





# Marine Debris Program NOAA OR&R

Responding to Marine Debris from Natural Disasters

Amy Gohres, Response Planning Project Manager Yaritza Rivera-Torres, Marine Debris Response Coordinator CRRT Meeting | January 28-30, 2020





## What is Marine Debris?

Marine debris is defined by the Marine Debris Act, 2006, as any persistent solid material that is manufactured or processed and directly or indirectly, intentionally or unintentionally, disposed of or abandoned into the marine environment or the Great Lakes.







# Why should we care?

# **Impacts**

**Economic loss** 

**Habitat Damage** 

Wildlife Entanglement and Ghostfishing

**Ingestion** 

**Vessel Damage and Navigation Hazards** 

**Alien Species Transport** 





Vessels can become marine debris through natural disasters and abandonment, and can be the most costly type of marine debris to remove

Pictures: NOAA MDP



https://MarineDebris.noaa.gov

PUBLIC LAW 109-449-DEC, 22, 2006

#### Public Law 109-449 109th Congress

An Act

establish a program within the National Oceanic and Atmospheric Administration and the United States Coast Guard to help identify, determine sources of, assess, reduce, and prevent marine debris and its adverse impacts on the marine environment and navigation safety, in coordination with non-Pederal entities, and for

Be it enacted by the Senate and House of Representatives the United States of America in Congress assembled, SECTION 1. SHORT TITLE.

This Act may be cited as the "Marine Debris Research, Preven-tion, and Reduction Act". SEC. 2. PURPOSES.

The purposes of this Act are—
(1) to help identify, determine sources of, assess, reduce, and prevent marine debris and its adverse impacts on the

marine environment and navigation safety;
(2) to reactivate the Interagency Marine Debris Coordiing Committee; and
(3) to develop a Federal marine debris information clearing-

SEC. 3. NOAA MARINE DEBRIS PREVENTION AND REMOVAL PROGRAM.

(a) ESTABLISHMENT OF PROGRAM.—There is established, within the National Oceanic and Atmospheric Administration, a Marine the National Oceanic and Amospheric Administration, a starine Debris Prevention and Removal Program to reduce and prevent the occurrence and adverse impacts of marine debris on the marine environment and navigation safety.

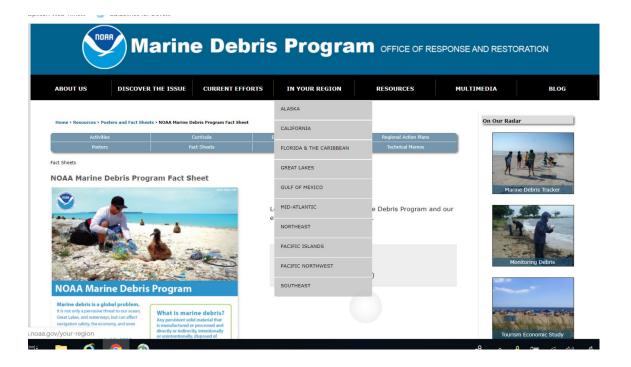
(b) PROGRAM COMPONENTS.—The Administrator, acting through

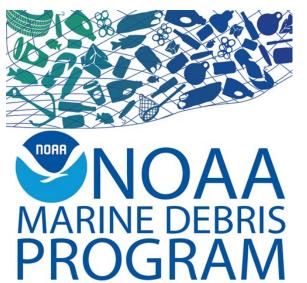
(b) PROGRAM COMPONENTS.—The Administrator, acting through the Program and subject to the availability of appropriations, shall carry out the following activities: REMOWAL, AND PRIVENTOS.—The Administrator shall, in con-sultation with relevant Federal agencies, undertake marine debris mapping, identification, impact assessment, prevention, and removal efforts, with a focus on marine debris posing a threat to living marine resources and navigation safety,

(A) the establishment of a process At the establishment of a process, fourling on exacting information sources maintained by Federal agencies such as the Environmental Protection Agency and the Coast Guard, for cataloguing and maintaining an inventory of marine debris and its impacts found in the navigable waters of the United States and the United States exclusive

## Marine Debris Program

- Mandated by the Marine Debris Act 2006, amended 2012
- Program staff are positioned across the country:
  - support marine debris projects
  - partnership with state and local agencies, tribes, NGOs academia and industry.





https://MarineDebris.noaa.gov



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## Marine Debris Program

Leads national and international efforts to research, prevent, and reduce the impacts of marine debris.

### The program:

- addresses the affects the marine debris has on the coastal environment, navigation, human health, safety and economy.
- spearheads national research efforts
- works to minimize the impacts of marine debris events
- Uses outreach and education initiatives to reduce the amount of marine debris that is generated.



## Vision

 The NOAA Marine Debris Program envisions the global ocean and its coasts free from the impacts of marine debris.

## Mission

The mission of the NOAA Marine Debris
 Programs is to investigate and prevent the
 adverse impacts of marine debris.

NOAA Marine Debris Program

Strategic Plan
2016 - 2020



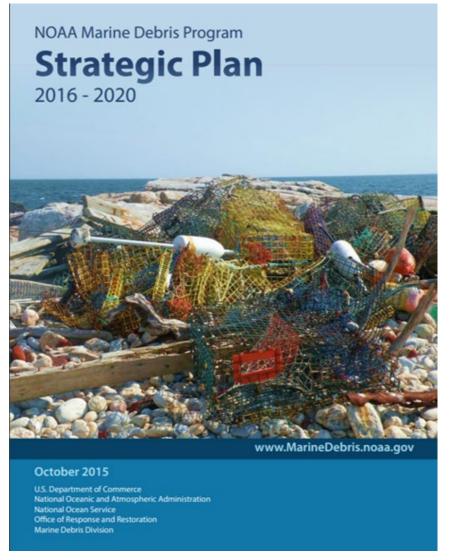
www.MarineDebris.noaa.gov

### October 2015

U.S. Department of Commerce National Oceanic and Atmospheric Administration National Ocean Service Office of Response and Restoration Marine Debris Division



## 2016-2020



## **MDP Goals**

- Coordination
- Emergency Response & Preparedness
- Removal
- Prevention
- Research & Assessment



## **NOAA Marine Debris Program**

### Marine debris is a global problem.

It is not only a pervasive threat to our ocean, Great Lakes, and waterways, but can affect navigation safety, the economy, and even human health.

In 2006, Congress authorized the NOAA Marine Debris Program (MDP) as the U.S. Federal government's lead for addressing marine debris.

The MDP achieves its mission through five main pillars: Removal, Prevention, Research, Regional Coordination, and Emergency Response. MDP staff is positioned across the country in order to support projects and partnerships with state and local agencies, tribes, non-governmental organizations, academia, and industry.

### 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 Great Lakes.

### Vision:

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

### Mission:

Investigate and prevent the adverse impacts of marine debris

Marine Debris Program | Office of Response and Restoration | National Ocean Service

## For more information:

https://marinedebris.noaa.gov

## NOAA Marine Debris Program Pillars

#### Prevention

Prevention is the ultimate solution to marine debris. The MDP supports projects that prevent marine debris from ever entering our ocean and waterways through outreach and education efforts that raise awareness and change behavior. These types of initiatives, along with individual decisions to reduce, reuse, and recycle, will help minimize the impacts of marine debris.

### Removal

The MDP supports community-based marine debris removal projects across the United States. From local shoreline cleanups to vessel removals, these projects benefit coastal habitats, waterways, and wildlife. Since 2006, NOAA has supported over 100 marine debris removal projects and removed more than 5,500 metric tons of marine debris from our coasts and ocean.

### Research

Marine debris is a relatively new field of research, and there are many opportunities to advance our understanding of how it impacts the environment. The MDP monitors the amount and types of debris on shorelines and supports projects to help understand debris baselines, chemicals in plastics, debris detection, plastic ingestion by wildlife, economic implications, and how to minimize the impacts of derelict fishing gear.

### **Regional Coordination**

The MDP supports local marine debris initiatives through coordination in ten regions across the United States, including the Pacific Islands and the Caribbean. Regional coordinators guide action planning and provide expertise to ensure that stakeholders have the best information available.

### **Emergency Response**

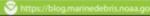
Storms and natural disasters that impact U.S. coasts can be an overwhelming source of marine debris. High winds, storm surges, and heavy rains drag household products, and even entire homes, into the surrounding waters. The MDP prepares for severe weather events by supporting regionally-focused emergency response planning efforts and coordinating with partners during an event.











# Funding:

## Removal and Prevention Grants

## USVI

- 2014 removal grant: Coral Bay
   Community Council Removes Derelict
   Vessels in USVI
- 2016 prevention grant: Pride in Our Seas,
   Pride in Ourselves: Preventing Land Based Sources of Marine Debris in the
   U.S. Virgin Islands



o 2019 - Active removal project:

Removing Hurricane-Deposited Marine Debris from Mangrove Shorelines & Developing a U.S. Virgin Islands Marine Debris Action Plan



This project will remove hurricane-deposited marine debris from vulnerable mangrove shorelines, through a series of cleanups called "Great Mangrove Cleanups", in marine protected areas and NOAA Coral Reef Program Priority Areas on St. Thomas, St. John, and St. Croix in the U.S. Virgin Islands.

# Funding: Removal and Prevention Grants

## Puerto Rico

- 2011 removal grant: Coral Reef Protection in Puerto Rico; Surfrider Foundation, Rincón
- 2014 prevention grant: Protectores de Cuencas
   "Think Before you Drop it"
- 2015 removal grant: Community Engagement in Marine Debris Removal, Coastal Conservation, and Recycling in Loíza, Puerto Rico
- 2016 removal grant: Shipwreck and Debris Removal from Las Croabas, Icacos, and Palominos, Puerto Rico



Cleanup under FY14 prevention grant: "Think before you drop it.

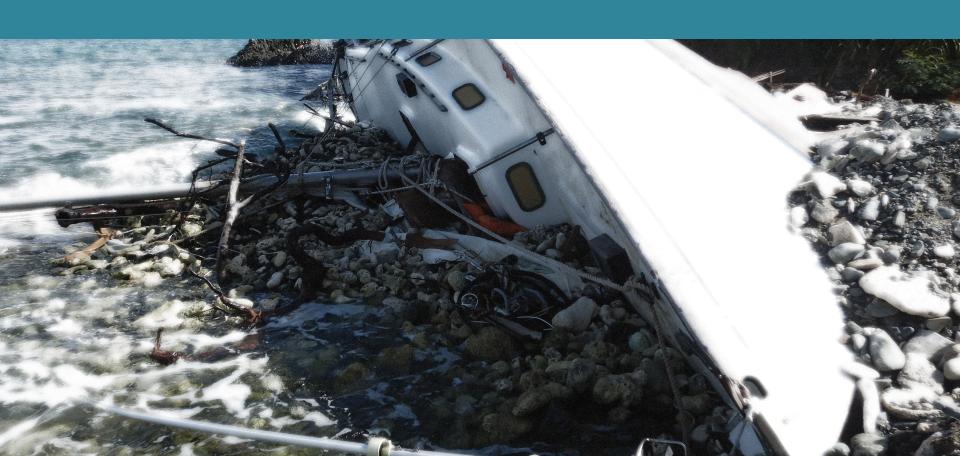
2019 - Active removal project:





The Ocean Foundation is collaborating with fishing groups, the Puerto Rico Department of Natural and Environmental Resources, and local non-governmental organizations to address undocumented and derelict fishing traps in Puerto Rico.

# Response & Preparedness



# **NOAA MDP: Response History**

## Case-by-case

- Hurricanes Katrina and Rita (2005)
- American Samoa Tsunami (2009)
- Japan Tsunami (2011)
- Super Storm Sandy (2012)

## Now

- Hurricanes Harvey, Irma, Maria (2017)
- Hurricanes Florence, Michael, Typhoon Yutu (2018)

## Funding and support for:

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

# **NOAA MDP: Response History**



# **2012: Amendments to the Marine Debris Act**

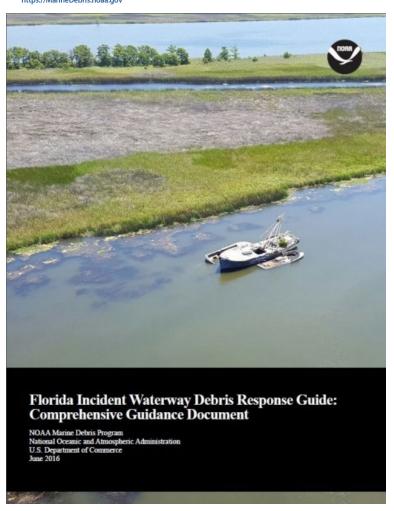
Includes specific language on response mandate

# 2014: Regional Response Planning Project

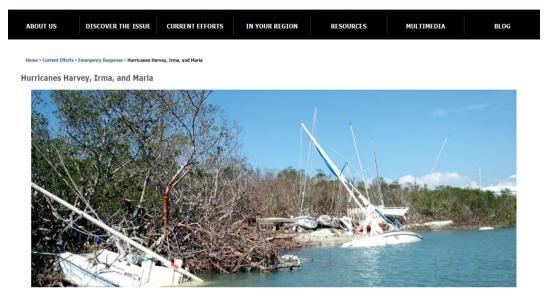
Began working with states/territories to create Regional Response Guides



## **Emergency Response & Preparedness**



- Supplemental Funding
- Emergency Response Guides



# FY18 Hurricane Supplemental Funding for Debris Removal

## Hurricanes Harvey, Irma & Maria



While FEMA and other agencies removed a great deal of marine debris during immediate emergency response operations, there are still large amounts of debris remaining.

# **Emergency Response**

- \$17.3M for Hurricanes Harvey, Irma, and María
- \$10M for Hurricanes Michael, Florence, Yutu
  - Funding to assess, remove, and dispose of hurricane related marine debris
- Assist with Emergency Support
   Functions 3 and 10
  - Deploy to JFO, ICP, EOC
  - Debris BMPs
  - Vessel assessment and removal recommendations



# FY18 Hurricane Supplemental Funding for Debris Removal

## **USVI**

Puerto Rico

Budget: \$4.2M

DPNR intends to remove and properly dispose debris at many locations around the islands of Saint Thomas, Saint John and Saint Croix.



Budget: \$3.7M

The DNER intends to remove and properly dispose debris at 39 locations around the main island of Puerto Rico including Vieques and Culebra Islands.

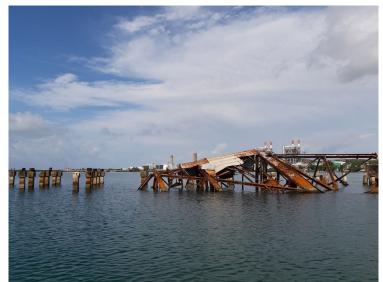


Metal frame in the mangroves a Jobos Bay NERR, Puerto Rico

# FY18 Hurricane Supplemental Funding for Debris Removal

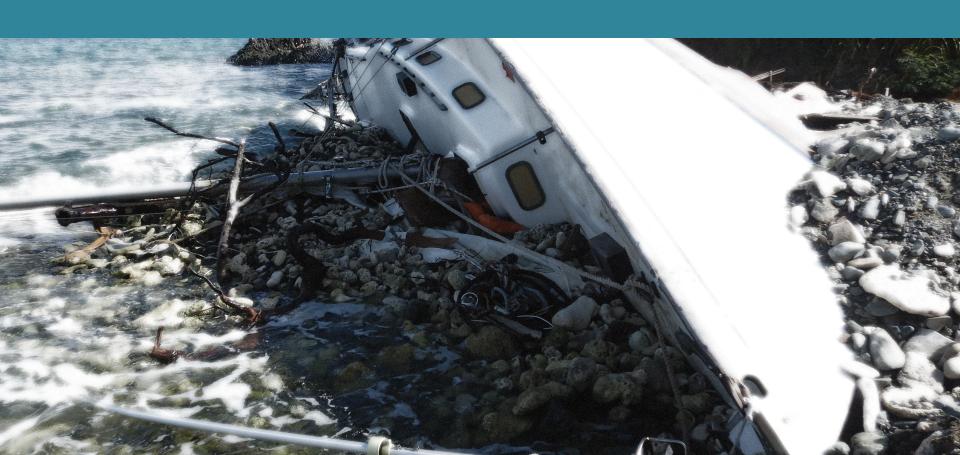
## **Targets for USVI & PR**

- sunken or displaced vessels
- remains of houseboats
- large debris aggregations caused by hurricane surge over ecologically sensitive environments
- damaged docks and piers, as well as decks
- appliances
- parts of cars
- pieces of roofs
- walls of residences or concrete slabs from piers or boat ramps affected by the hurricanes' wind and wave-forcing.





# Response Guide Project Status



# **Project Goal**

Improve preparedness for response to and recovery from acute marine debris incidents in coastal states and territories

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Improve preparedness for response to and recovery from acute marine debris incidents in coastal states and territories

Outline existing response structures, procedures, and responsibilities at the local, state, and federal levels into individual state guidance documents

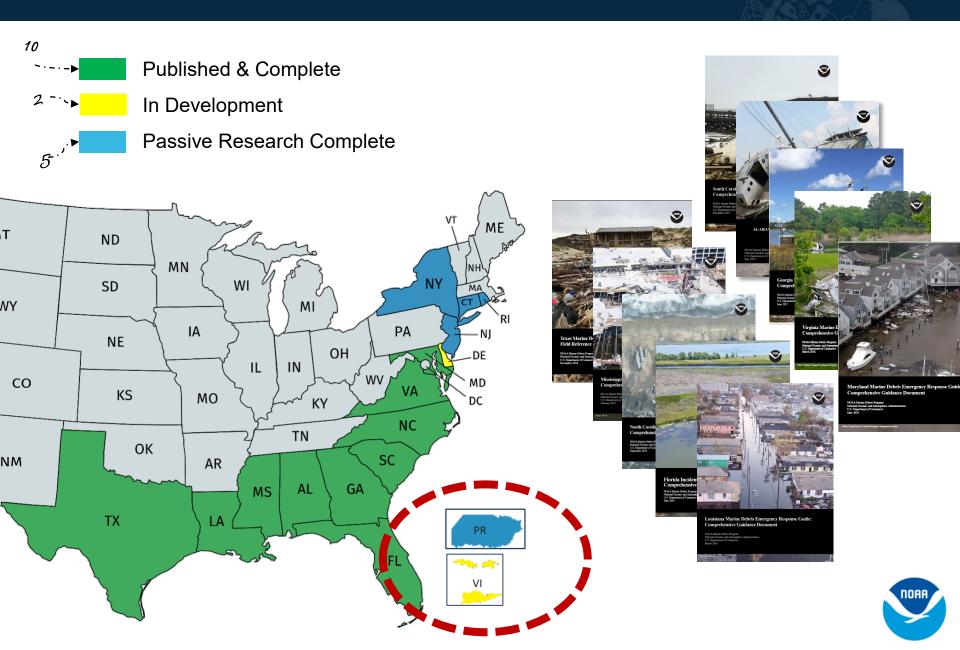
## **Marine Debris Response Guides**

- Focus on waterway debris
- Provides info in a single location
   Local-state/territory-federal-private
- Clarifies organization roles
   Waterway jurisdiction/ownership
- Identifies challenges
   Not always a lead agency or funding
- Targets all levels of government, responders

# **National Project Status**



# **National Project Status**



## **USVI** Coordination To Date











**US Army Corps** of Engineers<sub>®</sub>











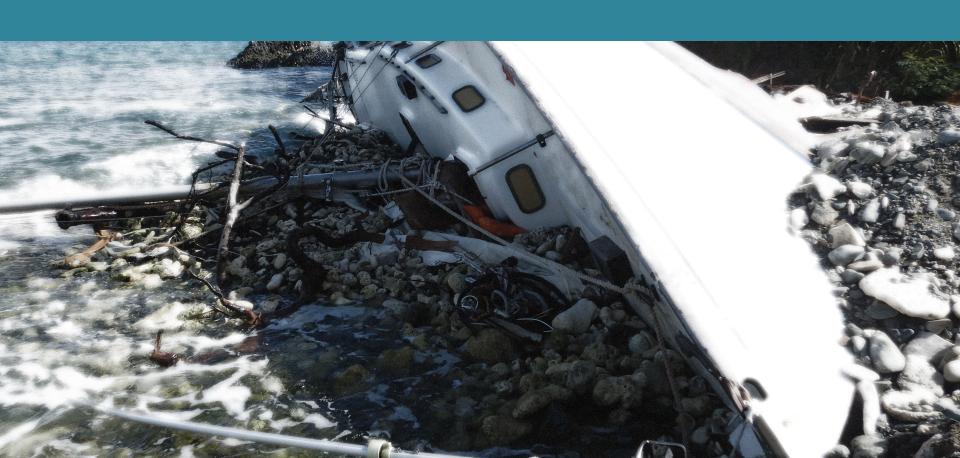








# Response Guide Development & Content







- 1. Background research
- 2. Engage stakeholders
- 3. Capture roles, point of contacts, and jurisdictions
- 4. Outline permitting and compliance structure
- 5. Stakeholder workshop
- 6. Guide drafting
- 7. Stakeholder review
- 8. Publication
- Ongoing maintenance and exercises





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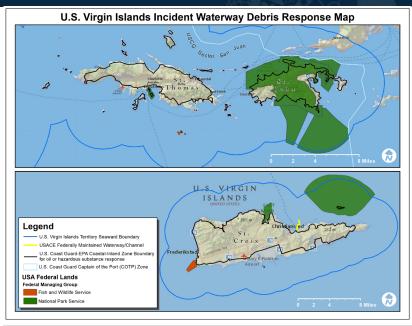
# **Guide Content**

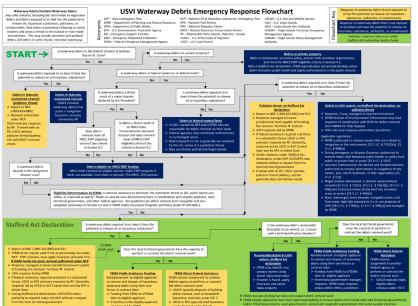
- I. Introduction
- II. Background Risk: Foreseeable Incidents and Debris Types
- III. Roles, Responsibilities, and Jurisdictions
- IV. Permitting and Compliance Requirements
- V. Challenges, Needs, and Recommended Actions
- VI. Response Capabilities
- VII. Contact Information



# **Guide Content**

- I. Introduction
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Waterway Debris/Incident Waterway Debris

Winy 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

Is waterway debris in the federal channel at Gallows

debris and debris in some inland, non-tidal waterways.

### **USVI Waterway Debris Emergency Response Flowchart**

ACP – Area Contingency Plan
DPNR – Department of Planning and Natural Resources
DPW – Department of Public Works

EPA – U.S. Environmental Protection Agency
ESF – Emergency Support Function
EWP – Emergency Watershed Protection
FEMA – Federal Emergency Management Agency

waterway debris using their own

> Funding from FEMA to VITEMA

> If territory is the eligible applicant,

then to eligible applicant

response led by DPNR

forces or contract labor

NCP – National Oil & Hazardous Substances Contingency Plan NPS – National Park Service NRC – National Response Center NRCS – Natural Resources Conservation Service RP – Responsible Party (Owner, Operator, Lessee) USACE – U.S. Army Corps of Engineers USACE – U.S. Coast Guard

USFWS – U.S. Fish and Wildlife Service USVI – U.S. Virgin Islands VIPA – Virgin Islands Port Authority VITEMA – Virgin Islands Territorial Emergency

insurance and owner

\* FEMA provides funding but does not conduct debris removal work

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

takes property

response. DPNR leads response

unless within VIPA's jurisdiction

FEMA eligible applicants must have legal responsibility to remove debris and include state and territorial governments,

Indian Tribal Governments, local governments, and private nonprofit organizations that serve a public function.

eligible debris

removal under ESF 3

Management Agency VIWMA – Virgin Islands Waste Management Authority 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,

nazardous substances, pollutants, or contaminants Indicates response may occur under Stafford Act authorities and/or funds

START → Is waterway debris on private property? Debris on private property Bay on St. Croix? Refer to homeowner insurance policy, partner with volunteer organizations, Yes No and check for NRCS EWP eligibility criteria in Section 4.2. After a Stafford Act declaration, FEMA typically does not provide funding unless debris threatens public health and safety and removal is in the public interest. Is waterway debris in federal waters or on federal lands? Is waterway debris exposed to or does it have the potential to release oil or hazardous substances? No Yes Is waterway debris exposed to or does it have the Yes potential to release oil or hazardous substances? Is waterway debris exposed to or Is waterway debris a direct No Yes **Debris in federally** Debris in federally result of a major disaster does it have the potential to release maintained channel maintained channel declared by the President? oil or hazardous substances? **USACE** removes (pollution threat) Pollution threat, no Stafford Act Debris in USVI waters, no Stafford Act declaration, no Report to NRC waterway debris that Yes No Yes declaration pollution threat 1-800-424-8802 poses a navigation Report to NRC 1-800-424-8802 and 911 Response, if any, managed at local territorial level Removal authorized hazard or oversees > DPNR Division of Environmental Enforcement may lead Response managed at lowest under NCP removal by RP Debris in federal waters/lands jurisdictional level capable of handling response in coordination with DPW for debris removal Is debris a direct result of USCG oversees response In USVI, owned by NPS and USFWS who are and VIWMA for final disposal the removal: Territory → Federal an NRCS State by RP. If vessel with no responsible for debris removal on their lands USVI response led by DPNR > VIPA may lead response within their jurisdiction Does debris Conservationist declared RP. USCG removes Federal agencies may coordinate with territory If federal assistance required and there disaster and does removal pollution threat (battery removal meet all Applicable Legislation: in co-managed areas is a substantial threat, USCG or EPA NRCS EWP eligibility meet all NRCS FWP oil) and USACE removes > DPNR authorized to remove vessels that are a threat to Debris beyond 3 n.mi. is generally not removed oversees response by RP. Generally, criteria? See criteria eligibility criteria? See navigation or the environment [12 V.I.C. § 715(2)(a), 25 by the U.S. unless it is a pollution threat. response led by USCG in ACP Coastal in Section 4.2. criteria in Section 4.2. V.I.C. § 404(a)] May coordinate with British Virgin Islands Zone and by EPA in Inland Zone. During emergency or disaster Governor authorized to No Yes Yes No Unlike response under Stafford Act remove debris that threatens public health or safety from declaration, under NCP USCG/EPA may public or private land or water [23 V.I.C. § 1015] respond without a request from the Assistant Commissioner for Marine and Aviation Services Is waterway debris **Debris eligible for NRCS EWP funding** local territorial government authorized to remove obstructions to navigation of any NRCS funds removal by eligible sponsor under EWP program if located in the designated If vessel with no RP, USCG removes harbor, pier, wharf, bulkhead, or their approaches [25] funds are available. Cost share is typically 75% NRCS, 25% sponsor. disaster area? pollution threat (battery, oil) but V.I.C. § 133] generally does not remove vessel Illegal to leave abandoned or derelict vessel without Yes No consent [12 V.I.C. § 715(1), 19 V.I.C. § 1563(6), 25 V.I.C. § 408] and to discard refuse of any kind into shoreline Eligibility Determination by FEMA: Is removal necessary to eliminate the immediate threat to life, public health and areas or waters [25 V.I.C. § 408(c)] safety, or improved property? Made on case-by-case discretionary basis in coordination with eligible applicant, local Note: Submerged lands beneath navigable waters and territorial government, and other federal agencies. See quidelines for debris removal from navigable and nonfrom mean high tide seaward to 3 n.m. are property of navigable waterways in Section 4.2 and in FEMA Public Assistance Program and Policy Guide FP 104-009-2. USVI [48 U.S.C. § 1705(a), 12 V.I.C. § 309(a)] and managed by DPNR Yes **Stafford Act Declaration** Is waterway debris exposed to or does it have the Does the local territorial government Is the waterway debris recoverable potential to release oil or hazardous substances? have the capacity to perform or (traceable to an owner), i.e. a vessel contract the debris removal work? with a Hull Identification Number? Yes No Yes No If FEMA Report to NRC 1-800-424-8802 and 911 funds used Does the local territorial government have the capacity to **FEMA Public Assistance Funding FEMA Direct Federal** FEMA funds may be used if not at pre-existing site under perform or contract the debris removal work? Recoverable debris in USVI Reimbursement to eligible applicant **Assistance** NCP. If RP is known, must apply insurance proceeds first. waters, Stafford Act to remove and dispose of waterway FEMA mission If FEMA funds not used, removal authorized under NCP Yes declaration debris using their own forces or assignment to another Response managed at lowest jurisdictional level capable > DPNR may identify and contract labor federal agency to of handling the removal: Territory → Federal contact owners using > Funding from FEMA to VITEMA perform or contract the USVI response led by DPNR **FEMA Public Assistance Funding FEMA Direct Federal Assistance** vessel registration data then to eligible applicant debris removal work If federal assistance required and there is a substantial Reimbursement to eligible applicant FEMA mission assignment to another If owner is found, apply If territorial government manages USACE typically leads threat, USCG or EPA oversees response by RP. Generally, to remove and dispose of hazardous federal agency to perform or contract

the debris removal work

➤ USACE typically disposes of building

debris hazmat, such as household

USCG or EPA typically lead hazardous

hazardous materials under ESF 3

waste disposal under ESF 10

Rev 2020.01.06

Inland Zone

response led by USCG in ACP Coastal Zone and by EPA in

authority to respond under the NCP without a request

During Stafford Act declarations, USCG/EPA retain

from the local territorial government

**USVI Waterway Debris Emergency Response Flowchart** Response to waterway debris that is exposed to Waterway Debris/Incident Waterway Debris or has the potential to release oil, hazardous Any solid material, including but not limited to vegetative substances, pollutants, or contaminants ACP - Area Contingency Plan NCP – National Oil & Hazardous Substances Contingency Plan USFWS - U.S. Fish and Wildlife Service debris and debris exposed to or that has the potential to DPNR - Department of Planning and Natural Resources NPS - National Park Service USVI - U.S. Virgin Islands Response to waterway debris that is not exposed release oil, hazardous substances, pollutants, or DPW - Department of Public Works NRC - National Response Center VIPA - Virgin Islands Port Authority to and does not have the potential to release oil, contaminants, that enters a waterway following an acute EPA - U.S. Environmental Protection Agency NRCS - Natural Resources Conservation Service VITEMA - Virgin Islands Territorial Emergency nazardous substances, pollutants, or contaminants incident and poses a threat to the natural or man-made ESF - Emergency Support Function RP - Responsible Party (Owner, Operator, Lessee) Management Agency environment. 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Cost share is typically 75% NRCS, 25% sponsor. disaster area? pollution threat (battery, oil) but V.I.C. § 133] generally does not remove vessel Illegal to leave abandoned or derelict vessel without Yes No consent [12 V.I.C. § 715(1), 19 V.I.C. § 1563(6), 25 V.I.C. § 408] and to discard refuse of any kind into shoreline Eligibility Determination by FEMA: Is removal necessary to eliminate the immediate threat to life, public health and areas or waters [25 V.I.C. § 408(c)] safety, or improved property? Made on case-by-case discretionary basis in coordination with eligible applicant, local Note: Submerged lands beneath navigable waters and territorial government, and other federal agencies. See quidelines for debris removal from navigable and nonfrom mean high tide seaward to 3 n.m. are property of navigable waterways in Section 4.2 and in FEMA Public Assistance Program and Policy Guide FP 104-009-2. USVI [48 U.S.C. § 1705(a), 12 V.I.C. § 309(a)] and managed by DPNR Yes **Stafford Act Declaration** Is waterway debris exposed to or does it have the Does the local territorial government Is the waterway debris recoverable potential to release oil or hazardous substances? have the capacity to perform or (traceable to an owner), i.e. a vessel contract the debris removal work? with a Hull Identification Number? Yes No Yes No If FEMA Report to NRC 1-800-424-8802 and 911 funds used Does the local territorial government have the capacity to **FEMA Public Assistance Funding FEMA Direct Federal** FEMA funds may be used if not at pre-existing site under perform or contract the debris removal work? Recoverable debris in USVI Reimbursement to eligible applicant **Assistance** NCP. If RP is known, must apply insurance proceeds first. waters, Stafford Act to remove and dispose of waterway FEMA mission If FEMA funds not used, removal authorized under NCP Yes declaration debris using their own forces or assignment to another Response managed at lowest jurisdictional level capable > DPNR may identify and contract labor federal agency to of handling the removal: Territory → Federal contact owners using > Funding from FEMA to VITEMA perform or contract the USVI response led by DPNR **FEMA Public Assistance Funding FEMA Direct Federal Assistance** debris removal work vessel registration data then to eligible applicant If federal assistance required and there is a substantial Reimbursement to eligible applicant FEMA mission assignment to another > If owner is found, apply If territorial government manages USACE typically leads threat, USCG or EPA oversees response by RP. Generally, to remove and dispose of hazardous federal agency to perform or contract insurance and owner response. DPNR leads response eligible debris response led by USCG in ACP Coastal Zone and by EPA in waterway debris using their own the debris removal work takes property unless within VIPA's jurisdiction removal under ESF 3 Inland Zone forces or contract labor ➤ USACE typically disposes of building During Stafford Act declarations, USCG/EPA retain > Funding from FEMA to VITEMA debris hazmat, such as household \* FEMA provides funding but does not conduct debris removal work authority to respond under the NCP without a request then to eligible applicant hazardous materials under ESF 3 FEMA eligible applicants must have legal responsibility to remove debris and include state and territorial governments, > If territory is the eligible applicant, USCG or EPA typically lead hazardous from the local territorial government

waste disposal under ESF 10

response led by DPNR

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Indian Tribal Governments, local governments, and private nonprofit organizations that serve a public function.

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

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.

### **USVI Waterway Debris Emergency Response Flowchart**

DPNR - Department of Planning and Natural Resources

DPW - Department of Public Works EPA - U.S. Environmental Protection Agency ESF - Emergency Support Function

EWP - Emergency Watershed Protection FEMA - Federal Emergency Management Agency

NCP - National Oil & Hazardous Substances Contingency Plan NPS - National Park Service NRC - National Response Center NRCS - Natural Resources Conservation Service

RP - Responsible Party (Owner, Operator, Lessee) USACE - U.S. Army Corps of Engineers USCG - U.S. Coast Guard

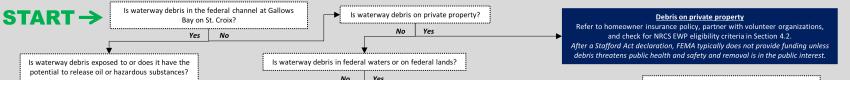
USVI - U.S. Virgin Islands VIPA - Virgin Islands Port Authority

VITEMA - Virgin Islands Territorial Emergency Management Agency VIWMA - Virgin Islands Waste Management

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, nazardous substances, pollutants, or contaminants Indicates response may occur under

Stafford Act authorities and/or funds



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

### FEMA funds may be used if not at pre-existing site under NCP. If RP is known, must apply insurance proceeds first. If FEMA funds not used, removal authorized under NCP Response managed at lowest jurisdictional level capable of handling the removal: Territory → Federal

- USVI response led by DPNR
- If federal assistance required and there is a substantial threat, USCG or EPA oversees response by RP. Generally, response led by USCG in ACP Coastal Zone and by EPA in
- During Stafford Act declarations, USCG/EPA retain authority to respond under the NCP without a request from the local territorial government

### Does the local territorial government have the capacity to perform or contract the debris removal work?

### **FEMA Public Assistance Funding** Reimbursement to eligible applicant to remove and dispose of hazardous

funds used

- waterway debris using their own forces or contract labor
- > Funding from FEMA to VITEMA then to eligible applicant

response led by DPNR

> If territory is the eligible applicant,

#### **FEMA Direct Federal Assistance** FEMA mission assignment to another federal agency to perform or contract the debris removal work

- USACE typically disposes of building debris hazmat, such as household hazardous materials under ESF 3
- USCG or EPA typically lead hazardous waste disposal under ESF 10

### Recoverable debris in USVI waters, Stafford Act

- declaration DPNR may identify and contact owners using vessel registration data
- If owner is found, apply insurance and owner takes property

### **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 VITEMA then to eligible applicant
- If territorial government manages response. DPNR leads response unless within VIPA's jurisdiction

#### **FEMA Direct Federal Assistance** FEMA mission

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

USACE typically leads eligible debris removal under ESF 3

- \* FEMA provides funding but does not conduct debris removal work
- FEMA eligible applicants must have legal responsibility to remove debris and include state and territorial governments, Indian Tribal Governments, local governments, and private nonprofit organizations that serve a public function.
- Public Assistance cost share is typically 75% FEMA, 25% applicant

Waterway Debris/Incident Waterway Debris Any solid material, including but not limited to vegetative ACP - Area Contingency Plan debris and debris exposed to or that has the potential to release oil, hazardous substances, pollutants, or DPW - Department of Public Works contaminants, that enters a waterway following an acute EPA - U.S. Environmental Protection Agency incident and poses a threat to the natural or man-made ESF - Emergency Support Function environment. This may include shoreline and wetland

debris and debris in some inland, non-tidal waterways.

### **USVI Waterway Debris Emergency Response Flowchart** NCP – National Oil & Hazardous Substances Contingency Plan

DPNR - Department of Planning and Natural Resources

FEMA - Federal Emergency Management Agency

forces or contract labor

> Funding from FEMA to VITEMA

> If territory is the eligible applicant,

then to eligible applicant

response led by DPNR

EWP - Emergency Watershed Protection

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 USVI - U.S. Virgin Islands VIPA - Virgin Islands Port Authority VITEMA - Virgin Islands Territorial Emergency

\* FEMA provides funding but does not conduct debris removal work

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

FEMA eligible applicants must have legal responsibility to remove debris and include state and territorial governments,

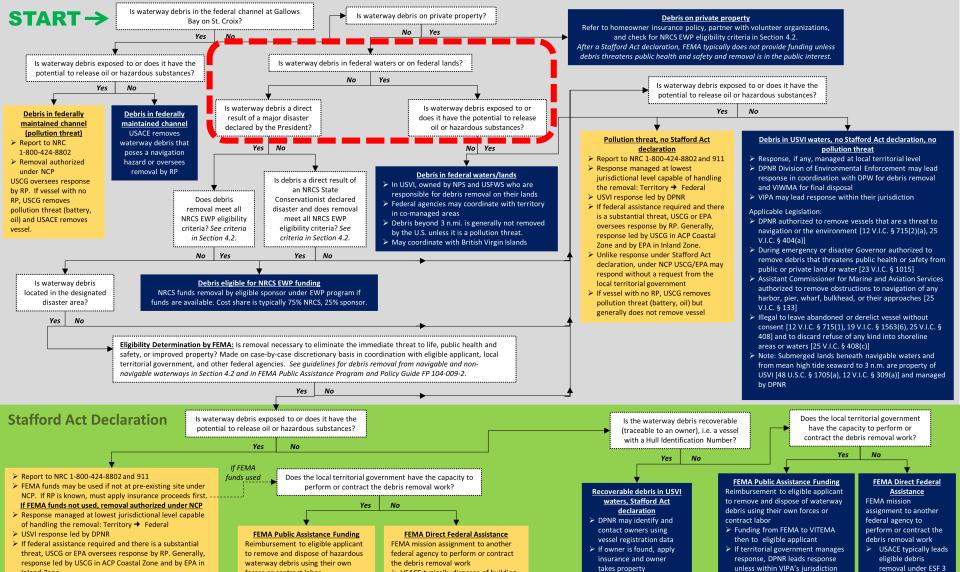
Indian Tribal Governments, local governments, and private nonprofit organizations that serve a public function.

Management Agency VIWMA - Virgin Islands Waste Management

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, nazardous substances, pollutants, or contaminants

Response to waterway debris that is exposed to

Indicates response may occur under Stafford Act authorities and/or funds



➤ USACE typically disposes of building

debris hazmat, such as household

USCG or EPA typically lead hazardous

hazardous materials under ESF 3

waste disposal under ESF 10

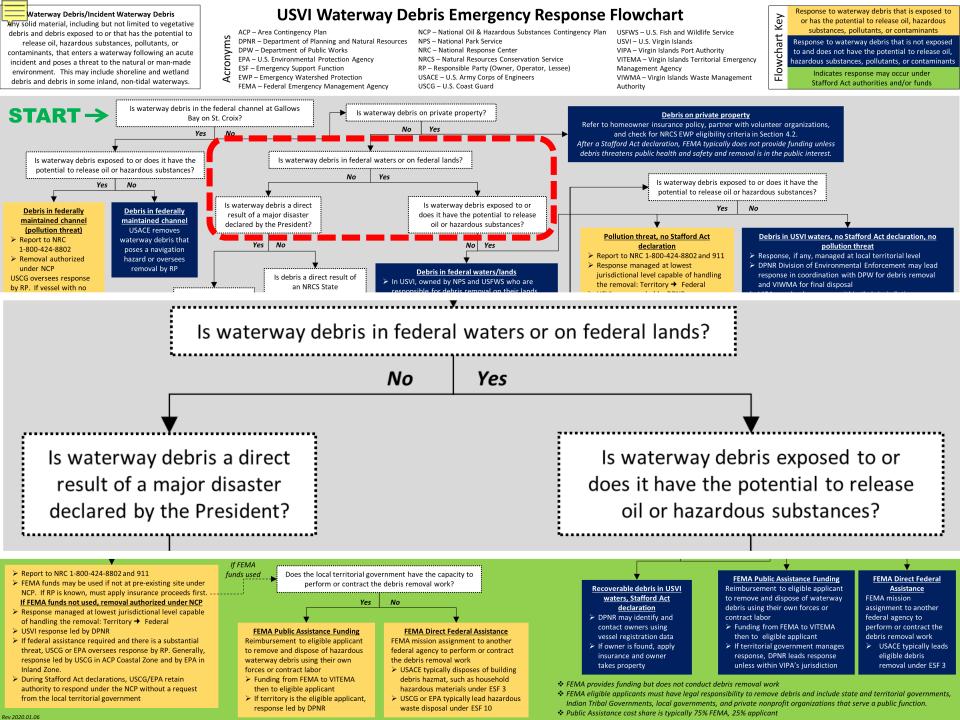
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Inland Zone

During Stafford Act declarations, USCG/EPA retain

from the local territorial government

authority to respond under the NCP without a request



## **Guide Content**

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- III. Roles, Responsibilities, and Jurisdictions
- IV. Permitting and Compliance Requirements
- V. Challenges, Needs, and Recommended Actions
- VI. Response Capabilities
- VII. Contact Information





### Permitting and Compliance for Waterway Debris Removal in the U.S. Virgin Islands

- In U.S. Virgin Islands, a Department of Planning and Natural Resources (DPNR) minor water coastal zone permit and U.S. Army Corps of Engineers (USACE) permit may be required if debris removal involves dredging, the discharge of dredge or fill material, or involves structures or work impacting the navigability of a waterway.
- The organization or individual conducting the debris removal is responsible for obtaining necessary permits, and DPNR and USACE have a joint permit application process.
- The <u>lead federal agency</u> is responsible for compliance with National Environmental Policy Act (NEPA), federal coastal consistency, and consulting with DPNR, 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** No Federal Funding (for example, FEMA funding under Stafford Act declaration) (local or privately funded removal) Permit(s) Issued **Debris Removal Federal Agency Coordination** Review all permit conditions including Coordinate with federal funding agency regarding DPNR and resource agency environmental compliance requirements before requirements. Generally, USACE will applying for DPNR-USACE permit not issue a permit until DPNR issues any required territorial authorizations. Lead federal agency responsible for NEPA compliance, federal coastal About NEPA As the lead federal agency, USACE ensures NEPA consistency, and consultations with DPNR, USFWS, and NOAA as required. The National Environmental Policy Act (NEPA) requires compliance, federal consistency with U.S. Virgin • FEMA is lead federal agency under Stafford Act declaration. federal agencies to assess the environmental effects Islands Coastal Zone Management Program, and Debris removal under Stafford Act declaration may trigger emergency of their proposed actions prior to making decisions. consults with DPNR, USFWS, and NOAA as required. permitting process.

### **Primary Agency Requirements and Contact Numbers**

Department of Planning and Natural Resources (DPNR)

> St Thomas 340-774-3320 St. Croix 340-773-1082

Coastal Zone Management Program czm@dpnr.vi.gov

State Historic Preservation Office 340-776-8605

### Coastal Zone Management Program (VICZMP)

- Manages joint application process for debris removal in Tier 1
- Serves as the initial agency to submit a permit application. DPNR forwards a copy to USACE and both agencies independently process application.
- Reviews federal actions for consistency with enforceable polices

### **Division of Environmental Protection**

Solid Waste Management Program

- Provides oversite and guidance for debris management and disposal
- Authorizes temporary debris management sites for declared disasters
   Water Quality Management Program
- Reviews federal permit applications for compliance with USVI water quality standards

### Division of Fish and Wildlife

Ensures compliance with the Endangered and Indigenous Species Act

### State Historic Preservation Office (SHPO)

- Ensures compliance with National Historic Preservation Act and Virgin Islands Antiquities and Cultural Properties Act of 1998
- Consultation with SHPO required if waterway debris response involves a federal agency 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

U.S. Army Corps of Engineers (USACE)

Jacksonville District Antilles Office Regulatory Section 787-729-6905

- USACE Antilles Office and DPNR have a joint permit application process
- In emergencies, USACE may waive permitting for waterway debris removal if there is no substrate disturbance. USACE recommends coordination to confirm.
- Permit(s) that may be required for debris removal in waterways and wetlands are:
  - 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

National Oceanic and Atmospheric Administration (NOAA) NOAA Fisheries ESA: 727-824-5312 EFH: 305-213-3089

- 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)

Caribbean Ecological Services Field Office 787-851-7297

- 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 of the U.S. Virgin Islands.

Rev 2020.01.15

### Permitting and Compliance for Waterway Debris Removal in the U.S. Virgin Islands

- In U.S. Virgin Islands, a Department of Planning and Natural Resources (DPNR) minor water coastal zone permit and U.S. Army Corps of Engineers (USACE) permit may be required if debris removal involves dredging, the discharge of dredge or fill material, or involves structures or work impacting the navigability of a waterway.
- The organization or individual conducting the debris removal is responsible for obtaining necessary permits, and DPNR and USACE have a joint permit application process.
- The lead federal agency is responsible for compliance with National Environmental Policy Act (NEPA), federal coastal consistency, and consulting with DPNR, U.S. Fish and Wildlife Service (USFWS), and the National Oceanic and Atmospheric Administration (NOAA) as required.

# Federally Funded Remchal Occupance Process The Perm Strated In Federally Funded Remchal Ole, FEMA funding under Stafford Act declaration) (local or privately funded removal)

Complete Day I a Review all permit ronding the Control of the Cont



- Lead federal agency responsible for NEPA compliance, federal coastal consistency, and consultations with DPNR, USFWS, and NOAA as required.
- FEMA is lead federal agency under Stafford Act declaration.
- Debris removal under Stafford Act declaration may trigger emergency

As the lead federal agency, USACE ensures NEPA compliance, federal consistency with U.S. Virgin Islands Coastal Zone Management Program, and consults with DPNR, USFWS, and NOAA as required

### **About NEPA**

The National Environmental Policy Act (NEPA) requires federal agencies to assess the environmental effects of their proposed actions prior to making decisions.

### **Primary Agency Requirements and Contact Numbers**

# Coastal Zone Management Program (VICZMP) Manages joint application process for activity of migra 4 sture Manages joint application process for activity of migra 4 sture Manages joint application process for activity of migra 4 sture Manages joint application process for activity of migra 4 sture Manages joint application process for activity of migra 5 (USACI May waive permitting for waterway debris removal if there is used to be activity of migra 5 (USACI May both a migra 5 (USACI May both a migra 6 for activity of migra 6

**Division of Environmental Protection** 

Solid Waste Management Program

Provides oversite and guidance for debrisman generation of the provides oversite and guidance for debrisman generation of the guidance for the guidance for debrisman generation of the gui



**US Army Corps** of Engineers<sub>®</sub>





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		Territorial Agencies Federal Agencies									
Yes (Y) - Verified In-house Capability	DPNR	UVI Center for Marine and Environmental Studies: USVI Marine	VIPA	EPA Region 2 <sup>4</sup>	FEM Regio		NOAA	NPS	USACE	USCG <sup>20</sup>	USFWS
Cont. (C) - Contracted capability		Advisory Service		•	-						
Aerial photography and video	Yes1			Yes	Con		Yes <sup>12</sup>	Cont.15	Cont.	Yes	
Data management/sharing capabilities (common operating picture)	Yes²			Yes	Ye	s	Yes	Yes <sup>15</sup>		Yes	
Remote sensing (LIDAR)				Yes	Con		Yes <sup>12</sup>	Cont.15	Cont.		
Sub-Surface Detection: Side scan, Single-beam, or Multi-beam sonar			Cont.		Con		Yes	Cont.15	Cont.		
Boom			Cont.		Con	t.º			Cont.	Cont.	
Emergency telecommunications equipment					Y2	С					
Heavy equipment: barge, cherry picker, crane, environmental clamshell dredge, excavator, etc.				Cont.	Con	t.º		Cont.	Cont.	Cont.	
# Helicopters				Cont.	Con	t.º		Cont.		Yes	
Portable GPS units					Y7	С			Cont.	Yes	
Remotely Operated Vehicle (ROV)/Underwater drones		Yes			Con	t.°		Cont.	Cont.		
Trucks	Yes <sup>2,3</sup>		Yes	Cont.	Con	t.º			Cont.	Cont.	
Unmanned Aerial Vehicle (UAV)/Surveillance drones					Con	t.6		Cont.	Cont.		
Vessels				Cont.	Con	t.6			Cont.		
Waste reduction equipment: grinders, incinerator, shredder					Con	t.6		Cont.	Cont.		
Waste storage/transportation equipment: dumpsters, shipping containers				Cont.	Con	t.º		Cont.		Cont.	
Dedicated waterway/marine debris staff (responders, response team, regional coordination, etc.)					Con	t.º		Cont.	Cont.		
Dive support			Cont.	Cont.	Con	t.º				Yes	
Environmental, archaeological, or cultural resource expertise (location of generative areas, endangered species present, etc.)				Yes	Υ	Cs					
Geographic Information System (GIS) mapping and plotting of imagery				Yes	Υ	C8					
HAZWOPER trained staff				Yes	Υ	Co				Yes	
Incident Command System (ICS) trained staff	Yes <sup>2</sup>			Yes	Ye						
Public affairs/outreach processes in place with trained staff										Yes	
Public health expertise (for poisonous vegetative debris)	Cont.3				Υ	Cs		Yes		Cont.	
Restoration expertise (wetlands, corals, submerged aquatic vegetation, etc.)	Y1,3 C2				Con	t.º				Cont.	
Staff with knowledge of FEMA (Stafford Act) process and documentation requirements	Yes²	Cont.		Yes	Υ	C4			Yes		Yes
Technical expertise for removal operations (techniques, BMPs, etc.)				Yes	Y	Co					



# **Capability Matrix**

		Territorial Agencies			Federal Agencies							
	Yes (Y) - Verified In-house Capability  Cont. (C) - Contracted capability	DPNR	UVI Center for Marine and Environmental Studies: USVI Marine	VIPA	EPA Region 2 <sup>4</sup>	FEMA <sup>5</sup> Region 2	NOAA	NPS	USACE	USCG <sup>20</sup>	USFWS	
>	Aerial photography and video	Yes¹	Advisory Service		Yes	Cont.6	Yes <sup>12</sup>	Cont.15	Cont.	Yes		
Jo G	Data management/sharing capabilities (common operating picture)	Yes <sup>2</sup>			Yes	Yes	Yes	Yes <sup>15</sup>	Cont.	Yes		
Ĕ	Remote sensing (LIDAR)	163			Yes	Cont. <sup>6</sup>	Yes <sup>12</sup>	Cont.15	Cont.	163		
Tec	Sub-Surface Detection: Side scan, Single-beam, or Multi-beam sonar			Cont.	res	Cont. <sup>6</sup>	Yes	Cont. <sup>15</sup>	Cont.			
	Boom			Cont.		Cont. <sup>6</sup>		COTTE	Cont.	Cont.		
	Emergency telecommunications equipment			Yes	Yes	Y <sup>7</sup> C		Yes	Yes	Yes		
	Heavy equipment: barge, cherry picker, crane, environmental clamshell dredge, excavator, etc.				Cont.	Cont. <sup>6</sup>		Cont.	Cont.	Cont.		
벋	Helicopters				Cont.	Cont.6		Cont.		Yes		
Ē	Portable GPS units	Yes <sup>1,3</sup>	Yes	Yes	Yes	Y <sup>7</sup> C	Yes <sup>13</sup>	Yes	Cont.	Yes		
흠	Remotely Operated Vehicle (ROV)/Underwater drones		Yes			Cont. <sup>6</sup>	Yes	Cont.	Cont.			
ü	Trucks	Yes <sup>2,3</sup>		Yes	Cont.	Cont. <sup>6</sup>		Yes	Cont.	Cont.		
	Unmanned Aerial Vehicle (UAV)/Surveillance drones	Yes <sup>1,3</sup>				Cont. <sup>6</sup>	Yes <sup>12</sup>	Cont.	Cont.			
	Vessels	Yes³	Yes	Yes	Cont.	Cont. <sup>6</sup>	Yes	Yes	Cont.	Yes		
	Waste reduction equipment: grinders, incinerator, shredder					Cont.6		Cont.	Cont.			
	Waste storage/transportation equipment: dumpsters, shipping containers				Cont.	Cont.6		Cont.		Cont.		
	Dedicated waterway/marine debris staff (responders, response team, regional coordination, etc.)				Yes	Cont.⁵	Yes	Cont.	Cont.	Yes		
	Dive support	Yes <sup>1,3</sup>	Yes	Cont.	Cont.	Cont.⁵	Yes <sup>13</sup>	Yes <sup>17</sup>		Yes		
ñ	Environmental, archaeological, or cultural resource expertise (location of sensitive areas, endangered species present, etc.)	Yes <sup>1,2,3</sup>	Yes		Yes	Y C	Yes <sup>12,13</sup>	Yes	Yes		Yes <sup>21</sup>	
ŧ	Geographic Information System (GIS) mapping and plotting of imagery	Yes <sup>1,2,3</sup>			Yes	Y C	Yes	Yes16	Yes			
×	HAZWOPER trained staff				Yes	Y C	Yes	Yes		Yes		
	Incident Command System (ICS) trained staff	Yes²			Yes	Yes	Yes	Yes	Yes	Yes	Yes	
for	Public affairs/outreach processes in place with trained staff	Yes <sup>1,2</sup>	Yes	Yes	Yes	Yes		Yes		Yes		
支	Public health expertise (for poisonous vegetative debris)	Cont.³				Y C		Yes		Cont.		
3	Restoration expertise (wetlands, corals, submerged aquatic vegetation, etc.)	Y <sup>1,3</sup> C <sup>2</sup>	Yes			Cont. <sup>6</sup>	Yes <sup>13</sup>	Yes		Cont.		
	Staff with knowledge of FEMA (Stafford Act) process and documentation requirements	Yes²	Cont.		Yes	Y C	Yes	Yes	Yes	Yes	Yes	
	Technical expertise for removal operations (techniques, BMPs, etc.)	Yes¹			Yes	Y C	Yes	Yes	Yes	Yes		



# **Capability Matrix**

			Territorial Agencies		Federal Agencies							
	Yes (Y) - Verified In-house Capability	DDAID SINGERING VIDA		EPA FEMA <sup>5</sup> NOAA			NPS	USACE	USCG <sup>20</sup>	USFWS		
	Cont. (C) - Contracted capability	DFINK	Studies: USVI Marine Advisory Service	VIFA	Region 2 <sup>4</sup>	Regi	on 2	NOAA	INFS	USACE	USCG	USFWS
	Aerial photography and video	Yes¹			Yes	Cor	nt. <sup>6</sup>	Yes <sup>12</sup>	Cont.15	Cont.	Yes	
	Data management/sharing capabilities (common operating picture)	Yes²			Yes	Υe	25	Yes	Yes15		Yes	
ы	Remote sensing (LIDAR)				Yes	Cor	nt. <sup>6</sup>	Yes12	Cont.15	Cont.		
	Sub-Surface Detection: Side scan, Single-beam, or Multi-beam sonar			Cont.		Cor	nt.6	Yes	Cont.15	Cont.		
	Boom			Cont.		Cor	nt. <sup>6</sup>			Cont.	Cont.	
	Emergency telecommunications equipment			Yes	Yes	Y <sup>7</sup>	С		Yes	Yes	Yes	
	Heavy equipment: barge, cherry picker, crane, environmental clamshell dredge, excavator, etc.				Cont.	Cor	nt. <sup>6</sup>		Cont.	Cont.	Cont.	
ŧ	Helicopters				Cont.	Cor	nt. <sup>6</sup>		Cont.		Yes	
mer	Portable GPS units	Yes <sup>1,3</sup>	Yes	Yes	Yes	Υ7	С	Yes <sup>13</sup>	Yes	Cont.	Yes	
qin	Remotely Operated Vehicle (ROV)/Underwater drones		Yes			Cor	nt. <sup>6</sup>	Yes	Cont.	Cont.		
Eq	Trucks	Yes <sup>2,3</sup>		Yes	Cont.	Cor	nt.6		Yes	Cont.	Cont.	
	Unmanned Aerial Vehicle (UAV)/Surveillance drones	Yes <sup>1,3</sup>				Cor	nt.6	Yes <sup>12</sup>	Cont.	Cont.		
	Vessels	Yes³	Yes	Yes	Cont.	Cor	nt. <sup>6</sup>	Yes	Yes	Cont.	Yes	
	Waste reduction equipment: grinders, incinerator, shredder					Cor	nt. <sup>6</sup>		Cont.	Cont.		
	Waste storage/transportation equipment: dumpsters, shipping containers				Cont.	Cor	nt.6		Cont.		Cont.	
	Dedicated waterway/marine debris staff (responders, response team, regional coordination, etc.)				Yes	Cor	nt. <sup>6</sup>	Yes	Cont.	Cont.	Yes	
	Dive support	Yes <sup>1,3</sup>	Yes	Cont.	Cont.	Cor	nt. <sup>6</sup>	Yes <sup>13</sup>	Yes <sup>17</sup>		Yes	
ñ	Environmental, archaeological, or cultural resource expertise (location of sensitive areas, endangered species present, etc.)	Yes <sup>1,2,3</sup>	Yes		Yes	Υ	C <sub>e</sub>	Yes <sup>12,13</sup>	Yes	Yes		Yes <sup>21</sup>
erti	Geographic Information System (GIS) mapping and plotting of imagery	Yes <sup>1,2,3</sup>			Yes	Υ	C <sup>8</sup>	Yes	Yes <sup>16</sup>	Yes		
×	HAZWOPER trained staff				Yes	Υ	C <sub>e</sub>	Yes	Yes		Yes	
/ec	Incident Command System (ICS) trained staff	Yes²			Yes	Υe	25	Yes	Yes	Yes	Yes	Yes
for	Public affairs/outreach processes in place with trained staff	Yes <sup>1,2</sup>	Yes	Yes	Yes	Υe	25		Yes		Yes	
Į,	Public health expertise (for poisonous vegetative debris)	Cont.³				Υ	Ce		Yes		Cont.	
3	Restoration expertise (wetlands, corals, submerged aquatic vegetation, etc.)	Y <sup>1,3</sup> C <sup>2</sup>	Yes			Cor	nt. <sup>6</sup>	Yes <sup>13</sup>	Yes		Cont.	
	Staff with knowledge of FEMA (Stafford Act) process and documentation requirements	Yes²	Cont.		Yes	Υ	C <sub>e</sub>	Yes	Yes	Yes	Yes	Yes
	Technical expertise for removal operations (techniques, BMPs, etc.)	Yes <sup>1</sup>			Yes	Υ	C <sup>6</sup>	Yes	Yes	Yes	Yes	



# **Capability Matrix**

			Territorial Agencies		Federal Agencies						
	Yes (Y) - Verified In-house Capability	UVI Center for Marine and Environmental		EPA	FEMA <sup>5</sup>	1A <sup>5</sup>					
	Cont. (C) - Contracted capability	DPNR	Studies: USVI Marine Advisory Service	VIPA	Region 2 <sup>4</sup>	Region 2	NOAA	NPS	USACE	USCG <sup>20</sup>	USFWS
ı	Aerial photography and video	Yes¹			Yes	Cont. <sup>6</sup>	Yes12	Cont.15	Cont.	Yes	
ı	Data management/sharing capabilities (common operating picture)	Yes²			Yes	Yes	Yes	Yes <sup>15</sup>		Yes	
ł	Remote sensing (LIDAR)				Yes	Cont.6	Yes12	Cont.15	Cont.		
ŀ	Sub-Surface Detection: Side scan, Single-beam, or Multi-beam sonar			Cont.		Cont. <sup>6</sup>	Yes	Cont.15	Cont.		
ı	Boom			Cont.		Cont. <sup>6</sup>			Cont.	Cont.	
ı	Emergency telecommunications equipment			Yes	Yes	Y <sup>7</sup> C		Yes	Yes	Yes	
	Heavy equipment: barge, cherry picker, crane, environmental clamshell dredge, excavator, etc.				Cont.	Cont.6		Cont.	Cont.	Cont.	

	_							
	Territorial Agencies							
Yes (Y) - Verified In-house Capability				1	UVI Center for Marine and Environmental			
Cont. (C) - Contracted capability		DPI	VK	Studies: USVI Marine Advisory Service			V	IPA
Aerial photography and video		Ye	5 <sup>1</sup>					
Data management/sharing capabilities (common operating picture)		Ye	s <sup>2</sup>					
Remote sensing (LIDAR)								
Sub-Surface Detection: Side scan, Single-beam, or Multi-beam sonar							Co	ont.
Boom							Co	ont.
Emergency telecommunications equipment							Y	'es
requirements  Technical expertise for removal operations (techniques, BMPs, etc.)  Yes²  Cont.  Yes²	Yes Yes	Y	C <sub>e</sub>	Yes Yes	Yes Yes	Yes Yes	Yes Yes	Yes



# **Guide Content**

- I. Introduction
- II. Background Risk: Foreseeable Incidents and Debris Types
- III. Roles, Responsibilities, and Jurisdictions
- IV. Permitting and Compliance Requirements
- V. Challenges, Needs, and Recommended Actions
- VI. Response Capabilities

**VII. Contact Information** 

Agency	Division	Topic	Point of Contact	Phone	Email
		Planning and coordination	Damian Cartwright, Acting Executive Director	340-778-1012	dcartwright@viport.com
Virgin Islands Port		Capability: Equipment, logistics	-	mberry@viport.com	
Authority (VIPA)	-	Capability: Workforce/expertise	Monifa Marrero Brathwaite	340-774-1629	
		Capability: Sub-surface detection	Playland Marine LLC	340-643-3913	-
		Planning and coordination	Daryl Jaschen, Director		daryl.jaschen@vitema.vi.gov
Virgin Islands			Emergency Operations Center – St. Thomas/St. John	340-774-3320 x 5156	
Territorial Emergency		Risk to public health and safety	Emergency Operations Center – St. Croix	340-773-2244	
Management Agency			VITEMA Headquarters (St. Thomas)	340-774-2244	contact@vitema.vi.gov
(VITEMA)	St. Croix Office	General questions	St. Croix Office	340-773-2244	contact@vitema.vi.gov
	St. John Office General questions St. John Office		St. John Office	340-776-2244	contact@vitema.vi.gov
Virgin Islands Waste			Adrian Taylor, Interim Executive Director	340-423-7885	ataylor@viwma.org
Management Authority (VIWMA)	-	Planning and Coordination	Ann Hanley, Acting Chief Operating Officer	340-514-9500	ahanley@viwma.org

Agency	Division	Topic	Point of Contact	Phone	Email
			John Dawson, Regional UFR Coordinator, Mitigation Division/EHP		john.dawson@fema.dhs.gov
		Environmental and historic preservation (EHP)	Shenelle Dore, FEMA-EHP	-	shenelle.dore@fema.dhs.gov
Federal Emergency Management Agency (FEMA)	Region 2	preservation (cnr)	John McKee, Regional Environmental Officer	212-680-3672 (O), 202-704-7160 (C)	john.mckee@fema.dhs.gov
	1 1	Interagency coordination	Dan Lofaro		daniel.lofaro@fema.dhs.gov
		Public assistance	Herbert Grigg, PA Group Supervisor, Transportation	202-374-7818	herbert.grigg-jr@fema.dhs.gov
			Israel Rivera, Infrastructure Branch Director	202-374-5059	israel.rivera@fema.dhs.gov
		Emergency ESA/EFH consultation	General contact	-	nmfs.ser.emergency.consult@noaa.go
		EFH information, capabilities	Ashley Ruffo, Fishery Biologist	305-213-3089	ashley.ruffo@noaa.gov
		EFH information	Pace Wilbur	843-460-9926	pace.wilber@noaa.gov
National Oceanic and	National Marine Fisheries Service		General contact	727-824-5312	
Atmospheric Administration	(NMFS or NOAA Fisheries)	ESA information	Jennifer Moore, Threatened Coral Recovery Coordinator	727-551-5797 (O), 727-647-2357 (C)	jennifer.moore@noaa.gov
(NOAA)		Capability: LIDAR, sub-surface detection			jose.a.rivera@noaa.gov
	N 11 10 0 1 (NOO)		Lauda Danes - Danis and Mandanellau Adamana		

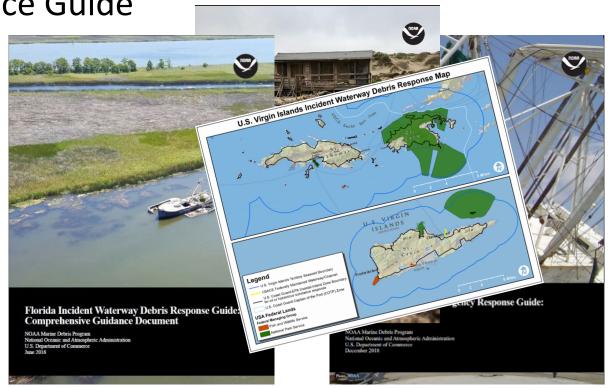


### **Guide Products**

Marine Debris Emergency Response Guide

Field Reference Guide

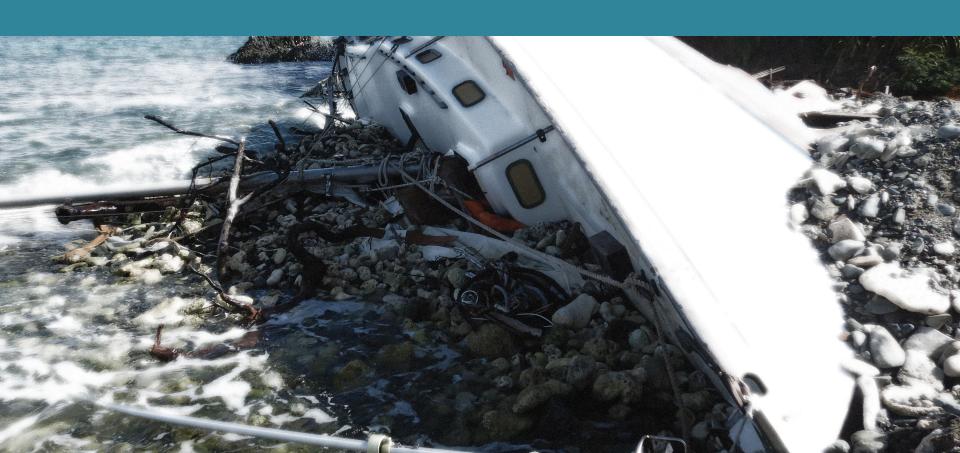
GIS Layers



### All Final Guides Can be found online at:

https://marinedebris.noaa.gov/emergency-response/marine-debris-emergency-response-guides

# Next Steps & Takeaways



# Next Steps & Takeaways

- Maintain published guides
- Support incorporation of content into existing plans
- Conduct exercises and drills

Alabama marine debris tabletop exercise (April 2020)

Talk before a disaster

Identifying best practices

Recognizing challenges and capability gaps



### All Guides Can be found online at:

https://marinedebris.noaa.gov/emergency-response/marinedebris-emergency-response-guides

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