

NOAA Marine Debris Program Emergency Response Mission

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NOAA Marine Debris Program

Established in **2006** by Congress as the federal lead for marine debris

Vision: the global ocean and its coasts free from the impacts of marine debris

Mission: to investigate and prevent the adverse impacts of marine debris





Photo: NOAA



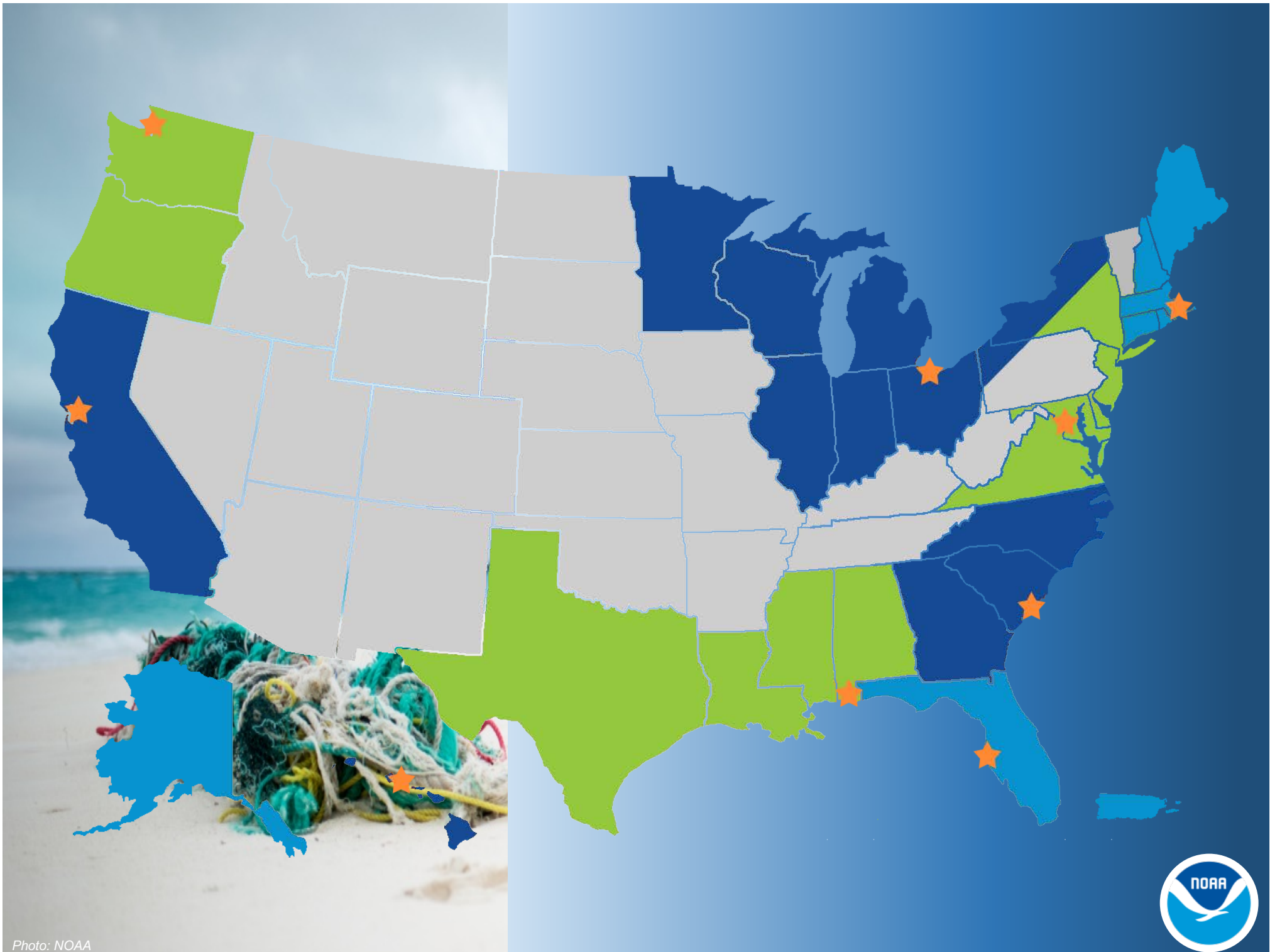


Photo: NOAA





What is Marine Debris?

“any **persistent solid material** that is manufactured or processed and directly or indirectly, intentionally or unintentionally, disposed of or abandoned **into the marine environment or the Great Lakes.**”



From MICRO

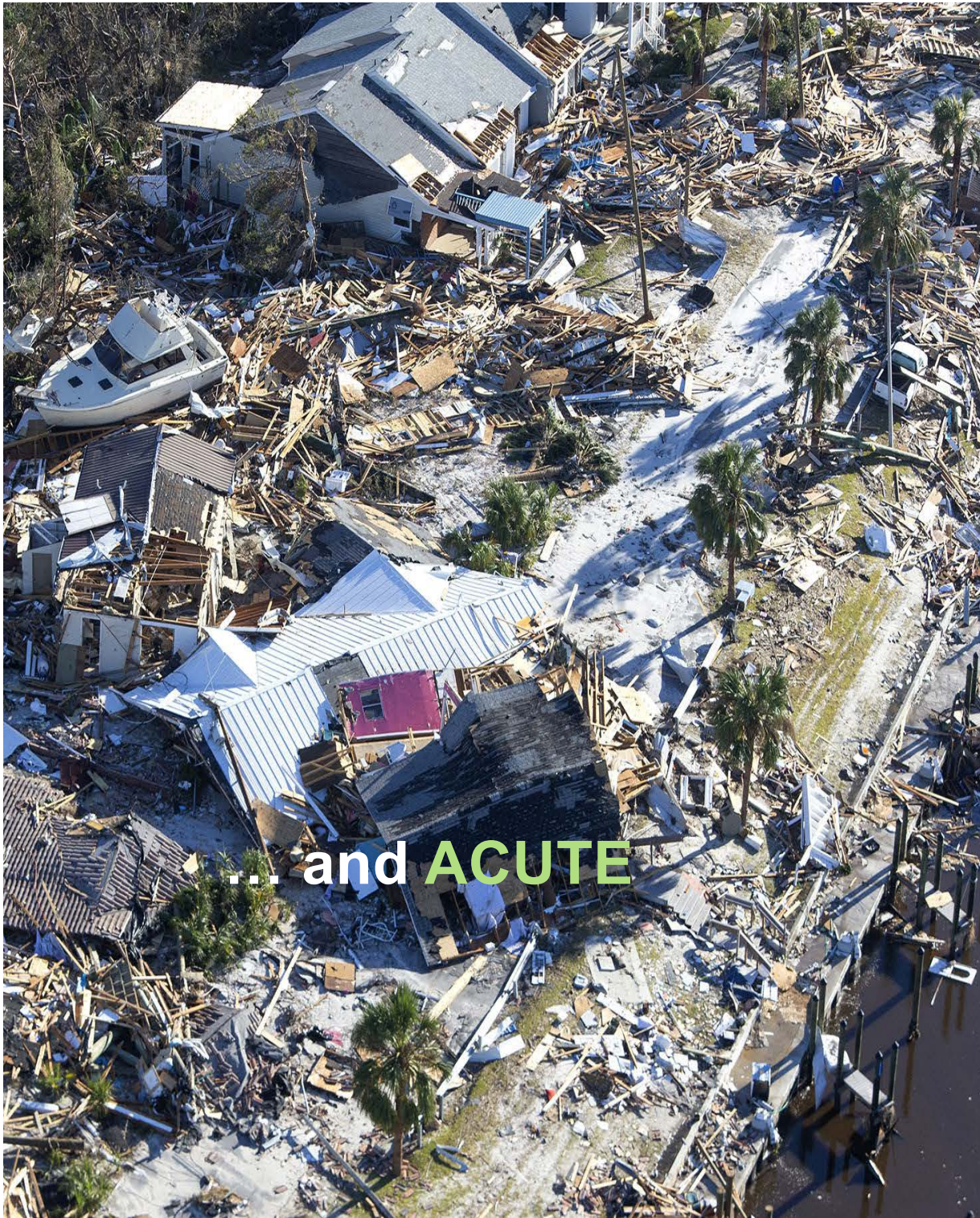
to MACRO



Both **CHRONIC**...

- Littering
- Storm Drains
- Illegal Dumping
- Fishing/Boating Activities
- Offshore Industry
- Aquaculture





... and ACUTE



Program Pillars

- Prevention
- Removal
- Research
- Regional Coordination
- Emergency Response
- International Engagement



Program Pillars

- Prevention
- Removal
- Research
- Regional Coordination
- **Emergency Response**
- International Engagement



MDP: Response History

Case-by-case:

- **Hurricanes Katrina and Rita (2005)**
- **American Samoa Tsunami (2009)**
- **Japan Tsunami (2011)**
- **Super Storm Sandy (2012)**
- **Hurricanes Harvey, Irma, and Maria (2017)**
- **Hurricanes Florence, Yutu, and Michael (2018)**

Funding and support for:

- **Mapping and surveying**
- **Risk assessments**
- **Model trajectories**
- **Remove debris**





MDP: Response History

2012: Amendments to the Marine Debris Act

Includes specific language on response mandate

2014: Regional Response Planning Project

*Working with relevant agencies to create **Regional Response Guides***

Marine Debris Response Guides

- Focus on **waterway debris**
- Info in a single location
Local-state-federal-private
- Clarify organization roles
Waterway jurisdiction/ownership
- Not all states have a lead agency or funding
- Target audience: All levels of government, responders

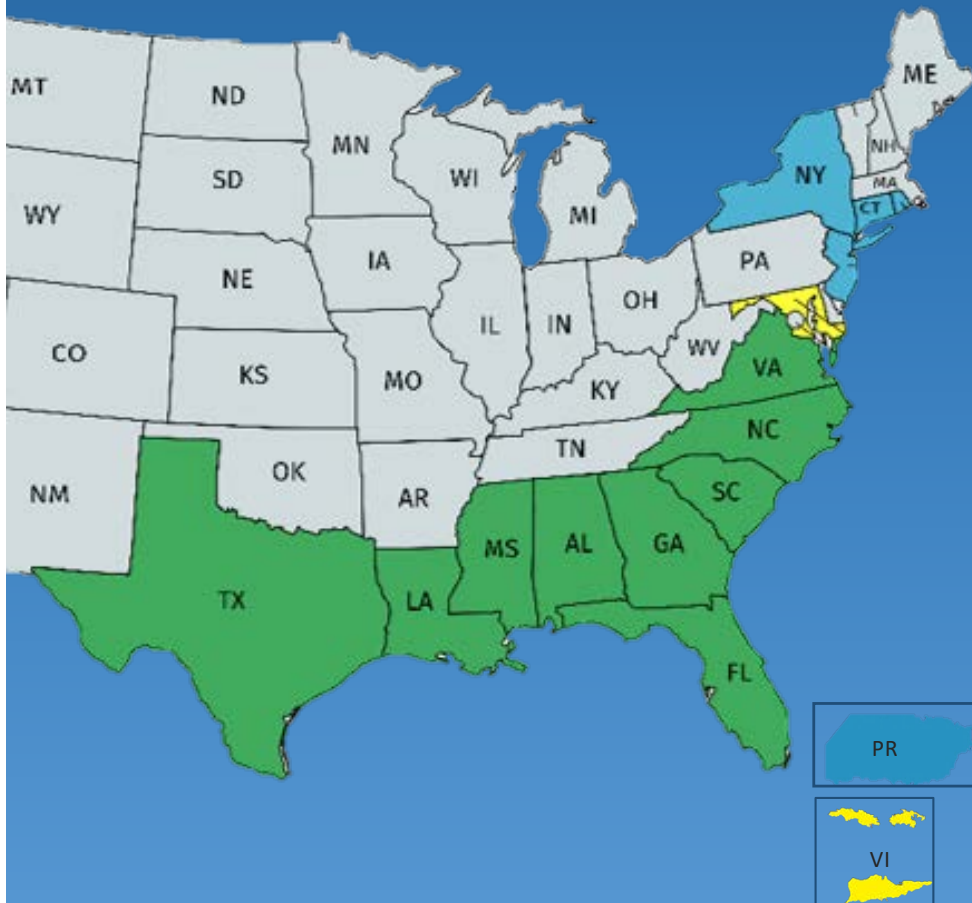


National Project Status

9 Published & Complete

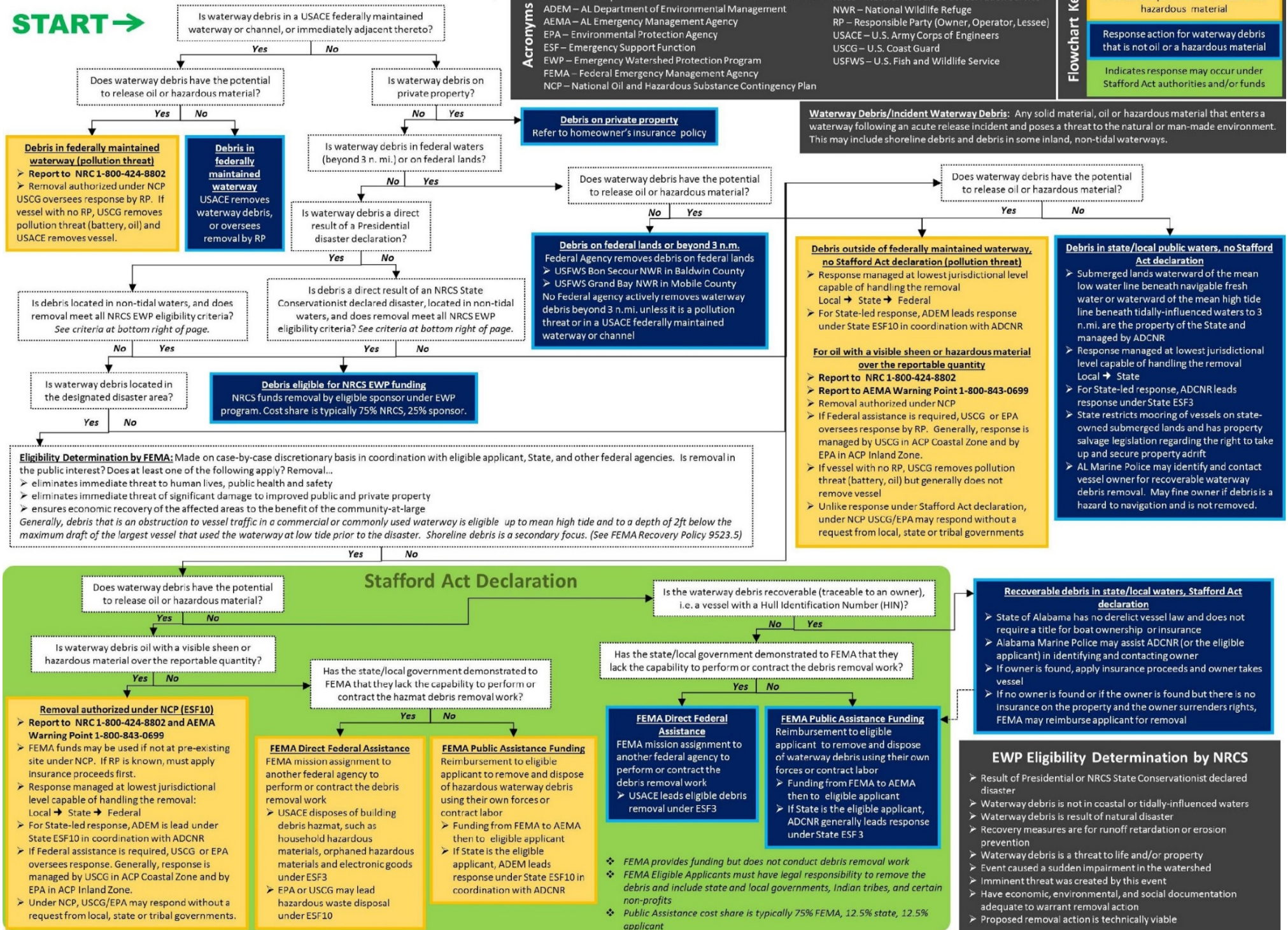
2 In Development

5 Passive Research Complete



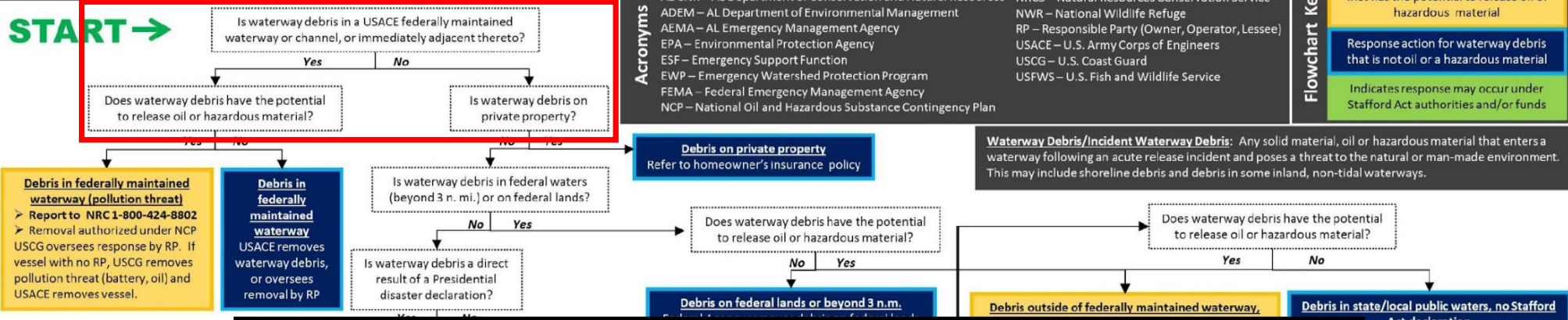
Alabama Incident Waterway Debris Response Action Flowchart

START →



Alabama Incident Waterway Debris Response Action Flowchart

START →



- Acronyms**
- ACP – Area Contingency Plan
 - ADCNR – AL Department of Conservation and Natural Resources
 - ADEM – AL Department of Environmental Management
 - AEMA – AL Emergency Management Agency
 - EPA – Environmental Protection Agency
 - ESF – Emergency Support Function
 - EWP – Emergency Watershed Protection Program
 - FEMA – Federal Emergency Management Agency
 - NCP – National Oil and Hazardous Substance Contingency Plan
 - NRC – National Response Center
 - NRCS – National Resources Conservation Service
 - NWR – National Wildlife Refuge
 - RP – Responsible Party (Owner, Operator, Lessee)
 - USACE – U.S. Army Corps of Engineers
 - USCG – U.S. Coast Guard
 - USFWS – U.S. Fish and Wildlife Service

Flowchart Key

- Response action for waterway debris that has the potential to release oil or hazardous material
- Response action for waterway debris that is not oil or a hazardous material
- Indicates response may occur under Stafford Act authorities and/or funds

Waterway Debris/Incident Waterway Debris: Any solid material, oil or hazardous material that enters a waterway following an acute release incident and poses a threat to the natural or man-made environment. This may include shoreline debris and debris in some inland, non-tidal waterways.

Debris in federally maintained waterway (pollution threat)

- Report to NRC 1-800-424-8802
- Removal authorized under NCP
- USCG oversees response by RP. If vessel with no RP, USCG removes pollution threat (battery, oil) and USACE removes vessel.

Debris in federally maintained waterway

USACE removes waterway debris, or oversees removal by RP

Debris on private property

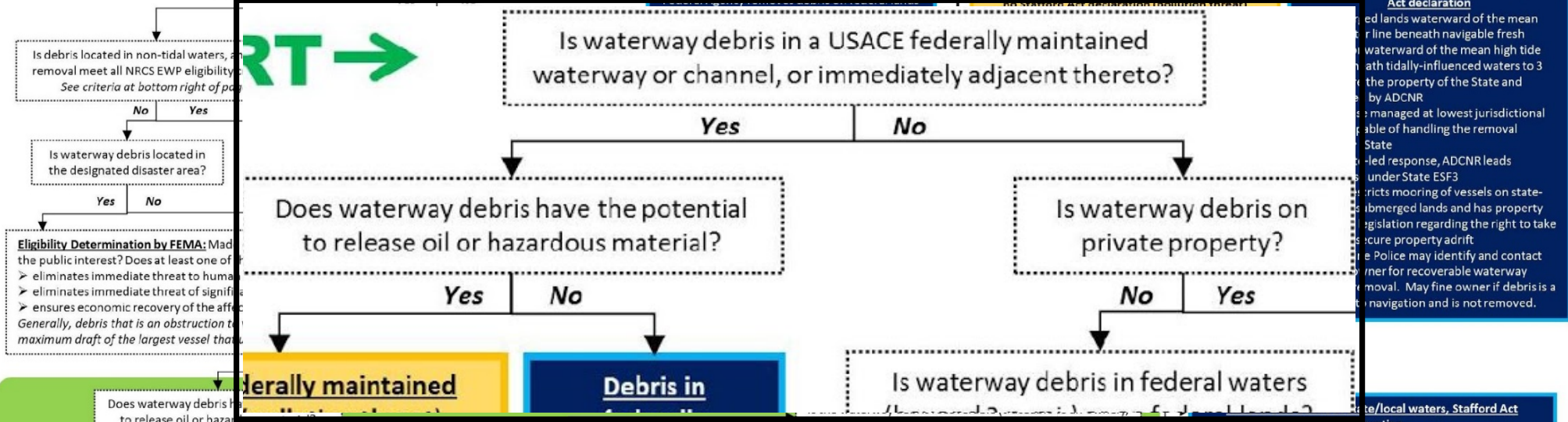
Refer to homeowner's insurance policy

Debris on federal lands or beyond 3 n.m.

Debris outside of federally maintained waterway.

Debris in state/local public waters, no Stafford Act declaration

START →



Eligibility Determination by FEMA: Made in the public interest? Does at least one of the following apply?

- eliminates immediate threat to human health
- eliminates immediate threat of significant economic loss
- ensures economic recovery of the affected area

Generally, debris that is an obstruction to the maximum draft of the largest vessel that can safely navigate the waterway.

Federally maintained

Debris in

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

Debris in state/local waters, Stafford Act declaration

Removal authorized under NCP (ESF10)

- Report to NRC 1-800-424-8802 and AEMA Warning Point 1-800-843-0699
- FEMA funds may be used if not at pre-existing site under NCP. If RP is known, must apply insurance proceeds first.
- Response managed at lowest jurisdictional level capable of handling the removal: Local → State → Federal
- For State-led response, ADEM is lead under State ESF10 in coordination with ADCNR
- If Federal assistance is required, USCG or EPA oversees response. Generally, response is managed by USCG in ACP Coastal Zone and by EPA in ACP Inland Zone.
- Under NCP, USCG/EPA may respond without a request from local, state or tribal governments.

FEMA Direct Federal Assistance

FEMA mission assignment to another federal agency to perform or contract the debris removal work

- USACE disposes of building debris hazmat, such as household hazardous materials, orphaned hazardous materials and electronic goods under ESF3
- EPA or USCG may lead hazardous waste disposal under ESF10

FEMA Public Assistance Funding

Reimbursement to eligible applicant to remove and dispose of hazardous waterway debris using their own forces or contract labor

- Funding from FEMA to AEMA then to eligible applicant
- If State is the eligible applicant, ADEM leads response under State ESF10 in coordination with ADCNR

FEMA Direct Federal Assistance

FEMA mission assignment to another federal agency to perform or contract the debris removal work

- USACE leads eligible debris removal under ESF3

FEMA Public Assistance Funding

Reimbursement to eligible applicant to remove and dispose of waterway debris using their own forces or contract labor

- Funding from FEMA to AEMA then to eligible applicant
- If State is the eligible applicant, ADCNR generally leads response under State ESF3

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

- State of Alabama has no derelict vessel law and does not require a title for boat ownership or insurance
- Alabama Marine Police may assist ADCNR (or the eligible applicant) in identifying and contacting owner
- If owner is found, apply insurance proceeds and owner takes vessel
- If no owner is found or if the owner is found but there is no insurance on the property and the owner surrenders rights, FEMA may reimburse applicant for removal

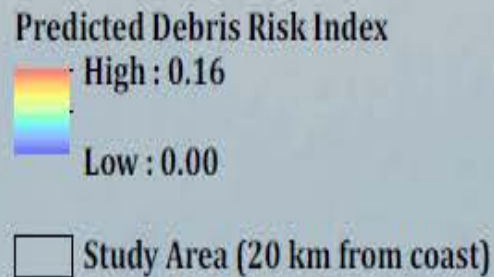
- EWP Eligibility Determination by NRCS**
- Result of Presidential or NRCS State Conservationist declared disaster
 - Waterway debris is not in coastal or tidally-influenced waters
 - Waterway debris is result of natural disaster
 - Recovery measures are for runoff retardation or erosion prevention
 - Waterway debris is a threat to life and/or property
 - Event caused a sudden impairment in the watershed
 - Imminent threat was created by this event
 - Have economic, environmental, and social documentation adequate to warrant removal action
 - Proposed removal action is technically viable

Remote and Local Support

- Coordination
- Communication
- Impacts of Debris/Modeling
- Removal BMPs
- Funding



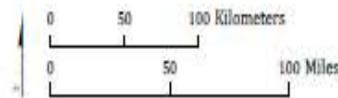
Where is it going to go?



Storm-Generated Marine Debris Risk in the Northern Gulf of Mexico Including Historical Storm Likelihood



Gulf of Mexico Disaster Response Center
Marine Debris Program, Office of Response and Restoration,
National Ocean Service, National Oceanic and Atmospheric Administration



RPI Generated: 6/28/2013
Research Planning, Inc.

This map depicts a model generated index of relative marine debris risk based upon assumed storm wind speed and surge, the distribution of on-shore infrastructure likely to generate marine debris, and the empirical historical likelihood of tropical storm exposure.

BMPs for Intertidal Marine Debris Removal

Includes:

- General Removal BMPs
- **Vegetated Wetland** Removal BMPs
- **Un-vegetated Intertidal** Removal BMPs

https://marinedebris.noaa.gov/sites/default/files/publications-files/MDP_Debris_Removal_Intertidal_Areas.pdf



Deployed for Hurricanes Harvey, Irma, and Michael

- Joint Field Office
Debris Task Force
- Incident
Command Post
**Biological Monitor
Coordinator**

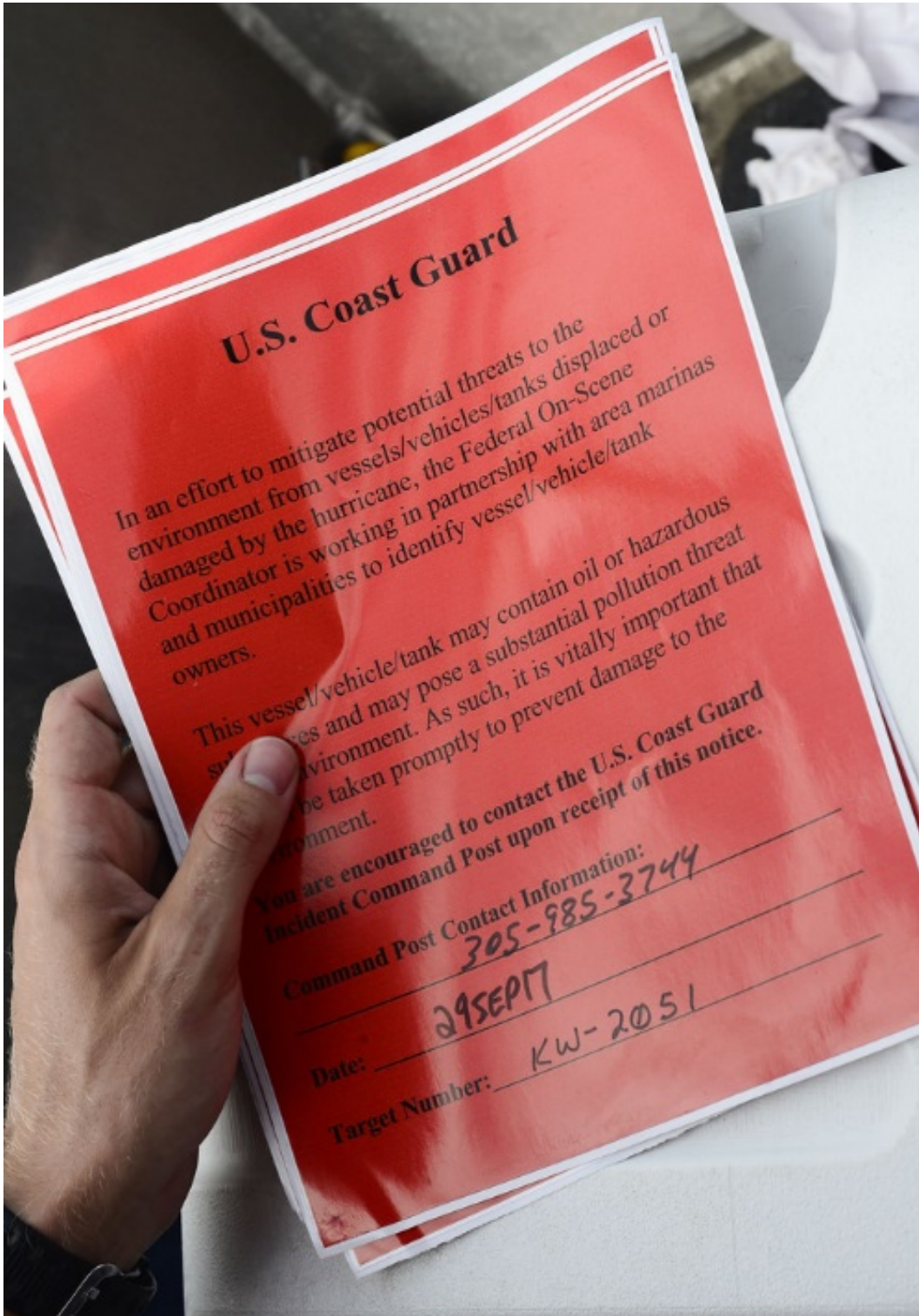


Incident Command Post

- Led by USCG, EPA, and the State
- Support from NOAA and USFWS







Biological Monitors

“...provide high quality, concise, and consistent guidance that supports pollution response and the removal of vessels/debris, while considering impacts to sensitive to natural, cultural, and other resources.”



Supplemental Funding

- \$17.2 million for assessment, removal, and disposal of hurricane related marine debris
- Impacted States:
 - Florida
 - Georgia
 - Puerto Rico
 - South Carolina
 - Texas
 - US Virgin Islands



Response Mission Evolution

MDP Reauthorization/SOS Act
and recent hurricane seasons
led MDP to consider...

- **How can we improve?**
- **Expand and clarify our roles in emergency response**



Response Mission Evolution

Developing tools and resources

- **Response Mission Document**
 - *Overall capture of MDP response posture, mandate, and interactions*
- **Capabilities Matrix**
 - *Captures key capabilities of MDP and how they can be provided to stakeholders in response*
- **Response Continuum**
 - *Graphical representation of the different tiers/roles of support MDP can provide and decisions to escalate or de-escalate MDP support*

Thank You

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