compensation Fund, La. Admin.
 Code 43:I.1501 et seq.
 - Development, Approval, Modification, and Periodic Review of Local Coastal Management Programs, La. Admin. Code 43:I.725
 - Rules and Procedures for Coastal Use Permits, La. Admin. Code 43:I.723
- Oil Spill Prevention and Response Act, La. R.S. 30:2451 et seg.
- State and Local Coastal Resources Management Act of 1978, La. R.S. 49:214.21 et seq.
- State Water Bottom Management, La. R.S. 41:1701
- Underwater Obstructions, La. Admin, Code 43:XI.301-331

Louisiana Department of Public Safety and Corrections (DPS)

- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 U.S.C. § 9601 et seq.
- Derelict vessels and structures, La. R.S. 30:2469
- 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.
 - o Oil Pollution Liability and Compensation, 33 U.S.C. § 2701 et seq.
- National Oil and Hazardous Substances Pollution Contingency Plan, 40 C.F.R. § 300
- Notification Regulations and Procedures for Unauthorized Discharges, La. Admin. Code 33:I.3901 et seq.
 - Notification Requirements for Unauthorized Discharges That Cause Emergency Conditions, La. Admin. Code 33:I.3915
- Oil Spill Prevention and Response Act, La. R.S. 30:2451 et seq.

Louisiana Division of Administration (DOA)

- Administration of State Lands, La. R.S. 39:11 et seg.
- Banks of navigable rivers or streams, La. Civ. Code art. 456
- Gulfward boundary, La. R.S. 49:1
- Ownership of Beds of Non-Navigable Waters, La. R.S. 9:1115.1 et seq.
- Ownership of waters and beds of bayous, rivers, streams, lagoons, lakes and bays, La. R.S. 9:1101
- Ownership of waters within boundaries, La. R.S. 49.3 et seq.
- Public Lands, La. R.S. 41
 - o Listing of lands owned, leased, or rented by state or instrumentalities of state; subsequent acquisitions or alienations, La. R.S. 41.13
 - o Determination of Boundaries, La. R.S. 41:1131 et seq.
 - o State Water Bottom Management, La. R.S. 41:1701 et seq.
- Public policy respecting ownership of navigable waters and beds thereof, La. R.S. 9:1107
- Public things, La. Civ. Code art. 450
- Reasons for surveys; La. R.S. 50:121 et seq.
- Sovereignty over waters within boundaries, La. R.S. 49.2
- Submerged Lands Act, 43 U.S.C § 1301 et seq.

8.3.3 Federal Agency Authorities

Animal, Plant and Health Inspection Service

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

Federal Emergency Management Agency (FEMA), Region 6

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

National Oceanic and Atmospheric Administration (NOAA)

- 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 seg.
- 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.

Natural Resources Conservation Service (NRCS)

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

U.S. Army Corps of Engineers (USACE)

- Authority for snagging and clearing for flood control (Section 208), 33 C.F.R. § 263.24
- 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.
 - o Permits for dredged or fill material (Section 404), 33 U.S.C. § 1344

- Flood Control and Coastal Emergency Act, 33 U.S.C. § 701n (Public Law 84-99)
- Permits for Structures or Work in or Affecting Navigable Waters of the United States (Section 10), 33 C.F.R. § 322
- Removal of snags and debris, and straightening, clearing, and protecting channels in navigable waters, 33 U.S.C. § 603a
- Removal of Wrecks and Other Obstructions, 33 C.F.R. § 245
- Rivers and Harbors Appropriation Act of 1899 and 1945, 33 U.S.C. § 401 et seq.
 - Obstruction of navigable waters generally; wharves; piers, etc.; excavations and filling in (Section 10), 33 U.S.C. § 403
 - o Alteration, or occupation, or use of federally authorized civil works projects (includes harbor or river improvements; Section 14), 33 U.S.C. 408
 - Requires permission from the Secretary of the Army (delegated to USACE) for the alteration, occupation or use of structures or works built by the United States
 - Obstruction of navigable waters by vessels; floating timber; marking and removal of sunken vessels, 33 U.S.C. § 409
 - o Removal by Secretary of the Army of sunken water craft generally; liability of owner, lessee, or operator, 33 U.S.C. § 414
 - Summary removal of water craft obstructing navigation; liability of owner, lessee, or operator, 33 U.S.C. § 415
 - Collection and removal of drift and debris from publicly maintained commercial boat harbors and adjacent land and water areas (Water Resources Development Act, Section 202), 33 U.S.C § 426m
- Robert T. Stafford Disaster Relief and Emergency Assistance Act, 42 U.S.C § 5121 et seq.

U.S. Coast Guard (USCG), District 8, Sector New Orleans and Sector Houston-Galveston

- 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.
 - o Oil Pollution Liability and Compensation, 33 U.S.C. § 2701 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 seg.
- Saving life and property, 14 C.F.R. § 88

U.S. Environmental Protection Agency (EPA), Region 6

- 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)

- Coastal Barrier Resources Act, 16 U.S.C. § 3501 et seq.
- Endangered Species Act, 16 U.S.C. § 1531 et seq.
- Fish and Wildlife Coordination Act, 16 U.S.C. § 661 et seq.
- Marine Mammal Protection Act of 1972, 16 U.S.C § 1361 et seq.

• Migratory Bird Treaty Act, 16 U.S.C § 703 et seq.

8.4 Louisiana Legislation Applicable to Waterway Debris Response

Citation	Title
La. Admin. Code 25:I.101	Definitions ("State-Owned Lands or Lands Belonging to the State
La. Admin. Code 23.1.101	of Louisiana")
La. Admin. Code 25:IX.307(G)	Water Craft
La. Admin. Code 43:XI.301-331	Underwater Obstructions
La. Civ. Code art. 450	Public things
La. Civ. Code art. 452	Public things and common things subject to public use
La. R.S. 9:1101	Ownership of waters and beds of bayous, rivers, streams,
Ld. K.S. 9.1101	lagoons, lakes and bays
La. R.S. 9:1107	Public policy respecting ownership of navigable waters and beds
La. R.S. 9.1107	thereof
La. R.S. 9:1115.2	Ownership of inland non-navigable water bottoms
La. R.S. 30:101.1 et seq.	Louisiana Underwater Obstruction Removal Program
La. R.S. 30:2413.1	Debris management plan
La. R.S. 30:2469	Derelict vessels and structures
La. R.S. 30:2537	Adopt-a-beach program
La. R.S. 30:2539	Beach sweep program
La. R.S. 30:2540	Inland water cleanup
La. R.S. 34:361	Navigation canals and improvement of water courses by
Ld. K.S. 54.501	municipalities and parishes; title to vest in the public
La. R.S. 34:843	Objects; removal; disposition
La. R.S. 38:315	Dedication of artificial waterways as public navigable waterways; approval
La. R.S. 39:11 et seq.	Administration of State Lands
La. R.S. 41:14	Conveyances of waterbottoms, ownership
La. R.S. 41:1701 et seq.	State Water Bottom Management
La. R.S. 49:1	Gulfward boundary
La. R.S. 49.2	Sovereignty over waters within boundaries
La. R.S. 49.3 et seq.	Ownership of waters within boundaries
La. R.S. 49.6	Gulfward boundary of coastal parishes
La. R.S. 56.4	Authority of Department of Natural Resources over navigable water bottoms





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