

Alaska Regional Response Team  
 March 7, 2024, Anchorage, AK and Virtual (Zoom.gov)  
**Meeting Summary**

**Introductions and Tri-Chairs Report**

Mary Goolie, EPA ARRT Coordinator, conducted a roll call of the ARRT Members and the On-scene Coordinators. Alaska RRT Tri-Chairs Beth Sheldrake (EPA R10), CAPT Brian McLaughlin (USCG D17), and Teresa Melville (ADEC) offered opening remarks.

**Actions Since the Last Meeting**

An overview of the actions of the ARRT since the September 2023 meeting is presented in slides 9 and 10.

**ARRT Committee Reports**

The table below provides a summary of the major activities of these committees and associated presentation slide numbers.

<b>ARRT Committee</b>	<b>Major Activities</b>	<b>Presentation</b>
Cultural Resources Committee	<ul style="list-style-type: none"> <li>Report delivered by Job Aids for cultural resource identification hardcopies distributed for use by responders in the field.</li> <li>Addition information presented in slides</li> </ul>	Slides 12-13
Wildlife Protection Committee	<ul style="list-style-type: none"> <li>The Wildlife Protection Committee invites input and participation in efforts to update the Wildlife Protection Guidance, beginning in the summer of 2024.</li> </ul>	Slide 14
Pribilof Islands Working Group	<ul style="list-style-type: none"> <li>All updates are included on slides.</li> </ul>	Slides 15-16
Science and Technology Committee	<ul style="list-style-type: none"> <li>The Science and Technology Committee is now Chaired by Liza Sanden (NOAA). The committee anticipates that membership will grow to include pertinent subject matter experts as the subcommittee identifies specific tasks to pursue.</li> </ul>	Slides 17-19
Statewide Planning Committee	<ul style="list-style-type: none"> <li>The committee continues to practice “joint planning without joint plans,” utilizing the sponsorship model to foster efficiencies in plan development.</li> <li>The Alaska Inland Area Contingency Plan (ACP) is the next plan scheduled to undergo public comment, followed by the Arctic and Western Alaska ACP.</li> </ul>	Slides 21-25
Regional Stakeholder Committee Task Force	<ul style="list-style-type: none"> <li>All updates are included on slides.</li> </ul>	Slides 26-30

Tribal Committee Task Force	<ul style="list-style-type: none"> <li>The goal of this is to determine if there is a need to form a committee</li> </ul>	Slides 31-34
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## Area Committee Reports

Each of the four Area Committees updated their activities and recent significant areas, summarized below.

Area Committee	Major Activities	Presentation
Arctic and Western Alaska (AWA)	<ul style="list-style-type: none"> <li>Report delivered by LTCDR Ahrens</li> <li>The Area Committee has extended the public comment period for Alaska Oil Spill Planning Criteria until May 4, 2024. AWA AC invites planning partners to provide input.</li> <li>The most recent AWA ACP was signed in 2023, and the next version will incorporate a Worst Case Discharge (WCD) in the Beaufort Sea and the Cook Inlet, provided by BSSE.</li> <li>Recent responses and updates are summarized in the associated slides.</li> <li>Next Area Committee Meeting Date: May 7, 2024; Location: UAA Gorsuch Commons, Anchorage, AK</li> </ul>	Slides 37-44
Prince William Sound Area Committee	<ul style="list-style-type: none"> <li>Report delivered by Andrew Waltland, Civilian Planner</li> <li>Prince William Sound Area Committee introduces USCG Civilian Andrew Watland, who will support the AC in planning.</li> <li>Recent responses and updates are summarized in the associated slides.</li> <li>Next Area Committee Meeting Date: March 14, 2024; Location: Valdez, AK</li> </ul>	Slides 45-50
Southeast Alaska Area Committee	<ul style="list-style-type: none"> <li>Report delivered by LT Lindsey Wheeler and LT MCACKEY?MAYLOR?</li> <li>Alaska Tanker Company and the National Weather Service presented at the most recent AC meeting.</li> <li>LT Wheeler will serve as the AC Chair until USCG hires a civilian to fill the position.</li> <li>Next Area Committee Meeting Date: September 2024, specific date and location to be determined.</li> </ul>	Slides 51-57
Alaska Inland Area Committee	<ul style="list-style-type: none"> <li>Report delivered by Bob Whittier (EPA) and Kimberly (ADEC)</li> <li>A public 60-day comment period for the Inland Area Contingency Plan will open in March 2024.</li> <li>In addition to responses included in the presentation slide deck, a diesel spill caused by a truck rollover occurred on milepost 29 on state-managed land and a federal landmark.</li> <li>Next Area Committee Meeting Date and location: To be determined.</li> </ul>	Slides 59-64

## Afternoon: Special Topics

The afternoon session consisted of three special topics presentations. A thorough summary of the presentations is not included in this meeting summary due to the complexity and detail; interested parties should review the presentation slides.

### Summary of Cultural Resources Job Aids Project

Shina DuVall, representatives from the National Park Service Alaska Interior Region 11, presented the newly completed Cultural Resource Job Aids for Coastal Alaska and one for Inland Alaska. The job aids assist spill responders in recognizing and protecting cultural resources in the field. National Park Service representatives in the Inland Oil Spill Preparedness Program created the job aids with input from multiple planning partner agencies, and leveraged the expertise of local and Tribal partners. A video overview may be viewed at [Alaska Job Aids Video](#). Presenters summarized how to use the Job Aids, and distributed laminated hardcopies for field use. Electronic copies are available at [Oil Spill Response \(alaska.gov\)](#). Presentation provided as slides 68-82.

### Dept. of Health and Environmental Public Health Program: Support During an Oil Spill or Hazmat Release

Allison Natcher of the Alaska Dept. of Health Environmental Public Health Program (EHP) presented capabilities offered by EPHP and ATSDR to support public health concerns during spill response. The presentations included program and agency resources and capabilities, receipt of initial notification, communication process flow between public health-facing organizations, and functions within the Incident Command System (ICS). Presentation provided as slides 83-99.

### Wildlife Response at University Lake

Torri Huelskoetter (EPA R10 FOSC) and Anna Carey (ADEC) presented a case study of wildlife deterrence and management during a spill response at University Lake in Anchorage, AK. The spill and response occurred in June and July 2023. Presenters shared wildlife survey tactics, as well as deterrence tactics, challenges, and successes. Additional information on the spill response is found at [Site Profile - University Lake Discharge - EPA OSC Response](#). Presentation provided as slides 100-129.

### Maui Case Study: Lithium-Ion Batteries

Chris Meyer (EPA R9 FOSC) presented a case study of lithium-ion battery removal and disposal from fire-damaged areas of Maui after the 2023 wildfires. Meyer presented an overview of lithium-ion battery sources, battery hazards, and response-specific methods of battery recovery, hazard mitigation, and disposal. EPA continues to address lithium-ion battery hazards through prevention and preparedness measures including training development, operational procedures, exercises, and a National EPA OSC Task Force. Additional information on Maui-specific response is available at [EPA's Storymap: 2023 Maui Wildfires](#) and [EPA's Maui Wildfire Webpage](#). Presentation provided as slides 130-153.

### Response Support Capabilities of the NOAA SSC

Liza Sanden (NOAA) took the role of Scientific Support Coordinator (SSC) in November 2023 and is stationed in Alaska at USCG 17. Sanden presented an overview of response support capabilities offered by the SSC and capabilities of various response tools including GNOME, and offered guidance on critical data to provide to the SSC when requesting support. Presentation provided as slides 154-174.

## USDOT Response Support Capabilities

Chris Barry (Department of Transportation) presented response capabilities offered by DOT including technical assistance, regulatory relief, and equipment under the National Transportation Response and Recovery Program. DOT can support small to large-scale responses and offers support in transportation permits, waivers, and other regulatory support during a response. Presentation provided as slides 175-192.

## Meeting Close-out

### Public Comment

- **Joel Curtis (NOAA National Weather Service)** Shared guidance with the group on how to produce more accurate NWS SPOT Forecasts to aid spill response. Responders can request a SPOT forecast by first visiting [NWS Spot Forecast Request \(weather.gov\)](https://www.weather.gov/spot), and entering accurate data (accurate lat/long are especially important). Additional Information is presented on slide 194.
- Audience members noted that the Regional Stakeholder Committee is a valuable resource for incorporating local knowledge in support of spill response, and that Liaison Officers in the UC can maximize valuable local input.

### Closing Remarks:

ARRT Tri-chairs offered closing remarks and thanked all presenters and attendees for participating.

### Upcoming ARRT Meeting Dates

- September 12, 2024; Location Anchorage, AK
- March 20, 2025; Location to be determined
- September 11, 2025; Location to be determined
- March 5, 2026; Location to be determined
- September 10, 2026; Location to be determined

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### Participant Summary:

Attendees represented RRT member agencies, other tribal governments, federal, and state agencies, industry, and other non-governmental organizations.

Member Agencies in Attendance		
Member Agency	Present	Not Present
Alaska Department of Environmental Conservation	●	
Department of Agriculture	●	
Department of Commerce	●	
Department of Defense	●	



Department of Energy	●	
Department of Health and Human Services	●	
Department of the Interior	●	
Department of Justice		●
Department of Labor	●	
Department of State		●
Department of Transportation	●	
Environmental Protection Agency	●	
Federal Emergency Management Agency	●	
General Services Agency	●	
U.S. Coast Guard	●	
U.S. Nuclear Regulatory Commission		●
<b>Non-member Organizations in Attendance</b>		
U.S. Department of Commerce, NOAA Fisheries		
U.S. Department of the Interior, Bureau of Safety and Environmental Enforcement		
U.S. Department of the Interior, Fish & Wildlife Service		
U.S. Department of Transportation, Pipelines and Hazardous Material Safety Administration		
U.S. Department of Agriculture, Forrest Service		
U.S. Dept. of Energy RAP Team		
Alaska Division of Homeland Security & Emergency Management		
Alaska Dept. of Natural Resources, Office of History and Archaeology		
Alaska Dept. of Fish and Game		
City of Gustavus		
Twin Hills Village Council		
Oregon Dept. of Environmental Quality		
<b>Federally Recognized Tribes &amp; Consortia</b>		
Nondalton Tribal Council		
Chickaloon Village Traditional Council (CVTC)		
National Weather Service		
<b>Industry</b>		
ConocoPhillips Alaska, Inc.		
Hilcorp Alaska		
<b>Non-governmental Organizations and Response and Environmental Services</b>		
Integrity Environmental		
Nuka Research		

International Bird Rescue
Zender Environmental
Mat-SU Hazmat
Global Diving & Salvage, Inc.
Alaska Clean Seas
Prism Alaska
Resolve Marine
Pearson Consulting
Crowley Alaska Tankers
Prism Alaska
<b>Non-Governmental Organizations</b>
Ocean Conservancy
<b>Cook Inlet Regional Citizens Advisory Council</b>



# *Alaska Regional Response Team*



March 7, 2024

# MEETING PURPOSE AND “RULES”

- **This is a business meeting of the ARRT**
  - Questions and discussions is for ARRT Members and OSCs
- **Items discussed that are the responsibility or content of the Area Committees will be referred to appropriate Area Committee and not included in the meeting discussion, except for how the ARRT can provide support, if requested/needed**
- **While open to the public, it is not a public meeting**
  - As time allows, questions may be taken from the public. Please type questions in the Chat box. Non-ARRT members are invited to sign up for Public Comment.

# MEETING SIGN-IN



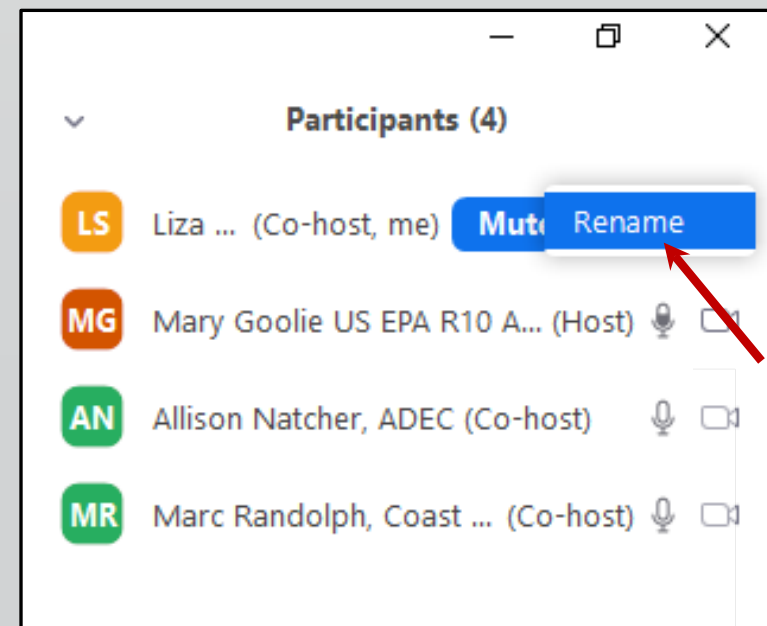
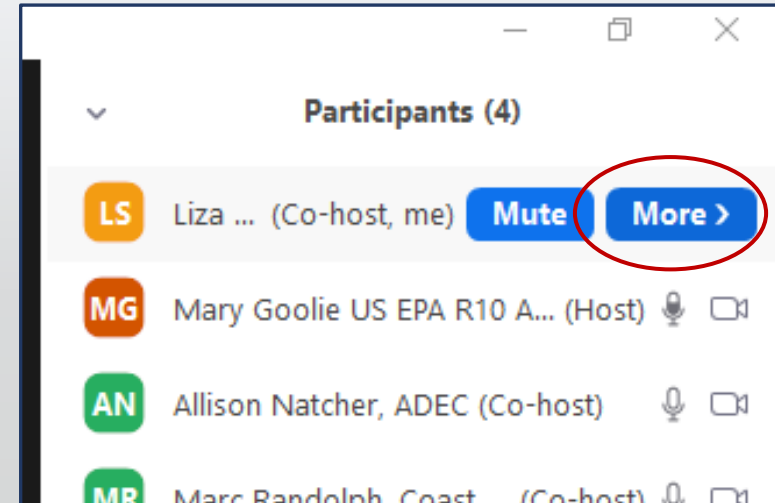
[www.AlaskaRRT.org](http://www.AlaskaRRT.org)



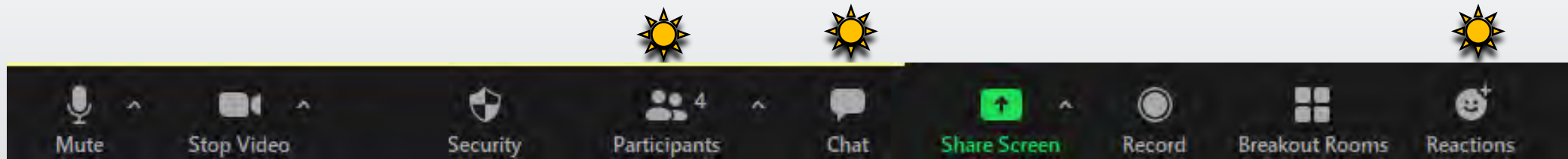
# TIPS: USING ZOOM

- Change your name to, **FULL NAME** and **AGENCY**

**Please mute your mic &  
turn off video,  
except when speaking**



# ZOOM TIPS: RAISE HAND AND CHAT



**ARRT Members & Representatives,  
raise your hand to speak or enter  
question/comment in chat.**

Chat

Find “Raise Hand”  
Under Reactions

*Please use “Everyone” Chat when asking or responding to questions or making general comments/requests during this meeting.*

# MORNING AGENDA

**9:00**            **INTRODUCTIONS AND REVIEW ACTIONS  
SINCE LAST MEETING**

**9:40**            **ARRT COMMITTEE REPORTS (10 Minutes Each)**

**10:40-10:50 BREAK**

**10:50**            **AREA COMMITTEE REPORTS (10 Minutes Each)**

**11:30**            **LUNCH (Until 1:00)**



# INTRODUCTIONS & REPORT FROM TRI-CHAIRS



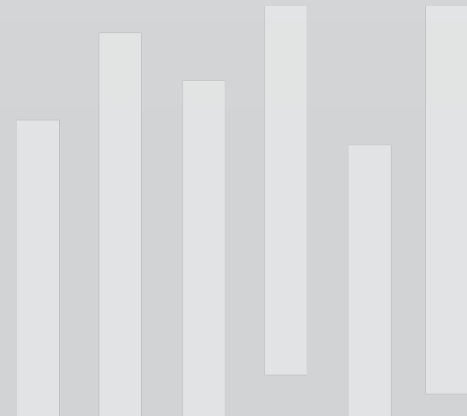
## *Alaska Regional Response Team*



# **MEMBER ROLL CALL**

**ARRT Coordinators will facilitate ARRT member and FOSC/SOSC roll call.**

**For other attendees and members of the public, an attendee list will be based on Participant Names**



# NEW MEMBERS, OSCS, AND AREA PLANNERS



Andy Watland, PWS Area Secretary

LT Lindsay Wheeler, SEAK Area Secretary



# SINCE LAST MEETING (SEPT 2023)

## Alaska Regional Response Team

- Tribal Engagement Task Force First Meeting – Feb 13, 2024 (next meeting April 3, 2024)
- ARRT Information Sharing – Genius Star XI

## Other Goings On

- National Contingency Plan, Subpart J final rule (Effective Dec 11, 2023)
  - NCP Product Schedule testing and listing requirements
  - Authorization of use procedures
- WOTUS (Revised rule effective Sept 8, 2023)
  - Conforms rule to May 25, 2023 Supreme Court ruling
- DEC Alaska Native Outreach Meeting (March 1, 2024)

## ARRT Staffing Changes

### USCG

- CAPT McLaughlin – Acting ARRT Tri-Chair
- CDR McFerran – Acting ARRT Alt Tri-Chair

### ADEC

- Teresa Melville - New ARRT Tri-Chair
- Graham Wood - Renewed ARRT Alt Tri-Chair
- Ytamar Rodriguez – ARRT Coordinator

### EPA

- Stephanie Wenning back from temporary assignment (ARRT Alt Tri-Chair)

# ALASKA REGIONAL RESPONSE TEAM COMMITTEES



## *Alaska Regional Response Team*







**CULTURAL RESOURCES COMMITTEE  
WILDLIFE PROTECTION COMMITTEE  
PRIBILOF ISLANDS WORKING GROUP**

# Cultural Resources Committee (CRC)

- No meetings this reporting period
- Current Work: Revising the *Alaska Implementation Guidelines*
  - *New Title: “Alaska Historic Properties Implementation Guidelines for Federal On-Scene Coordinators”*
  - Revision process paused
  - Next steps: subcommittees to address specific topics
- Cultural Resource Job Aids completed, available on the Alaska Office of History and Archaeology website:  
<https://dnr.alaska.gov/parks/oha/oilspill/aiccrjobaid.htm>
- Next meeting to be scheduled in early 2024

# Wildlife Protection Committee (WPC)

- *Wildlife Protection Guidelines for Oil Spill Response in Alaska (WPG)*
  - UPDATE your WPG bookmark on the ARRT Website:  
<https://alaskarrt.org/PublicFiles/WPG-v2020.2-FINAL.pdf>.
  - Wildlife Protection Tab on the ARRT Website:  
<https://www.alaskarrt.org/Home/Documents/50>
  - ALL the updated WPG forms and tools are available at:  
[ADEC Area Plan References and Tools](#)
- Wildlife Observation Job Aid
  - Printing more copies for field use
- Future work
  - Begin content update of WPG this summer (will likely take 1-2 years to complete)
- Next meeting – TBD



# Pribilof Islands Working Group

- *Pribilof Islands Wildlife Protection Guidelines (PI WPG)*
  - Completed revision available on the ARRT website:  
[https://alaskarrt.org/PublicFiles/PribilofIslandsWPG\\_April2023.pdf](https://alaskarrt.org/PublicFiles/PribilofIslandsWPG_April2023.pdf)
  - PI WPG also available at:  
[ADEC Area Plan References and Tools](#)
- WPC is considering a Pribilof Island wildlife-focused drill in 2024 to practice using the new PI WPG



**Wildlife  
Protection  
Committee**  
Pribilof Islands  
Working Group

Version 2023.1  
April 2023



# Questions?

ADEC: [mike.donnellan@alaska.gov](mailto:mike.donnellan@alaska.gov)

ADFG: [jeanette.alas@alaska.gov](mailto:jeanette.alas@alaska.gov)

DOI: [lisa\\_fox@ios.doi.gov](mailto:lisa_fox@ios.doi.gov)

[grace\\_cochon@ios.doi.gov](mailto:grace_cochon@ios.doi.gov)

FWS: [bridget\\_crokus@fws.gov](mailto:bridget_crokus@fws.gov)

NMFS: [sadie.wright@noaa.gov](mailto:sadie.wright@noaa.gov)

SHPO: [judy.bittner@alaska.gov](mailto:judy.bittner@alaska.gov)





# SCIENTIFIC AND TECHNICAL COMMITTEE

# COMMITTEE MEMBERS

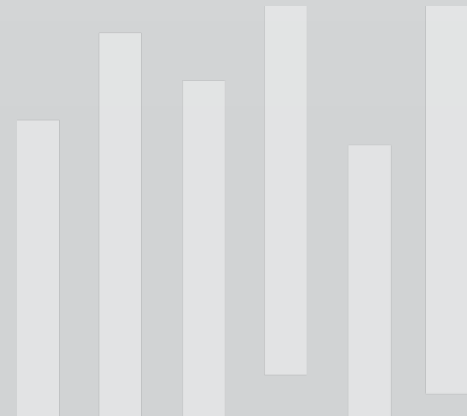
- Liza Sanden (DOC/NOAA)
  - [liza.sanden@noaa.gov](mailto:liza.sanden@noaa.gov)
- Heather Parker (DOD/ Navy)
  - [heather.a.parker.civ@us.navy.mil](mailto:heather.a.parker.civ@us.navy.mil)
- Sara Benovic (DOD/ Navy)
  - [sara.l.benovic.civ@us.navy.mil](mailto:sara.l.benovic.civ@us.navy.mil)
- Mike Donnellan (ADEC)
  - [mike.donnellan@alaska.gov](mailto:mike.donnellan@alaska.gov)



# NATIONAL RESPONSE TEAM SCIENCE & TECHNOLOGY PROJECTS

## 2 Official Projects

- Updating SMART Protocols for Dispersants and In Situ Burning
- Updating old fact sheets
  - (16 fact sheets, average age 20 years old.)
- **2 Possible Projects**
- Develop an FAQ on SMART Dispersant Monitoring vs Subpart J dispersant monitoring.
- Develop a simple modelling tools guide.
  - Tools & options for modeling pollutants in air and water.





# STATEWIDE PLANNING COMMITTEE

## Statewide Planning Committee members

### ARRT Coordinators

- **EPA:** Mary Goolie
- **USCG D17:**  
Angella Gebert
- **ADEC:** Ytamar  
Rodriquez

### USCG Area Secretaries and ADEC/EPA Area Planners

- **USCG PWS:** LT Shelby  
Frasca & Andy  
Watland
- **USCG SEAK:** LT  
Lindsay Wheeler & LT  
Matthew Naylor
- **USCG AWA:** LCDR  
JoEllen Arons
- **ADEC:** Victoria Colles
- **EPA:** Mary Goolie

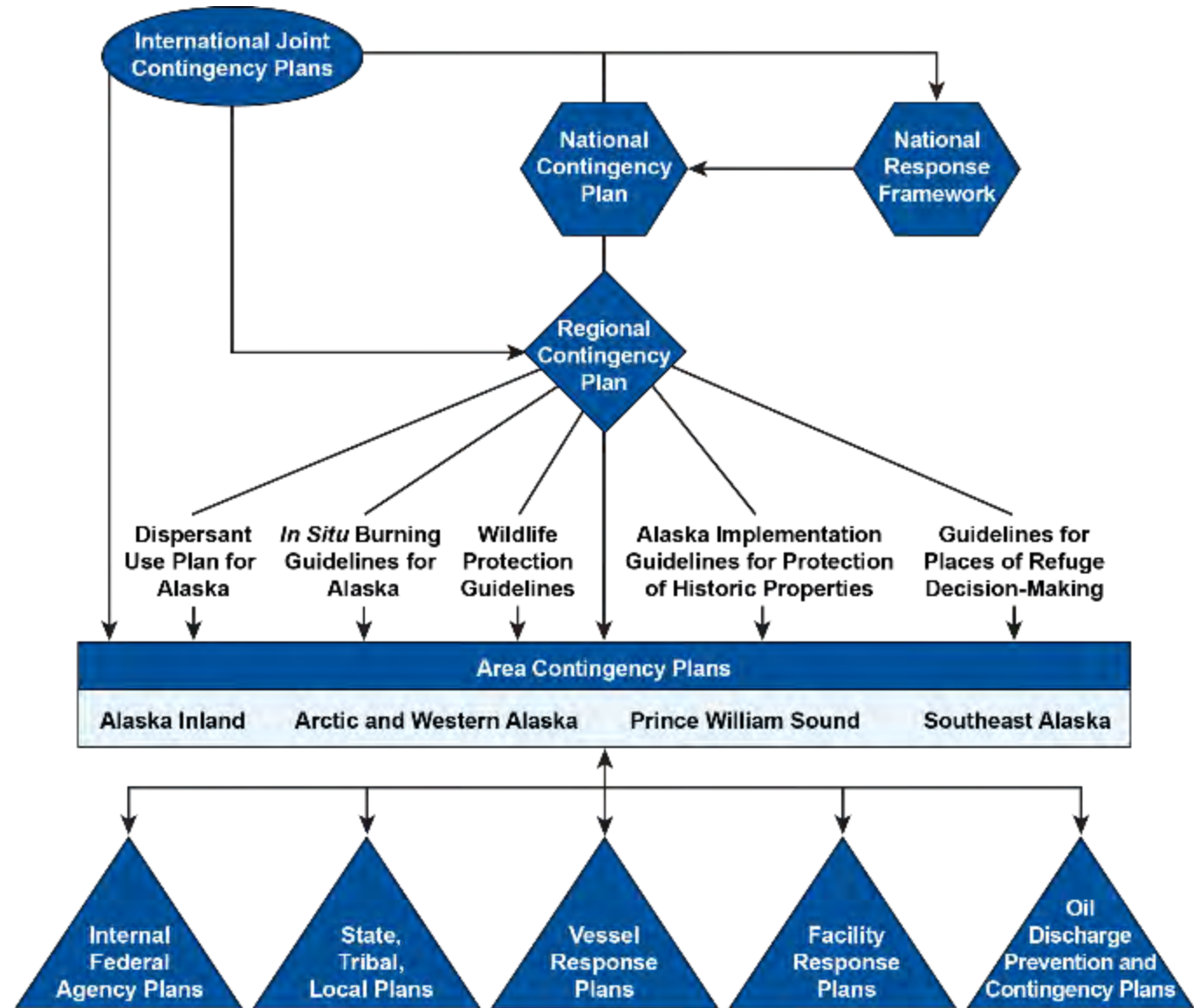
# Statewide Planning Committee Activity

- Monthly SPC Meetings
- Upcoming ACP Reviews: AK Inland ACP & Arctic Western Alaska ACP
- Outreach: bimonthly announcement email & quarterly newsletter
- Recommending & coordinating ADEC and ARRT Website Updates
- Planning a May workshop for the SPC members to look at the new USCG ACP template

*Overall: Interagency coordination of planning efforts*



# Plan Relationships



21P-0084

## Regional Contingency Plan

- Planner Centric
- Region-wide policy issues
- Updates: ARRT

## Area Contingency Plan

- Responder Centric
- Area resources and procedures
- Updates: Area Committee





# REGIONAL STAKEHOLDER COMMITTEE TASK FORCE

# RSC Task Force

Task Force Initiated by ARRT Tri-Chairs 2/17/2022,

## Task Force Members

- Environmental Protection Agency
- United States Coast Guard
- Alaska Department Environmental Conservation
- Native Village of Eyak
- Aleutian Pribilof Islands Association
- Prince William Sound Regional Citizens Advisory Council (RCAC)
- Cook Inlet RCAC
- Alaska Clean Seas
- Crowley Marine
- Alyeska Pipeline Service Co.
- Hilcorp Alaska LLC

## Task Force Meeting History

- 2/28/2024
- 1/17/2024
- 9/5/2023
- 7/25/2023
- 6/14/2023
- 4/28/2023
- 2/21/2023
- 1/24/2023
- 12/20/2022
- 11/30/2022
- 11/15/2022
- 9/27/2022
- 8/2/2022

# RSC Task Force

## Deliverables (under development)

- Liaison Officer Job Aid
- Regional Stakeholder Committee (RSC) Member Job Aid
- Updated Definitions for RSC and Regional Citizens Advisory Council (RCAC)
- Updated RSC content/language for Area Contingency Plans and the Regional Contingency Plan

# What's Happening Now/ What's Next

- Work on the RSC Member Job Aid
- Tri-Chair Review for all deliverables
- Public Review (2024 with the Arctic Western Alaska ACP Public Review)





Contact us:

Alaska Regional Response Team Coordinators

Mary Goolie – EPA

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Angella Gebert – USCG

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Ytamar Rodriquez– ADEC

[Ytamar.rodriquez@alaska.gov](mailto:Ytamar.rodriquez@alaska.gov)

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# TRIBAL COMMITTEE TASK FORCE

# Tribal Task Force

Task Force Initiated by ARRT Tri-Chairs March 2023

## Task Force Members

- Environmental Protection Agency
- United States Coast Guard
- Alaska Department Environmental Conservation
- Native Village of Napaimute
- Native Village of Chickaloon
- Aleutian Pribilof Islands Association
- Kawerak
- Department of the Interior
- Federal Emergency Management Agency
- Department of Defense/Navy
- Department of Transportation

## First Task Force Meeting

- February 13, 2024

# Proposed Tasking from the ARRT Tri-Chairs

1. Review Article VIII of ARRT Charter.
2. Review Presidential Memoranda of January 26, 2021 and November 30, 2022.
3. Review current guidance and other relevant law, regs, policies and documentation.
4. Make recommendations re:
  - a. Edits to current guidance
  - b. Inclusion of DOI guidance re. ANCSA Corporations
  - c. Adopting new approaches & technologies for better outcomes
  - d. Establishing a permanent ARRT Tribal Affairs committee and identifying committee goals
5. Produce/present report to ARRT full membership.

Contact us:

Alaska Regional Response Team Tribal  
Task Force Co-Chairs

Mary Goolie – EPA

[goolie.mary@epa.gov](mailto:goolie.mary@epa.gov)

CDR Jim McFerran– USCG

[james.c.mcferran@uscg.mil](mailto:james.c.mcferran@uscg.mil)





Please don't forget to  
SIGN IN

BREAK



# ALASKA REGIONAL RESPONSE TEAM AREA COMMITTEE REPORTS



## *Alaska Regional Response Team*







# ARCTIC AND WESTERN ALASKA AREA COMMITTEE

# AREA COMMITTEE UPDATE

Notable initiatives within the Arctic and Western Alaska Area Committee:

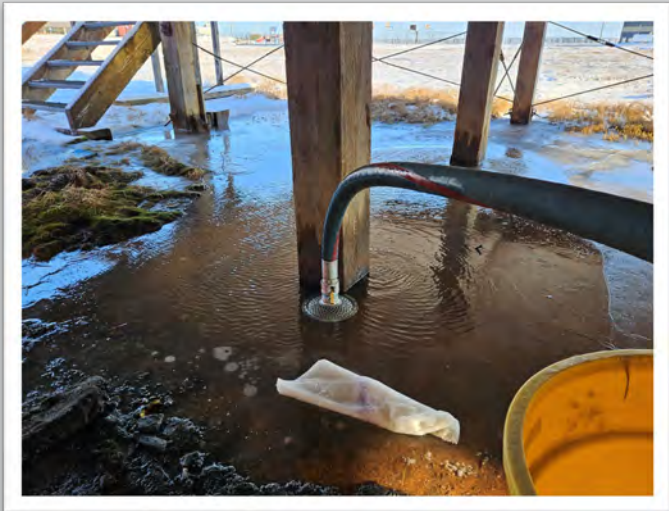
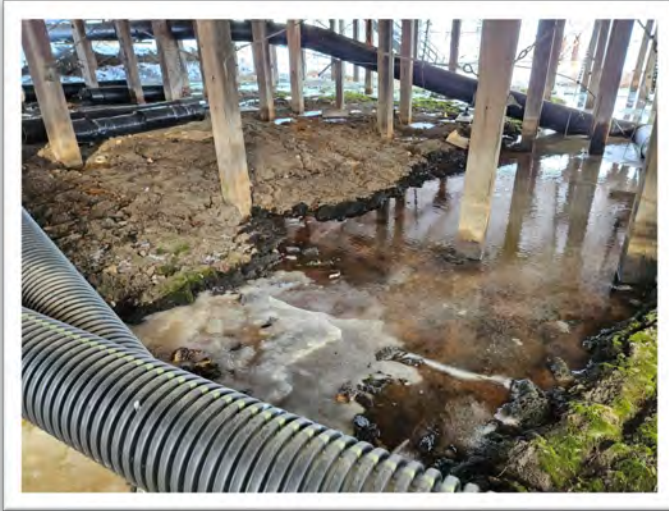
- **Conducting outreach on the Western AK Planning Criteria**
    - Attended “Alaska Forum on the Environment”
    - Pending “Alaska Tribal Conference on Environmental Management”
  - **Geographic Response Strategy Progress**
    - Tier 1 and 2 Field in conjunction with UAS Validations throughout Western Alaska Region
  - **Next Area Committee Meeting: May 7<sup>th</sup> UAA Gorsuch Commons**
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# AREA CONTINGENCY PLAN UPDATE

- Area Contingency Plan – signed Jan 2023
  - Integrating BSEE Worst Case Discharge (Beaufort Sea & Cook Inlet)
- Future ACP Updates
  - Convening workgroup meeting with planners/secretaries in May 2024 to commence ACP re-architecture per CG-MER guidance
  - Re-architecture ETA December 2024



# CASE SUMMARY – POINT LAY

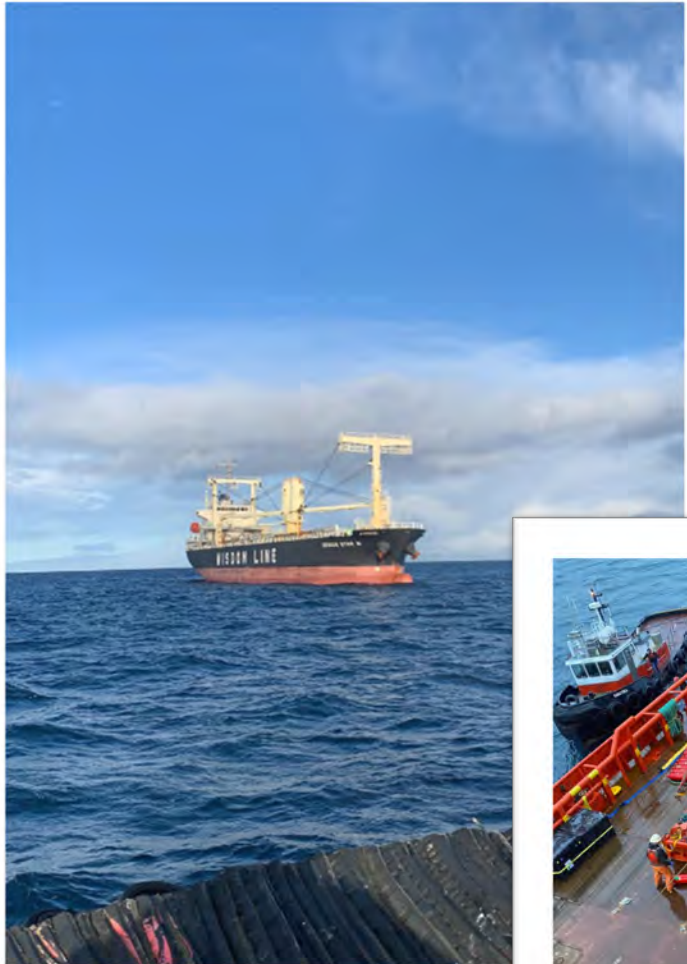


- On 09 Oct 23, 2,500 gal. diesel reported discharged from a tank in Point Lay:
- Secondary containment failed & impacted community buildings.
- Weather and ice inhibited response capability and only 270 gallons were recovered.
- Winterization plan created and response efforts will continue in the spring.



# CASE SUMMARY – GENIUS STAR XI

- **25-28 Dec 2023, USCG responded to 2 fires reported on the M/V GENIUS STAR IX, a 410-foot vessel containing 800 tons of Lithium-Ion Batteries.**
- GENIUS STAR XI expended its CO2 suppression system while fighting the fire.
- A UC Command was established with USCG, ADEC, and Gallagher Marine Systems.
- The COTP directed the vessel to a mooring buoy in Dutch Harbor to ensure SOLAS.
- Gallagher Marine hired Resolve Marine, T&T Salvage and technical experts to make the vessel seaworthy.
- Pacific Strike Team deployed to conduct continuous air monitoring for the duration of the response.





# CASE SUMMARY – POINT THOMSON EXPORT PIPELINE

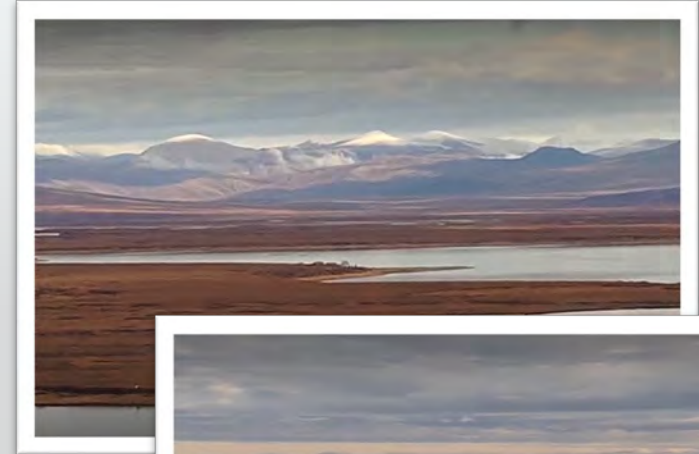


- On 16 Jan, USCG/ADEC responded to an oil spill 35 miles East of Prudhoe Bay:
  - An maximum potential 275 barrels of natural gas condensate spilled from a 22-mile pipeline.
  - Unified Command established with USCG, ADEC, North Slope Borough, & Harvest (RP).
  - Clamp was installed on pipeline; source of leak is secured.
  - RP mobilized gear and commenced removal of contaminated snow between intermittent weather windows.



# SPECIAL ANNOUNCEMENTS

- Further development of UAS policy and program expansion
- Expansion of Arctic Deployment Operations
- Upcoming Exercises:
  - 02-03 May – North Slope Borough (Utqiagvik)
  - 16-17 Apr - Prudhoe Bay/Hilcorp (Anchorage)
  - TBD Aug - Kodiak Tsunami IMT (Kodiak)
  - TBD Sep - Red Dog IMT (Red Dog Mine)



# AREA COMMITTEE CONTACTS

ADEC Area Planning website:

<http://alaska.gov/go/7EKN>

Contact us:

Victoria Colles

[Victoria.Colles@alaska.gov](mailto:Victoria.Colles@alaska.gov)

LCDR JoEllen Arons

[Joellen.m.aron@uscg.mil](mailto:Joellen.m.aron@uscg.mil)



# PRINCE WILLIAM SOUND AREA COMMITTEE BRIEF



# AREA COMMITTEE UPDATE

Notable initiatives within the PWS Area Committee:

- **Last Steering Committee Meeting:**
  - January 30th
- **Next Area Committee Meeting:**
  - March 14<sup>th</sup>, 2024 (Valdez)
  - Fall (Cordova)

Photo credit: Gary Minish, Kelsey Dock, State Ferry





# AREA CONTINGENCY PLAN UPDATE

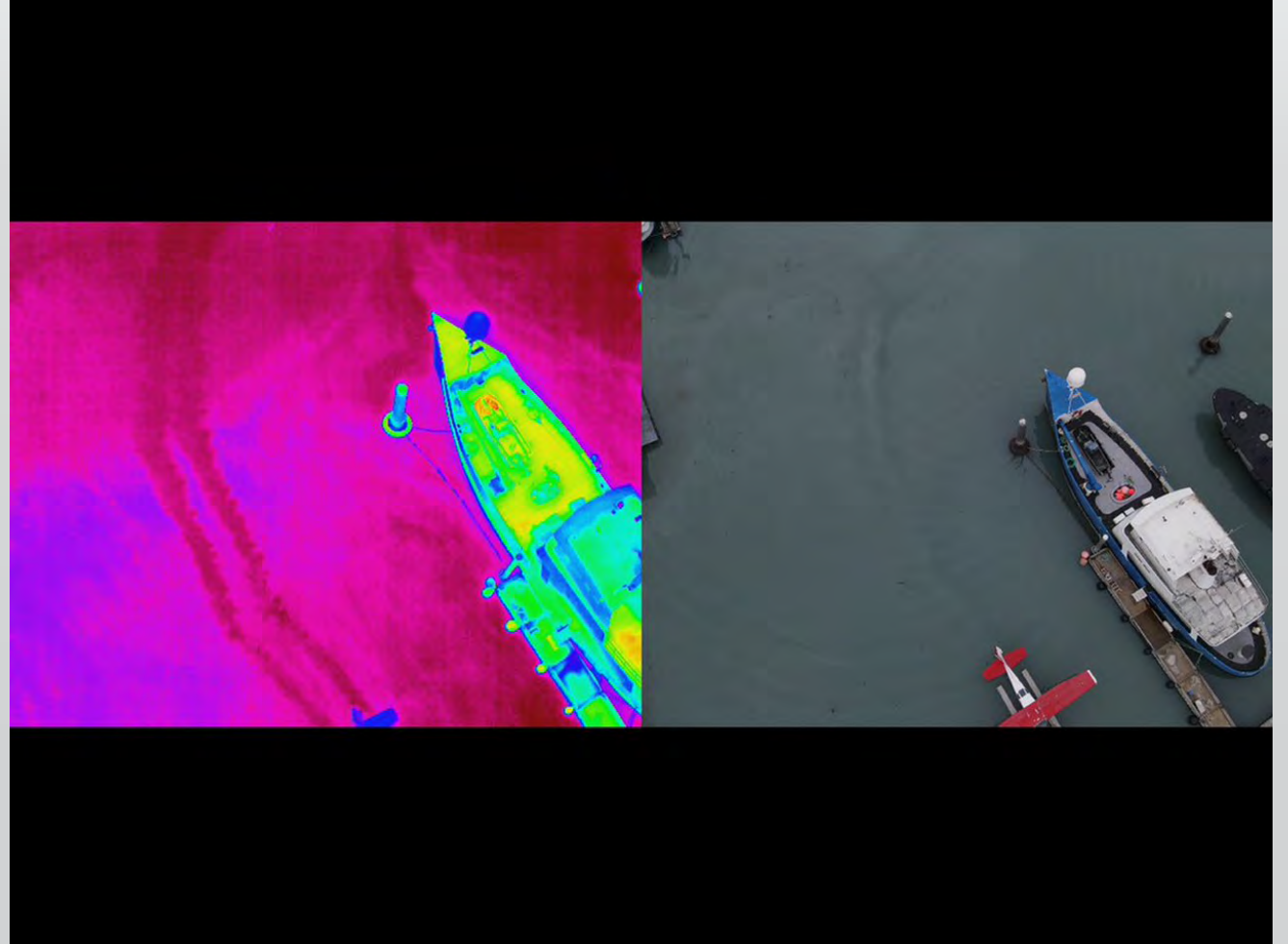
Current Version (2020.1) signed  
1/9/2023

## Plan updates:

- Convening workgroup meeting in May 2024 to commence ACP architecture per CG-MER guidance
- Continue to streamline formatting. Incorporate applicable changes made in AWA and Inland ACPs
- Use reference and tools boxes directing readers to updated information.
- Public comment late 2024

## Future considerations:

- GRS digitalization
- RSC Job aids



# CASE SUMMARY/ENFORCEMENT

## Valdez Petroleum Terminal Spill 04JAN24



During a transfer of diesel, a partially open valve caused a discharge into the Port of Valdez resulting in the halting of transfer operations and OSRO response conducted.

## Harris Sand and Gravel 03NOV23



A construction crane owned by Harris Sand & Gravel discharged hydraulic oil from a leaking hose while sitting atop of a barge causing a sheen upon the surface of Valdez harbor.



# SPECIAL ANNOUNCEMENTS

- ICS-400 & Operations Section Chief training completed Jan. 25, 2024 (Valdez)

## Upcoming Exercises 2024:

- March 12 - Fisheries/ESA S7 presentation March 12 (USCG MSU Valdez)
- March 13 - TableTop Exercise "F/V Other Guys" March 13 (Valdez PWSC)
- May 8 - Alyeska VMT FE (Valdez SERVS VEOC)
- May 30 - AlaskaEX Valdez
- Oct. 15 to 17 - PWS Shippers Drill – Andeavor (Valdez SERVS VEOC)



# PWS AREA COMMITTEE CONTACTS

PWS Area Planning website:

[Prince William Sound Area  
\(alaska.gov\)](http://alaska.gov)

Contact us:

[Sarah.K.Rousseau@uscg.mil](mailto:Sarah.K.Rousseau@uscg.mil)

[Anna.Carey@alaska.gov](mailto:Anna.Carey@alaska.gov)

[Andrew.M.Watland2@uscg.mil](mailto:Andrew.M.Watland2@uscg.mil)

[Victoria.Colles@alaska.gov](mailto:Victoria.Colles@alaska.gov)



East view of the Valdez Small Boat Harbor  
Photo credit: Gary Minish



# SOUTHEAST ALASKA AREA COMMITTEE



# AREA COMMITTEE UPDATE

- **Recent Actions:**
  - Area Committee Meeting 12 Feb, 2024
  - LT Wheeler is the new SEAK Executive Secretary
  - Next meeting in September, 2024
- **Initiatives:**
  - Tactics Exercise/GRS Validation – April 22-25, 2024 - Sitka, Alaska



Wrangell Landslide as seen from CG-6026 on November 18, 2023

# AREA CONTINGENCY PLAN UPDATE

- Latest Version: March, 2021
- Future Updates:
  - **GRS and UAS protocol IAW Sponsorship Model**
  - **Administrative update**
  - **Pending Public Comment Period**



# WRANGELL LANDSLIDE CASE SUMMARY

- 20 Nov 2023: USCG and local/state/tribal partners were notified in the evening of a landslide on Zemovia Highway in Wrangell, AK
- 3 homes were wiped out and 6 people missing or confirmed deceased; 1 survivor
- Immediate response focused on SAR of missing individuals
- Pollution response carried out over next few days to address reports of sheening and fuel odors
- Responders from USCG MSD Ketchikan arrived on scene with contractor Alaska Commercial Divers (ACD) to assess pollution reports and determine sources
- After a couple days, no definitive pollution sources located; ACD unable to safely dive in area due to shifting mud and debris
- Source estimates included 6 cars, 2 excavators, 1 dump truck, and 1 container of home heating oil; none were recovered
- Light sheen observed in area presumed to originate from submerged vehicles or heavy equipment
- USCG and ACD continued to work with local officials and the EOC before demobilizing

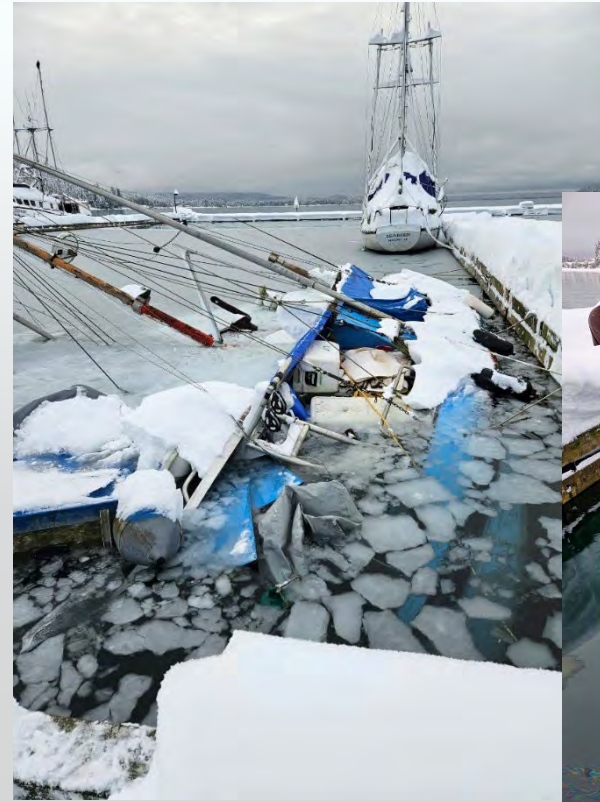


Wrangell Landslide photos from CGC BAILEY BARCO, UAS, and MSD Ketchikan from 21-24 November 2023



# JUNEAU SNOWSTORM CASE SUMMARY

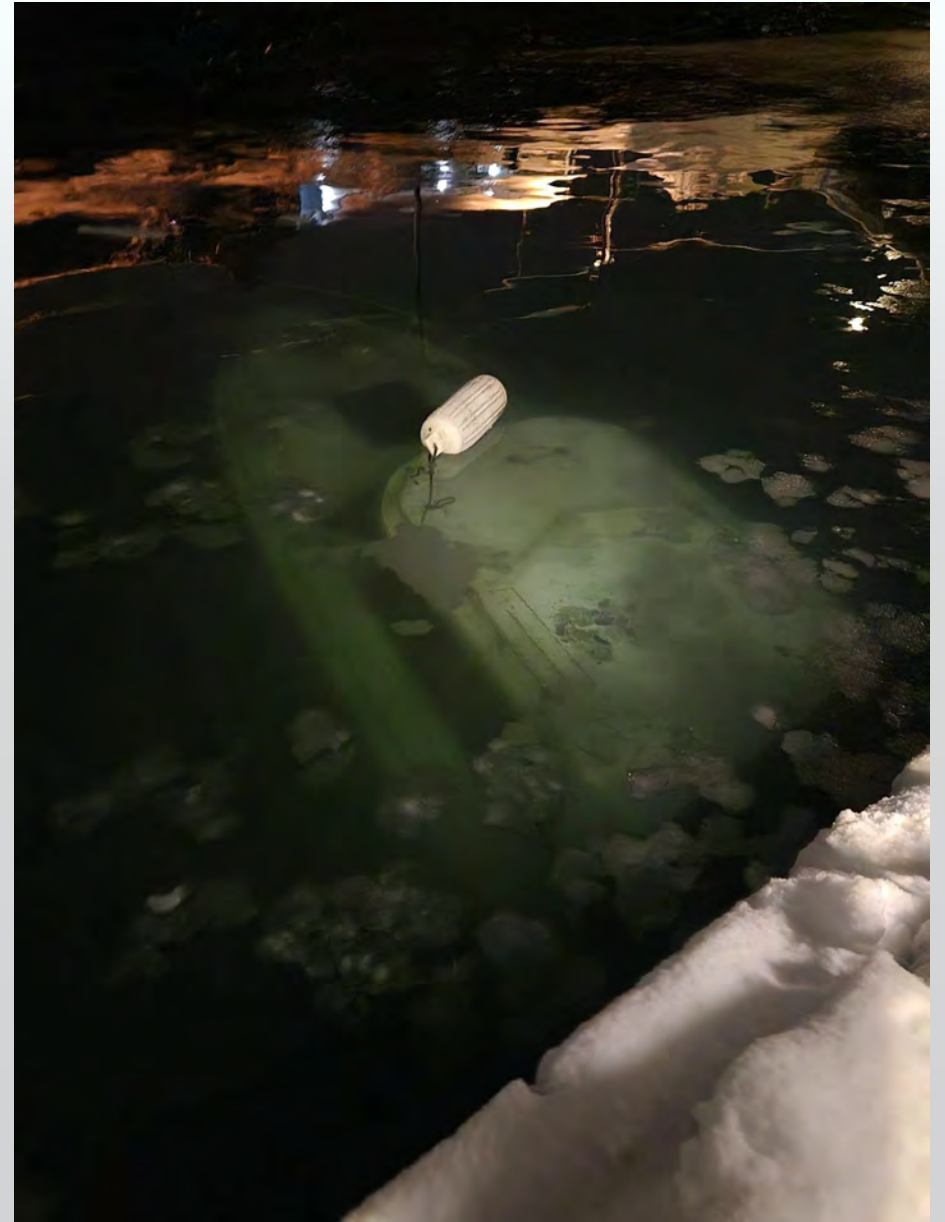
- 16-25 Jan 2024: Juneau experienced a series of snow storms over the course of several days, generating over 60 in of snow
- USCG and ADEC responded to reports of 9 vessels sunk or partially sunk in 3 harbors across Juneau; owners, contractors, city officials, and ADEC responders employed boom and sorbents
- Respective oil products included gasoline and diesel; estimated amounts onboard all vessels totaled at least 585 gal gasoline & 200 gal diesel
- USCG opened federal funds for 5 of the vessels (later downgraded to 4) with total NPFC expenditures over \$183,000
- Event highlighted the importance of boat owners to maintain snow accumulation to avoid costly incidents



Photos by USCG responders of sunken boats and associated sheens in Juneau harbors

# SPECIAL ANNOUNCEMENTS

- Exercises:
  - GRS/Tactics Ex, 22-25 April 2024 in Sitka
  - Tabletop with DEC, September 2024 in Juneau
- Emergency Management Specialist position opening for Sector Southeast Alaska



Sunken vessel in Aurora Harbor, Juneau from 15 Jan 2024



# AREA COMMITTEE CONTACT

ADEC Area Planning website:

<http://alaska.gov/go/7EKN>



Sunken vessel in Aurora Harbor, Juneau from 25 Jan 2024



# ALASKA INLAND AREA COMMITTEE

# AREA COMMITTEE UPDATE

## Working Groups Sponsored by AK Inland Area Committee

- **Administrative:** Going out for public comment
- **In Situ Burning: Task Completed.** ISB Decision-Making Checklist posted on ADEC website. Checklist will be incorporated into 2023 ACP
- **Hazardous Substance Response:** Task Update ACP Chapter 7000 & HazSub Job Aid. *On Hold*
- **Response Logistics:** Task Update Chapter 5000 Logistics & Logistics Job Aid. *On Hold*



# AREA CONTINGENCY PLAN UPDATE

**Version 2020.1 approved March 2021**

**Public Review Period planned for March 2024**

**2023 Tasks:** Annual Review Kick off at March 6  
Area Committee/ Admin Subcommittee meeting

## **Focus of Modifications:**

Incorporate applicable changes made in AWA  
and PWS ACPs

Incorporate products of ISB Working Group

*Contact Mary Goolie and Victoria Colles with  
proposed plan modifications or to be on the AK  
Inland Admin Subcommittee*



# CASE SUMMARY – MATANUSKA RESPONSE

- October 2023 – Old Matanuska Townsite
- Response Actions Summary:
  - Nine-day removal conducted in partnership with the Matanuska-Susitna Borough
  - Disposed of:
    - 84 tons of lead and thallium soil
    - 25 cubic yards of hazardous substances such as lead-based paint, corrosive material, solvents, and asbestos-containing material



# CASE SUMMARY – RED DOG MP 14.5 TRUCK ROLLOVER



- October 18, 2023
- Estimated 1-2 metric tons of mining concentrate released, including lead, zinc, and cadmium
- Coincided with fall caribou migration
- Limited weather windows for cleanup
- Trying to maximize clean up while minimizing impacts to the tundra plant community



# SPECIAL ANNOUNCEMENTS

- Proposing Capacity Building Outreach and Training-  
Coordinated by EPA, ADEC
- Removals planned at Shungnak School, potential  
removals at ANCSA sites
- Future focus discussions on lithium-ion battery  
preparedness and response in Alaska
- Upcoming exercises
  - ?



# AREA COMMITTEE CONTACTS

ADEC Area Planning website:

ADEC Area Planning website:

<http://alaska.gov/go/7EKN>

Contact us:

[huelskoetter.torri@epa.gov](mailto:huelskoetter.torri@epa.gov)

[whittier.robert@epa.gov](mailto:whittier.robert@epa.gov)

[anna.carey@alaska.gov](mailto:anna.carey@alaska.gov)

[rachael.krajewski@alaska.gov](mailto:rachael.krajewski@alaska.gov)

[kimberley.maher@alaska.gov](mailto:kimberley.maher@alaska.gov)

[bernie.nowicki@alaska.gov](mailto:bernie.nowicki@alaska.gov)







Please  
**SIGN IN**

# LUNCH

Meeting will restart at **1:00 PM** (Alaska time)

- If you want to offer a public comment, sign up in “Chat” or the sign up sheet located in the room
- Must sign up by the end of this lunch break.

# WELCOME BACK

## Meeting Sign-In



[www.AlaskaRRT.org](http://www.AlaskaRRT.org)



# AFTERNOON AGENDA

1:00 CULTURAL RESOURCES JOB AID (30 Minutes)

1:30 DEPARTMENT OF HEALTH, ENVIRONMENTAL PUBLICHEALTH PROGRAM, SUPPORT DURING AN OIL SPILL OR HAZMAT RELEASE (30 Minutes)

2:00-2:15 BREAK

2:15 WILDLIFE RESPONSE AT UNIVERSITY LAKE (30 Minutes)

2:45 MAUI CASE STUDY: LITHIUM-ION BATTERIES (30 Minutes)

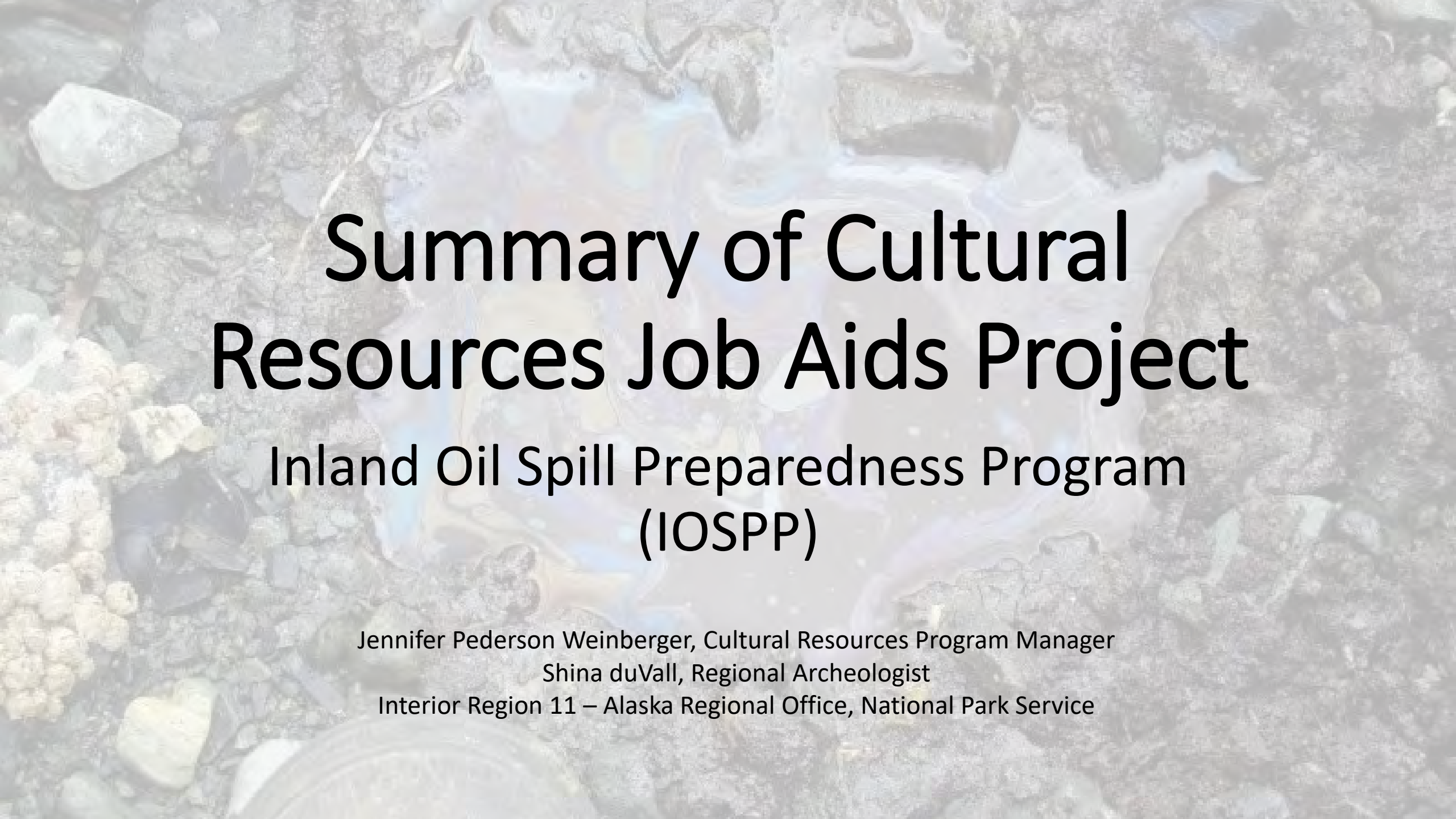
3:15 AVAILABLE SUPPORT FROM NOAA (15 Minutes)

3:30 DEPARTMENT OF TRANSPORTATION (15 Minutes)





# CULTURAL RESOURCES JOB AID



# Summary of Cultural Resources Job Aids Project

## Inland Oil Spill Preparedness Program (IOSPP)

Jennifer Pederson Weinberger, Cultural Resources Program Manager  
Shina duVall, Regional Archeologist  
Interior Region 11 – Alaska Regional Office, National Park Service



# Job Aids for Oil Spill Response Personnel

- Intended for use during an incident by non-cultural resource experts (e.g., members of SCAT teams, Incident Command, etc.)
- Ideally used in coordination with a designated Historic Properties Specialist (HPS) if assigned on a spill
- Also useful if no HPS is assigned

# Job Aids for Oil Spill Response Personnel

- Simple, straightforward, user-friendly
- Two versions – Coastal and Inland (per oil spill response structure under either USCG and EPA)
- Translatable to other regions/agencies



# Alaska Coastal Cultural Resource Job Aid

*It is a privilege to live and work on these lands stewarded by Alaska Native people since time immemorial*

## What are cultural resources?

Objects, places, traditions, and beliefs that are significant to a group of people and form a collective cultural identity. Cultural resources include objects/artifacts made of stone, ceramic, bone, metal, glass, or wood, or buildings, structures, cemeteries, monuments, shipwrecks, railroads, trails, and subsistence areas. **There are federal and state laws protecting cultural resources.** Treat cultural resources with respect and help protect them.

## IMPORTANT!

**If you observe bone or possible human remains, immediately notify your Supervisor/Authorized Official (AO) or Historic Property Specialist (HPS).**



**Scan here**— Access a short tutorial on how to use this form, and other resources here.



**Know where you are**— Record GPS coordinates and nearby permanent landmarks.



**Make a call**— An AO or Incident HPS may call the State Historic Preservation Office at (907) 269-8700 for assistance.



**Take some notes**— Describe what you see. Consider size, extent, location, condition, and threats.



**Do not disturb**— Do not collect or move anything. Doing so can risk damaging an artifact or its historic integrity.



**Take a photo**— Photograph the location and any artifacts using the provided scale and north arrow.

Incident \_\_\_\_\_ Your name \_\_\_\_\_

AO/HPS Name, Phone \_\_\_\_\_ Date \_\_\_\_\_

Lat/Long \_\_\_\_\_

Observations (attach pages if necessary) \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Place this scale and north arrow in your photos.



## Examples of Coastal Cultural Resources

Near water and shore



Pilings, shipwrecks/watercraft, potentially-historic marine debris, petroglyphs

Markers and monuments



Totems, graves/cemeteries, cairns, signposts, monuments

Surface/roading



Concentrations of bone, stone, wood, metal tools/artifacts, pottery, glass, rock rings, house pits/depressions

Objects and artifacts



Stone, bone, wood, metal tools and artifacts, historic cans/housewares, beads, pottery/porcelain

Buildings and structures



Cabins, churches, trails, corrals, railroad tracks, totems, abandoned buildings, caches

Other



Mining and military

Subsistence

Paleontology/Fossils





# Alaska Inland Cultural Resource Job Aid

*It is a privilege to live and work on these lands stewarded by Alaska Native people since time immemorial*

## What are cultural resources?

Objects, places, traditions, and beliefs that are significant to a group of people and form a collective cultural identity. Cultural resources include objects/artifacts made of stone, ceramic, bone, metal, glass, or wood, or buildings, structures, cemeteries, monuments, shipwrecks, railroads, trails, and subsistence areas. **There are federal and state laws protecting cultural resources.** Treat cultural resources with respect and help protect them.

## IMPORTANT!

**If you observe bone or possible human remains, immediately notify your Supervisor/Authorized Official (AO) or Historic Property Specialist (HPS).**



**Scan here** – Access a short tutorial on how to use this form, and other resources here.



**Know where you are** – Record GPS coordinates and nearby permanent landmarks.



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**Take some notes** – Describe what you see. Consider size, extent, location, condition, and threats.



**Do not disturb** – Do not collect or move anything. Doing so can risk damaging an artifact or its historic integrity.



**Take a photo** – Photograph the location and any artifacts using the provided scale and north arrow.

Incident \_\_\_\_\_ Your name \_\_\_\_\_

AO/HPS Name, Phone \_\_\_\_\_ Date \_\_\_\_\_

Lat/Long \_\_\_\_\_

Observations (attach pages if necessary) \_\_\_\_\_

Place this scale and north arrow in your photos.



## Examples of Inland Cultural Resources

Near water and shore



Fish camps, shipwrecks/watercraft, dredges, rock art, fish traps/wheels

Markers and monuments



Monuments, graves/cemeteries, cairns, signposts

Surface/eroding



Concentrations of bone, stone, wood, metal tools/artifacts, pottery, glass, rock rings, house pits/depressions

Objects and artifacts



Stone, bone, wood, metal tools and artifacts, historic cans/housewares, beads, pottery/porcelain

Buildings and structures



Cabins, churches, trails, railroad tracks, abandoned buildings, caches

Other



Mining and military

Subsistence

Paleontology/Fossils



ALL PHOTOGRAPHS COURTESY OF COOPERATORS/AGENCIES

# Components of the form: Definitions

## **What are cultural resources?**

Objects, places, traditions, and beliefs that are significant to a group of people and form a collective cultural identity. Cultural resources include objects/artifacts made of stone, ceramic, bone, metal, glass, or wood, or buildings, structures, cemeteries, monuments, shipwrecks, railroads, trails, and subsistence areas.

**There are federal and state laws protecting cultural resources.**

Treat cultural resources with respect and help protect them.



# Important Reminders

**IMPORTANT!**

**If you observe bone or possible human remains, immediately notify your Supervisor/Authorized Official (AO) or Historic Property Specialist (HPS).**

# Simple Icons



**Scan here** – Access a short tutorial on how to use this form, and other resources here.



**Make a call** – An AO or Incident HPS may call the State Historic Preservation Office at (907) 269-8700 for assistance.



**Do not disturb** – Do not collect or move anything. Doing so can risk damaging an artifact or its historic integrity.



**Know where you are** – Record GPS coordinates and nearby permanent landmarks.



**Take some notes** – Describe what you see. Consider size, extent, location, condition, and threats.



**Take a photo** – Photograph the location and any artifacts using the provided scale and north arrow.

# Prompts for Recording Key Information

Incident \_\_\_\_\_ Your name \_\_\_\_\_

AO/HPS Name, Phone \_\_\_\_\_ Date \_\_\_\_\_

Lat/Long \_\_\_\_\_

Observations (attach pages if necessary) \_\_\_\_\_

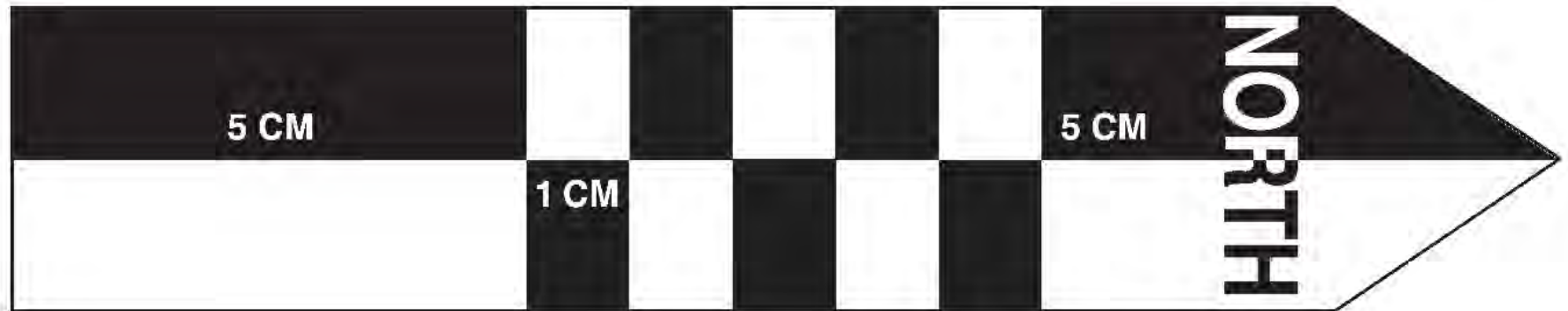
\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

# North Arrow & Scale for Photographs

Place this scale  
and north arrow  
in your photos.





Near water and shore



Pilings, shipwrecks/watercraft, potentially-historic marine debris, petroglyphs

Markers and monuments



Totems, graves/cemeteries, cairns, signposts, monuments

Surface/eroding



Concentrations of bone, stone, wood, metal tools/artifacts, pottery, glass, rock rings, house pits/depressions

Objects and artifacts



Stone, bone, wood, metal tools and artifacts, historic cans/housewares, beads, pottery/porcelain

Buildings and structures



Cabins, churches, trails, corrals, railroad tracks, totems, abandoned buildings, caches

Other



# Representative Photographs by Category





Alaska Department of Natural Resources

## OFFICE OF HISTORY AND ARCHAEOLOGY

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## Alaska Inland and Coastal Cultural Resource Job Aids

The Alaska Inland and Coastal Cultural Resource Job Aids are two-page visual aids that provide simple, straightforward guidance on how to appropriately and respectfully identify and report observations of cultural resources during spill/incident response. The two versions are intended to correspond to the overarching structure of oil spill response in the United States – inland response led by the Environmental Protection Agency (EPA) and coastal response led by the U.S. Coast Guard (USCG). Each form provides a definition for cultural resources, color photos of representative examples of cultural resources, and directions on what to do if one observes cultural resources when in the field. There are prompts on the form for the type of information that is critical to record, and guidance on photographing and documenting location information. The job aids were developed for incident response professionals assigned to SCAT teams, incident command, etc. They may be used in coordination with a designated Historic Properties Specialist (HPS) if one is assigned, or on incidents where no HPS is assigned. As designed, they are easily customized to other regions/agencies.

These Job Aids were produced in partnership amongst the U.S. Department of National Park Service Alaska Regional Office, U.S. Bureau of Land Management, Alaska Department of Natural Resources Office of History and Archaeology, State of Chickaloon Native Village.

The project was supported by a generous grant from the U.S. Department of the Interior. Laminated hard copies can be obtained by contacting Shina duVall, Regional Archeologist at the Alaska Regional Service at [shina\\_duvall@nps.gov](mailto:shina_duvall@nps.gov). Please note, when printing a Job Aid, do not change the scale provided on the forms.

[Alaska Inland Cultural Resource Job Aid](#)

[Alaska Coastal Cultural Resource Job Aid](#)

### Alaska Job Aids Video

Watch this video to hear from cultural resource professionals, Tribal leaders, and agency personnel about why protect cultural resources during incident response and how to do it using the Alaska Inland and Coastal Cultural Resource



Alaska Department of Natural Resources

## OFFICE OF HISTORY AND ARCHAEOLOGY

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[Parks Home](#) / [Office of History and Archaeology](#) / [Oil Spill Response](#)

### Alaska Oil Spill Response and Cultural Resources

The 1989 EXXON VALDEZ oil spill and response activities that followed necessitated the development of emergency and long-term measures to protect cultural resources along Alaska's affected coastline. The Alaska State Historic Preservation Office (SHPO) played a key role in developing and monitoring these efforts, along with other government and industry cultural resource specialists.

#### Resources

[Additional Preservation Planning Resources](#)  
[AK Inland and Coastal Cultural Resource Job Aids](#) **NEW**

In many ways, the response to cultural resources and quick development of an infrastructure to address the challenges were unprecedented. There were lessons learned as protocols, guidelines, and organizational structure evolved over the course of several field seasons. One of the important accomplishments in the aftermath of the EXXON VALDEZ oil spill was the development of a "National Programmatic Agreement on Protection of Historic Properties During Emergency Response Under the National Oil and Hazardous Substances Pollution Contingency Plan" and the complimentary "Alaska Implementation Guidelines for Federal On-Scene Coordinators for the Programmatic Agreement On Protection Of Historic Properties During Emergency Response Under The National Oil And Hazardous Substances Pollution Contingency Plan."

Chris Wooley (Chumis Cultural Resource Services), who has played a key role as an industry contractor for the EXXON VALDEZ spill response and for subsequent spill responses and spill drills, offers this advice for cultural resource professionals responding to a major multi-state oil release:

"[Response] ... will likely require the organization of a joint Cultural Technical Advisory Group from a number of SHPOs across the spill area. The first thing that typically is done is implement a cleanup-wide cultural resource policy... (customized to the event) that shows the unified command supports the historic properties issues... If there are cultural resource issues (sites in the spill area), get archaeologists on the SCAT (shoreline assessment) teams to document site condition prior to response if at all possible. Keeping site confidentiality is a challenge, so using shoreline segment numbers – not site names or locations when dealing with the documentation – help protect locations. Get monitors into the cleanup. As you know, this takes coordination with all the Unified Command elements, and most importantly, good communications with the Operations element. The folks involved in laying boom, collecting oil, doing cleanup need to understand we're not some pinhead "ologist" doing research and standing in the way of cleanup. Rather we're there to help them work around these sensitive areas – just like spawning area of biological concern. That's a message that needs to be understood early in the response."

# Where are these tools located?

# Purpose and Use

## Alaska Coastal Cultural Resource Job Aid

*It is a privilege to live and work on these lands stewarded  
by Alaska Native people since time immemorial*

## Introduction and use

## Alaska Inland Cultural Resource Job Aid

*It is a privilege to live and work on these lands stewarded  
by Alaska Native people since time immemorial*

[Alaska Job Aids Video -  
YouTube](#)



# Toolkit

## Cultural Resource Job Aids Toolkit

Do you like the Job Aids but you're not in Alaska? Or you have an idea for how they can be used in other ways? The partners who developed the Alaska Job Aids have developed a toolkit for use by other entities or regions to customize their own Cultural Resource Job Aids. The toolkit includes a 'Tips and Tricks' guidance document, as well as Interior and Coastal folders with blank InDesign files, fonts, and image tables.

### [Tips and Tricks for CR Job Aid Templates](#)

Alaska Interior Job Aid Template Folder

Alaska Coastal Job Aid Template Folder

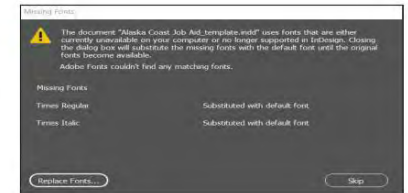


## Tips and Tricks

### Cultural Resource Job Aid Template

Your job aid templates are provided as Adobe InDesign documents (.indd)

For ease of use, the templates use the common fonts **Arial** and **Times**, included in most computer systems. Your computer's version of these fonts may be different. The first time you open the InDesign document you will see an alert dialog box like this. Click on the **Replace Fonts** button to substitute the closest font on your system.



If Adobe InDesign is unavailable, you can view the .pdf file with Adobe Acrobat

You may use this template as a guide, including use of any concepts, wording, and design elements. Feel free to directly **copy and paste** the text from the .pdf file into your program.

The icons and the North Arrow are available as .eps and .jpg files in the **Graphic Resources** folder.



**The North Arrow must not be scaled!**

When you import the North Arrow, be sure all scaling options are **set at 100%**. The arrow should be placed as close to an edge of the document as possible, while also allowing for your printer's margins. Remember, the photographer will want to place the arrow as close to the photo subject (e.g., artifact) as possible!

**Photo hints**

Once you have imported your images, it is good practice to print a test copy to examine the results. Make sure each photo's overall quality and pixel resolution is sufficient to be useful to the user. Be aware that many images downloaded from the internet may not have a resolution high enough for print quality. Always be aware of copyright rules!

**Be sure to print your job aids at 100%!**

Printers will often default to a "scale to margins" setting or similar wording. If printed with this option checked, the arrow size will be reduced, and scale inaccurate. If you have allowed for margins, typically a maximum of .25 inch, you can print at **Actual Size** and your content will not be cut off. Make sure your print dialog box settings are all set to **Actual Size**, or **100%**!



# DEPARTMENT OF HEALTH, ENVIRONMENTAL PUBLIC HEALTH PROGRAM, SUPPORT DURING AN OIL SPILL OR HAZMAT RELEASE





# Oil Spill & Hazardous Material Release Support

Allison Natcher, MPH  
Environmental Public Health Program



# Environmental Public Health Program (EPHP)

- Evaluate potential hazards to human health associated with toxic substances in the environment.
- Epidemiological studies and toxicological risk assessments are used to evaluate human exposures to hazardous substances and potential health risks.
- Chemical contaminants can enter our environment from emergency release events, hazardous waste disposal, global transport, local deposition and other sources.

## Environmental Public Health Program (EPHP)

- Develop intervention strategies to reduce or eliminate chemical exposures of human health concerns.
- Foster two-way communication to address community concerns about contaminants.
- Provide information about the health risks associated with hazardous substances.
- Provide information about balancing the risks and benefits of subsistence food resources in Alaska.

# Agency for Toxic Substances and Disease Registry (ATSDR)

- Recommends actions that need to be taken to safeguard people's health.
- Advise federal and state agencies, community members, and other interested parties on the health impacts of Superfund sites and other petitioned sites.
- Provide technical support and advice to other federal agencies and state and local governments.



## What does ATSDR do?

- Identifies communities where people might be exposed to hazardous substances in the environment.
- Determines the level of public health hazard posed by a site.
- Educates physicians, other health care professionals, and community members about the health effects of-and how to lessen exposure to-hazardous substances.



## What assistance can ATSDR provide?

- Assist communities by working with them to resolve their health concerns, including meeting with residents to address concerns and providing medical monitoring.
- Educates residents about any health hazards posed by environmental contaminants.
- Works with local health care providers to ensure they have the information needed to evaluate possible exposures to hazardous substances in their community.
- Provides medical monitoring in communities exposed to hazardous substances if such action is needed.

# How is ATSDR's role in helping communities different from the EPA?

- Unlike EPA, ATSDR is not a regulatory agency.
- ATSDR is a public health agency that advises EPA on the health aspects of hazardous waste sites or spills.
- ATSDR makes recommendations to EPA when specific actions are needed to protect the public's health.

## EPHP and ATSDR Partnership

EPHP works with the ATSDR to address issues related to contaminants that are of health concern to communities in Alaska.

- Number of hazardous substances at a site.
- Potential hazardous substance exposure and pathways to humans.
- Potential human health impacts.



## EPHP and ATSDR Partnership

ATSDR's Partnership to Promote Local Efforts to Reduce Environmental Exposure (APPLETREE).

- Identify exposure pathways at specific sites.
- Educate affected communities and local health professionals about site contamination and potential health effects.
- Review health outcome data to evaluate potential links between site contaminants and community health outcomes



# State Response to Oil Spills and Hazardous Materials

- For response to oil and hazardous substance releases, the Department of Environmental Conservation (DEC), Spill Prevention and Response Division is the lead state agency, in coordination with United States Coast Guard and the Environmental Protection Agency.
- State responses to oil and hazardous substance releases are conducted in accordance Alaska Regional Contingency Plan, Area Contingency Plans, State of Alaska Emergency Operations Plan, and the Department of Health Emergency Operations Plan.
- Incident Command System.



# Health and Medical Services Activation

- Receipt of initial notification can come in a variety of ways, including the Section of Rural and Community Health Systems (RCHS) Duty Officer, Public Health Nurses, the State Emergency Operations Center, the DEC and/or our EPHP email.
- The Department of Health Emergency Operations Center reaches out to all the sections within the Department to request assistance as needed during a disaster or response.



# ROLES & RESPONSIBILITIES

## Health and Medical Services (Emergency Support Functions #8)

- Technical assistance to control disease and identify public health hazards.
- Coordinate the use of emergency medical, health care, public health and mental health resources.
- Provide DOH Liaison and Health/Medical branch personnel.
- Provide healthcare information and clinic support to health care providers through the Health Alert Network (HAN), and the Alaska Public Health Alert Network (APHAN).

# ALASKA RCP

Evaluates incident implications for public health and welfare of the United States.

Recommends public health and welfare of the United States protection methods.

Arranges for on-scene emergency medical support and victim transport, as necessary.

Determines availability and condition of health facilities.

Coordinates public health information.

Advises on response activities as they relate to public health.

Collects and analyzes samples to identify potential human health concerns, in coordination with the Alaska Department of Environmental Conservation and Alaska Department of Fish & Game.

Assesses damages to human health and welfare of the United States.

Provides disaster psychology services.





## ATSDR EMERGENCY RESPONSE

Emergency Response Teams are available 24 hours a day, and are comprised of toxicologists, physicians, and other scientists available to assist during an emergency involving hazardous substances in the environment.



# ATSDR EMERGENCY RESPONSE



## Emergency Responders

Information for persons who respond to or oversee emergency events involving chemicals, radioactive materials, or both.

[Emergency Responder Resources](#)

[ToxFAQs](#)



## Healthcare Professionals & Clinicians

Resources to assist health professionals treating individuals who have been exposed to chemicals.

[Healthcare Professionals & Clinicians Resources](#)

[Medical Management Guides \(MMGs\)](#)

[Toxicological Profiles](#)



## Health Departments & Partners

Support for Regional, State, and Local office, and other partners, when handling an emergency.

[Health Departments & Partners Resources](#)

[Regional Offices](#)

[Planning & Preparedness Resources](#)

[Assessment of Chemical Exposures \(ACE\) Teams](#)

# THE EPHP TEAM

- Allison Natcher, Program Manager. [allison.natcher@alaska.gov](mailto:allison.natcher@alaska.gov)
- Dr. Andrew Cyr, Toxicologist. [andrew.cyr@alaska.gov](mailto:andrew.cyr@alaska.gov)
- Stacey Cooper, Environmental Health Assessor. [stacey.cooper@alaska.gov](mailto:stacey.cooper@alaska.gov)
- Abby Nelson, Lead Epidemiologist. [abby.nelson@alaska.gov](mailto:abby.nelson@alaska.gov)

[eph@alaska.gov](mailto:eph@alaska.gov)

907-269-8000





# WILDLIFE RESPONSE AT UNIVERSITY LAKE



# Wildlife Response at University Lake

Torri Huelskoetter, EPA

Anna Carey, ADEC



# Wildlife coordination

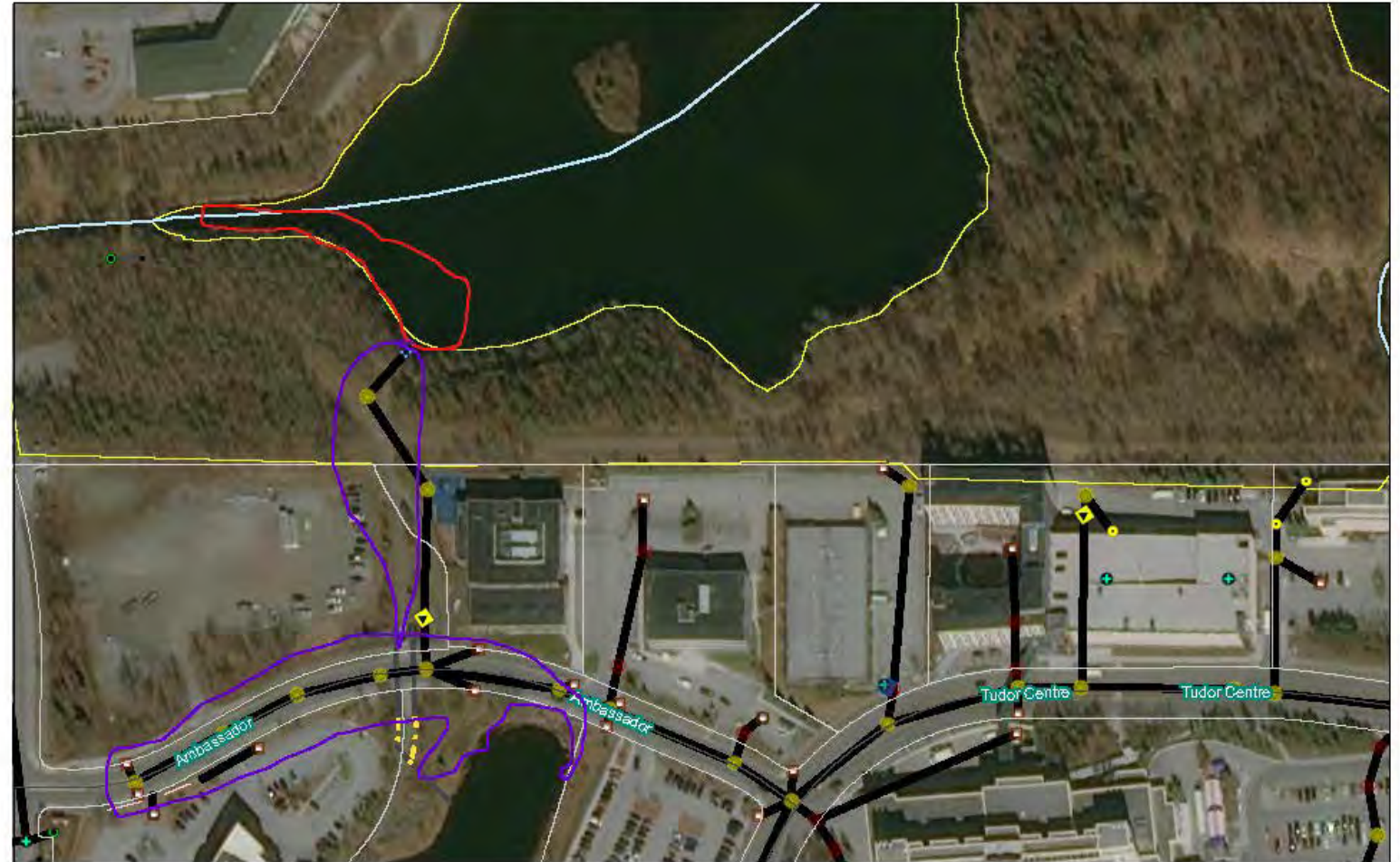


# Spill overview



- June 21 sheen reported on University Lake
- June 22 ADEC EPA Unified, MOA led recovery ops
- June 28 Fuel vault on ANMC identified as source
- July 11 park reopened

MOA Drainage Viewer



6/21/2023







# University Lake Habitat

- Food sources
- Island
- Overhanging trees
- Habituated waterfowl
- Brood season
- Location in Town



# Wildlife Tactics Used

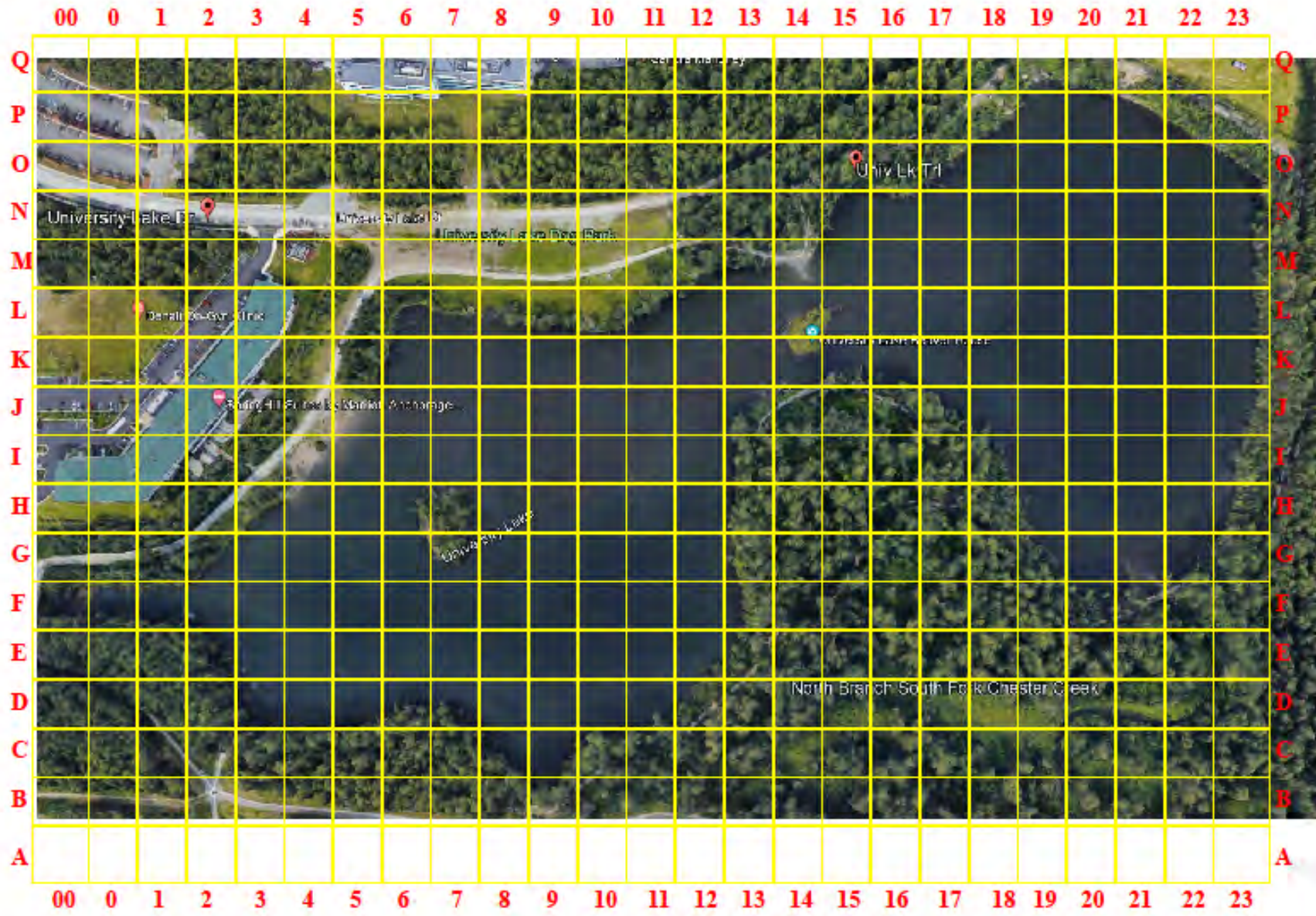
Passive  
Hazing

Active  
Hazing

Debris  
Removal

Exclusion  
Fencing

Pre-emptive  
Capture



# Wildlife Survey Grid

- Initial wildlife survey
- Communication of areas of waterfowl sightings.



# Passive Hazing



# Active Hazing





# Exclusion booming and fencing





# Pre-emptive Capture

present in the spill area:			▼	▼	▼	▼
Species Group	Yes	Species, numbers (estimated or observed), and location relative to spill, etc.	Carcass Collection Yes	Haze/Deter Yes	Pre-emptive Capture Yes	Capture and Rehabil Yes
Bald or golden eagles	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Raptors	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Waterfowl	<input checked="" type="checkbox"/>	<i>Mallards &amp; wigeons (10s), Canada geese (&lt;10), common loon (1), kingfisher (1-2)</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Diving ducks	<input checked="" type="checkbox"/>	<i>Grebes (10s)</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Shorebirds	<input checked="" type="checkbox"/>	<i>Yellowlegs (&lt;5)</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Seabirds	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Passerines	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Non-migratory birds	<input checked="" type="checkbox"/>	<i>Magpies, ravens (occasional; &lt;5)</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Brown or black bears	<input checked="" type="checkbox"/>	<i>Brown and black bears – none observed, ~1-5</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Ungulates (moose, deer, caribou, etc.)	<input checked="" type="checkbox"/>	<i>Moose – none observed, ~1-5</i>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Small furbearers (fox, muskrat, river otter, etc.)	<input checked="" type="checkbox"/>	<i>River otter (~5), muskrat (~5)</i>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Wolves	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Northern sea otters (Southcentral or Southeast Alaska stocks)	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Walrus	<input type="checkbox"/>		<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>





# Debris Removal



# Hazing Challenges

HABITUATED DUCKS

```
graph TD; A[HABITUATED DUCKS] --> B[ACTIVE HAZING VERY RESOURCE INTENSIVE]; B --> C[PASSIVE HAZING TACTICS NEEDED TO CHANGED OFTEN]; C --> D[SITE LIMITATIONS];
```

ACTIVE HAZING VERY RESOURCE INTENSIVE

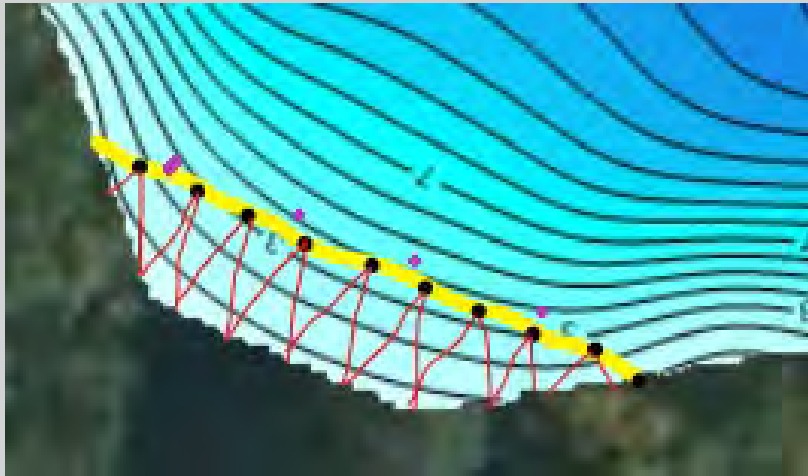
PASSIVE HAZING TACTICS NEEDED TO CHANGED OFTEN

SITE LIMITATIONS



# Passive Hazing Lesson learned

- Overhang grid with mylar tape and helium ballons was the most effective tool for flyover waterfowl.



# Active Hazing Lessons Learned



- Two experienced hazers working together to move waterfowl to the other side of the lake was more effective
- Aggressive physical harassment best for keeping brood out of hot zone
- Using noise effective for some species





# Hazing Lessons learned

- Most effective methods to keep waterfowl broods out of the hot zone was the fully enclosed exclusion fence
- Diving Waterfowl the exception





# Habitat Modifications

- Shoreline vegetation that provided cover was oiled







Habitat modification of grass created easier hazing areas, but fresh cut grass did provide an attractant-will need to remove loose cuttings from the area.



# Pollen Plug



- Pollen mixed with sheen needed removal
- Cottonwood seeds are a sought-after food source for waterfowl, needed to be removed from the oil spill site to reduce attraction





Revegetation concerns





# Spawning Season



Carcass Collection Form <small>Use one form for each batch of carcasses</small>		Incident Name: University Lake	Today's Date (mm/dd/yyyy): 7/19/2023	INV (OLE Use Only)			
ICS Position <small>(Group, Task Force, Strike Team, or other name if no ICS Position assigned):</small>		Carcass Collector <small>Name &amp; Employer (Phone &amp; Email, if no ICS Position assigned):</small> Andrew Kastning, ADFG					
Data Recorder <small>Name &amp; Employer (Phone &amp; Email, if no ICS position):</small> Andrew Kastning, ADFG		Have carcass collection permits & authorizations been obtained? YES <input checked="" type="checkbox"/> <b>If not, Do Not Collect Carcasses</b>					
Camera & SD Card ID #: IMG_7958	GPS & SD Card ID #:	GPS Datum: (WGS84 preferred) <input type="checkbox"/> NAD83 <input type="checkbox"/> NAD27 <input type="checkbox"/> Other: _____					
General Location or Shoreline Segment: <small>North shore of lake outlet</small>		<small>If applicable, fill out Shoreline Search Information on reverse.</small>					
INDIVIDUAL CARCASS LOG							
Carcass ID #	Latitude (decimal degrees)	Longitude (decimal degrees)	Species	Condition <small>FRESH, DEG, MUM</small>	Oiling <small>NO, LT, MOD, HV, UNK</small>	Photo #	Comments
01	61.185353	-149.806927	sockeye	DEG	unk	7958	female, belly full empty of eggs, likely post spawning mortality, no visible wounds
02							
03							
04							
05							
06							
07							
08							
09							
10							
For this batch, record white Carcass Chain of Custody Tag pre-printed Batch Tag No. _____ and Total number of carcasses: _____					Fold completed form and put inside a resealable waterproof storage bag (e.g., Ziploc®), then place inside the large plastic carcass batch bag.		



# Spill Response Equipment Lessons Learned







# Site Control Challenges

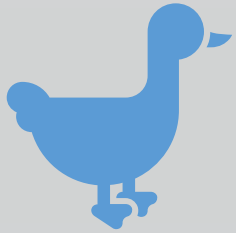


# Hazing Site Control Lessons Learned

- Worked with Anchorage Parks and Recreation Department to close the park
  - Continued pedestrian traffic
- Waterfowl habituated to some hazing tactics
- Dogs scare birds towards spill location
- Residential location limited hazing tactics
  - Noise concerns



# Personnel Challenges



Trained Wildlife  
Personnel



Access to Wildlife  
Contractors



Extensive Hazing  
Resources Needed

# Personnel Limitations and Lessons learned

- Wildlife specific training and HAZWOPER training needed
- Access to trained personnel challenging even in populated area
- Considerations on what level of trained wildlife personnel to request for event
  - When to plan for more than Hazing
  - Trained personnel for capture/transport/stabilization levels
  - Likelihood of oiled birds high in this case





# Federal and State funding

- Find out what spill clean up contractor has for wildlife contractor capabilities
- Length of time to get contracts in place
- Pollution Removal Funding Authorizations
- State Term Contractors



# Lessons learned

- Create wildlife plan early on, and identify paths for funding
- Access to wildlife contractors
- Limited wildlife trained personnel in Alaska
- Hazing lessons learned for the area







**Report oiled or injured wildlife to:**

**US Fish & Wildlife Service Spill Response**

**907-242-6893**





For more information on this response check the EPA site :

[https://response.epa.gov/site/site\\_profile.aspx?site\\_id=16097](https://response.epa.gov/site/site_profile.aspx?site_id=16097)



# MAUI CASE STUDY: LITHIUM-ION BATTERIES



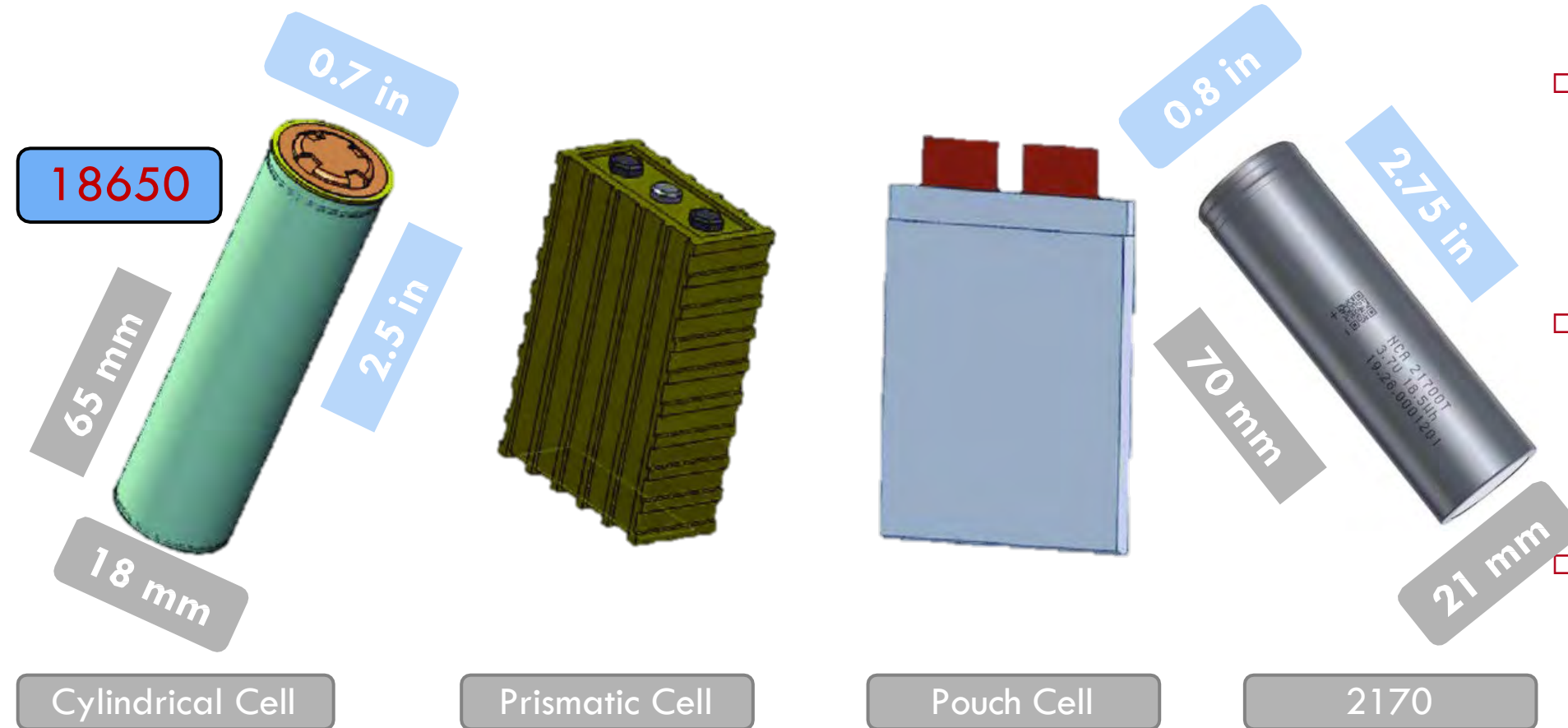


# LITHIUM ION BATTERIES: MAUI WILDFIRES CASE STUDY





# Lithium-Ion Battery Types



- Cylindrical Cells (18650) are the most common battery in most mobile applications (bikes, scooters, etc.)
- Cylindrical Cells are also used by electric vehicles, where you can find anywhere from 3K-7K individual cells
- Prismatic and Pouch Cells are found in all other electric vehicles

**Lithium-Ion Batteries** Good memory resistance Very stable High energy density  
Toxic, corrosive, flammable, and explosive gas generation during thermal runaway

# Three Primary Presentations of LIB

Energy Storage Systems



Electric Vehicles



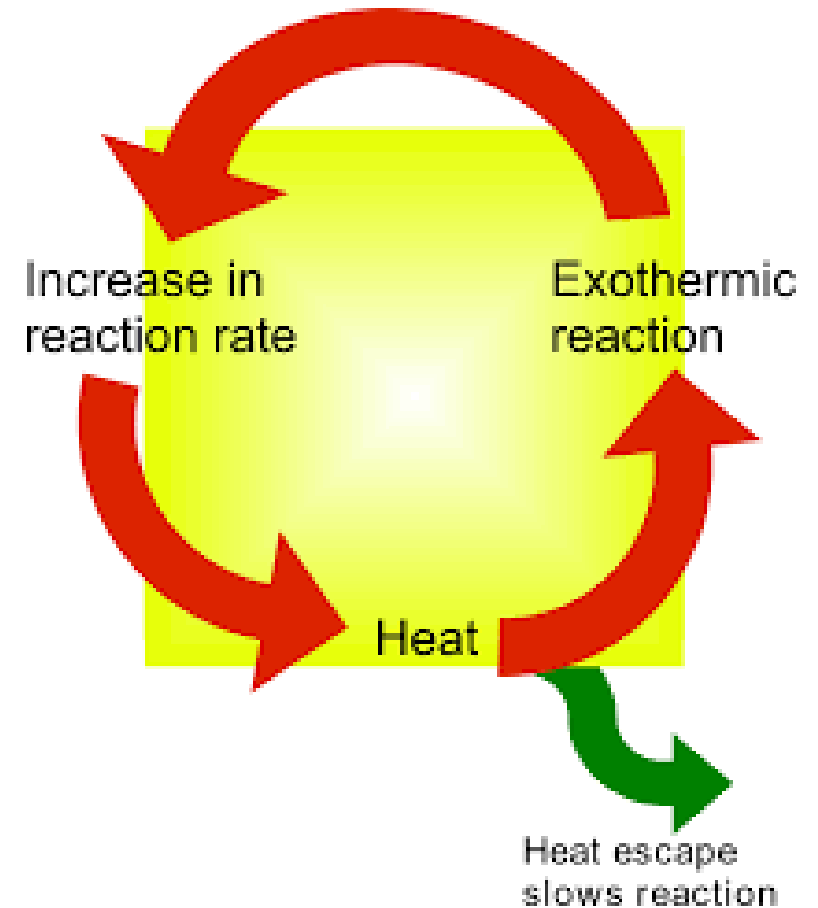
Micro-mobility



# Differences in Lithium-Ion Battery Fires



- Very toxic atmospheres
- Burn temperatures are higher than normal
- Fires can burn without Oxygen – can't smother!
- Explosive potential – Hydrogen Gas
- Thermal Runaway reaction
  - Chemical reaction – rapid degradation
  - Does not require Oxygen
  - Nearly impossible to stop once it starts
  - Could happen in seconds or days
- Re-ignition is common – as much as 30 days or more!







10

Scooter





# MAUI WILDFIRES RESPONSE





**Legend**

- EPA Staging Area
- EPA Incident Command Post
- Joint Information Center (JIC/EOC)
- Maui Memorial Medical Center
- Air Monitoring Stations
- Assembly Points
- Fire Perimeters

**Maui Wildfires General Map**  
EPA Emergency Response  
1 Ritz-Carlton Drive  
Kapalua, HI 96761

**Prepared For**  
EPA Region 9  
Emergency Response

**Prepared By**  
EPA Region 9  
Emergency Response







# Maui Lithium-Ion Battery Operations

- **Sources of Li-Ion Batteries**
  - BESS (Battery Energy Storage System)
  - Vehicles
  - Other
- **Reconnaissance**
  - BESS: Information provided by manufacturer, utility company, self-assessment (residents), field recon (OPS section)
  - Electric Vehicles: County data, Motor Vehicles Data, National Insurance Crime Bureau, self-assessment (owner), hotline/commercials/PSAs, field-recon (OPS section)
- **Operations**
  - Removal from site/field. BESS vs EV
  - Transport to staging area
  - Processing (de-energizing, crushing)
  - Shipment



# Removal/Recovery of “Powerwalls” (Residential BESS)







# Removal/Recovery of “Powerwalls” (Residential BESS)

Tyvek/FB



3-“Lau Lau”



4-Buffalo Convoy  
Relo-Staging





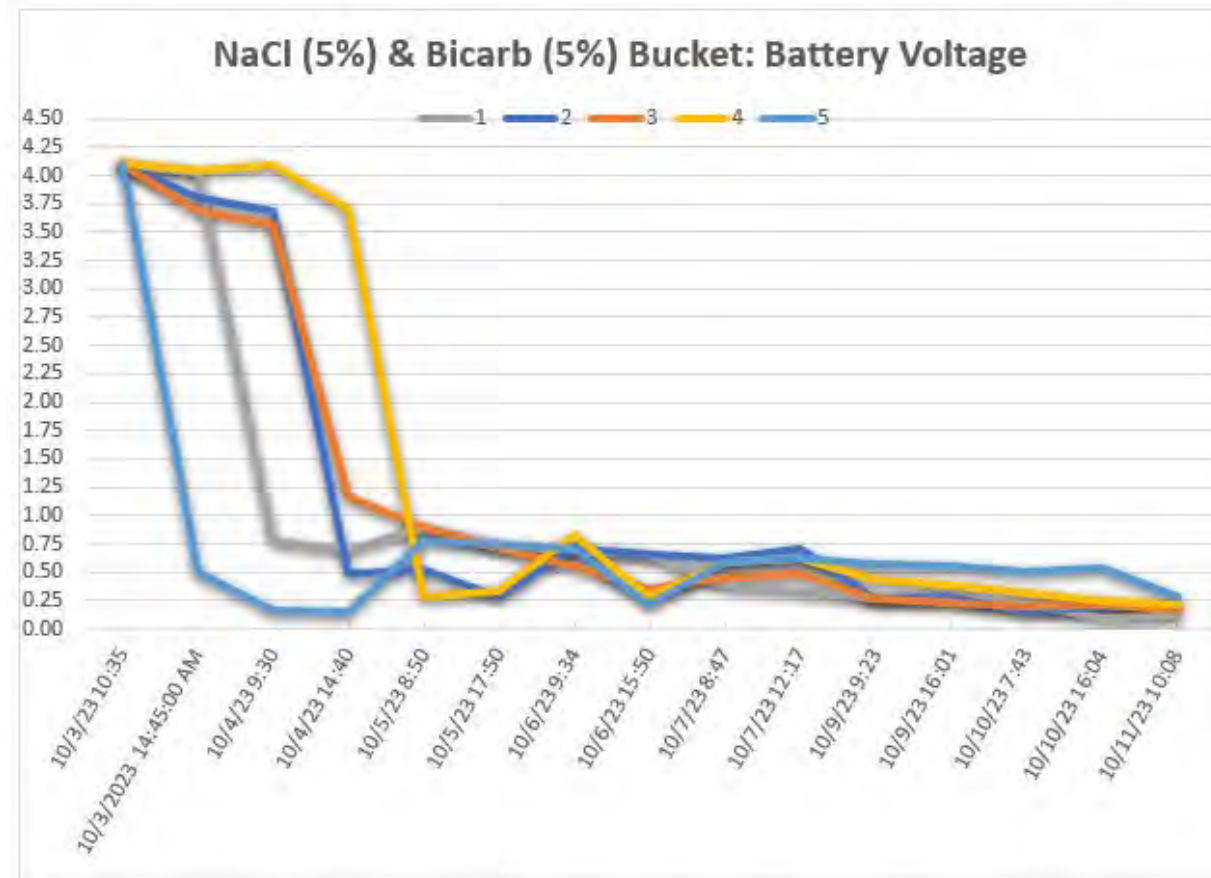
# Battery Processing – De-Energizing







# Battery Processing – De-Energizing







## Battery Processing – Crushing







# Battery Recovery - EVs



Different Make = Different Battery  
Different Model = Different Battery  
Different Year = Different Battery  
Different Option = Different Battery







# Removal/Recovery of Burned Electric Vehicle Batteries







# Electric Vehicle - Battery Removal Ops

## 3-Remove Fasteners/Strip







# EV-Battery Removal Ops/Processing

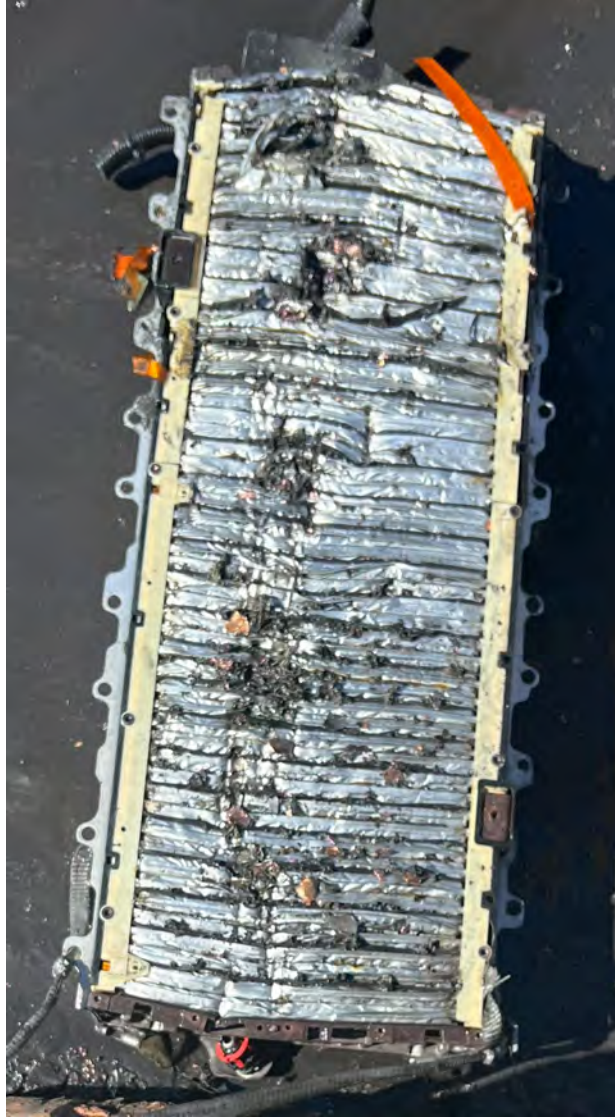
## 4-Harvest







# Battery Processing – Electric Vehicles





# Waste Determination and Transportation

- Material still observed to generated very limited toxic and flammable gases (Electrolysis, hydrolysis, oxidation, and/or decomposition)
- Material moved in packaging that provides:
  - Ventilation
  - Particulate Control
  - Water Intrusion Control
- Packaging transported in open top containers







## Battery Processing – Packaging







# NEXT STEPS

- Online Training Modules
- Train-the-Trainer
- SOPs
- TTXs
- National OSC Taskforce





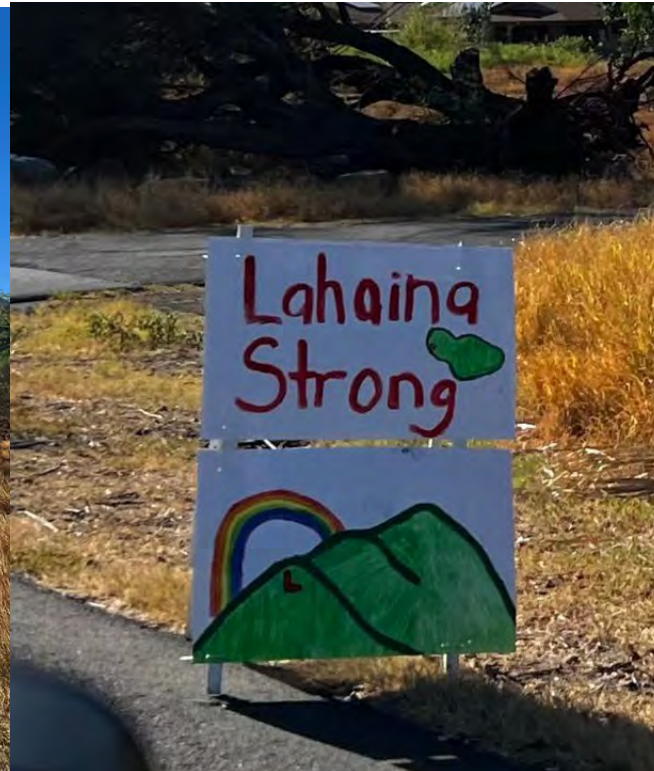
# Li-Ion Battery Taskforce

Region	Contact(s)	Region	Contact(s)
1	Lina Takahashi Michael Cofsky	7	Gregory Dillon
2	Stephen Simonetti Keith Glenn	8	Eric Sandusky Joe Payne
3	Christopher Guzzetti	9	Christopher Myers Eric Nuchims
4	Bryan Vasser	10	Stephen Ball
5	Leonard Zintak	ERT	Joseph Bundens Brian Kovak
6	David Robertson	RM Reps	Peter Guria James Webster





# QUESTIONS?



- EPA Storymap: [2023 Maui Wildfires](#)
- EPA Webpage: [Maui Wildfires](#)
- Website for survivors: [Maui Recovers](#)



**Alaska Regional  
Response Team**



# AVAILABLE RESPONSE SUPPORT FROM THE NOAA SSC





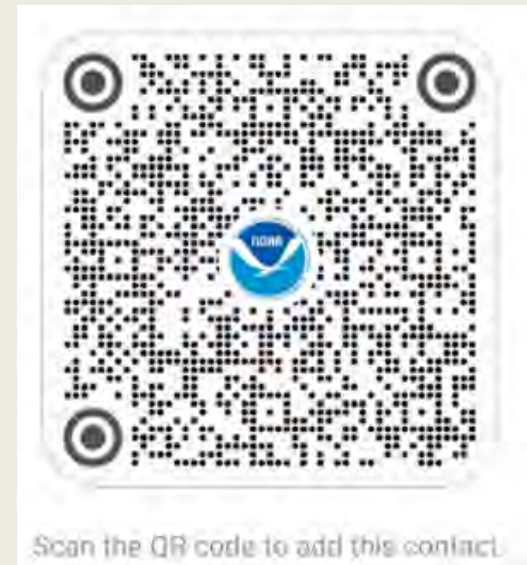
# How the NOAA Emergency Response Division & the Scientific Support Coordinator Can Support Your Response

**Liza Sanden**

Scientific Support Coordinator  
Regional Preparedness Coordinator  
Alaska/ USCG D17

Cell : 907-529-9157  
24/7 Emergency: 206-526-4911

[liza.sanden@noaa.gov](mailto:liza.sanden@noaa.gov)



# What was spilled?

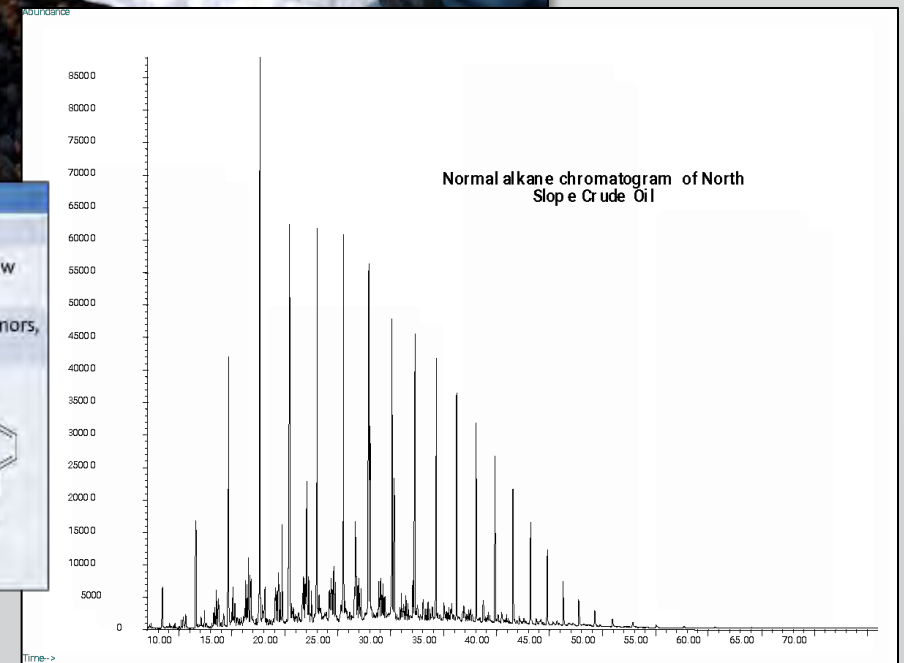
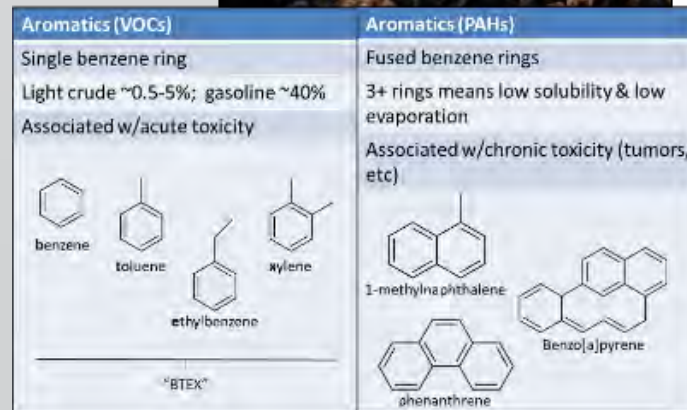
Chemistry support

## Expertise & Tools:

- Staff chemists
- Contract laboratory
- Oil fate model
- Chemical databases

## Typical Questions:

- Is it oil or a chemical?
- Will it float or sink?
- How long will it persist?
- Will it burn? Disperse?
- How will it react?





## Where will it go? Observations & modeling

### Overflight support:

- Trained observers
- Satellites
- Un-manned aerial systems (UAS or “drones”)



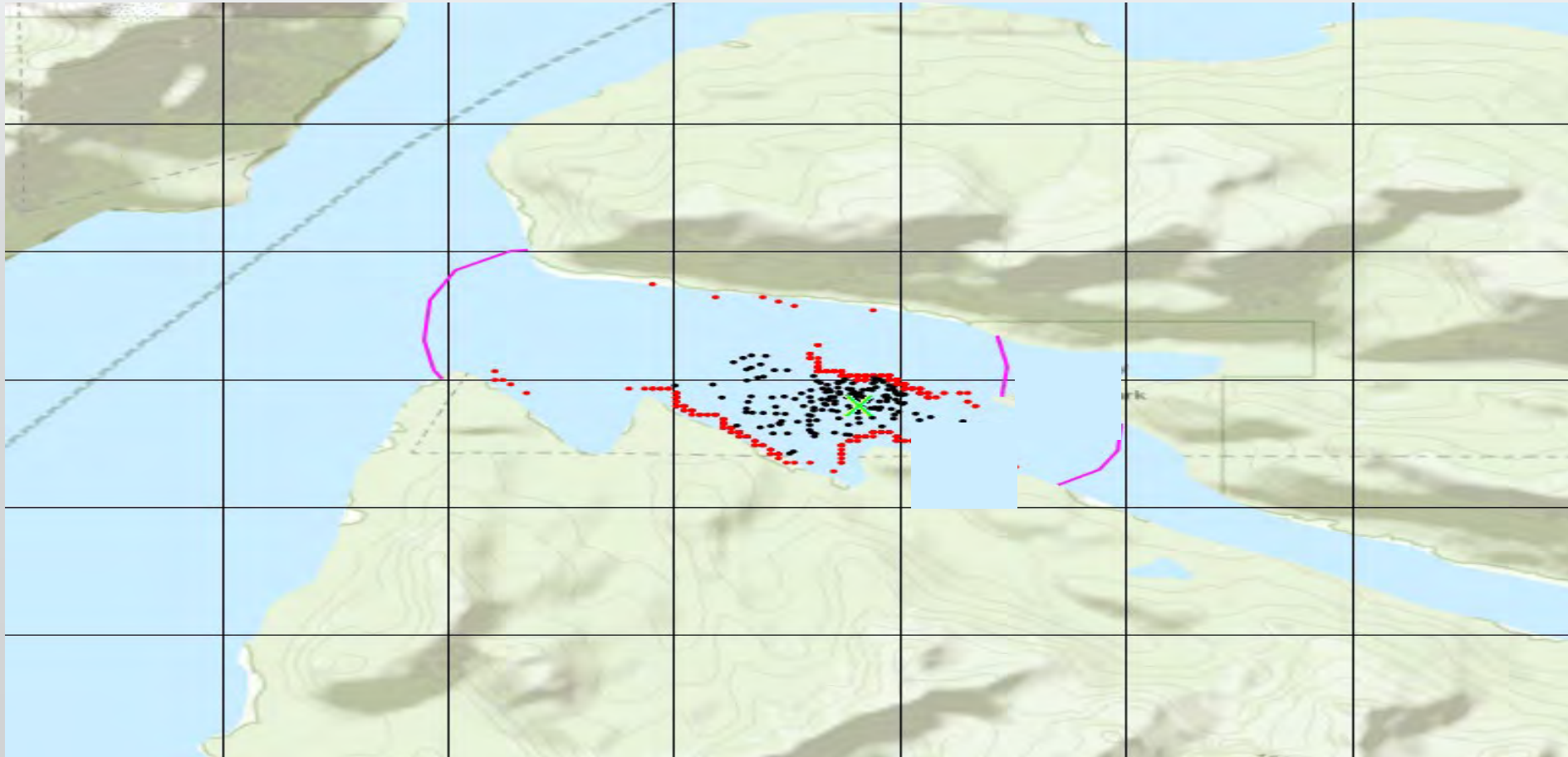
### Computer models:

- Oil trajectories
- Chemical air plumes



# Example Products

# Oil Spill Trajectory



Trajectory results showing predicted transport for a release. Red particles represent shoreline impacts, black particles are floating on the water surface. Purple line designates uncertainty boundary.

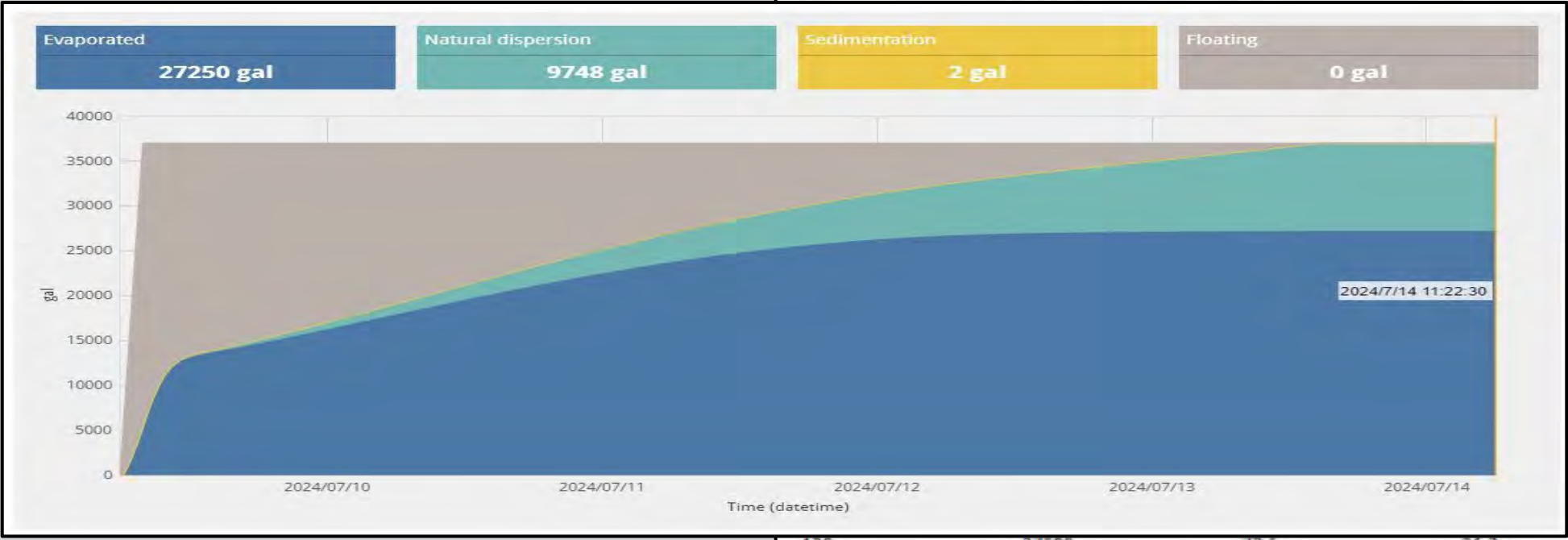


# Oil Weathering

<b>Oil Name:</b> DIESEL FUEL OIL (ALASKA)	<b>Water Temp:</b> 55 °F
<b>API:</b> 38.9	<b>Total Amount of Oil Released:</b> 37000 gal
<b>Wind Speed:</b> Constant 5 knots	<b>Spill Rate:</b> 18500.00 gal/hour
<b>Pour Point:</b> -36 °C	<b>Spill Duration:</b> 2 hours
<b>Wave Height:</b> Computed from wind	

Time (hours)	Amount released (gal)	Evaporated (%)	Natural dispersion (%)	Sedimentation (%)	Floating (%)
1	18500	11.9	0	0	88
2	37000	15.5	0.1	0	84.5
3	37000	24.7	0.1	0	75.1
4	37000	30.8	0.2	0	69
5	37000	34	0.3	0	65.7
6	37000	35.6	0.4	0	64
9	37000	37.7	0.7	0	61.6



0	59.2
0	56.6
0	53.9
0	51.1
0	48.3
0	42.7
0	37.1
0	31.9
0	27
0	18.5
0	12.1
0	7.4
0	3.1
0	0
0	0
0	0

120      37000      73.6      26.3

# Diesel Behavior and Effects

- *Light refined products, such as diesel, typically have very high evaporation and dispersion rates and do not tend to create persistent slicks*
- *When spilled, the diesel spreads quickly into thin films often forming patches of rainbow and silver sheens.*
- *In quiescent conditions ( low wind/waves) sheens could persist for several days*
- *Diesel fuel oils can have a relatively high concentration of light aromatic compounds and tend to be more soluble and more toxic than heavier oils. These oils do not generally present an involved cleanup problem. However, they can result in an initial toxic shock to biota and can persist as a biological threat in low energy marine environments.*

# Trajectory Analysis

*BTEX concentrations in Bakken can vary between 1 - 5%. This means the source strength of the dissolved fraction can vary by a factor of 5 depending upon the oil chemistry. We assume that since most of the river system is covered by ice, the evaporative loss of BTEX has been reduced. We also assume that some oil would be trapped in pockets under the ice or within the ice.*

*The discharge rate of the Yellowstone River is about 7,000 cfs and will remain in this range for the next few days. The discharge rate of the Missouri is about 20,000 cfs. We would expect the concentration of BTEX in the water would dilute by a factor of 3 in the Missouri River. The river velocity will drop significantly when the Missouri reaches Lake Sakakawea. Any contaminated water will linger in the lake for a significant time but it will also dilute further.*



# Trajectory Analysis

*There are a wide variety of products that are known as “asphalt”. These analyses are assuming that this is a typical asphalt, such as paving asphalt.*

*Asphalt is usually more dense than fresh water at environmental conditions, but may float when hot. Past experience with hot asphalt spills indicate that hot asphalt that make it into the river is likely to form floating patties that rapidly cool and will sink, likely within 100 yards or so. As they sink, they can be transported downstream, perhaps as far as about 1 mile or so. Any asphalt that impacts the shorelines is likely to become stranded.*

# Atmospheric Plume Model



**Layer:** 1 unit - 840 cells - HF ALOHA - Genius Star City Pier

**Time:** January 28, 2024 2023 hours AST

**Chemical Name:** HYDROGEN FLUORIDE

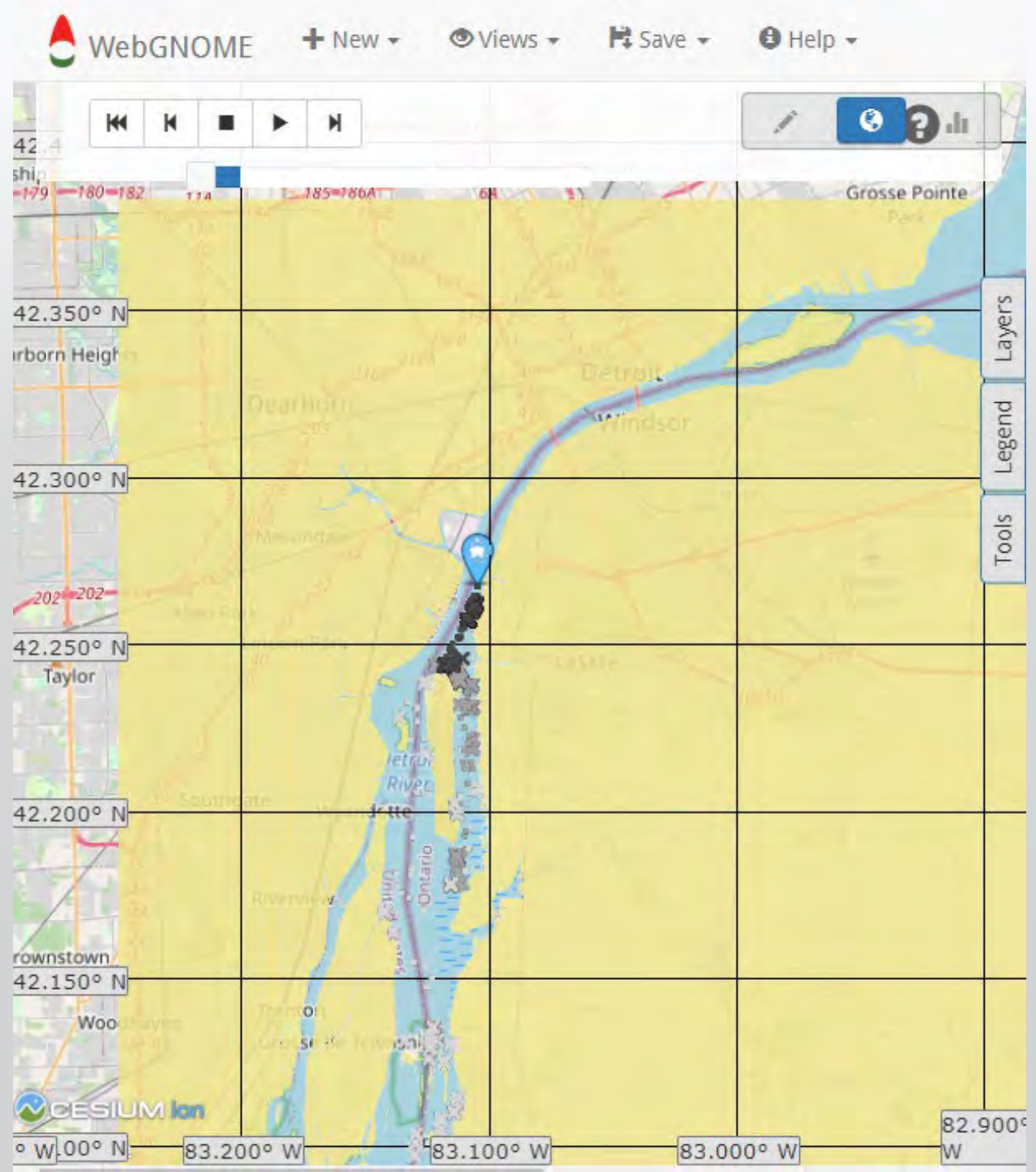
**Wind:** 16 miles/hour from 230° true at 10 meters

## THREAT ZONE

 Red	229 yards	44 ppm = AEGL-3 (60 min)
 Orange	314 yards	24 ppm = AEGL-2 (60 min)
 Yellow	1.1 miles	1 ppm = AEGL-1 (60 min)

Model: ALOHA Gaussian

# Modeling Oil Spills in Rivers





# Oil Spills into Rivers: Challenges to Modeling

**GNOME** can model surface movement of oil on large rivers but we are often data limited.

Several inputs needed for accurate modeling.

**WebGNOME**

*Typically this detailed information is not available on response time scales and we are more likely produce “**time of travel**” estimates than detailed maps showing stranding locations*



# Oil Spills into Rivers: Challenges to Modeling In Rivers

## Factors influencing Oil behavior in Rivers:

- **Currents & Flow Conditions:**
  - Velocity (kn or mph) and discharge (cfs)
- **Type of river** (braided, meandering, etc)
  - Topography of flood plain, extent of flooded areas
- **Depth & Water Levels**
- **Turbidity/Sediment load**
- **Water Temperature**
  - Cold Water Temp = Lower Oil Viscosity
- **Ice Conditions**
- **Tidal** ranges on rivers

*Typically only  
volume  
discharge is  
available*

*Is data  
(maps/imagery)  
current for  
dynamic rivers?*

*Lacking algorithms  
for oil/ice*

*Extent of tide up rivers  
often poorly*

*Interactions in rivers*

# Does it Float?

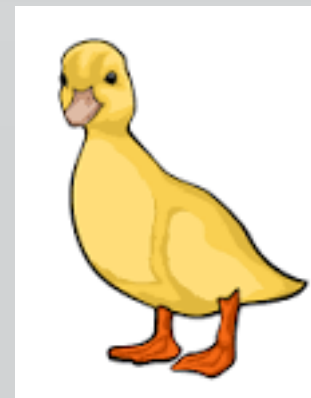
## Does oil float?

Yes, often...but.....

- Salt water is denser than fresh water.
- Oil can interact with sediment in the water column AND along shorelines – behaving differently
- *Future topic: heavy oils*

## The wisdom of Monty Python

### How Do You Know She's a Witch?





# Oil Interaction with Suspended Sediments

**Turbulence disperses surface oil in the form of small droplets**

Low concentrations of suspended sediments:

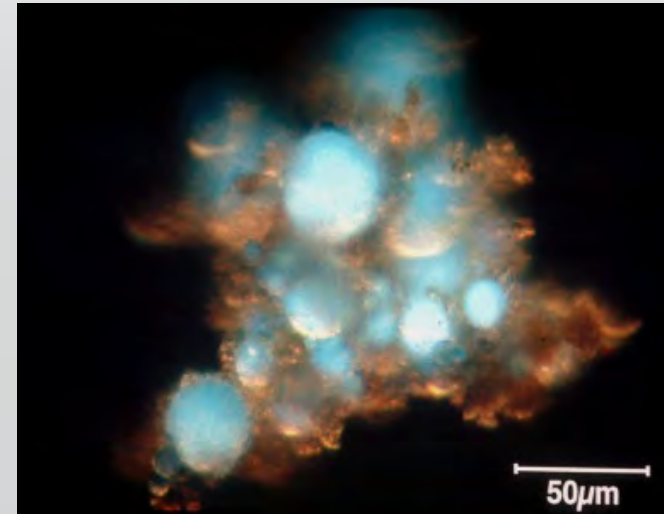
Oil droplets may resurface in lower turbulence areas

Moderate to high concentrations of suspended sediments:

Oil droplets may become coated with heavier solid particles, stay suspended and eventually sink

# Oil Interaction with Suspended Sediments

- OPAs will stay suspended under even moderate stream flows; however, they will settle out in slow, low turbulence areas.
  - Many Alaskan rivers have braids & channels with higher or lower velocity and turbulence,
- In large, silty rivers, such as the Copper River, this process can remove a large % of the oil from the surface.
- It happens naturally, so need to be aware of this pathway and fate.



Oil-mineral aggregates (OMA): oil droplets stabilized by fine mineral particles. Oil droplets (blue) with sediment attached.

# Lab Studies with ANS Crude & Yukon River Water

McCourt and Shier, 1989 IOSC

Oil and Suspended Sediments interaction can occur at TDS levels as low as 140 ppm total ;

The most important factors affecting the oil-sediment interaction process:

## **Primary Factors:**

1. mixing energy
2. temperature (affecting oil viscosity)

## **Secondary Factors**

1. oil volume
2. settling time



# Oil Interaction with River Shorelines

Oil on the surface of water can interact with **shoreline sediments**

Considerations:

- Oil/Sand or Oil/Silt mixtures are different from OMAs
- May float, sink or get stranded on shorelines

Flood Conditions can result in stranded oil outside of the 'normal' river banks or across mid-channel bars/islands

# Rivers of glacial origin = High Sediment



Photo Credits:  
Copper River, NPS,  
Matanauska River, USGS;  
Yukon/Tanana River, Fairbanks News Miner;



# Questions?

If you have any questions,  
let minnow!



**Liza Sanden**

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# DEPARTMENT OF TRANSPORTATION

**Department of Transportation  
Office of the Secretary**



**Emergency Support Function #1  
Transportation**

**Regional Response Team Support to National  
Contingency Plan and On Scene Coordinator**

# Emergency Support Function 1

- Monitor and report status of and damage to the transportation system and infrastructure
- Identify temporary alternative transportation solutions that can be implemented by others
- Perform activities conducted under the direct authority of DOT elements
- Coordinate the restoration and recovery of the transportation system and infrastructure
- Coordinate and support prevention, preparedness, response, recovery, and mitigation activities among transportation stakeholders





# Partners

- Department of Agriculture
  - US Forest Service



- Department of Commerce
  - NOAA



- Department of Defense
  - Transcom
  - US Army Corps of Engineers



- Department of Energy



- General Services Administration



- Department of Homeland Security

- CBP
- FEMA
- TSA
- USCG
- CISA



- Department of the Interior



- Department of Justice



- Department of State



- US Postal Service



# ESF-1: Regional Personnel

## Regional Emergency Transportation Coordinator (RETCO)

- Secretary's executive-level regional representative
- Ensure effective regional transportation emergency programs
- Collateral Duty

## Regional Emergency Transportation Representative (RETREP)

- Coordinate Federal, State, Local, and Private Sector disaster planning
- Develop a regional ESF-1 response team
- Conduct training and exercises
- Lead ESF-1 operations in the RRCC/JFO

## Regional Emergency Transportation Cadre (RET-C)

- Support ESF-1 mission in variety of locations
- Members of various Operating Administrations
- Volunteer

# National Transportation Response and Recovery Program

**DOT HQ, Washington, DC**  
**NTRRP Manager: Mike Callahan**  
**NTRRP Deputy Manager: Jorge Reyes**  
**Operations Planner: Joanne Soliman**  
**Operations Planner:**  
**Senior Analyst: Gregory Brown**

**Region AK: Anchorage**  
**RETCO: Aleta Best**  
**RETREP: Christopher Barry**

**Region 8: Denver**  
**RETCO: Peter Osborn**  
**RETREP: David Plance**

**Region 7: Kansas City**  
**RETCO: Mayela Sosa**  
**RETREP: Nicole Jarvis**

**Region 5: Chicago**  
**RETCO: Mayela Sosa**  
**RETREP: Jeff McSpaden**

**Region 1: Boston**  
**RETCO: Peter Butler**  
**RETREP: Ryan Jones**

**Region 10 Seattle**  
**RETCO: Aleta Best**  
**RETREP: David Lutes**

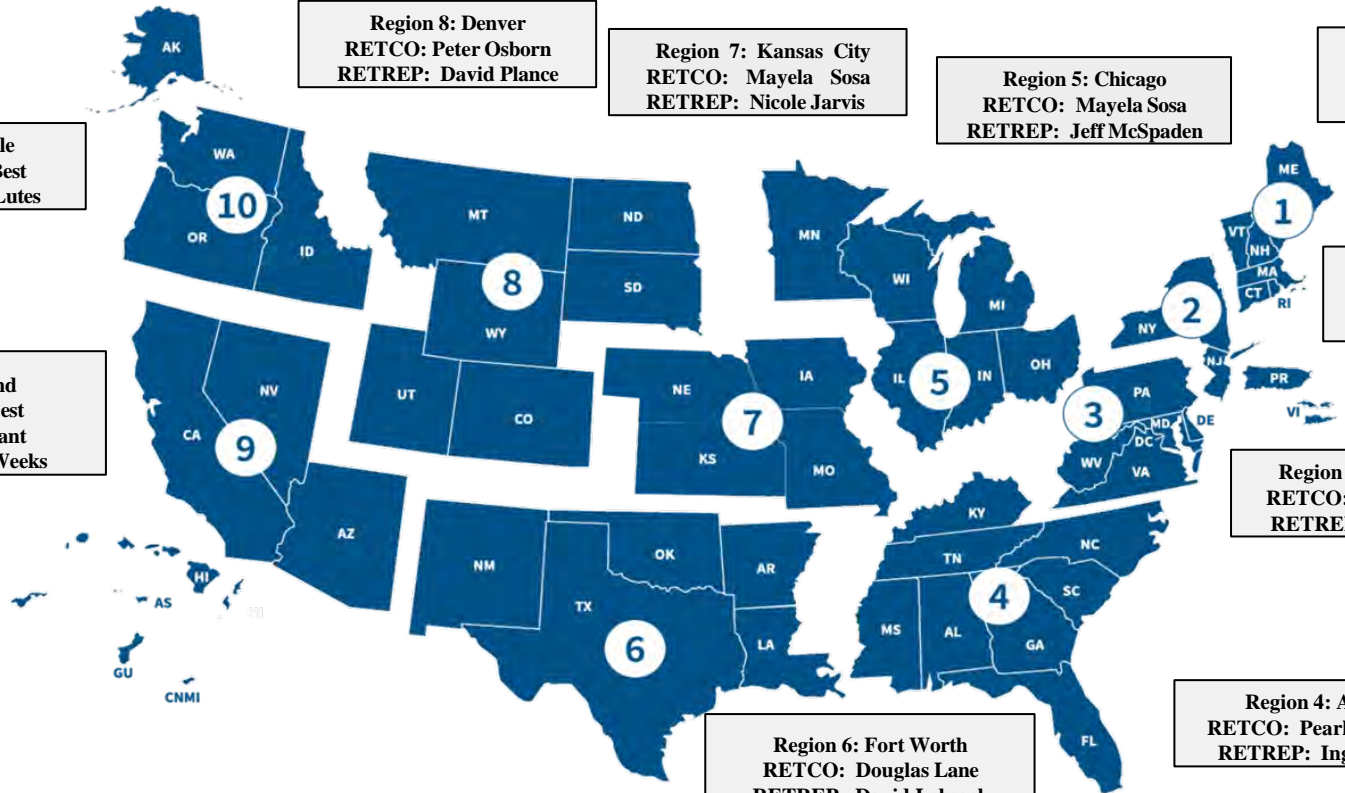
**Region 2: New York**  
**RETCO: Mary McCarthy**  
**RETREP: Jeremy McMaster**

**Region 9: Oakland**  
**RETCO: Aleta Best**  
**RETREP-N: Vacant**  
**RETREP-S: John Weeks**

**Region 3: Philadelphia**  
**RETCO: Pearlis Johnson**  
**RETREP: Lisa Brennan**

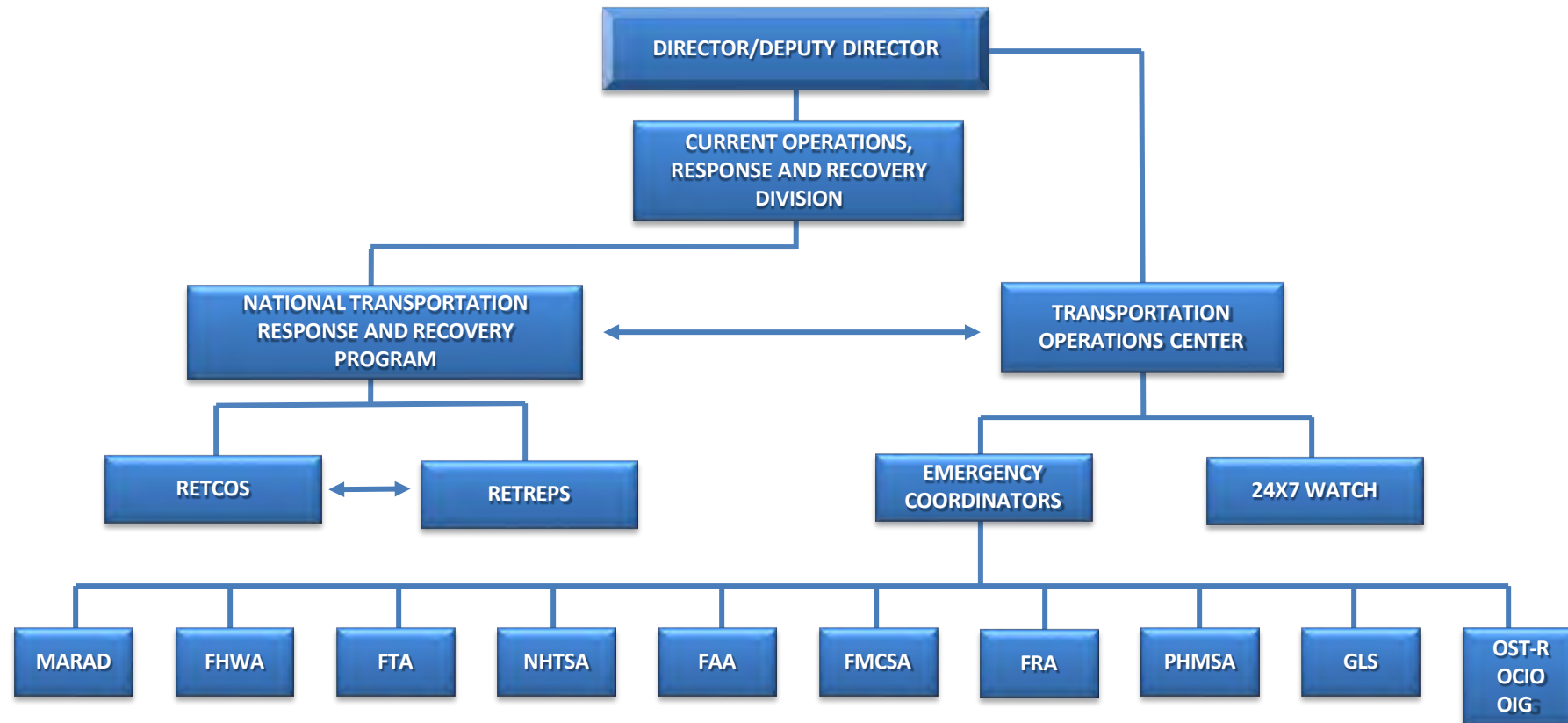
**Region 6: Fort Worth**  
**RETCO: Douglas Lane**  
**RETREP: David Lebsack**

**Region 4: Atlanta**  
**RETCO: Pearlis Johnson**  
**RETREP: Ingrid Allen**





# Operations Division Organization Chart



# TOC 2022



# USDOT Capabilities

## Technical Assistance

- NTRRP Personnel
- Air Navigation Services
- Evacuation Liaison Team
- Joint Damage Assessment Teams
- Emergency Relief Funding
- Routing Assistance Hotline

## Regulatory Relief

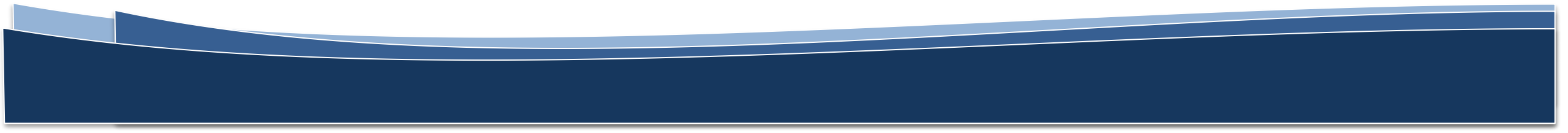
- Federal Motor Carrier Waivers
- HAZMAT Special Permits
- Oversize/Overweight Permits (facilitate)
- Toll Relief (facilitate)
- Temporary Flight Restrictions
- Railroad Inspection Relief
- Jones Act Waiver Concurrence

## Assets

- MARAD Ready Reserve Force
- Operation SafeStor
- Mobile Air Navigation Services assets
- Washington Flight Program



# ESF-1: Technical Assistance

- National Transportation Response and Recovery Program Personnel
    - Lead Federal ESF-1 Operations at the National and Regional Response Coordination Centers
    - Coordinate USDOT field response
  - Evacuation Liaison Team
    - Provide technical assistance to State and local jurisdictions regarding evacuations
  - Air Navigation Services, including Airspace Management
  - Emergency Relief Funding - FHWA and FTA
- 

# ESF-1: Assets and Capabilities

- Maritime Administration (MARAD)
  - Ready Reserve Force
  - Operation SafeStor: Storage of emergency response vehicles
- Federal Aviation Administration (FAA)
  - Washington Flight Program
  - Mobile Air Navigation Services assets

# USDOT Response Assets



**FAA Citation V (Hangar 6, DCA)**



**FAA Mobile Air Traffic Control Facility**



**MARAD Ready Reserve Force Ships**



# RECOVERY COORDINATION

Dependent on severity or complexity of the disaster:

- Small scale disasters (Nebraska Flooding)
  - RETCO/RETREP coordinate with local DOT office (FHWA, FTA, MARAD)
    - RETREP responsible for DOT wide coordination if necessary
    - Local POC attends meeting at JRFO, or another site as appropriate
      - Collateral Duty
- Large scale more complex disaster (Super Storm Sandy)
  - RETCO/RETREP assign full time POC
    - RETREP attends recovery planning and coordination meetings
      - Collateral Duty/Detail Assignment
      - Represents DOT to all RSFs and FEMA recovery leadership
- Catastrophic or extremely complex (Hurricane Maria)
  - NTRRP/S-60 coordinates with Modal Administrators
    - Full time dedicated Recovery Coordinator
      - Represents DOT to all RSFs and FEMA recovery leadership
      - Puerto Rico/USVI
- Alternative Recovery Coordinator Consideration
  - Volpe Center
  - FHWA Federal Lands Division

# Technology

- WebEOC
  - Web-enabled crisis information management system and provides secure real-time information sharing
- GIS:
  - Create, analyze, edit, and print maps to assist in identifying the status of the transportation system
- USDOT Emergency Website: [www.dot.gov/emergency](http://www.dot.gov/emergency)
  - One-stop shop for information related to transportation permits, waivers, and other regulations and authorities that are applicable during an emergency. Also contains links to ESF-1 partners websites.



[Home](#)

#### Contact Us

Office of Intelligence, Security and  
Emergency Response  
1200 New Jersey Ave, SE  
Washington, DC 20590  
United States

Email: [Emergency@dot.gov](mailto:Emergency@dot.gov)

If you are deaf, hard of hearing, or  
have a speech disability, please dial  
7-1-1 to access telecommunications  
relay services.

## DOT Emergency Preparedness, Response, and Recovery Information

During emergency situations, DOT will post information related to transportation permits, waivers, and other regulations and authorities that are applicable during an emergency. Under the [National Response Framework](#), DOT is the primary federal agency for the [Emergency Support Function - 1 - Transportation \(ESF-1\)](#).

### DOT Modal Information

#### Aviation

- [Federal Aviation Administration \(FAA\) Temporary Flight Restrictions](#)
- [FAA Flight Delay Information](#)
- [FAA Notice to Airmen \(NOTAM\)](#)

#### Maritime

- [Maritime Administration Ready Reserve Force \(RRF\)](#)
- [RRF Characteristics Pamphlet](#)
- [RRF Locations Map](#)

#### Pipelines and Hazmat

- [Pipelines and Hazardous Materials Administration \(PHMSA\) Approvals and Permits](#)

#### Public Transportation

- [Federal Transit Administration \(FTA\) Emergency Management](#)
- [Federal Transit Administration \(FTA\) Emergency Relief Manual](#)

#### Railroads

- [Federal Railroad Administration \(FRA\) Emergency Declarations](#)

#### Roadway and Bridges

- [Federal Highway Administration \(FHWA\) National Road Closure Information](#)
- [Federal Highway Administration \(FHWA\) Oversize/Overweight Load Permits](#)
- [Federal Highway Administration \(FHWA\) Emergency Relief Program](#)

#### Trucking and Motor Coaches

- [Federal Motor Carrier Safety Administration \(FMCSA\) Declarations, Waivers, Exemptions and Permits](#)



[Home](#) / [Emergency](#)[Emergency](#)[COVID-19 Archives](#)[Archives 2023](#)[Archives 2022](#)[Archives 2021](#)[Archives 2020](#)[Archives 2019](#)[Archives 2018](#)[Archives 2017](#)[General Emergency FAQs](#)

#### Related Links

- [Subscribe to Email Updates](#)

#### Contact Us

For information on FMCSA  
Emergency Declarations  
Federal Motor Carrier Safety  
Administration  
1200 New Jersey Avenue SE  
Washington, DC 20590  
United States

**Email:**[FMCSADeclaration@dot.gov](mailto:FMCSADeclaration@dot.gov)**Phone:** [877-831-2250](tel:877-831-2250)

If you are deaf, hard of  
hearing, or have a speech  
disability, please dial 7-1-1 to

## Emergency Declarations, Waivers, Exemptions and Permits

### [Emergency Declarations Clarified](#)

HOS exemption under State or FMCSA emergency declaration extends to interstate transportation - if providing direct assistance

### Overview

The Federal Motor Carrier Safety Administration (FMCSA) is coordinating with the following states that have Declared Emergency Declarations. We recommend you check each State's Web site and search for "Issued Emergency Declarations" if you are interested in more details. For those carriers or drivers interested in providing services or who need to understand FMCSA regulations, the following applies.

### Category

- [Declarations by FMCSA](#)
- [Federal Emergency Declarations by FMCSA Service Centers](#)
- [Federal Notice of Enforcement Discretion Determination](#)
- [Canadian Emergency Declarations](#)
- [State Emergency Declarations by State](#)
- [Emergency Declaration Information](#)

### Federal Emergency Declarations by FMCSA

There are no active Emergency Declarations at this time.

### Federal Emergency Declarations by FMCSA Service Centers

There are no active Emergency Declarations at this time.

### Federal Notice of Enforcement Discretion Determination

There are no active Emergency Declarations at this time.



## Trucking and Motor Coaches

- [Federal Motor Carrier Safety Administration \(FMCSA\) Declarations, Waivers, Exemptions and Permits](#)

## ESF-1 Federal Partner Agency Information

- [Department of Agriculture](#)
- [Department of Commerce](#)
  - [National Oceanic and Atmospheric Administration](#)
- [Department of Defense](#)
  - [United States Army Corps of Engineers](#)
- [Department of Energy](#)
  - [DOE Energy Waiver Library](#)
- [Department of Homeland Security](#)
  - [US Customs and Border Protection](#)
  - [Federal Emergency Management Agency](#)
  - [Transportation Security Administration](#)
  - [United States Coast Guard](#)
  - [Office of Infrastructure Protection](#)
- [Department of the Interior](#)
- [Department of Justice](#)
- [Department of State](#)
- [General Services Administration](#)
- [National Interagency Fire Center](#)
- [United States Forest Service](#)
- [United States Postal Service](#)

### Stay Updated

[Sign up for email updates](#) about DOT Emergency Preparedness, Response, and Recovery Information.

## Related Links

- [USDOT Office of Intelligence, Security, and Emergency Response](#)
- [Ready.gov: Plan, Prepare, and Stay Informed](#)

## Related Documents

- [USDOT Recovery Resource Guide](#)
- [Maritime Emergency Response Guide](#)

## Transportation Emergency Response Factsheets (TERF)

- [TERF 1: National Response Program](#)



24 Hour Contact: 202-366-1863

[toc-01@dot.gov](mailto:toc-01@dot.gov)

For Emergency Related Information Visit:

[www.transportation.gov/emergency](http://www.transportation.gov/emergency)



# PUBLIC COMMENT



## *Alaska Regional Response Team*



# NWS SPOT Forecasts

## [weather.gov/spot/request](https://weather.gov/spot/request)

- ***First Response – Initial Forecast 24 / 7 / 365***
- ***Great for Exercises!***
  - *Please Notify NWS Forecast Office Prior to Exercise to prepare staff*

### Tips and Tricks:

- 1) Accurate Lat/Long for 3 X 3 Km square
- 2) Ask for *only* weather elements that you *need*.
- 3) Remarks:
  - Aviation Operations? Departing from where?
  - Marine transit to the incident? From what Port?
- 4) **Anyone on scene? WEATHER OBSERVATIONS needed**
- 5) **Daily observations to “calibrate” our forecasts**
- 6) **FEEDBACK is welcome!**

[Joel.Curtis@noaa.gov](mailto:Joel.Curtis@noaa.gov)

# NEXT MEETINGS

- **September 12, 2024**
- **March 20, 2025**
- **September 11, 2025**
- **March 5, 2026**
- **September 10, 2026**





# REVIEW OF PARKING LOT ISSUES & CLOSING REMARKS



## *Alaska Regional Response Team*





# ALASKA REGIONAL RESPONSE TEAM

## MARCH 5, 2019

# SAFETY & LOGISTICS

- Safety Brief
- Logistics:
  - Restrooms
  - Refreshments
  - Parking Validation
  - Public Comment
  - Questions/Answers
  - Remote Participants
- Safety or Logistics Questions?



# AGENDA

Time	Topic	Speaker
8:00 a.m.	Arrival and Sign-In	
8:30	Welcome and Safety Brief	
8:40	Introductions (10 min)	Calvin Terada (USEPA), Mark Everett (USCG), Denise Koch (ADEC), ARRT Members and Attendees
8:50	Review of actions since last meeting (10 min)	Mark Everett and Marc Randolph (USCG)
	<b>ARRT Committee &amp; Work Group Reports (45 min)</b>	
9:00	Science and Technology Committee Report (10 min)	Catherine Berg (NOAA)
9:10	Cultural Resources Protection Committee Report (5 min)	Dr. Philip Johnson (USDOJ)
9:15	Wildlife Protection Committee Report (10 min)	Dr. Philip Johnson (USDOJ)
9:25	Food Safety Task Force Report (5 min)	Doug Helton (NOAA)
9:30	Statewide Planning Committee Update, (15 min) Regional Contingency Plan, Version 2 Update	Craig Ziolkowski (ADEC) Mary Goolie (EPA) Marc Randolph (USCG)
9:45	National Response Team (NRT) Update (15 min)	Roger Fernandez (EPA/NRT)

# AGENDA

10:00-10:20	Break (20 min)	
	<b>Cook Inlet 2018 Earthquake – Lessons Learned</b>	
10:20	Federal Emergency Management Agency & Alaska Department of Homeland Security and Emergency Management	Tim Manner (FEMA) Bryan Fisher (DHS&EM)
11:20-11:30	Break (20 min)	
11:30	Alaska DHS&EM - Tools and Support to Alaska Communities and Alaska Tribes (15 Min)	Bryan Fisher (DHS&EM)
12:00-1:30 (90 min)	Lunch (not provided)	
1:30	Earthquake and Tsunami Hazards & Risks (20 min)	Ms. Summer Ohlendorf, US Tsunami Warning Center
1:50	<b>OSC Reports on Recent Activities &amp; Area Committees (45 min)</b>	State, Coast Guard, and EPA OSC's
2:35	Shuyak Strait Response USCG After Action Report (15 min)	USCG Sector Anchorage, Incident Management Division
2:50	Break (15 min)	
3:05	Discussion: Can the ARRT co-exist during a National Response Framework/Stafford Act Disaster Response?	Robert Forgit (FEMA), ARRT members
4:05	Break (10 min)	
4:15	Public Comment	
	Closing Remarks & Discussion of Next Meeting	Co-Chairs and Members
5:00 pm	Adjourn	

# INTRODUCTIONS

- Please state your name, community or organization, and position, as applicable
  - Around the room
  - Online/On the phone
- On-Scene Coordinator introductions and Opening Comments



# Since Last Meeting (30 Oct 2018 - Anchorage)



- 5-week partial federal furlough (caused delay in meeting)
- Statewide Planning Committee
- Resolved IWI policy-making
- 30 November Earthquake
- New Governor, ADEC Commissioner, & SPAR Director
- Food Safety Policy report

## National Response Team

- NRT member meetings
- NRT NEC ESA work group

## Relevant Agreements

- CANUSDIX19 preps
- Russia-US JCP meeting/exercises



# ALASKA REGIONAL RESPONSE TEAM COMMITTEE & TASK FORCE REPORTS



# SCIENCE & TECHNOLOGY COMMITTEE

Report for the ARRT Meeting  
5 Mar 2019

Rick Bernhardt, ADEC  
Timothy Mayers, EPA  
Matt Odum, USCG  
Angela Matz, USFWS  
Catherine Berg, NOAA  
(Chair)



# REPORT TOPICS

- **Sea Grant Workshop:** *Setting Priorities for Health, Social, and Economic Disruptions from Spills in Alaska—Learning from the Past, Preparing for the Future*
- **Marine Mammal Response Working Group**

# SEA GRANT WORKSHOP, FEB 20 - 21

- **Sea Grant Oil Spill Science Outreach Program**
  - National project taking a multi-region approach to improving community preparedness for oil spills
  - Collaboration of the Gulf Research Program of the National Academies of Sciences, Engineering & Medicine; Gulf of Mexico Research Initiative; and Sea Grant programs.
- Workshop Locations:
  - Gulf of Mexico region: Houma, LA and Mobile, AL
  - Alaska region: Anchorage, AK
  - West Coast region: Santa Barbara, CA
  - Mid-Atlantic region: Norfolk, VA

# SEA GRANT WORKSHOP

*Setting Priorities for Health, Social, and Economic  
Disruptions from Spills in Alaska:  
Learning from the Past, Preparing for the Future*

## **Purpose:**

- Raise awareness of the topical areas related to spills
- Listen to those directly affected by spills
- Identify regional level needs and priorities for improving preparedness
- Promote networking among groups who may not have previously interacted
- Identify resources to address gaps



# Marine Oil Spills: Array of Possible Human Effects\*

\* Spill-specific conditions determine occurrence, type, scale of effects

Figure by K. Nicholls, S. Picou, S. McCord (University of South Alabama); A. H. Walker (SEA Consulting Group); and D. Gill (Oklahoma State University), L.A. Olsen, Gulf Research Program Workshop Proceedings: Protecting Communities from the Impacts of Marine Oil Spills (2017). Modeled after: J. Beyer et al., Marine Pollution Bulletin 110(2016) 28-51

- Increased vulnerability or effects due to:
- Natural or other technological disasters
  - Economic recession
  - General life stressors (health, family, job)

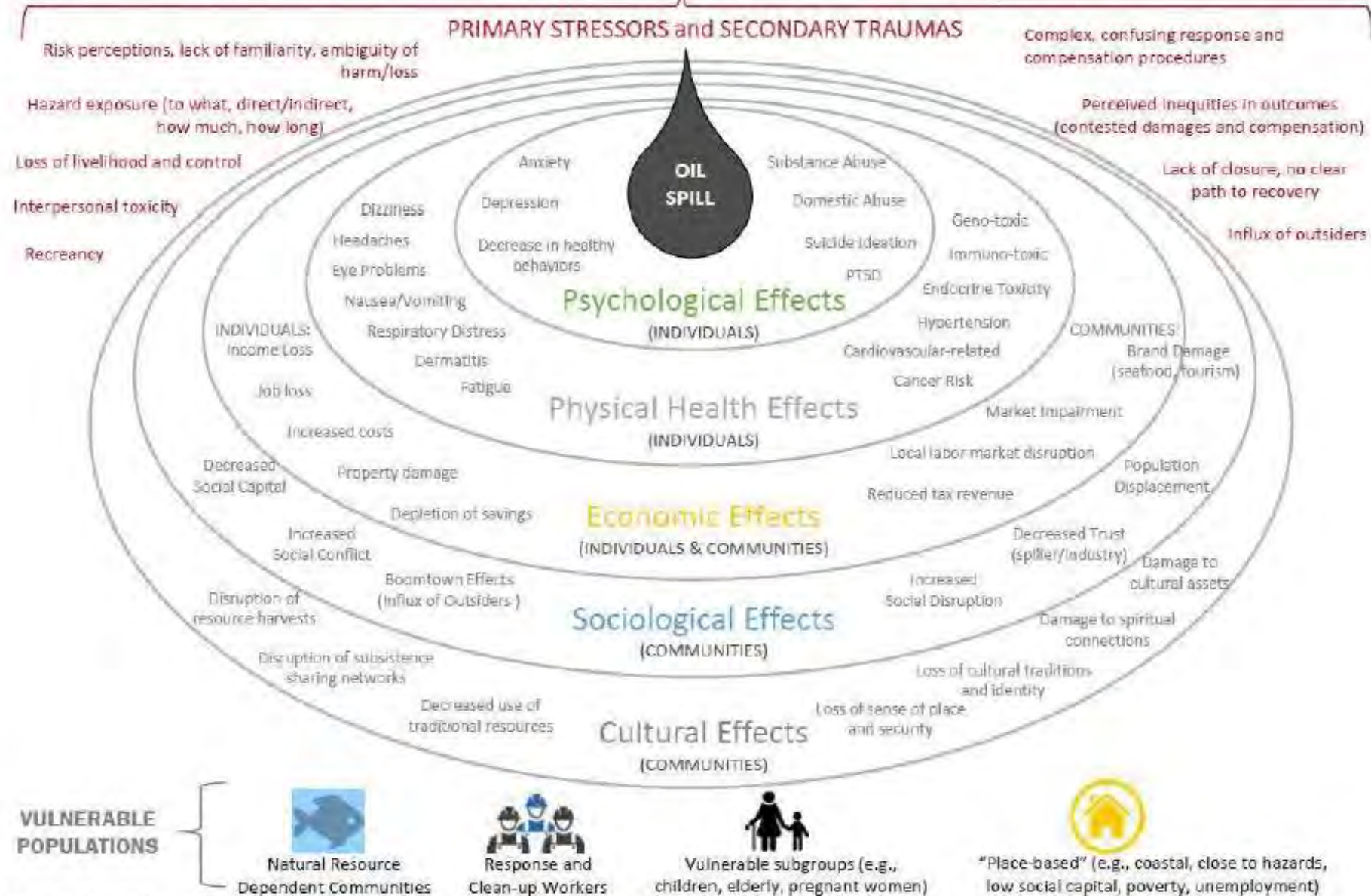


Figure development based on discussion at a 2017 workshop supported by the Gulf Research Program and a review of the literature

# SEA GRANT WORKSHOP

## Potential Outcomes/Deliverables

- Regional and inter-regional research and outreach priorities.
- Protocols that could be included in existing response and regulatory frameworks.
- Pilot project ideas that address local, state/regional issues.
- Increase understanding among participants of public health, social disruption, economic impacts.
- List of resources available to improve preparedness and minimize impacts, and assist communities with coping.
- Ideas for research, outreach, and pilot projects to address identified gaps and opportunities.
- Five workshop reports and a synthesized summary document customized for and available to target audiences and public.

# SEA GRANT WORKSHOP

Reports and Links:

- *Oil Spill Science: Improving Preparedness for Marine Oil Spills to Minimize Health, Social, and Economic Disruptions* **by Martha Sibley and Christine Hale**
  - [https://gulfseagrant.org/wp-content/uploads/2018/11/Oil-Spill-Science-Pre-Workshop-Summary.FINAL\\_-1.pdf](https://gulfseagrant.org/wp-content/uploads/2018/11/Oil-Spill-Science-Pre-Workshop-Summary.FINAL_-1.pdf)
- **National Academies and Sea Grant collaborative workshop series**
  - <https://gulfseagrant.org/oilspilloutreach/collaborative-workshop-series/>



# MARINE MAMMAL RESPONSE WORKING GROUP

- Arctic domain (mostly)
- Informal working group of federal and state agencies, industry, NGOs, and private partners.
- Share information and needs regarding marine mammal oil spill response.
- Issue sharing and problem solving.
- Shared and Developed:
  - Response plans, protocols, equipment, training.
- Current issues:
  - WO/PSOs: Wildlife Observers/Protected Species Observers
  - UAS use during spill response



# CULTURAL RESOURCES PROTECTION COMMITTEE REPORT

Dr. Philip Johnson  
U.S. Department of the Interior

# HISTORIC PROPERTIES SPECIALIST AND CULTURAL RESOURCE TRAINING

Organized by:

- US Department of the Interior (DOI),
- National Park Service (NPS) and
- Alaska State Historic Preservation Officer (SHPO)

Target date: late **October 2019** (Rescheduled due to federal government shutdown)

## Need for HISTORIC PROPERTIES SPECIALIST (HPS) training

- HPSs advise the Federal On-Scene Coordinator on how to minimize damage to historic properties during a response
- No training in Alaska since post-*Exxon Valdez* oil spill, nearly 30 years ago
- No HPSs currently available in Alaska who received that HPS training



# HISTORIC PROPERTIES SPECIALIST AND CULTURAL RESOURCE TRAINING

## Target audience

Potential HPSs could come from:

- Federal agencies (e.g., NPS, Bureau of Land Management, Bureau of Indian Affairs, U.S. Fish and Wildlife Service (USFWS), U.S. Forest Service (USFS), Department of Defense)
- Alaska tribes and native organizations
- Contractors
- Graduate school programs

# HISTORIC PROPERTIES SPECIALIST AND CULTURAL RESOURCE TRAINING

- NPS-led curriculum development
- National workshop in March 2019
  - DOI Regional Environmental Officer (REO) for Alaska to participate. Provide field perspective and Alaska perspective
- **Potential Topics**
  - HPSs and spill response
  - Incident Command System (ICS)
  - Section 106 of the National Historic Preservation Act requirements and Programmatic Agreement
  - Resource protection, consultation, documentation, etc.
  - Local issues, examples
  - Exercises

# HISTORIC PROPERTIES SPECIALIST AND CULTURAL RESOURCE TRAINING

## Alaska State Historic Preservation Officer (SHPO) role

- Help plan training
- Present at the training
- Can maintain a list of those who receive HPS training
- Provide proof of training, but not a “certification”

## Federal On-Scene Coordinator (FOOSC) role

- Provide perspectives and expectations

## Alaska Native organizations and representatives role

- Peer review of course content
- Speak at training
- Provide students





# WILDLIFE PROTECTION COMMITTEE REPORT

Dr. Philip Johnson  
U.S. Department of the Interior

# WILDLIFE PROTECTION COMMITTEE REPORT

- Committee was reconvened in 2018 to revise the Wildlife Protection Guidelines for Alaska (former Annex G)
- Committee is chaired by DOI; Other members include: USFWS, NMFS, ADF&G, ADEC, NOAA, USFS, USCG, EPA, Cook Inlet RCAC, Defenders of Wildlife, Alaska Clean Seas, Alyeska Pipeline Service Corporation, International Bird Rescue, Aleutian Pribilof Islands Association, and Chugach Regional Resources Commission
- Committee met six times in 2018
- Next meeting in March 2019

# WILDLIFE PROTECTION GUIDELINES UPDATE

## Goals for Revising Guidelines

- Make more responder-friendly
- More checklists, flow charts, job aids
- Streamline content where possible
  - Organize according to the Area Contingency Plan (ACP) table of contents
  - Reference recent and more specific guidelines (e.g., NMFS Arctic Marine Mammal Disaster Response Guidelines, USFWS Polar Bear Response Plan)



# WILDLIFE PROTECTION GUIDELINES UPDATE

## Goals, continued

- Provide links to response tools like NOAA's Arctic Environmental Response Management Application (Arctic ERMA)
- Review other regional and area contingency plans for additional or updated content
- Add more information on the Natural Resource Damage Assessment process
- Add more information on subsistence considerations, recognizing that harvest and consumption issues should be addressed in a Food Safety policy, not in these guidelines

# WILDLIFE PROTECTION GUIDELINES UPDATE

## Actions

- ADEC led effort to cut/paste existing guidelines into the ACP format
- Excellent work by Craig Ziolkowski!
  - Cut/paste version may serve as an interim update
- Not finalized yet - would require ARRT approval
  - Work groups formed to subdivide the workload
  - Federal government shutdown hampered work group progress



# FOOD SAFETY WORK GROUP REPORT

Doug Helton  
U.S. Department of Commerce, National Oceanic and Atmospheric Administration



# FOOD SAFETY WORKGROUP UPDATE

Doug Helton, DOC/NOAA  
Philip Johnson, DOI  
Gary Sonnenberg, USDA/USFS  
Joe Sarcone, DHHS/ATSDR  
Rick Bernhardt, ADEC

Oil Spill Recovery Institute  
Contractor: Nuka Research  
and Planning Group, LLC

## Ensuring Food Safety Following an Oil Spill in Alaska: Regulatory Authorities and Responsibilities

By Sierra Fletcher and Alyssa Hall, Nuka Research and Planning Group, LLC



December 31, 2018



# ENSURING FOOD SAFETY FOLLOWING AN OIL SPILL IN ALASKA: REGULATORY AUTHORITIES AND RESPONSIBILITIES

Report Completed December  
2018.

Available online:  
[HTTP://WWW.PWS-OSRI.ORG/](http://www.pws-osri.org/)

**Ensuring Food Safety Following an Oil Spill  
in Alaska:**

**Regulatory Authorities and Responsibilities**

By Sierra Fletcher and Alyssa Hall, Nuka Research and Planning Group, LLC



December 31, 2018





# PURPOSE

- Advance the ARRT's efforts to develop policy and guidance for OSCs regarding food safety.
- Identify statutory and regulatory authorities regarding closure/opening of commercial, recreational, personal use, and subsistence resources in Alaska
- Produce a concise report on existing policy and guidance related to food safety in the event of an oil spill that affects Alaskan lands and waters.





# REPORT OUTLINE

1. Introduction
2. Background on Food Resources and Management
3. Spill Response Context
4. Overview of Agency Responsibilities in Protecting Food Safety After a Spill
5. Case Studies
6. Disposal of Contaminated Foods
7. Discussion
8. References
  - Appendix A – State of Alaska Zero Tolerance Policy
  - Appendix B – Descriptions of State Agency Food Safety Responsibilities
  - Appendix C – Descriptions of Federal Agency Food Safety Responsibilities
  - Appendix D – Example Notices of Closures and Advisories and Associated Communications



## Key Authorities Related to Food Safety Closures/Advisories

### SPILLS IN ANY LOCATION:

- Unified Command or OSCs could limit access to any area for public safety purposes
  - ADEC, DHSS may issue advisories for subsistence use
    - ADEC oversees the safety of foods processed or sold in Alaska
  - ADF&G may issue advisory or closure related to both commercial and non-commercial hunting and fishing resources under its management [16.05.060]
    - NOAA Fisheries or USFWS may issue advisories or closures related to subsistence harvests of co-managed marine mammals and migratory birds

**If spill impacts agricultural lands:**  
 USDA and FDA would inspect meat/eggs intended for interstate commercial sale (regardless of source of contamination)

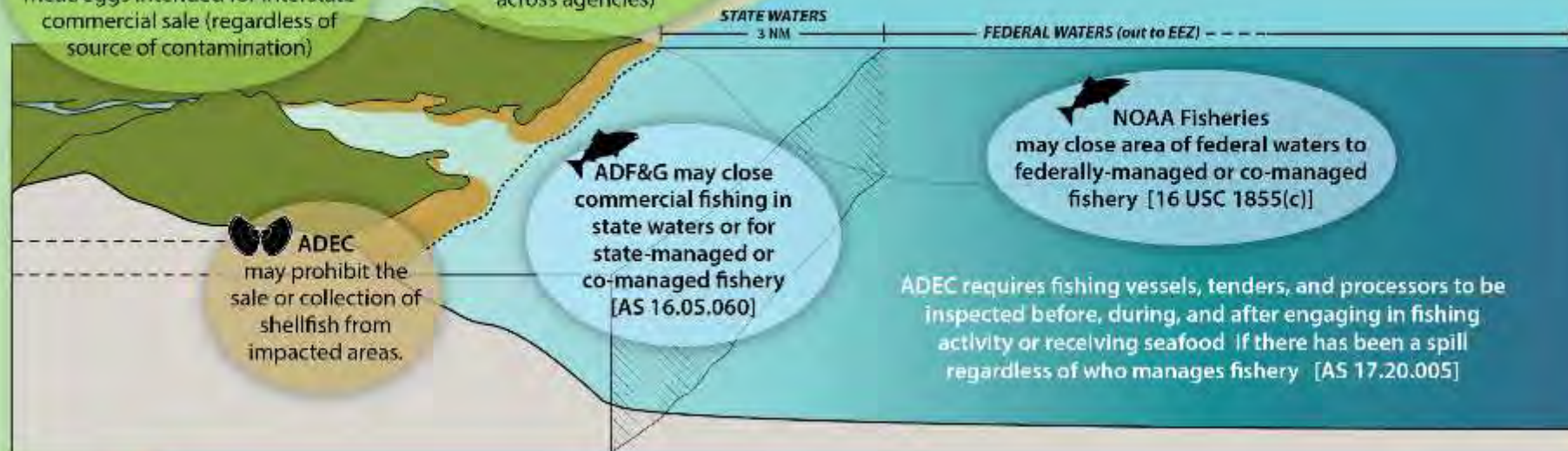
**If spill impacts state/federal lands:**  
 Land-managing agency (state/federal) may support sampling, participate in decision regarding need for closure/advisory, and/or disseminate information (varies somewhat across agencies)

**ADEC**  
 may prohibit the sale or collection of shellfish from impacted areas.

**ADF&G** may close commercial fishing in state waters or for state-managed or co-managed fishery [AS 16.05.060]

**NOAA Fisheries**  
 may close area of federal waters to federally-managed or co-managed fishery [16 USC 1855(c)]

ADEC requires fishing vessels, tenders, and processors to be inspected before, during, and after engaging in fishing activity or receiving seafood if there has been a spill regardless of who manages fishery [AS 17.20.005]

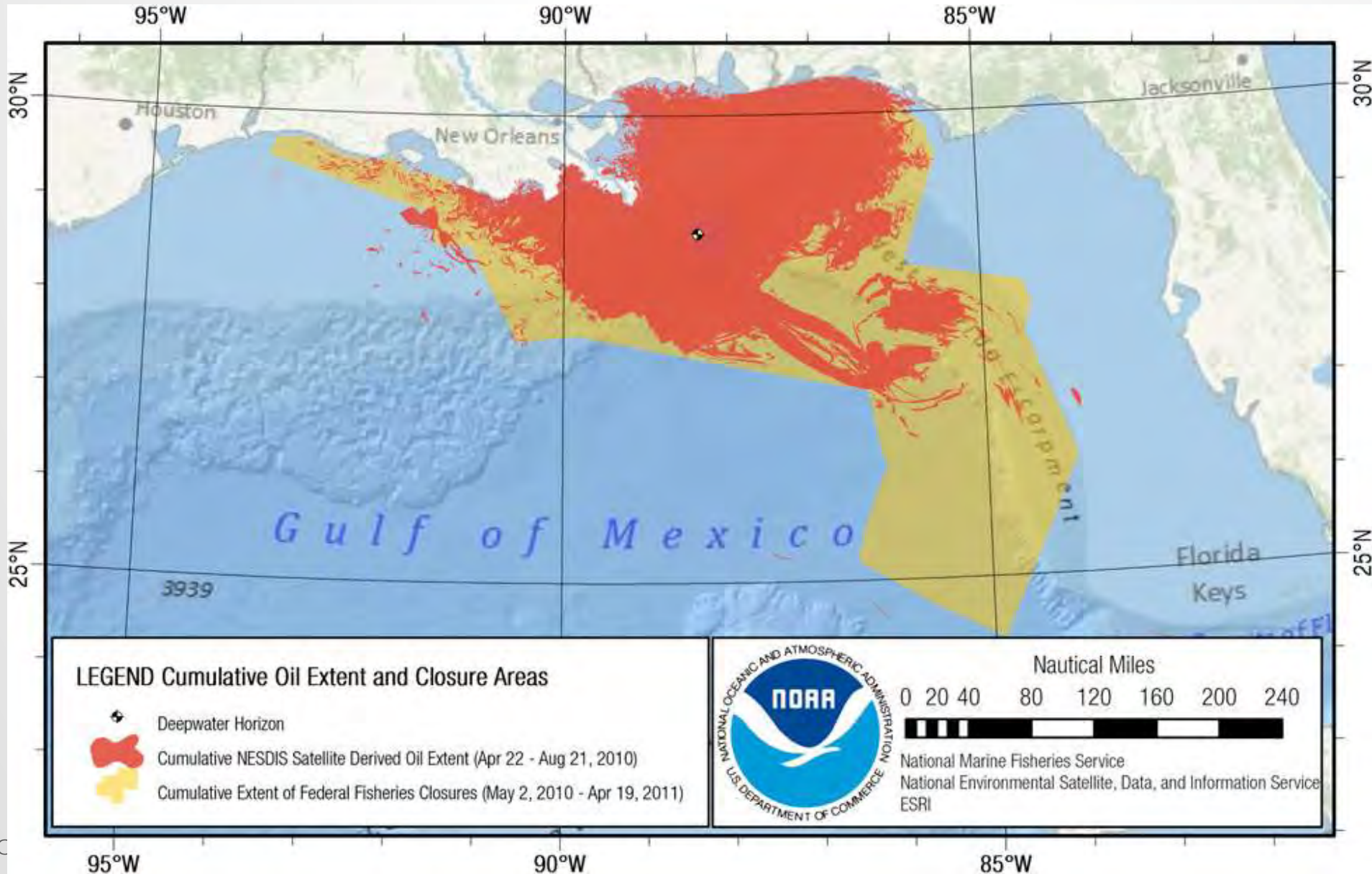




## NEXT STEPS (DISCUSSION)

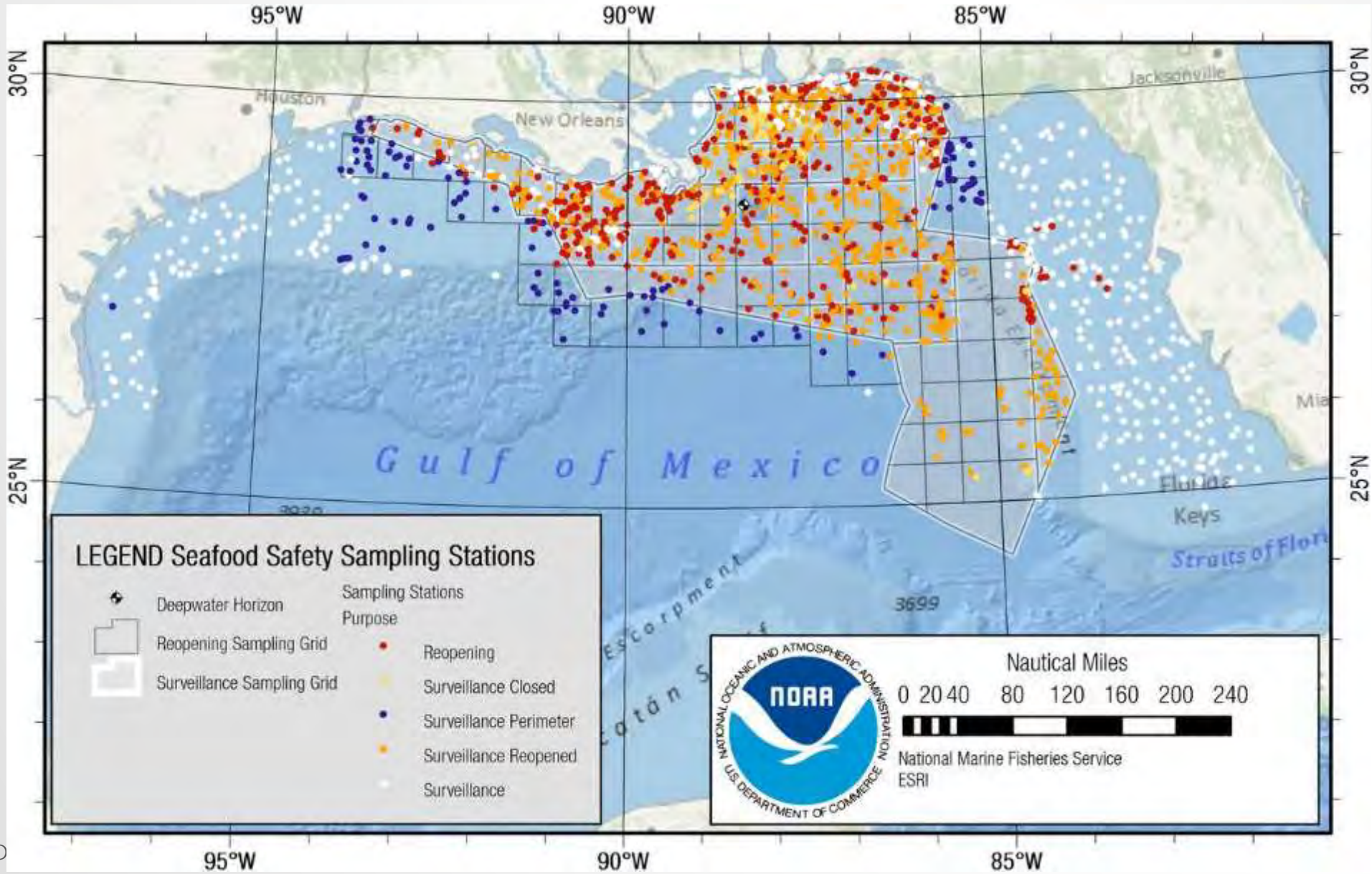
- Exercise communications and authorities regarding food safety for terrestrial and freshwater spills.
- Develop best management practices and examples for risk communications.
- Address subsistence food safety in new standing Area Committees.
- Review seafood information/protocols developed following Deepwater Horizon spill for use in Alaska.

















# ALASKA STATEWIDE PLANNING COMMITTEE BRIEFING

# STATEWIDE PLANNING COMMITTEE

## **Primary Objectives:**

The Statewide planning committee manages the Regional Contingency Plan and provides coordination and logistics for the three annual ARRT meetings.

The Committee maintains awareness of National Response System related issues across the State of Alaska and translates issues into policy recommendations and/or advises Area Committee planners.



# STATEWIDE PLANNING COMMITTEE

**Permanent Members are ARRT Coordinators from:**

ADEC

EPA

USCG

Ad-hoc members considered on a case-by-case basis:

Area Committee Reps

Subject matter experts (topic dependent)

Other agency representatives, as appropriate

# STATEWIDE PLANNING COMMITTEE UPDATES

## **ARRT Approved Process Improvements & Best Practices:**

Review of the AK Coastal ACPs via USCG National Review Panel Guidelines- identified best practices to agency planners

## **ARRT Annual Report to NRT:**

Submitted to National Response Team Executive Director  
February 28, 2019

## **Special Projects:**

ARRT Leadership reviewing update process of ACPs and RCP

# STATEWIDE PLANNING COMMITTEE UPDATES

## Area Committee Meetings

Held:

- AWA & AK Inland in OCT 2018
- PWS DEC 2018

Upcoming:

- AWA & AK Inland in MAY 15, 2019
- PWS May 2019
- SE AK OCT 2019



# STATEWIDE PLANNING COMMITTEE UPDATES

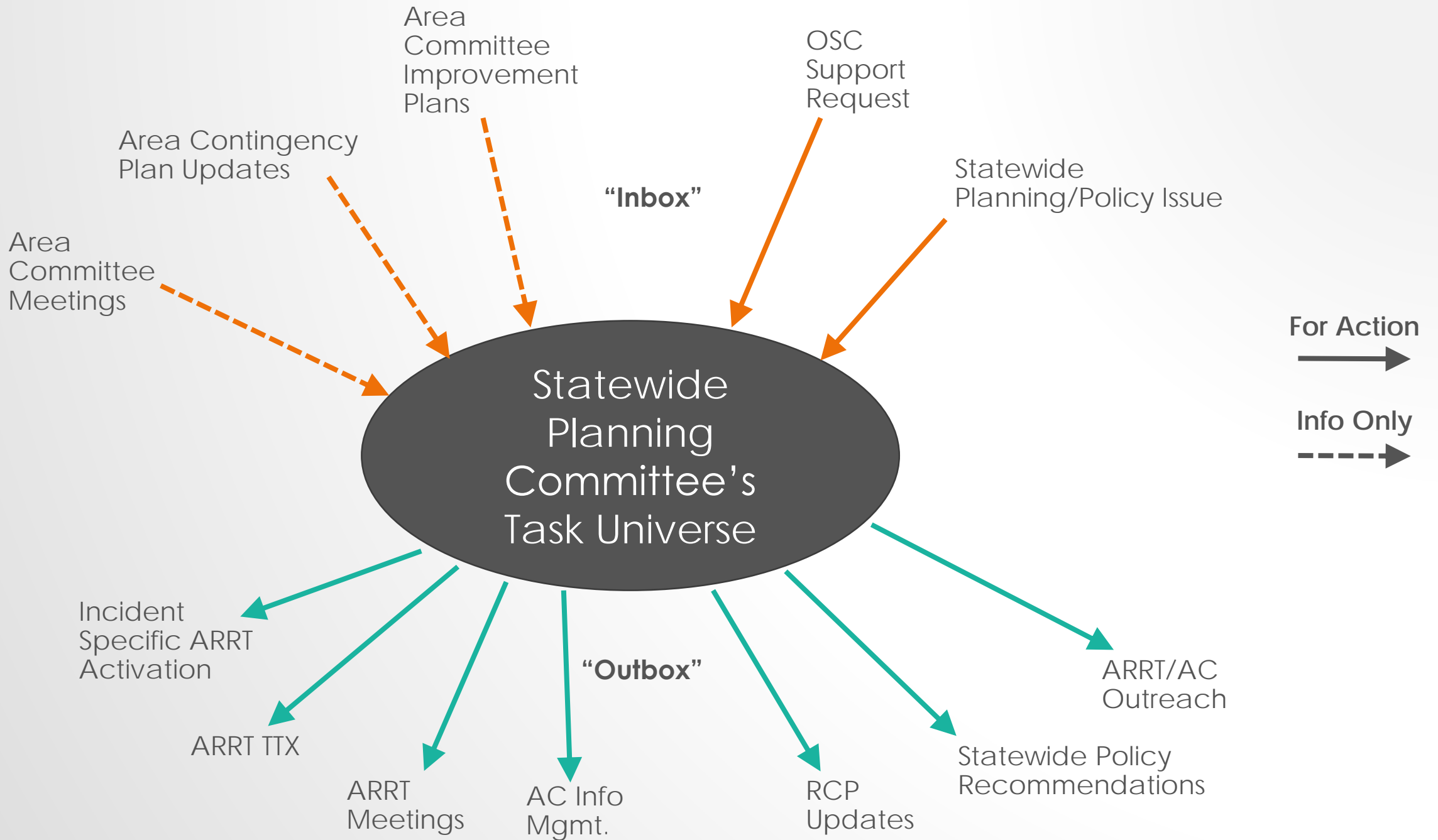
## ACP Updates:

- AWA subcommittees met DEC 2018, ACP update in process
- AK Inland currently under technical edit
- SE AK in process of forming area committee
- PWS admin subcommittee is in process of forming
  - Initial focus is on updating emergency contact information

# STATEWIDE PLANNING UPDATES

## Regional Contingency Plan:

- Currently under technical review
- Developing/Revising plan content for the following sections:
  - Develop: Appendix VI, Plan Update Process
  - Develop: Part 3, C. Other Non-mechanical response technologies. Insert placeholder language referring to Intentional Wellhead Ignition and Surface Washing Agents decision making to OSCs, and addressed by Area Committees in ACP. (brief statement, refer to EPA legal letter)
  - Update: Part 4, MOU/MOAs – Update list of MOU/MOAs to remove old/defunct ones. *Identify & prioritize those to recommend for revision.*
  - Update: Appendix 1. Abbreviations and Definitions.
  - NEW: Part 1, I. ARRT, 4. ARRT Standing Committees. Develop descriptions
  - NEW: Appendix VIII. RCP & ACP Style Guide







QUESTIONS?

ARRT website  
<http://alaskarrt.org>





# NATIONAL RESPONSE TEAM UPDATE

Roger Fernandez  
U.S. Environmental Protection Agency/ National Response Team

Upcoming...

BREAK





# PRINCE WILLIAM SOUND AREA REPORT

CDR Michael R. Franklin, FOSC

# FOSC PRINCE WILLIAM SOUND (PWS) NOVEMBER 2018 – MARCH 2019 INCIDENT SUMMARY

- Total Incidents: 8 incidents
- Amount Discharged: 6 gallons
- Total Potential: 6500+ gallons
- OSLTF Supported: 00 incidents
- CERCLA Supported: 00 incidents

# SIGNIFICANT PWS RESPONSES

- 03OCT2018: F/V GAMBLER Response
  - 40' Commercial Fishing Vessel Lost Power and was beached near the White River, East of Cape Yakataga.
  - Vessel was secured to shore with minimal hull damage.
  - AMR responded rapidly to remove pollutants and plug tanks. AMR Removed all fuel, lube, hydraulic oil, and 04 marine batteries from the vessel.
  - AMR planned to remove vessel from the beach but weather window did not allow it. Vessel was completely destroyed by the surf.





# SIGNIFICANT PWS RESPONSES

- 23OCT2018: F/V POLAR BEAR Response
- 102' commercial fishing vessel broke free from its grounding and re-grounded South of Hawkins Island.
- AMR responded rapidly to remove pollutants. AMR Removed all fuel, lube, hydraulic oil, and batteries from the vessel.
- High local, media and political interest.
- Vessel was securely grounded and left in place.



# VALDEZ NARROWS NAVIGATION SAFETY UPDATE

- Security Zone Enforcement
- Expecting 13 cruise ship port calls in 2019 (5 during Eastern season)
- USCG Strategy
  - Request for Forces for expanded USCG LE support - Completed
  - Quick Response Card for Near Misses - Completed
  - Further legal engagement - Ongoing
  - Continued outreach - Ongoing



# AMMO LOADOUTS

- USCG Aids DOD in securing ammunition transits multiple times per year
  - Container inspections
  - Explosive Handling Supervision
  - Safety Zone creation and enforcement
  - Shore side Patrols





# AREA CONTINGENCY PLAN UPDATE

- Prince William Sound Area Committee:
    - Next Meeting: May 21, 2019
- Proposed Location: Cordova, AK

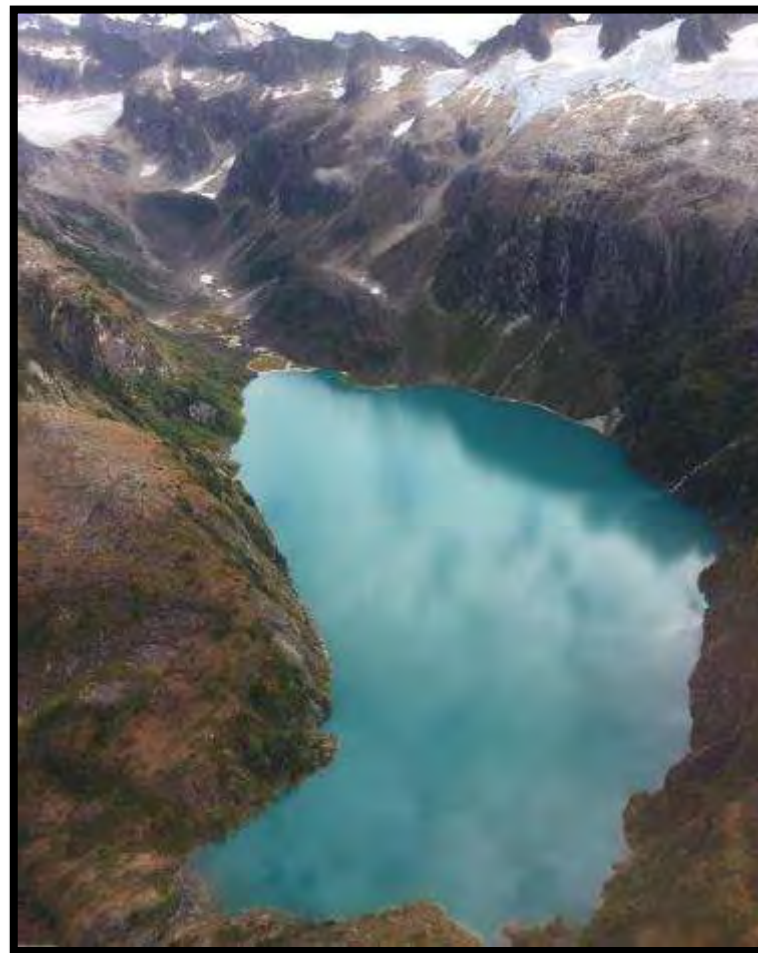
## Future Projects:

- Hold first Administrative Subcommittee meeting

# FUTURE TRAINING & EXERCISES

- Response Readiness Drills (monthly January – April)
  - Tabletop, operations level
  - Scenario-based
  - Holistic start (initial notification and our notifications) to finish (201, ESA Section 7 consultation determination, site safety plan etc)
  - Drill includes calls to actual players like NPFC and SILC as well as ADEC
  - Future drills to heavily include ADEC Valdez Field Office
- Alaska Shield 2019: Statewide
  - April 10 -13, 2019 (Cordova)
- 2019 Valdez Marine Terminal Exercise: Alyeska/SERVS
  - May 8, 2019 (Valdez)

QUESTIONS?



View from a flight between Cordova and Valdez



# SOUTHEAST AREA REPORT



Southeast Alaska FOSC-SOSC Brief

CAPT Steve White, USCG  
MR. Bob Mattson, Alaska DEC

March 05, 2019

# AREA COMMITTEE & AREA CONTINGENCY PLAN

- Dec 2018 Strategy Meeting and formation of Steering Committee
  - Focus on developing a robust response community
  - Initial Working Groups – GRS and Plan Rewrite
  - Construct – frequent smaller meetings/teleconferences in between larger meetings to maintain engagement
- Jan 2019 Area Committee kick-off meeting to be rescheduled for late summer due to furlough

# SOUTHEAST FULL SCALE EXERCISE

## APRIL 3-4, 2019

- April 3 – Field exercise in Hawk Inlet, Admiralty Island, AK
  - Partners:
    - State of Alaska: DEC, DNR, DF&G
    - Federal: USCG, NOAA, USFS
    - Oldendorf Carriers, Hecla-Greens Creek Mine, SEAPRO
  - Test Geographic Response Strategy in Hawk Inlet
  - Validate ability to relay real-time drone info to Incident Command Post
- April 4 – Incident Command Post exercise
  - Test Incident Management Team capabilities
  - Test University of Alaska Southeast (UAS) as alternative ICP location
- CANUSDIX occurring simultaneously in Juneau
  - Observers to visit UAS Incident Command Post
  - Tours of Canadian OSRO response vessel
  - Outreach between U.S. and Canada



# Existing and Emerging Threats: Very Large Cruise Ships

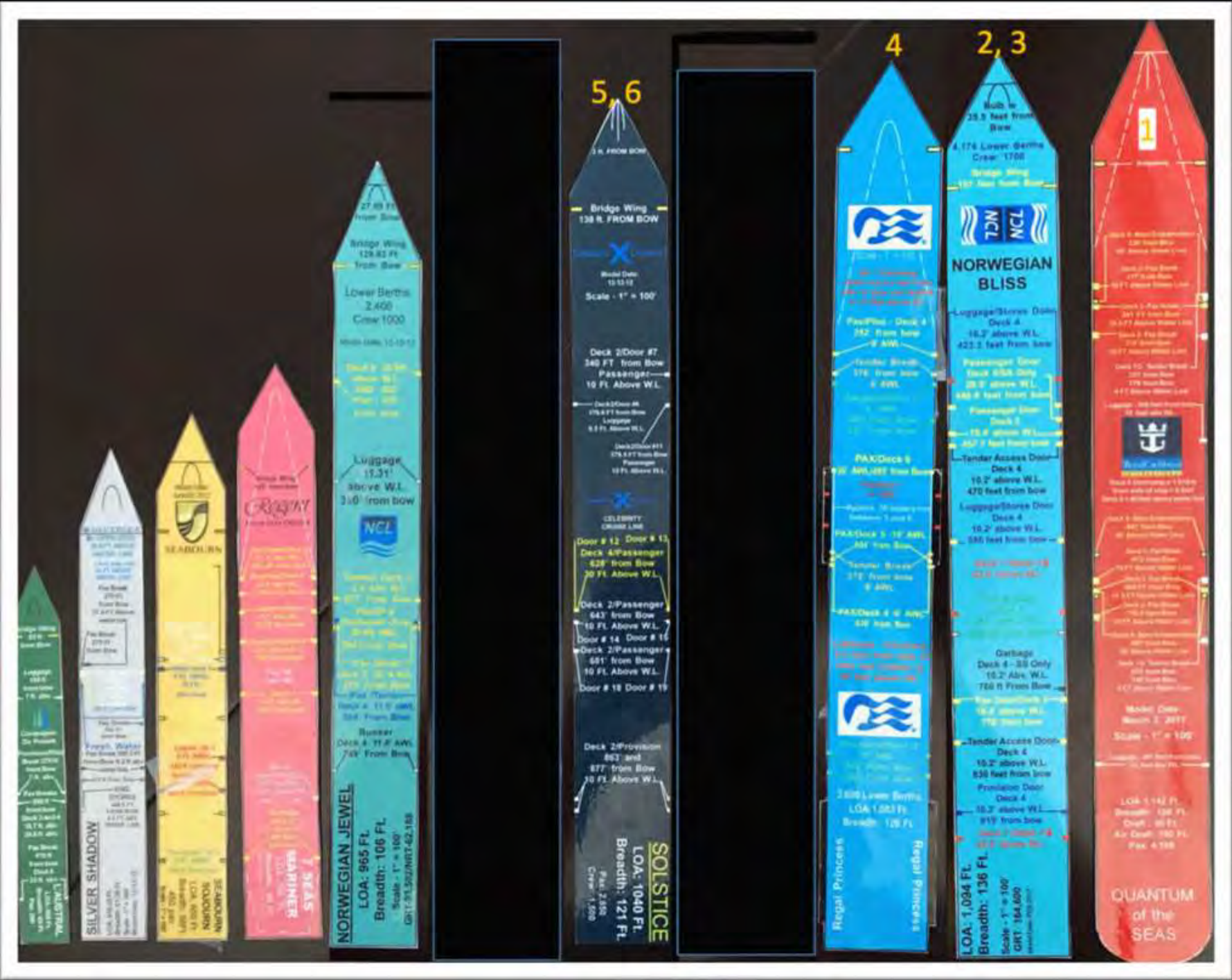
## Model comparison for the ship classes

### VLCS Class Vessels for 2019:

1. Ovation of the Seas (169K)
2. Norwegian Bliss (168K)
3. Norwegian Joy (168K)
4. Royal Princess (143K)
5. Celebrity Solstice (122K)
6. Celebrity Eclipse (122K)

### VLCS Class vessels are defined by:

- GT > 120,000GT
- Length > 1000







## C/S GOLDEN PRINCESS

LENGTH: 952FT (290M)

PAX: 2,600 / CREW: 1,100

109,000 GROSS TONS



C/S GOLDEN PRINCESS MOORED NEXT TO C/S NORWEGIAN BLISS IN SKAGWAY, AK IN 2018.

2015 – 1 SHIP  
2016 – 1 SHIP  
2017 – 1 SHIP  
2018 – 2 SHIPS  
2019 – 6 SHIPS

## C/S NORWEGIAN BLISS

LENGTH: 1,092FT (333M)

PAX: 4,400 / CREW: 1,700

168,000 GROSS TONS

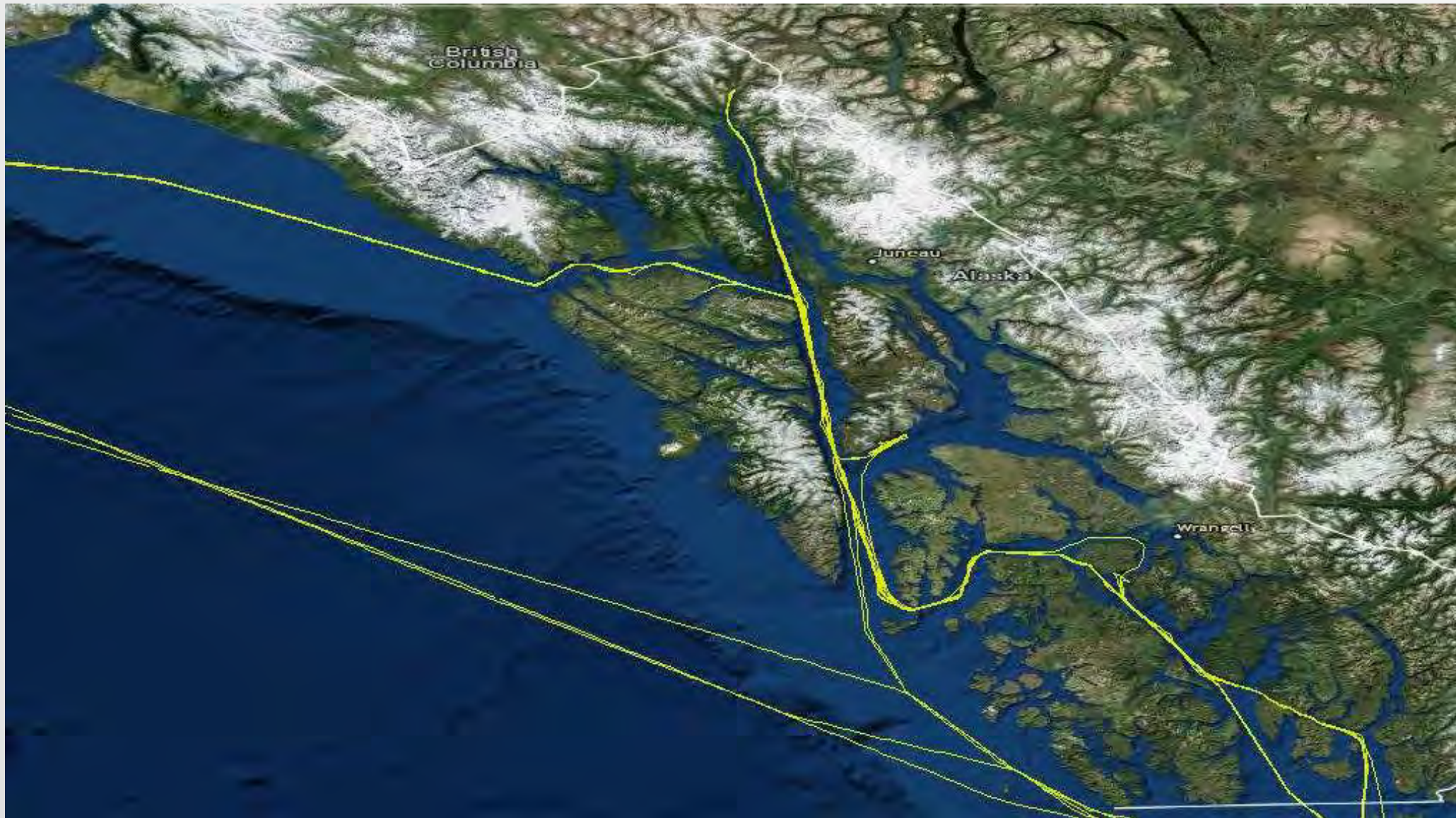


# Existing and Emerging Threats: SOUTHEAST TRAFFIC PATTERNS ATB ONE CURE & ZIDELL 277



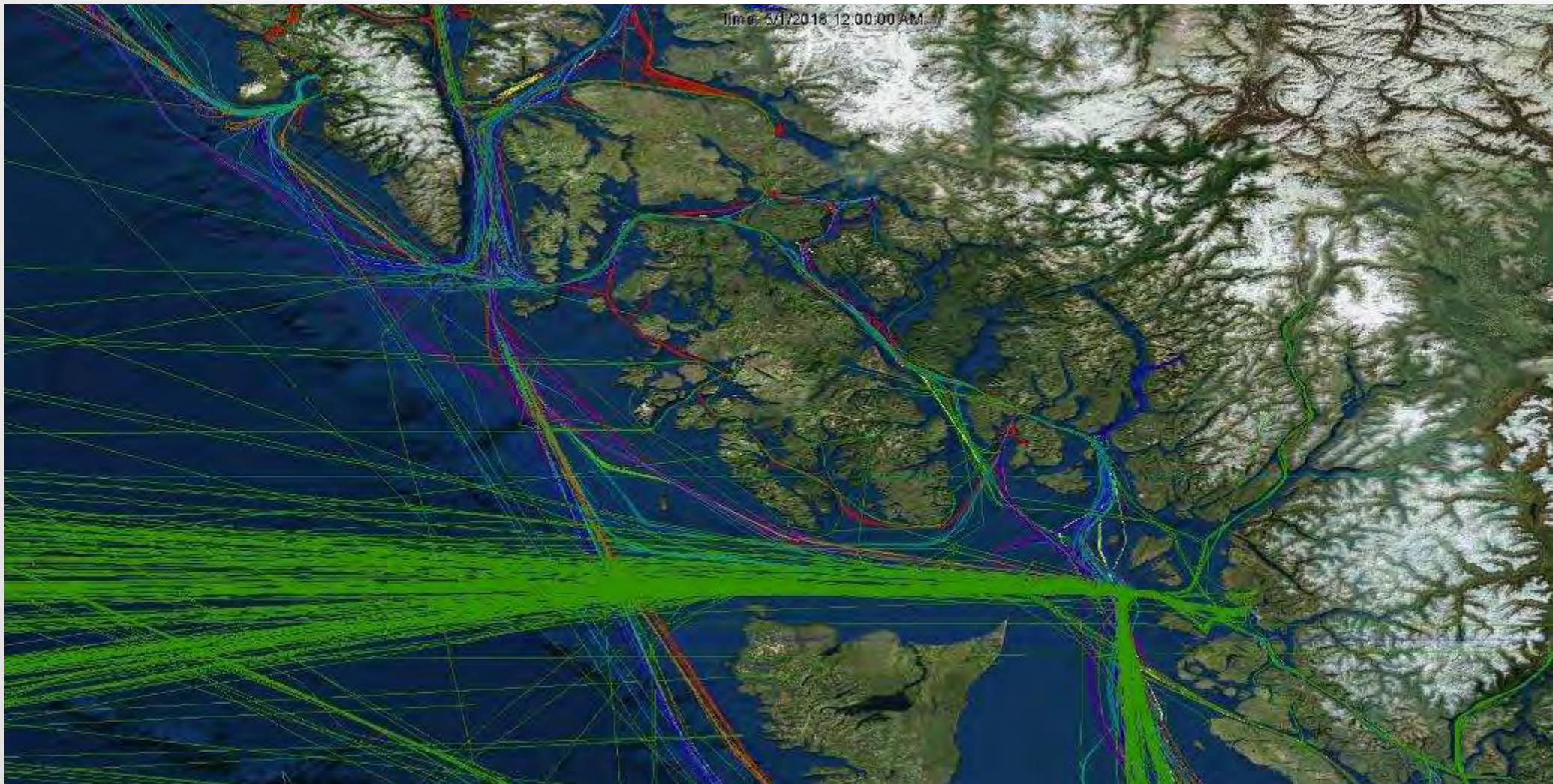


Existing and Emerging Threats:  
SOUTHEAST TRAFFIC PATTERNS  
ATB ONE CURE & ZIDELL 277





# Existing and Emerging Threats: DIXON ENTRANCE – ALWAYS ON OUR MIND





# Interagency PREVENTION-RESPONSE Activities: Government-Initiated Unannounced Exercise & Facility Inspection

## Crowley Fuels, LLC, Ketchikan





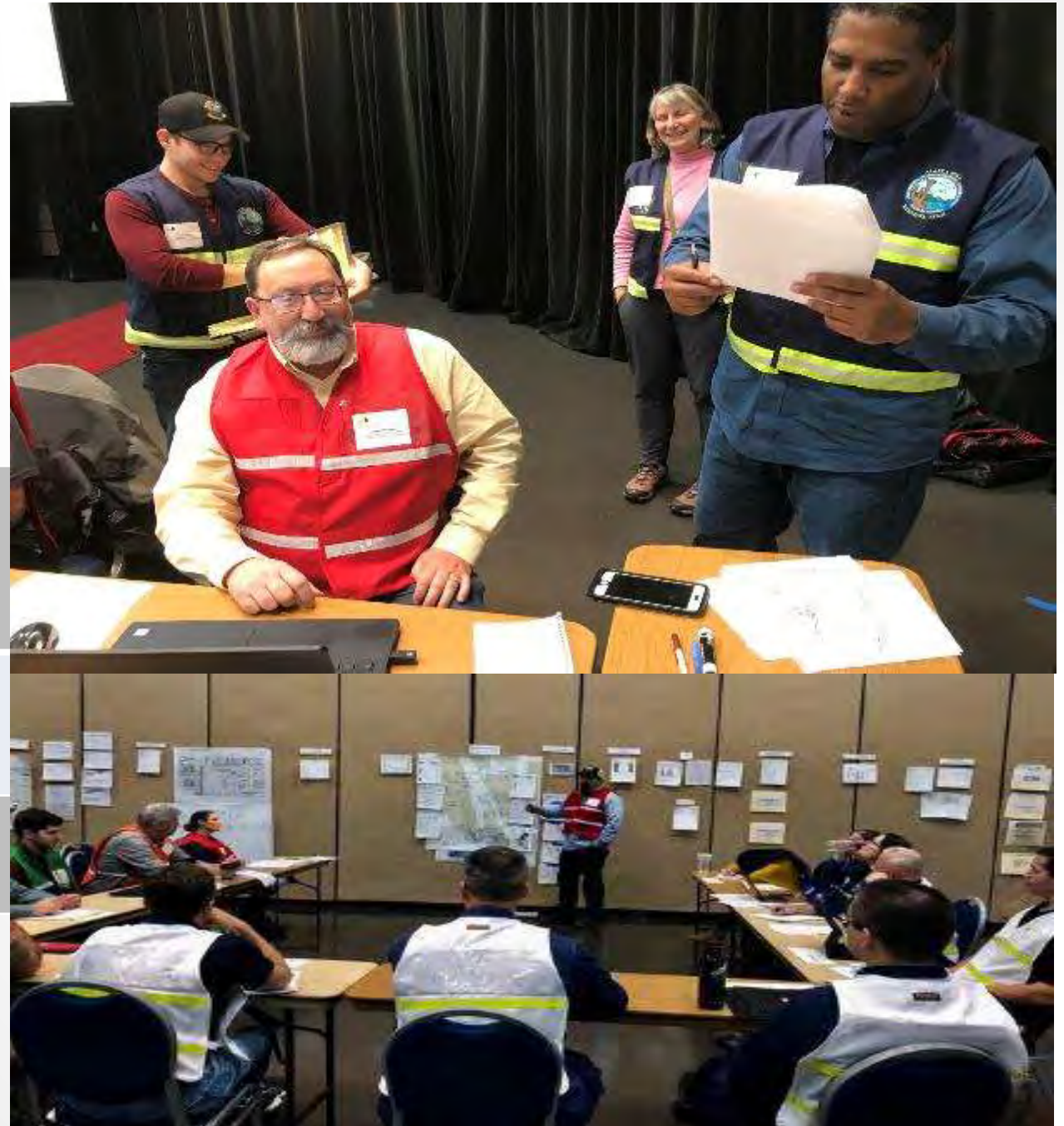
# INDUSTRY EXERCISES

## - HARLEY MARINE SERVICES

Simulated an on-water collision in Icy Strait between a tank barge loaded with Ultra Low Sulfur Diesel 2 and a CFV, releasing more than 12,000 barrels of product.

Private Sector	<ul style="list-style-type: none"><li>• Harley Marine Services</li><li>• Witt/O'Brien's</li><li>• SEAPRO</li><li>• Alaska Steamship Response</li></ul>
State of Alaska	<ul style="list-style-type: none"><li>• ADEC</li><li>• DNR</li><li>• ADF&amp;G</li></ul>
Federal	<ul style="list-style-type: none"><li>• US Coast Guard</li><li>• NOAA</li></ul>

Additional Exercises:  
- Delta Western  
- Cook Inlet Tug & Barge

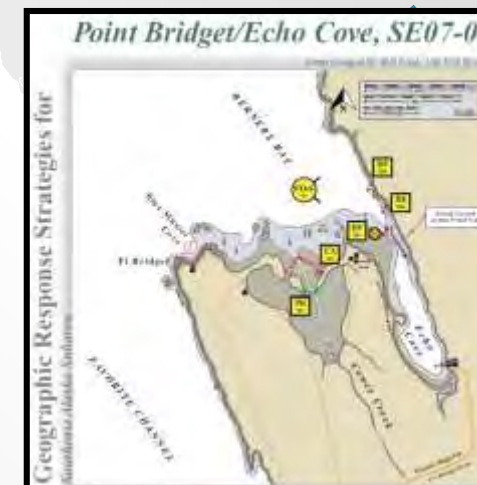
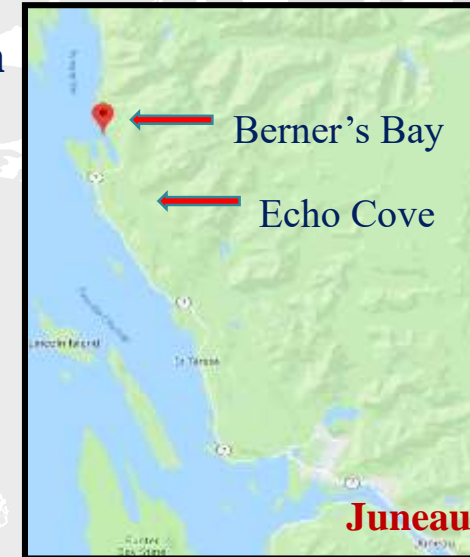


# Interagency Activities: Point Bridget / Echo Cove GRS Boom Deployment

**Assess existing/alternatives to the booming strategy in an attempt to enhance natural resource protection.**

## Snapshot of Participating Agencies

State of Alaska	<ul style="list-style-type: none"> <li>• ADEC</li> <li>• DNR, incl. State Parks</li> <li>• ADF&amp;G</li> </ul>
Federal	<ul style="list-style-type: none"> <li>• US Coast Guard: Sector Juneau, Station Juneau, AIRSTA Sitka</li> <li>• NOAA: NMFS, NWS</li> </ul>
City and Borough of Juneau	<ul style="list-style-type: none"> <li>• Docks and Harbors</li> </ul>
Response Organizations	<ul style="list-style-type: none"> <li>• SEAPRO</li> <li>• Global Diving and Salvage, Inc.</li> </ul>
Private Stakeholders	<ul style="list-style-type: none"> <li>• Echo Ranch Bible Camp</li> <li>• Alaska Marine Exchange</li> </ul>





# POINT BRIDGET / ECHO COVE GRS BOOM DEPLOYMENT





# ECHO COVE (Proposed Revisions)



# Point Bridget / Echo Cove GRS Boom Deployment Sample Lessons Learned

- Due to heavy currents, oil entrainment likely inevitable
- Maintaining boom in place would require labor-intensive 24-hour ops
- Vessels need sufficient HP to tow boom thru heavy currents
- Larger boom is needed, but may not be available in the lengths required for adequate coverage

## Bottom Line

➔ Field deployments are **vital** to evaluating GRS effectiveness

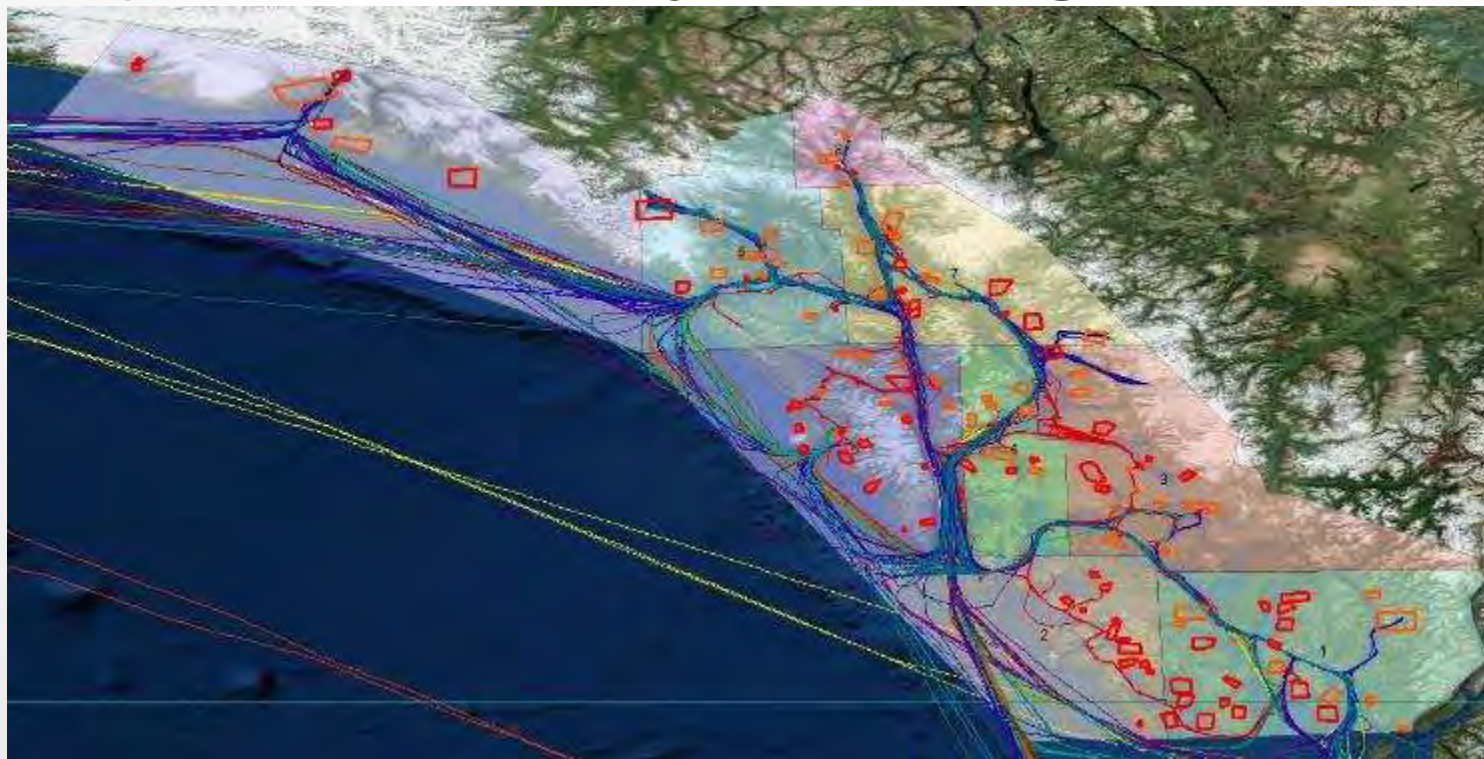
➔ Given resource constraints, some means of prioritizing sites for testing is necessary





## SOUTHEAST ALASKA VESSEL TRAFFIC STUDY

- Determine the movement of Oil throughout Southeast Alaska using Automated Information System (AIS) data.
- Analyze vessel traffic patterns to identify areas of higher risks to oil spills.





# Interagency Activities: Development of a GRS Prioritization Matrix

## Objectives

- For each GRS, estimate risk of incident based on proximity to transfer facilities, vessel traffic patterns, and Resources at Risk
- Prioritize highest-risk GRS for field testing
- Deploy GRS tactics for prioritized sites
- During deployment, observe and evaluate the need for GRS revision



# Interagency Activities: GRS Targeting Matrix

	Zone 1														Resources at Risk		Total Points							
	Cruise Ship	Primary Route - Overlaps GRS Site (Apts)	Primary Route - Adjacent to GRS (Bpts)	Secondary Route - Overlaps GRS (2pts)	Secondary Route - Adjacent to GRS (4pts)	None (0pts)	Tug & Barge	Primary Route - Overlaps GRS Site (Apts)	Primary Route - Adjacent to GRS (Bpts)	Secondary Route - Overlaps GRS (2pts)	Secondary Route - Adjacent to GRS (4pts)	None (0pts)	Cargo Ship	Route - Overlaps GRS Site (2pts)	Route - Adjacent to GRS (1-pts)	None (0pts)	Transfer Facility Distance from GRS Site	< 4NM (4pts)	4NM - 8NM (3pts)	8NM - 15NM (2pts)	15NM - 25NM (1pts)	> 25NM (0pts)	Total Resources (0.5 pts Per)	Total Points
SE01-01 Bostwick Estuary		3						3						1				3					8	14.0
SE01-02 Foggy Bay		3						3						1							0		6	10.0
SE01-03 Rudyerd Bay			2											0							0		7	5.5
SE01-04 Chickamin River Estuary				0										0							0		5	2.5
SE01-05 Thorne Bay		3						3						1							0		5	9.5
SE01-06 Dog Island		3						3						1							0		9	11.5
SE01-07 Grindall Island		3						3						1					2				6	12.0
SE01-08 Karta Bay				0										0							0		8	4.0
SE01-09 Lincoln Channel				0						1				1							0		3	3.5
SE01-10 Kendricks Bay		3						3						2							0		0	8.0
SE01-11 Southern Duke Island		3						3						1							0		0	7.0
SE01-12 Tamgas Harbor		3						3						1							0		5	9.5
SE01-13 North Arm Moira Sound				0										0							0		0	0.0
SE01-14 South Arm Moira Sound				1				3						1							0		0	5.0
SE01-15 E. Long Island		3						3						1							0		1	7.5
SE01-16 Tah Bay & Hessa Inlet		3						3						1							0		0	7.0
SE01-17 Kassa Inlet				0				3						1					2				0	6.0
SE01-18 Nutkwa Inlet				0				3						1				4					0	8.0
SE01-19 Refuge/Ward Coves/Totem Bight		4						4						2				4					0	14.0
SE01-20 Skowl Arm		3						3						2						1			0	9.0
SE01-21 Roosevelt Lagoon-Naha Bay				0														4					4	6.0
SE01-22 Traitors Cove				0																	0		1	0.5
SE01-23 Port Stewart				0																	0		1	0.5
SE01-24 Neets Bay				0																	0		0	0.0



Yellow Highlighting =  
High risk sites,  
likely prioritized for  
equipment  
deployment

# QUESTIONS?

ADEC Area Planning website:

<http://alaska.gov/go/7EKN>





# ARCTIC AND WESTERN ALASKA

## AREA REPORT



Arctic & Western Alaska Area Committee Brief  
March 5, 2019

# AREA COMMITTEE UPDATE

Notable Events within Area Committee:

- 5 Subcommittees met and began work on OSC tasking
- Workgroups formed underneath Subcommittees
- Next Meeting: May 15, 2019

Fairbanks North Star Borough Library  
1215 Cowles Street  
Fairbanks, AK 99701

# AREA CONTINGENCY PLAN UPDATE

- Anticipated plan updates: Incorporating substantive changes identified when conducting administrative reorganization
- Timeline to next version 2018.1: Calendar Year 2019.



# CASE SUMMARY/ENFORCEMENT

- Fishing Vessel NORDIC VIKING sank at the pier discharging an estimated 300 gallons of diesel in Seward Harbor.
- Statistical data
  - 1 federal case
  - \$1750 in fines via 2 Notice of Violations
  - 0 Letter of Warnings
  - 1 COTP Orders/Admin Orders
  - 612 gallons spilled from 18 reported spills



# SPILLS

- Nome State Office Building (3/27/2018) Cleanup will be addressed this summer
- Summer follow up on the Gambell fuel line release (7/12/2018) - ensure that repairs were done and that the line is pressure tested prior to delivery
- DS 2 Well 2 Damage – DS2 Well 3 (April 2017) Alaska Oil and Gas Conservation Commission is providing oversight
- Hilcorp Moose pad spill (1/06/2019)
  - 5,166 gallon brine spill to containment & gravel pad
  - Contaminated material is being stored at F pad for reuse

# EXERCISES

- Savant Badami Starfish Exercise (1/10/19)
  - A continuation of November 8, 2017, Savant Badami exercise. The exercise begins on day two of a well blow-out, discharging approximately 5,500 bbls of crude oil a day with the well bridged during day two.
    - Good discussion concerning oil characteristics, fate & transport, and related safety concerns
- Eni (3/13/19)
  - Due to a medical emergency a vehicle leaves the road at Nikaitchuq sales line crossing and strikes the pipeline resulting in release to fresh water and tundra.



# AWAA HHOT PUBLIC SERVICE ANNOUNCEMENT

### BETTER Installation Practices



This tank has an enclosure that will protect it from overhead damage like falling ice & snow.



This tank has been painted to prevent exterior corrosion.



This stand is in good condition and has a stable foundation.



These lines are coated to help absorb shock of falling debris.



This lead is protected by a liquid-tight conduit.

### BAD Installation Practices



This tank has a number of problems: no stand, very rusty and a large wet spot.



These fuel lines are not protected and can easily be broken.



Pits are a sign of corrosion and can lead to tank failure.



This stand is starting to fail & is close to no longer being able to support the tank.



The tank is on a sinking foundation.

ADEC received numerous notifications for, and responded to, multiple spills from HHOTs in Nome and other villages during later winter and spring of 2018. These spills were often caused by falling snow and ice impacting unprotected HHOTs, piping, and tank stands, resulting in broken fuel lines and damaged tanks.

### OIL SPILL COST BY DROPS

RATE OF LEAK	GALLONS PER YEAR	DOLLAR PER YEAR COST	TONS OF CONTAMINATED SOIL
Drop Every 10 Seconds	40	\$160	150
Drop Every 5 Seconds	80	\$320	300
Drop Every Second	410	\$1,640	1,500
Three Drops Every Second	1,200	\$4,800	4,500
Stream that Breaks into Drops	8,600	\$34,400	32,000

(Drops are approximately 1/64 inch in diameter.)  
 \*At \$4.00 per gallon of heating oil  
 \*\*Average 1000 ppm (646) petroleum hydrocarbons

### Once Around Your Tank Can Save You Money!



1) The vent pipe is clear of debris and soot.



2) The tank is free of debris and rust and is painted to protect it.



3) The fill pipe has a cover to keep water out.



4) The fuel lines are protected from damage. Lines in the ground or concrete are inside liquid-tight conduit.



5) The tank, especially the ends, are free of stains or wet spots.



6) The fuel system is protected from overhead damage such as falling ice, snow or trees.



7) The fuel filter is protected from damage and is not leaking.



8) The tank legs or stand are in good condition and are on a stable foundation.



9) If the tank is more than 15 years old, consider replacing it.

The department has put together public service announcements that will be aired in Nome and is working with industry partners to spread awareness to other communities who use HHOTs.

In November 2018 SB 158 was signed into law which allows the department to waive all or a portion of the response costs incurred during a response to a HHOT release.

# AREA PROJECTS

- Hilcorp North Slope Production C plan renewal has begun, expiration November 14, 2019. Public review process February 28-April 1<sup>st</sup>.
- Savant
  - Badami Unit Expansion
  - In process of submitting a major amendment application for summer exploration and change to response planning standard
- Eni purchase of Oooguruk from Caelus Energy on January 3, 2019

# QUESTIONS?

ADEC Area Planning website:

<http://alaska.gov/go/7EKN>

Contact us:

[AWA-AC@uscg.mil](mailto:AWA-AC@uscg.mil)



Fuel farm, Utqiagvik



# ALASKA INLAND AREA REPORT



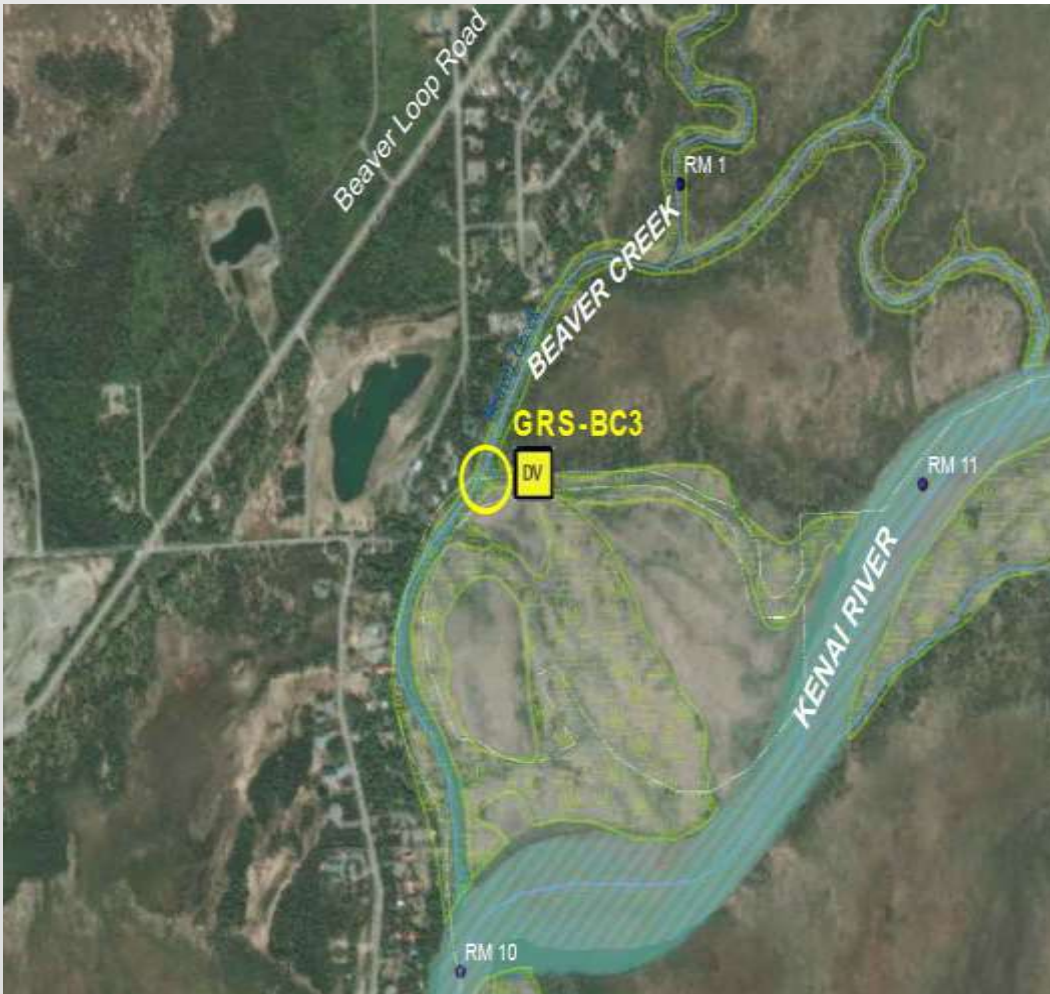
Alaska Inland Area Committee Brief

March 5, 2019

Bob Whittier, EPA FOSC & Geoff Merrill, ADEC SOSC

# EPA INLAND ZONE REPORT

## Kenai Peninsula GRS Development



Kenai Vulnerability Assessment

Approximately 30 GRS's

3 representative GRS's tested, Andeavor, CISPRI, and ADEC

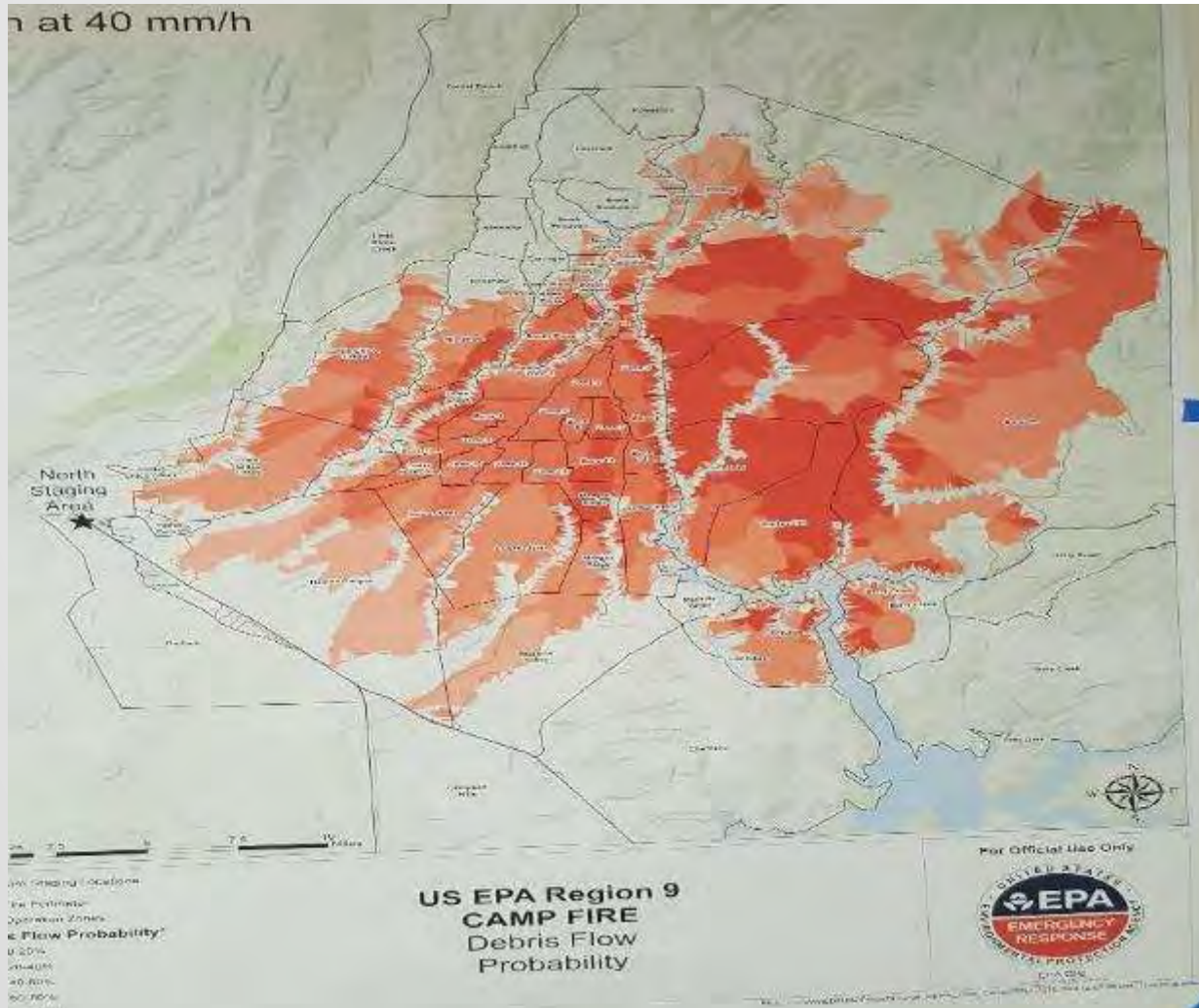


## Kenai Peninsula GRS Development





# Northern California Wildfire Response (Camp Fire)



- ❑ Started November 8, 2018
- ❑ 153,000 acres
- ❑ 18,000 structures both residential & commercial
- ❑ 85 Fatalities
- ❑ ESF 10 Household Hazardous Waste (HHW)

Paradise, CA Butte County











## PREPAREDNESS EXERCISES & OUTREACH

- Mutual Aid Drill-Conoco Phillips North Slope
- Hilcorp TTX “Seaview Blowout” May 1st
- Alaska Shield?
- Eielson AFB WCD Exercise May 1-2
- Oil Prevention SPCC/FRP inspections SE AK
- 3-Day Oil Spill Response Course for local & Tribal Responders TBD

# AREA COMMITTEE UPDATE

- Next Meeting: May 15, 2019 in Fairbanks.

## Area Contingency Plan improvement task summary

- Anticipated plan updates: Technical Edits By the Admin Workgroup
- Timeline to draft Version 2: Summer 2019



# AREA CONTINGENCY PLAN UPDATE

Area Contingency Plan improvement task summary

- Anticipated plan updates: Technical Edits By the Admin Workgroup
- Timeline to draft Version 2: May 2019

# QUESTIONS?

ADEC Area Planning website:

<http://alaska.gov/go/7EKN>



**KEEP  
CALM  
I'M FROM ALASKA  
I GOT  
THIS**



# THE NATIONAL RESPONSE SYSTEM

## ARRT Meeting

March 4, 2019

Roger Fernandez



# NATIONAL RESPONSE TEAM (NRT)



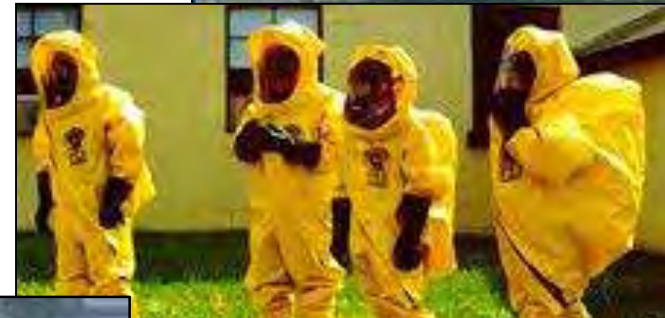
**Mission:** *To provide technical assistance, resources and coordination on preparedness, planning, and response activities for emergencies involving hazardous substances, pollutants and contaminants, hazmat, oil, weapons of mass destruction in natural and technological disasters and other environmental nationally significant incidents.*

- Comprised of 15 federal agencies/departments
- EPA – Chair; USCG – Vice Chair
- National-level planning, policy, and coordinating body
- Provides policy advice and national-level assistance to the OSC and RRT(s) during a response



# WE ARE HERE TO SERVE YOU

## SPECIAL TEAMS HIGHLIGHTS





# NOAA

## SCIENTIFIC SUPPORT COORDINATORS (SSCs)

- SSCs are designated as a “Special Team” to advise the OSC on scientific and technical issues.

Expertise includes:

- Pollutant Transport Modeling in air and water
- Oil & Hazmat Fate and Effects
- Natural Resources at Risk
- Environmental Chemistry and Toxicity
- Environmental Trade-off of Countermeasures and Cleanup
- Environmental sampling
- Data & Information Management
- Contingency Planning
- Liaison to Scientific Community





# OSHA

## SPECIALIZED RESPONSE TEAM



- Members include:
  - Certified Industrial Hygienists
  - Professional Engineers
  - Occupational Physicians
  - Specialized Safety Experts
- Support the OSC in the area of worker health and safety
- Can also support through National Response Framework (NRF) Worker Safety and Health Support Annex

# DoD

## NAVY SUPERVISOR OF SALVAGE & DIVING (SUPSALV)

- Waterborne Pollution Response and Recovery
- Salvage, Wreck Removal, Diving, Deep Ocean Recovery
- Technical Support in Salvage, Ocean Engineering, and Spill Response



# DEPARTMENT OF THE INTERIOR

- Through its various bureaus and offices, provides scientific expertise to On-Scene Coordinators (OSCs) to help protect sensitive natural, recreational, and cultural resources and areas
- Provides experts on remote sensing; mapping surface and ground water contamination; contaminant transport; oil, gas, and mineral development; source control of off-shore wells





# BSEE

## SOURCE CONTROL SUPPORT COORDINATOR (SCSC)

The Bureau of Safety and Environmental Enforcement (BSEE)

The SCSC can:

- Provide expertise and inspection resources for analysis and monitoring of proposed well intervention or pipeline source control operations;
- Quantify flow rate information from the source and provide forecasting for flow rate modeling; and
- Facilitate consultations, knowledge integration, and consensus from government agencies, academic and research institutions, and industry for source control issues.



# DEPARTMENT OF HEALTH AND HUMAN SERVICES

- CDC/ATSDR:
  - On-call and on-site specialists to answer human health questions
  - Facilitate OSC interactions with state/local public health
  - Facilitate access to other HHS assets
- NIEHS:
  - worker training program and on-site just-in-time training.



# DEPARTMENT OF AGRICULTURE

The **Department of Agriculture** (USDA) can provide a variety of assets to the Incident Command System teams: wildlife services, communications, laboratory analysis, geospatial and soil analysis, mapping and other technical expertise

- **Forest Service** has personnel, laboratory, and field capability to measure, evaluate, monitor, and respond on lands under its jurisdiction, custody, or control.



- **Agriculture Research Service** has a network of laboratories that are permitted to manipulate/analyze samples of select agents regulated by the United States/Department of Health and Human Services/USDA.
- **Animal and Plant Health Inspection Service** can regulate movement of diseased/infected organisms and assist in animal carcass disposal.
- **Natural Resources Conservation Service** has personnel in nearly every county in the nation who are knowledgeable in soil, agronomy, engineering, and biology and can predict the effects of pollutants on soil and its movements over and through soils.





# GENERAL SERVICES ADMINISTRATION

- GSA may facilitate response and recovery efforts by providing commodity support, telecommunications support, transportation services or other support through use of GSA's Federal Supplies Schedules
- GSA may also provide leasing support for needed federal facilities or space as requested utilizing staff from among its national cadre of realty specialists



# DEPARTMENT OF TRANSPORTATION

- The Pipeline and Hazardous Materials Safety Administration (PHMSA) manages national transportation safety programs for hazardous materials and oil by all modes of transportation and pipelines.
- PHMSA provides technical assistance to the planning and response communities, including publication of the DOT Emergency Response Guidebook



# DEPARTMENT OF STATE

- Coordinates international response and notification efforts when discharges or releases may affect international interests, including when they involve foreign flag vessels or threaten impact beyond U.S. jurisdiction
- Coordinates requests for National Response System (NRS) assistance from foreign governments

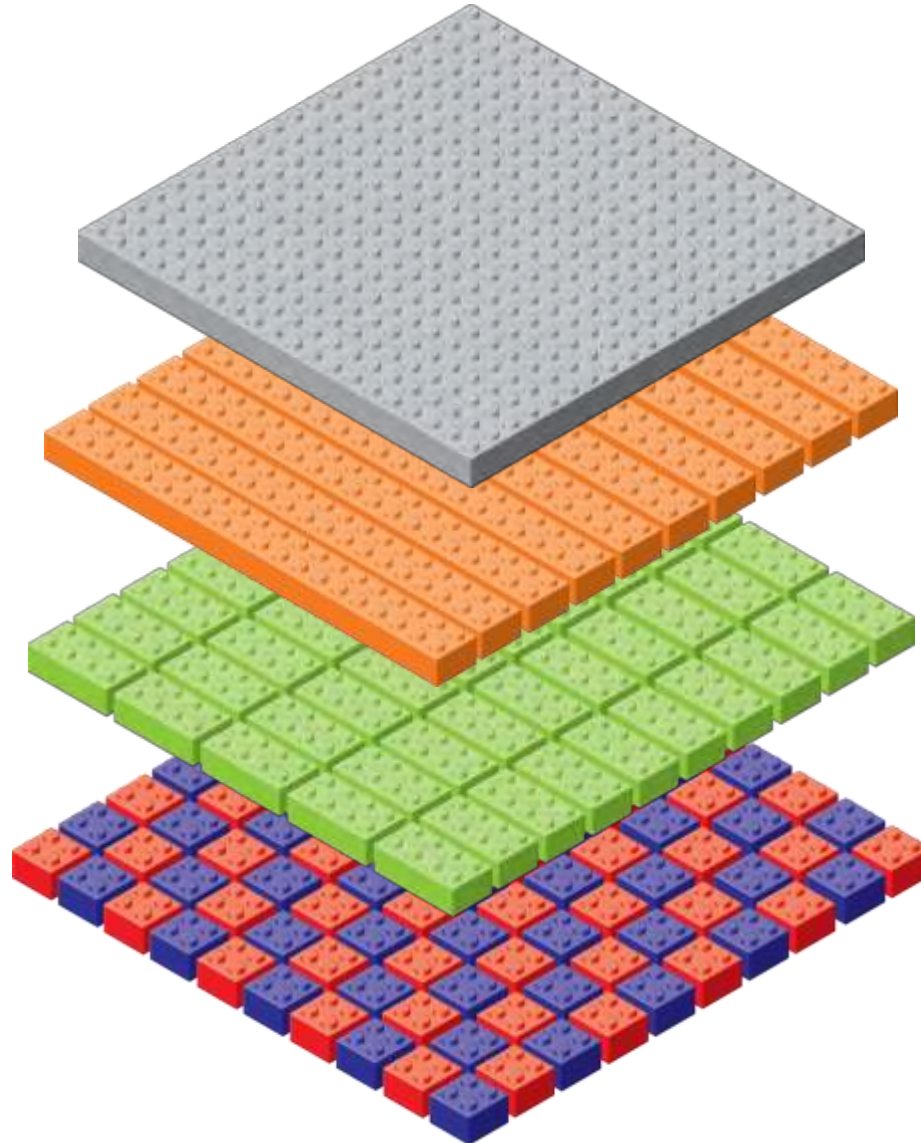




# NRS Plans and Planning Groups

## NRS Plans

- National Contingency Plan
- Regional Contingency Plans
- Area Contingency Plans
- Local Emergency Planning Committee Plans
- Industry Plans



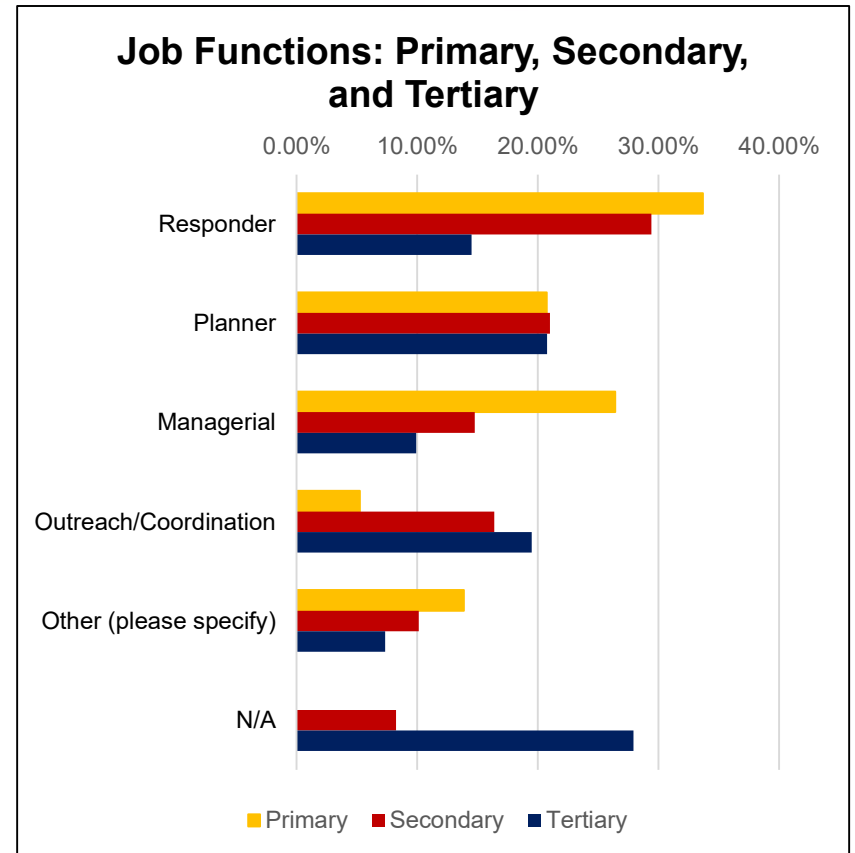
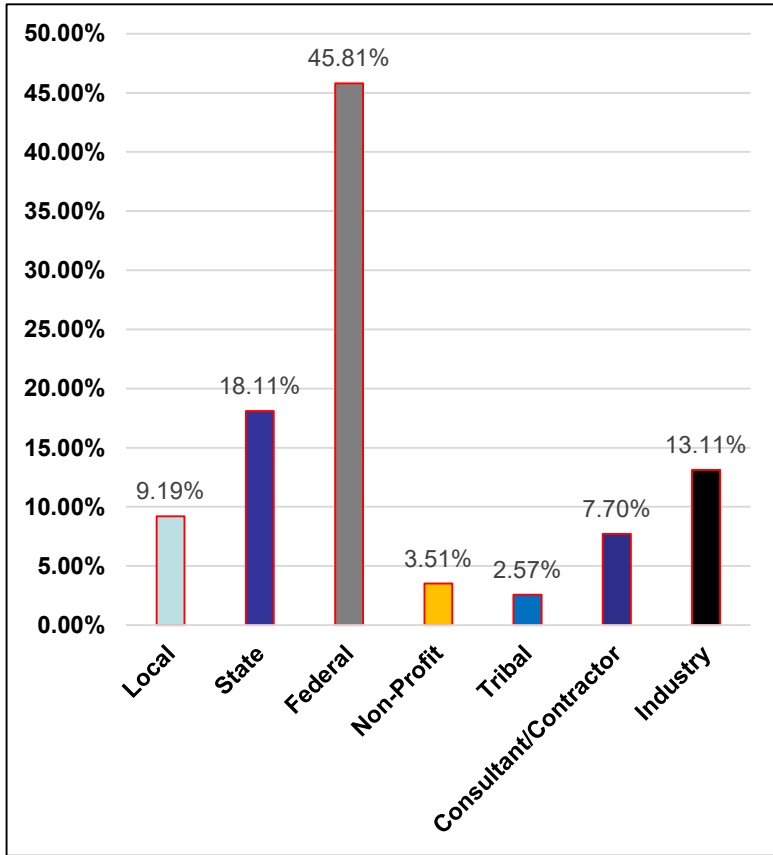
## Planning Groups

- National Response Team
- Regional Response Teams
- Area Committees
- State Emergency Response Commissions
- Local Emergency Planning Committees
- Industry

# ACP SURVEY

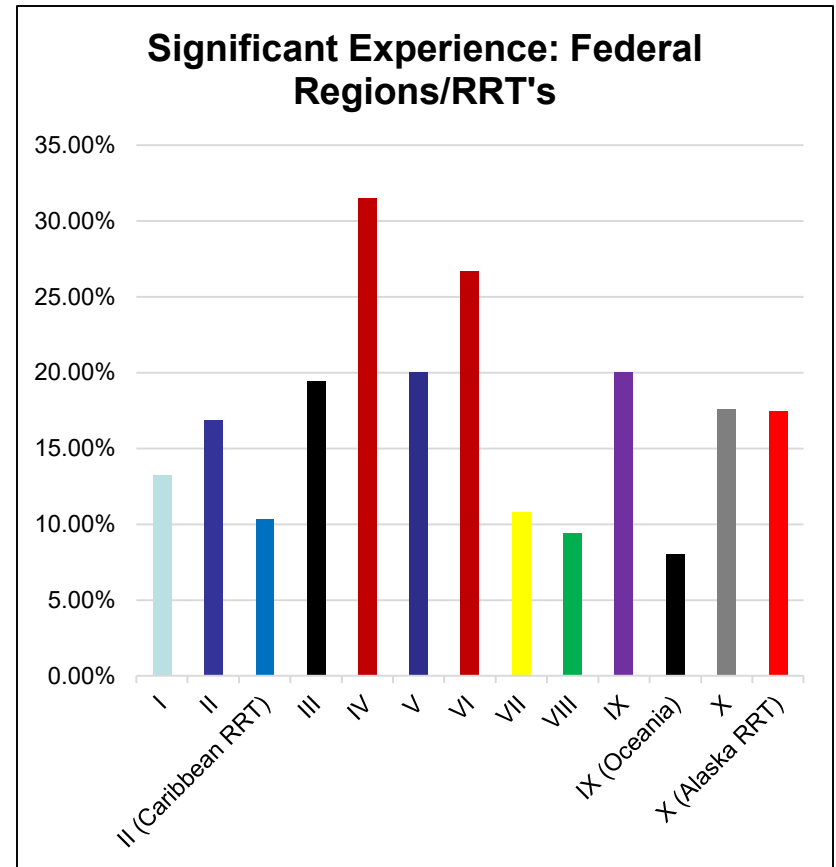
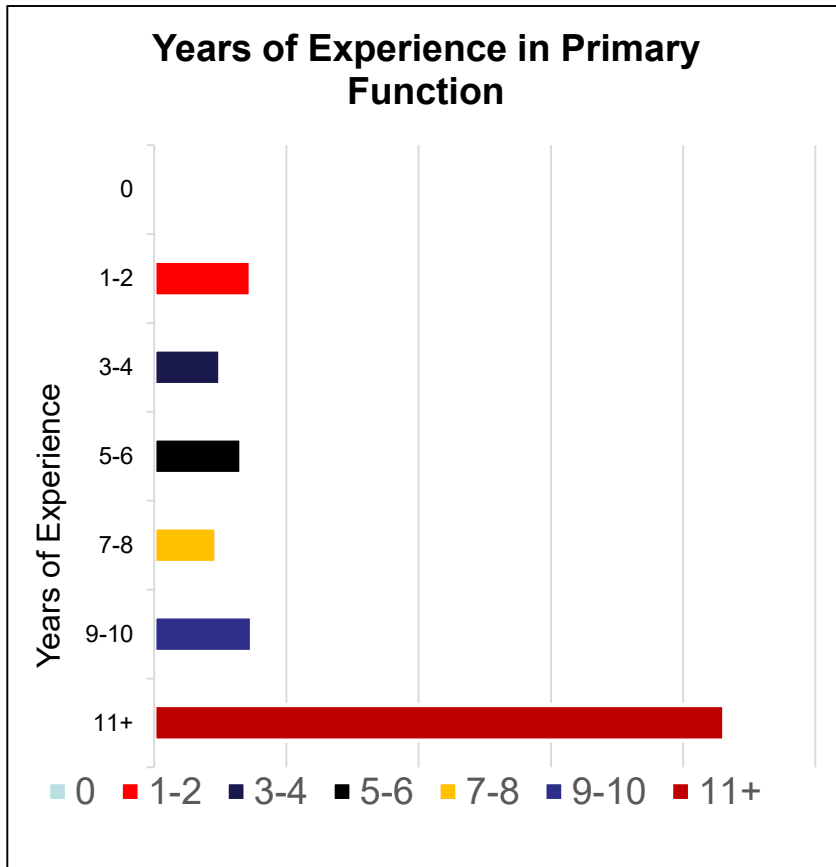
- **In 2018, NRT-ACP workgroup developed survey items that distributed via Survey Monkey.**
- **The main purpose of survey was to assess the functionality of ACP's and how they can be improved.**
- **Following the close of the survey (743 respondents), survey experts conducted analysis of the survey data.**
- **Data was analyzed according to three methods**
  - Aggregate Mean Categories (Above Mid-Point, Mid-Point, Below Mid-Point)
  - Qualitative Thematic Analysis
  - Experience Bands (e.g., 0, 1-2, 3-4, 5-6, 7-8, 9-10, 11+)

# RESPONSES





# RESPONSES



# RESPONSES

<b>Negative Words/Terms</b>	<b>Positive Words/Terms</b>
<b>Inaccurate</b>	<b>Information</b>
<b>Outdated</b>	<b>Data</b>
<b>Cumbersome</b>	<b>Strategies</b>
<b>Inconsistent</b>	<b>Resources</b>
<b>Too Large</b>	<b>Equipment</b>
<b>Not Detailed Enough</b>	<b>Networking Tools</b>
<b>Poor Formatting</b>	<b>Contact Lists</b>
<b>Too Broad/Not Locally Focused</b>	<b>Stakeholder Information</b>

- Removing redundancy and limiting ACP size
- Increasing stakeholder involvement during the ACP creation process
- Increasing accuracy through increased validation
- Using a more logical formatting structure
- Increasing consistency across different ACP's and the areas to which they apply
- Implementing a consistent schedule for the review and updating of ACP's

# CONTINUING DEVELOPMENT AND ANALYSIS

- The preliminary report provides a basic description of the survey's development, analysis methods, and key findings. Further analysis and explanation is possible, but time and resources are limited.
- Identify needed further development for explanatory sections (e.g., executive summary, methods)
- Identify specific, continuing analysis items



# NEXT STEPS

- Complete Analysis and Finalize Report
- Send to NRT-ACP Work group for review
- Draft Executive Summary Report

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## WORKING TOGETHER TO PROTECT AGAINST THREATS TO OUR LAND, AIR AND WATER

The U.S. National Response Team (NRT) provides technical assistance, resources and coordination on preparedness, planning, response and recovery activities for emergencies involving hazardous substances, pollutants and contaminants, oil, and weapons of mass destruction in natural and technological disasters and other environmental incidents of national significance.

To Report Oil and Chemical Spills, and Hazardous Material Releases Call the National Response Center:  
**1-800-424-8802 or 202-267-2675**

[More info >>](#)

### REGIONAL RESPONSE TEAMS (RRTs)

There are 13 Regional Response Teams (RRTs), one for each of ten federal regions, plus one for Alaska, one for the Caribbean, and one for the Pacific Basin. Each RRT maintains a Regional Contingency Plan (RCP) and has state, as well as federal government, representation.

[More info >>](#)

### RECENT UPDATES

Name	City	State	Updated
<a href="#">National Environmental Compliance Subcommittee</a>	Washington	DC	8/29/2016
<a href="#">NRT WMD S&amp;T Subcommittee (Chemical Workgroup)</a>	Edison	NJ	8/26/2016
<a href="#">NRT WMD S&amp;T Subcommittee (Biological Workgroup)</a>	Washington	DC	8/26/2016
<a href="#">2016 NRT Worker Safety and Health Technical Conference</a>	Washington	DC	8/26/2016
<a href="#">NRT Current Responses</a>	Washington	DC	8/26/2016

[More Updates >>](#)

### RESOURCES

[Laws, Regulations & Directives](#) ▾  
[Guidance, Technical Assistance & Planning](#) ▾  
[Training, Exercises & Lessons Learned](#) ▾  
[International Coordination](#) ▾

[Current Events](#)

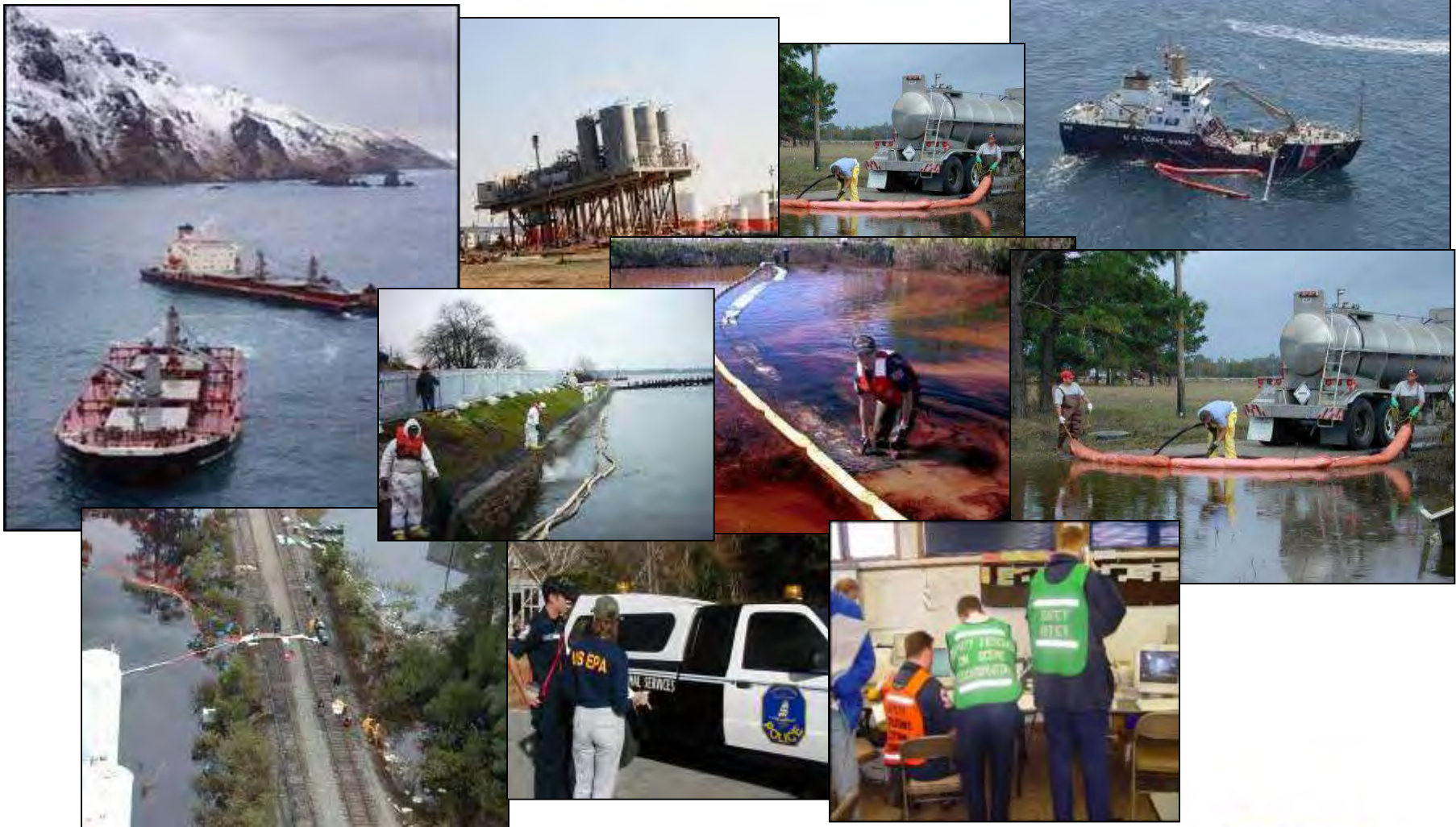


# 2019 NRT-RRT CO-CHAIRS MEETING CHICAGO April 29 - May 3, 2019





# QUESTIONS?





# 2018 Cook Inlet Earthquake

Bryan J Fisher  
State Coordinating  
Officer

Alaska Division of Homeland  
Security and Emergency  
Management

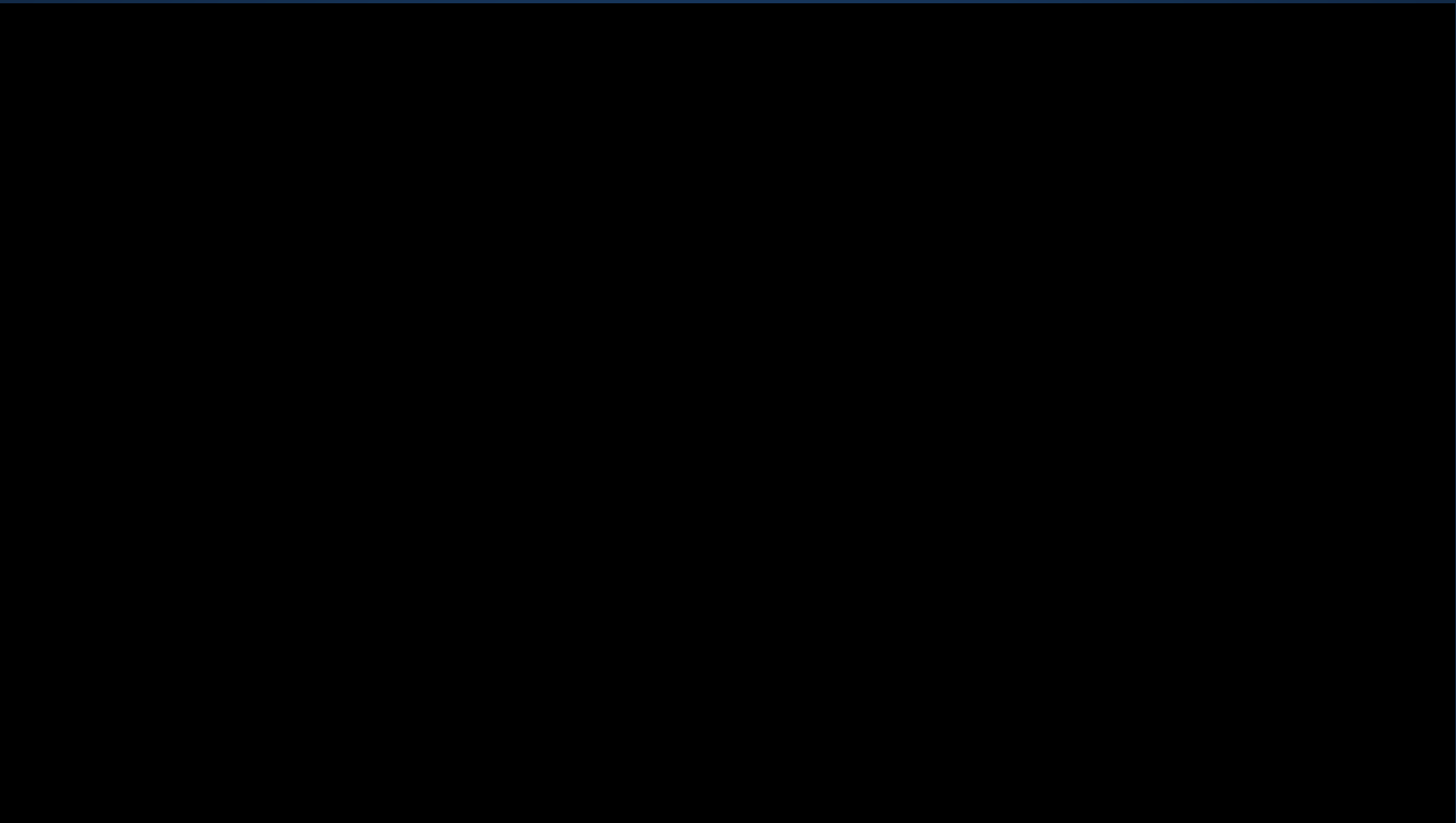
Timothy Manner  
Federal Coordinating  
Officer

Federal Emergency  
Management Agency





# Friday Morning in the Classroom







8:29 a.m. November 30th





# SEOC Activated to Level 3







# First Week

## Sat 12/1/2018

- 0000 – FEMA IMAT arrives in AK
- 0200 – FEMA FCO brief at SEOC (N-IMAT stopped)
- 0600 – FEMA IMAT starts Ops with SEOC
- 0900 – Egan and Menard Shelters closed
- 1200 – Power restored >99% affected pop.
- 1200 – SEOC discon. 24hr Ops -> 12hr Ops

## Mon 12/3/2018

- FEMA/SEOC full integration
- Joint IAP begins
- AKRR opens Southbound
- SOA offices closed
- MOA EOC stand down

## Wed 12/5/2018

- Glenn HWY fully open both directions
- SOA offices opened
- Last ARC shelter closed



## Fri 11/30/2018

- 0829 – 7.0 earthquake, SEOC activated L3
- 0835 – Tsunami Warning issued by NWS
- 0941 – FEMA RRCC activated
- 1005 – Tsunami Warning cancelled by NWS
- 1200 – SEOC LNO's deployed MOA/MSB EOC's & 24hr Ops
- 1200 – Gov Walker verbally declares disaster
- 1326 – POTUS issues emergency declaration
- 1609 – TAPS restarts oil flow
- 2130 – FEMA RA in SEOC with FEMA2

## Sun 12/2/2018

- Joint Operations begin with FEMA
- RX RRCC hand-off to RX IMAT
- Port of Alaska confirmed operational

## Tues 12/4/2018

- AKRR open all directions
- SOA offices remain closed
- State IA program initiated & taking applications







# Lifeline Status



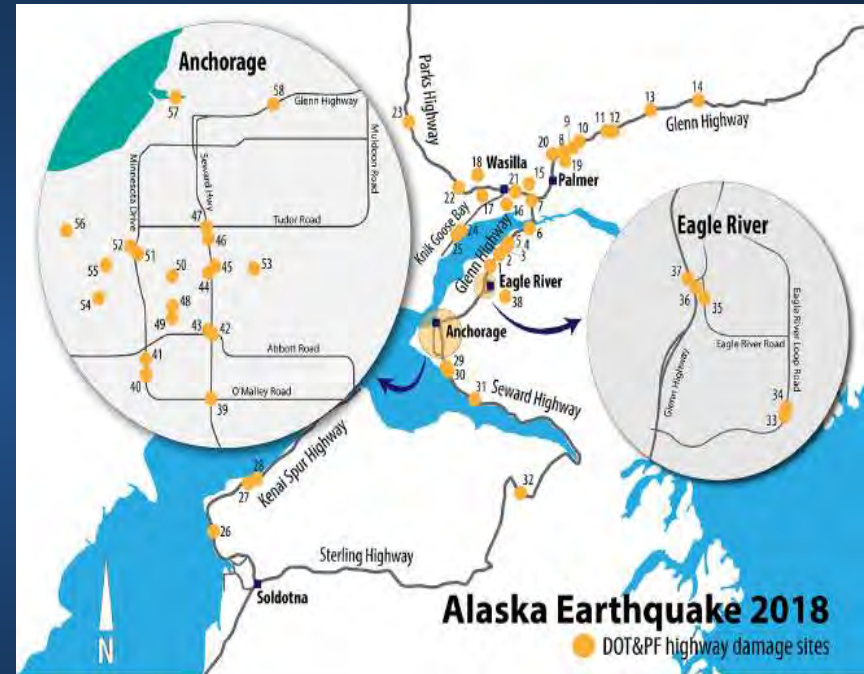
A lifeline enables the continuous operation of **government functions and critical business**, and is **essential to human health and safety or economic security**.

Ease of Communication	
<b>Status</b>	<i>“What?”</i>
<b>Impact</b>	<i>“So What?”</i>
<b>Actions</b>	<i>“Now What?”</i>
<b>Limiting Factors</b>	<i>“Without What?”</i>



# Rapid Response by DOT&PF

- DOT&PF faced with 58 damage locations in three jurisdictions
- Inspections included 243 bridges
- Asphalt plants fired up after the earthquake had material ready for placement as soon as the earthwork was done.
- All eight damaged major transportation corridors reopened within five days!







# Quick Work by the DOT&PF







DOT&PF requested more  
than \$70 million in assistance  
funding for repairs





# Schools

- Anchorage School District: \$22.39 million for repairs so far
- Mat-Su Schools: at least 50 reports of structural damage







# Individuals and Families

14,673 State Individual Assistance  
Applications

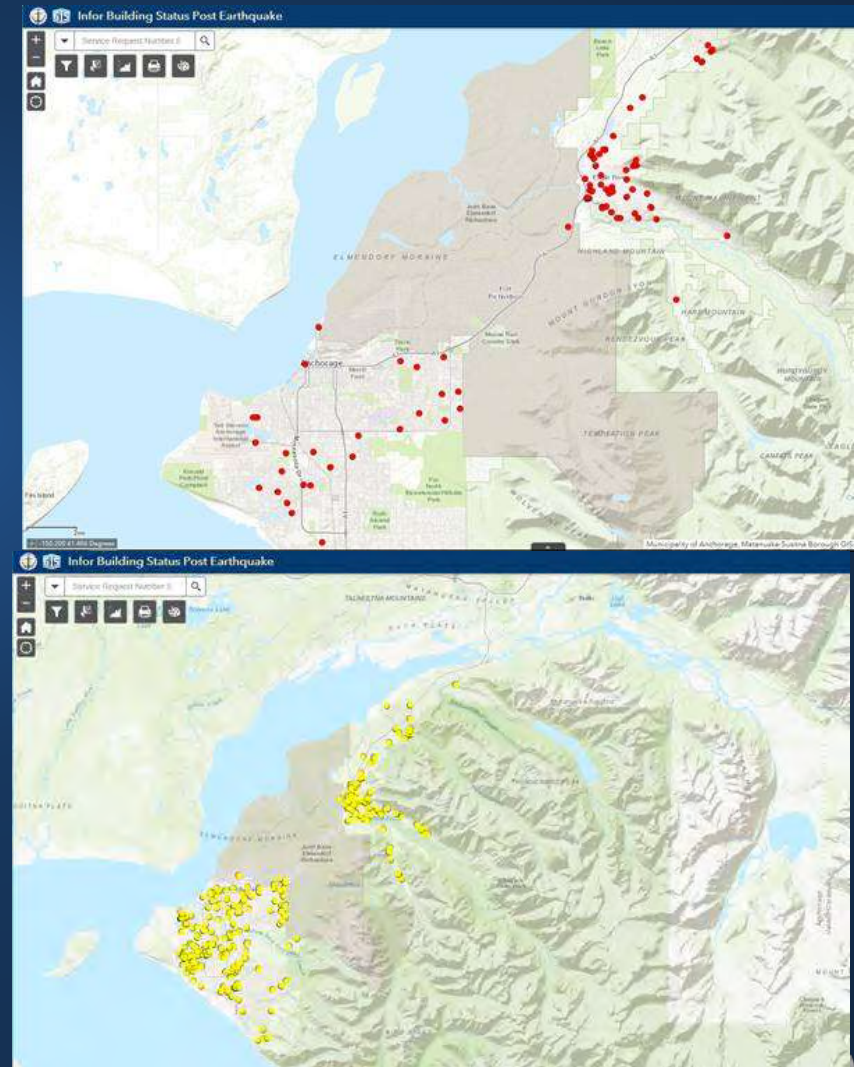
5,029 FEMA Registrations



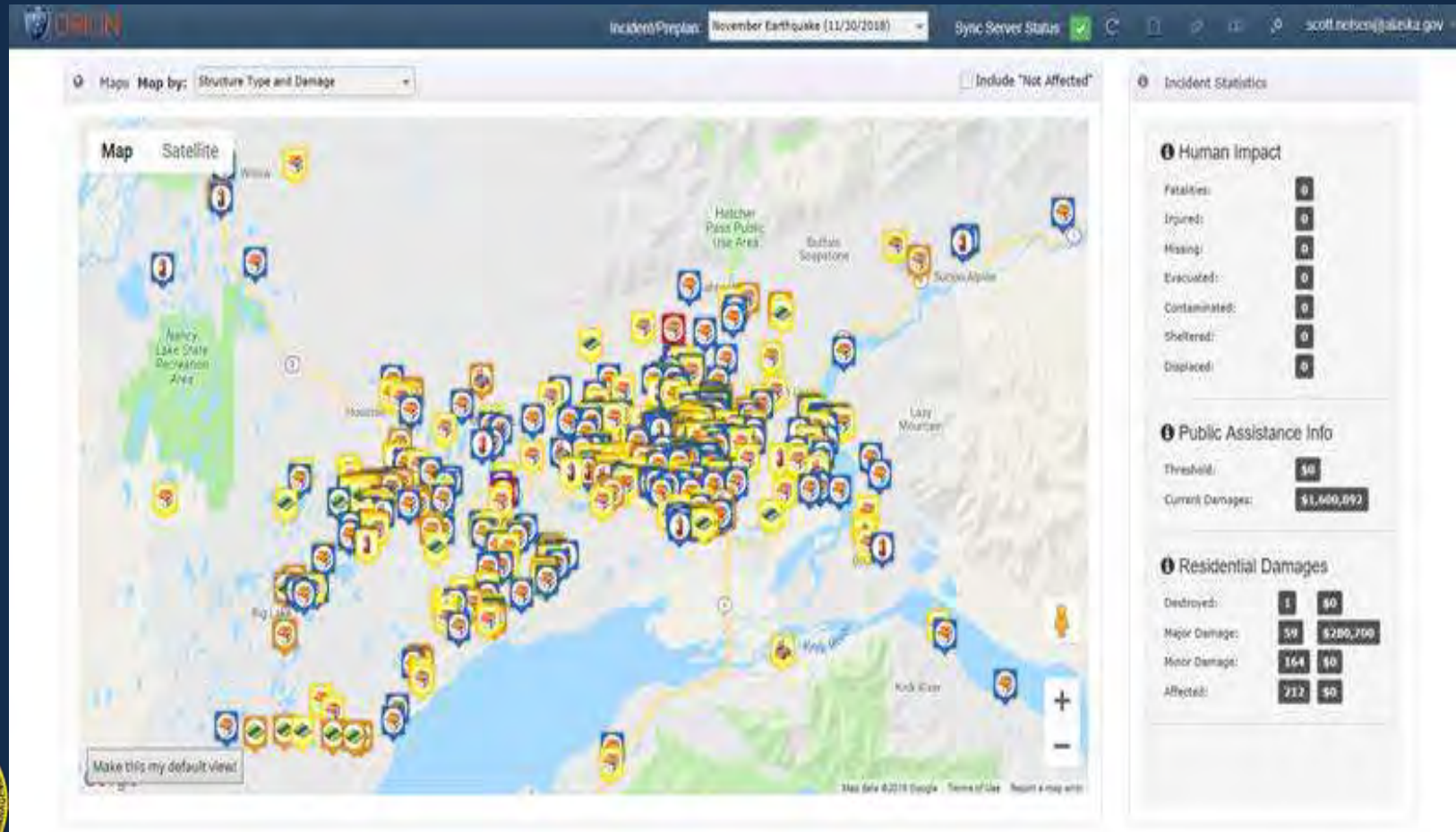


# MOA Damage Assessment

- FEMA's HAZUS modeling estimated five destroyed buildings, 250 with major damage, 4,600 with minor damage, and 32,000 affected homes.
- The Joint PDA viewed 620 homes - approximately 10% of reported damages as of December 18, 2018.
- The field PDA teams found: 9 destroyed, 289 with major damage, 219 with minor damage, and 103 affected per FEMA's Damage Assessment Matrix.



# Mat Su Damage Assessment





# A More Complete Assessment of Damaged Homes and Buildings

- A hierarchy was assigned to damage level based on:

1. Joint PDA - damage observed by FEMA, State, and Local Partners;
2. Local/NGO Assessed - damage assessed by ARC/local jurisdictions;
3. State Verified - assigned damage levels in the State database based on a review of reported damages;
4. Self-Reporting - applications pending review and assignment of damage level in the State queue and other unknown levels







# Current Verified Home Damages

	Anchorage	Mat-Su Borough	Kenai Pen. Borough
Destroyed	54	25	2
Major Damage	676	144	18
Minor Damage	23	349	20
Affected	9	40	10





[disasterassistance.gov](https://disasterassistance.gov)

1-800-621-3362

[sba.gov/disaster](https://sba.gov/disaster)

1-855-445-7131

[ready.alaska.gov/earthquake](https://ready.alaska.gov/earthquake)

1-855-445-7131





**Bryan J Fisher**  
**State Coordinating  
Officer**

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**Timothy Manner**  
**Federal Coordinating  
Officer**

Federal Emergency Management  
Agency  
DHS

[Timothy.manner@fema.dhs.gov](mailto:Timothy.manner@fema.dhs.gov)







# Alaska Earthquake and Tsunami Hazards



Dr. Summer Ohlendorf  
U.S. National Tsunami Warning Center  
Palmer, AK





# Overview



## Tectonic Setting of Alaska

## Location of Seismic Hazard

## Possible Sources of Tsunami Hazard

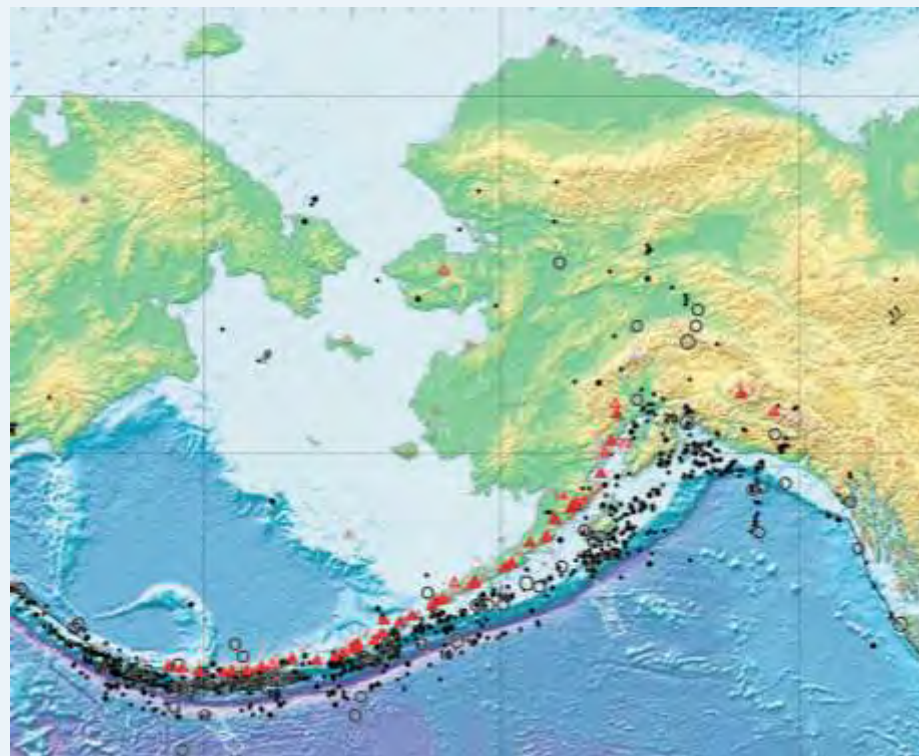
## Earthquake Hazards

## Tsunami Hazards

## Landslide Tsunamis

## Volcanic Tsunamis

## Resources



### Disclaimer:

- Instrumental records don't go far back, and historical records are incomplete
  - Typical recurrence intervals for large earthquakes, tsunamis, and eruptions tend to be long
- >> Just because we don't have a record of a certain type of event, doesn't mean it hasn't happened!



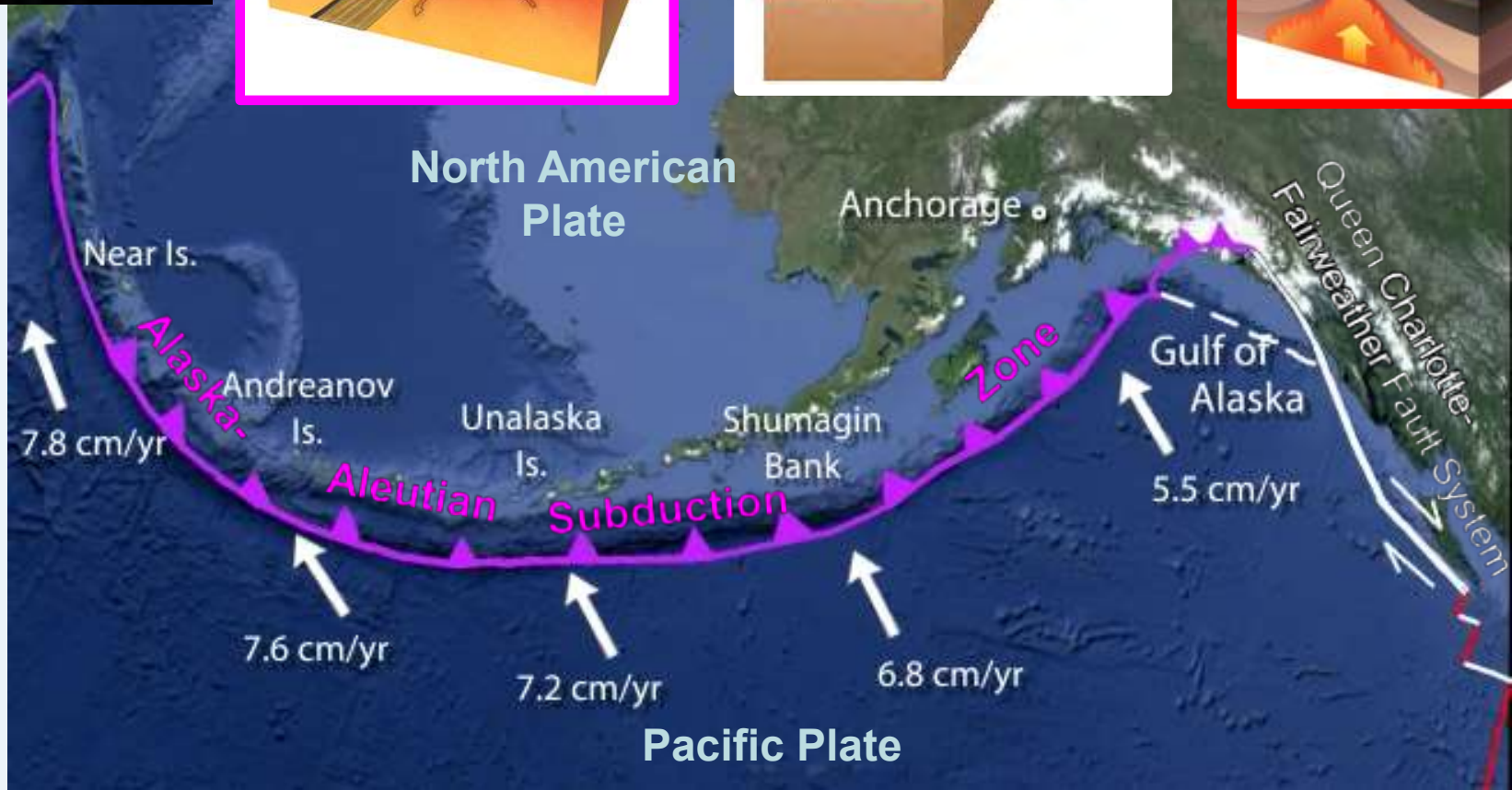
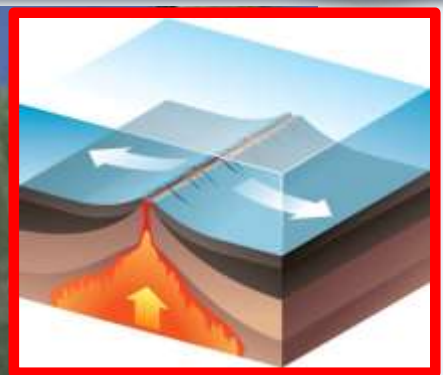
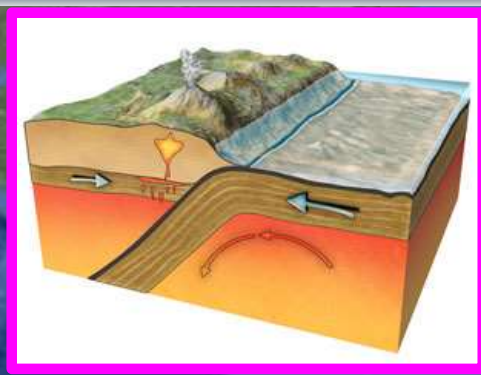




# Tectonic Setting of Alaska

**EXPLANATION**

- Subduction
- Transform
- Divergent

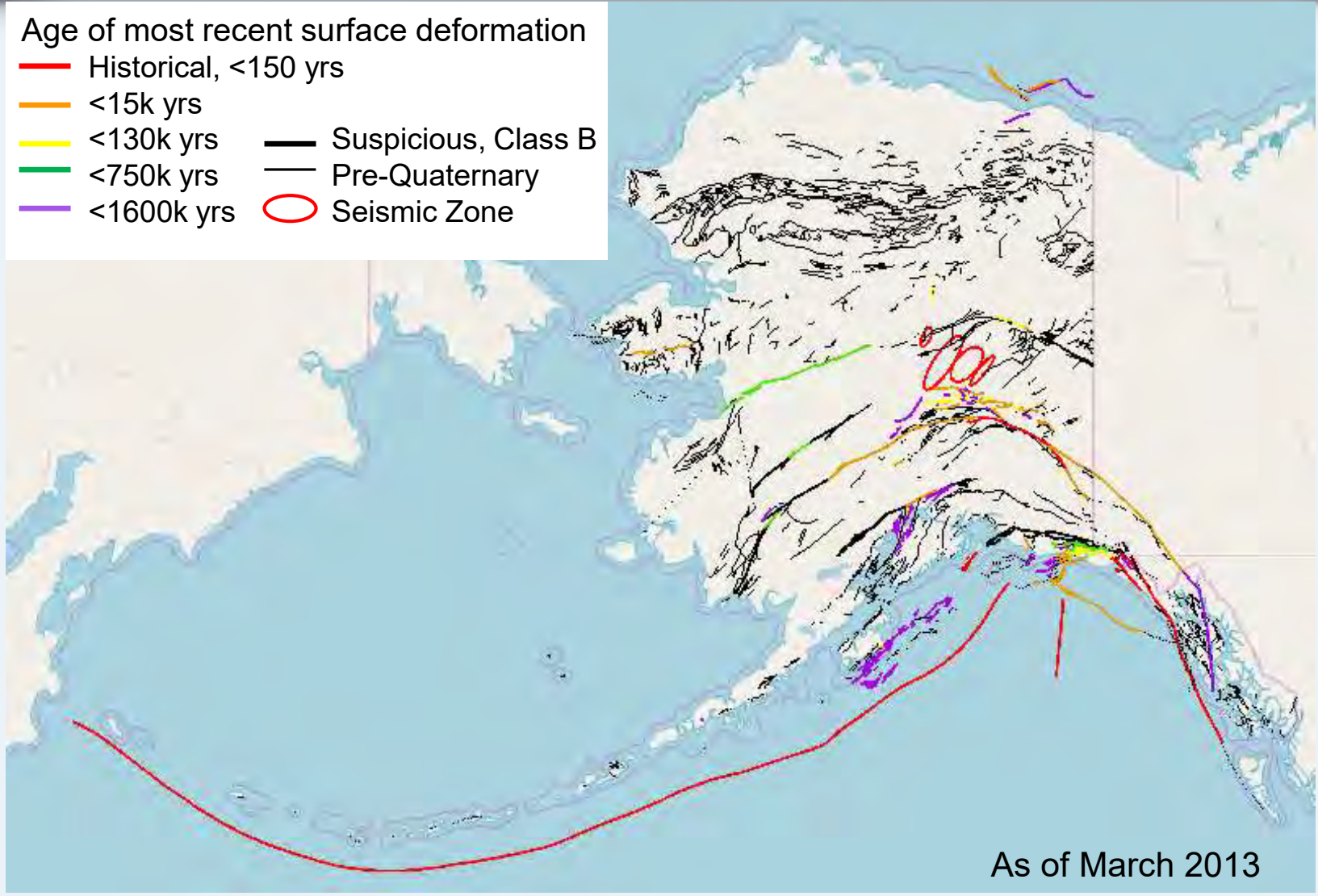






# Known Alaskan Faults

- Age of most recent surface deformation
- Historical, <150 yrs
  - <15k yrs
  - <130k yrs
  - <750k yrs
  - <1600k yrs
  - Suspicious, Class B
  - Pre-Quaternary
  - Seismic Zone



As of March 2013



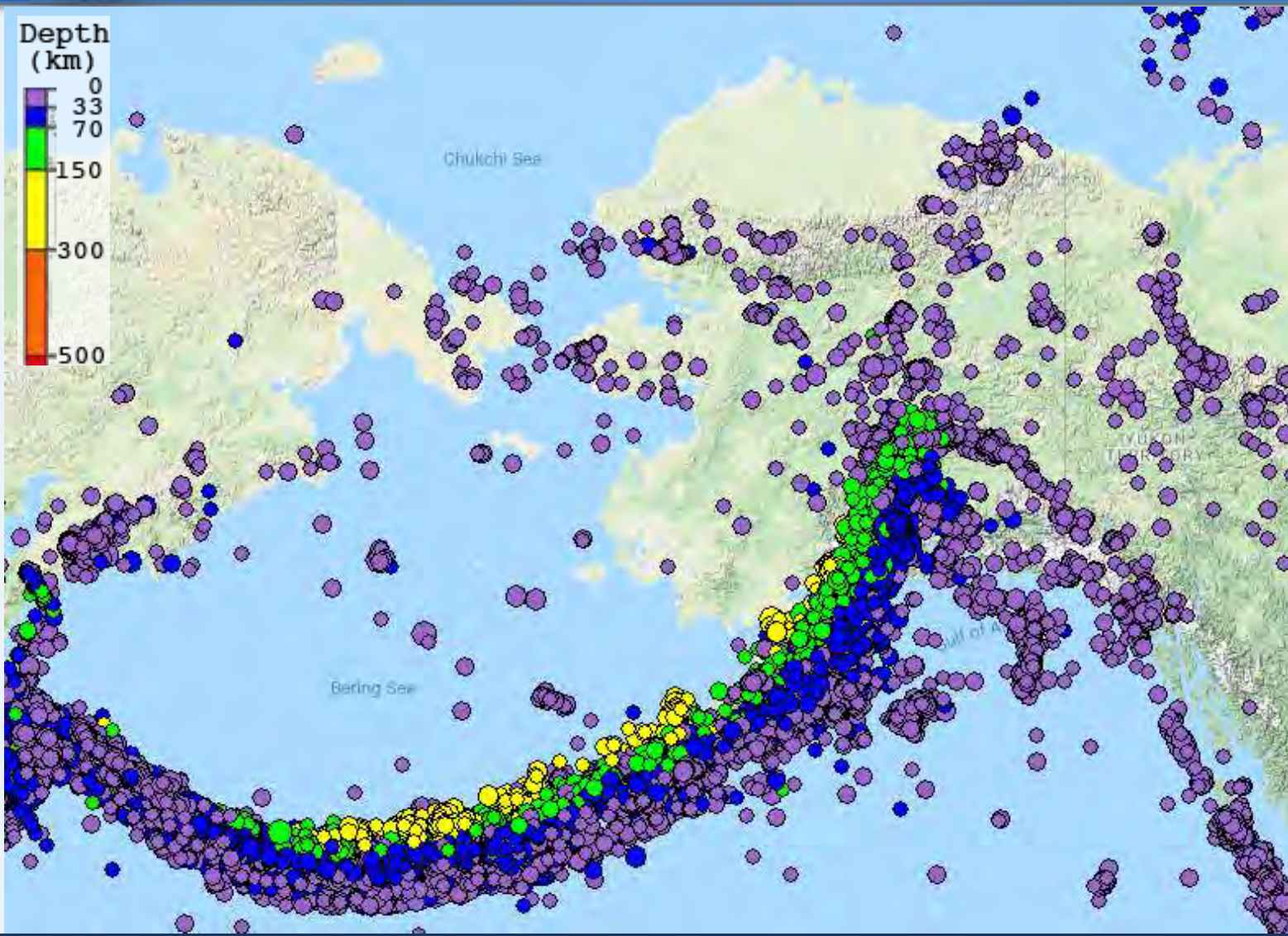
Building a Weather-Ready Nation



www.tsunami.gov



# Recent Alaskan Earthquakes



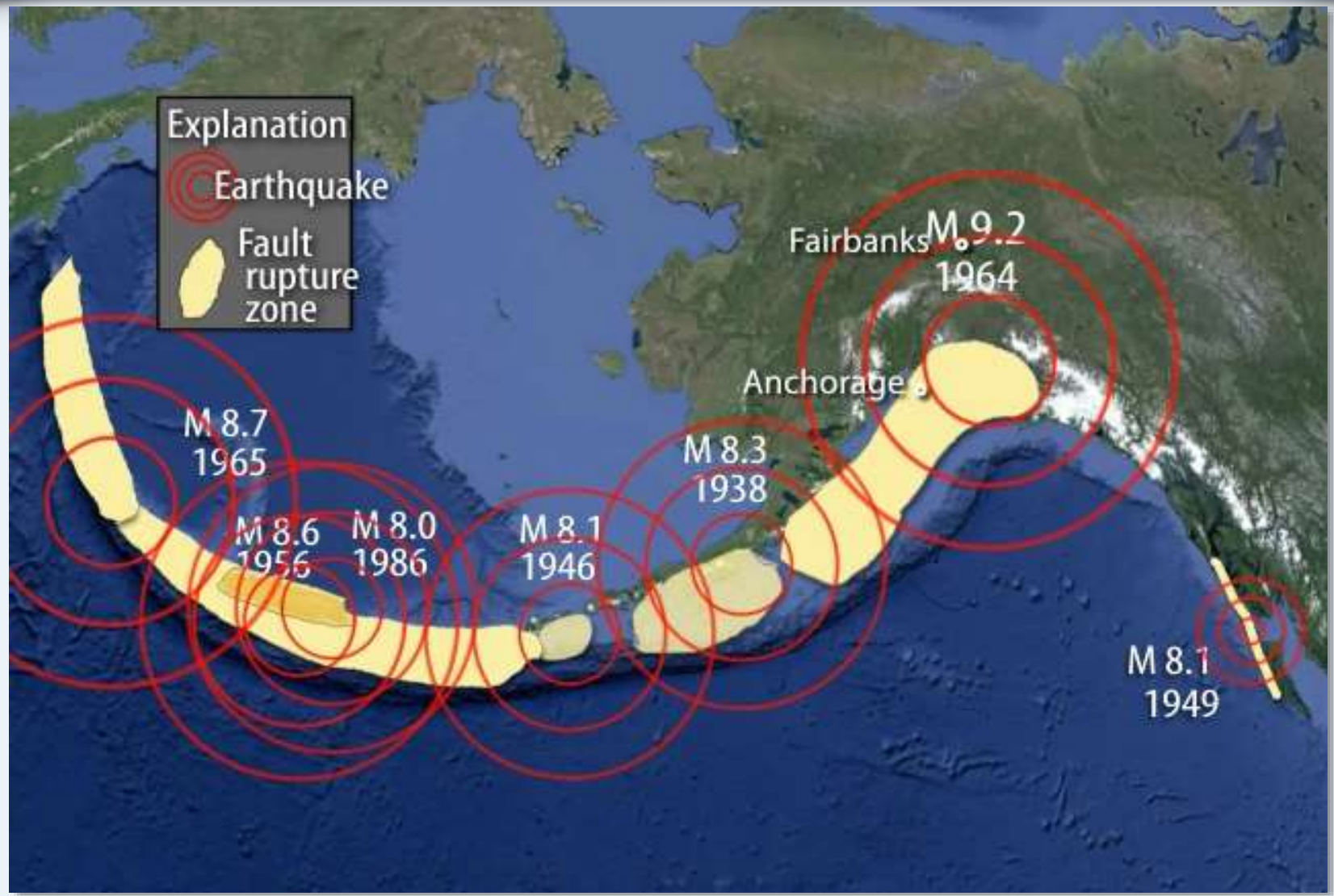
**M 4+  
quakes  
Since 1985**







# Past Earthquakes and Tsunamis







# Alaska Earthquake Hazard



# Likely Tsunami Sources

- **Earthquakes**

- Distant

Likely smaller tsunami, but impacting many locations.  
Hours of warning time

- Regional/local

Likely larger tsunami, but more localized. Little warning time

- **Landslides**

Triggered by earthquake shaking, or not. Little to no warning

- Subaerial: above water
- Submarine: below water

- **Volcanoes**

- Flank collapse
- Submarine explosion
- Pyroclastic flows



Tsunami generation at a subduction zone







# Hazards associated with earthquakes



## Liquefaction

Loss of strength during shaking in saturated soils



## Landsliding & avalanches

Danger from both steep slopes and weak geological units



## Deformation of the land surface

Lateral or vertical



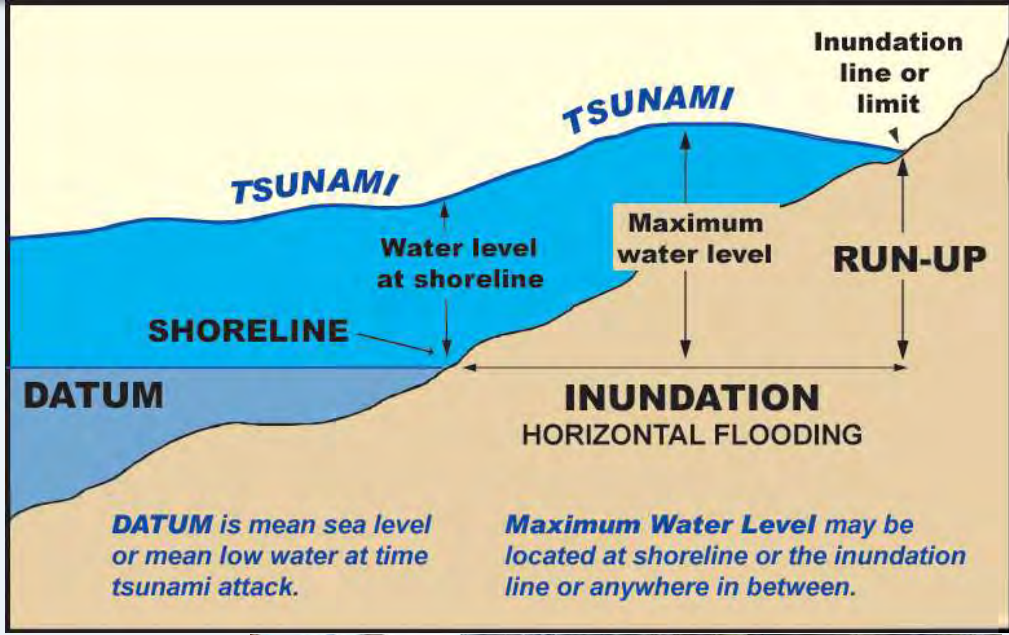




# Hazards associated with tsunamis

## Coastal flooding/ inundation

- Maps made for many communities based on worst case scenario
- If no map, rule of thumb: 1 mi inland/ 100 ft above sea level/ 3 stories up
- Tsunamis can also travel up low-lying coastal waterways



## Strong Currents

Danger from even "small" tsunamis

Santa Cruz Harbor, 2011: 13 knot current





# Hazards associated with tsunamis

## Tsunami Facts:

- Near shore tsunami speed: ~30 mph
- The first wave is often not the biggest
- Series of long waves: may continue going in & out for many hours

*\*wait for official local all-clear\**

**Expected wave height**

**Example impact**

0.3m-1m

1964, 0.6 m tsunami: \$200k damage in L.A. harbor

1m+

1964, 1.2 m tsunami: \$500k damage in Seldovia





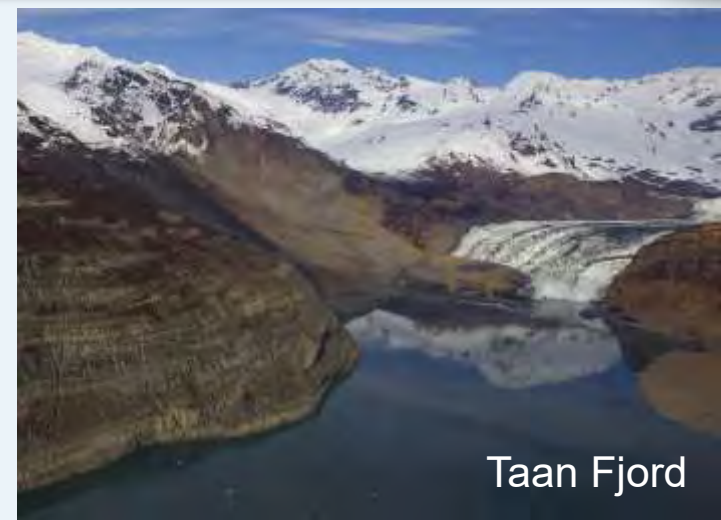
# Additional tsunami hazard in fjords



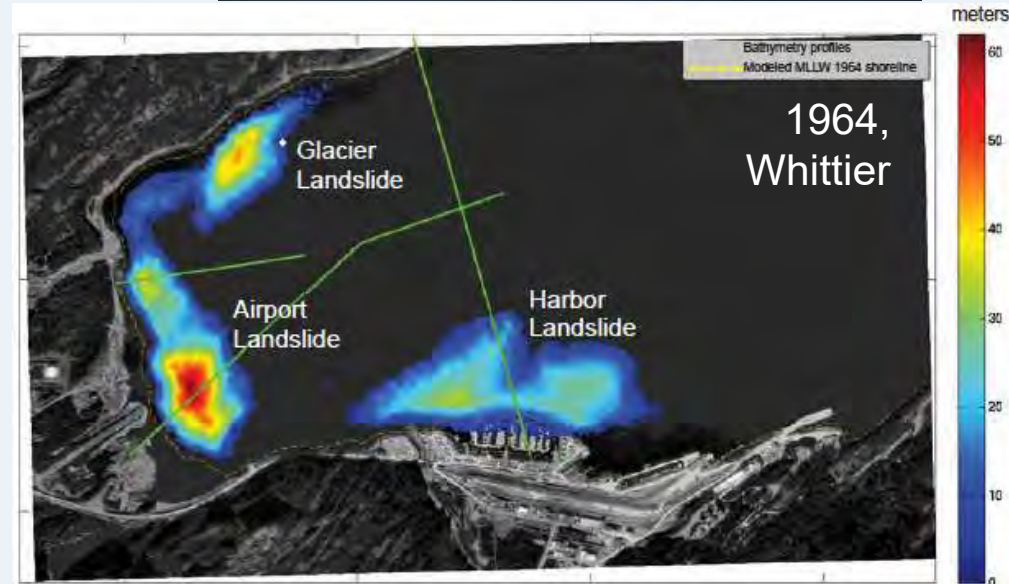
## Landslides Submarine landslides

- Landslide-generated tsunamis don't travel as far, but can be huge locally
- Tsunami waves from local subaerial or submarine landslides can arrive long BEFORE earthquake-generated tsunami

1964: Seward  
Whittier  
Valdez



Taan Fjord

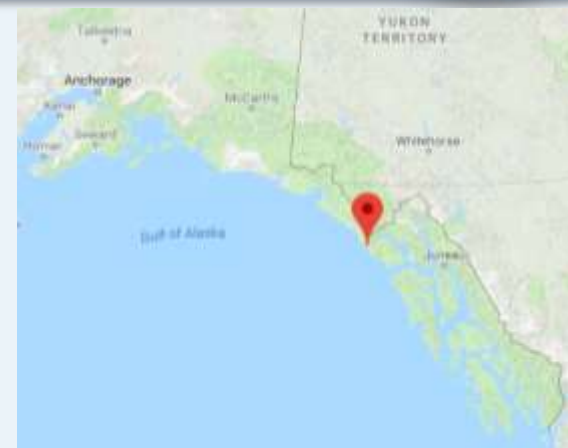






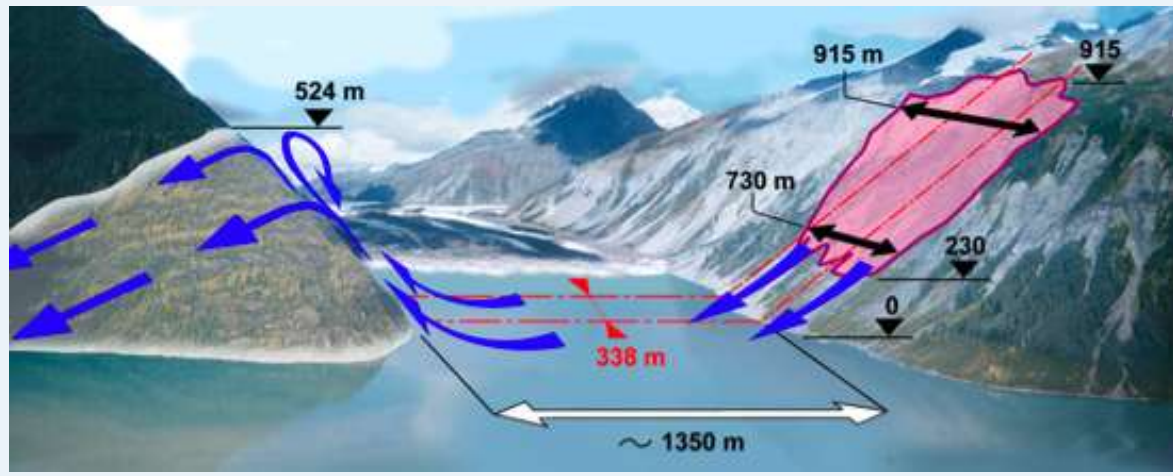
# Tallest Tsunami on Record: 1958 Lituya Bay

M 7.8 quake on Fairweather fault (strike-slip)



Landslide-generated tsunami:  
40 million yd<sup>3</sup> of material (9 Superdomes!)

**Max wave height:  
1720 ft**





# Historically Active Alaskan Volcanoes



AK volcanoes known or suspected of causing tsunamis:

- Bogoslof (1796)
- Pogromni/Westdahl (1820)
- Shishaldin (1824, 1856)
- Okmok (1878)
- Augustine (1883)
- Kasatochi (2008)



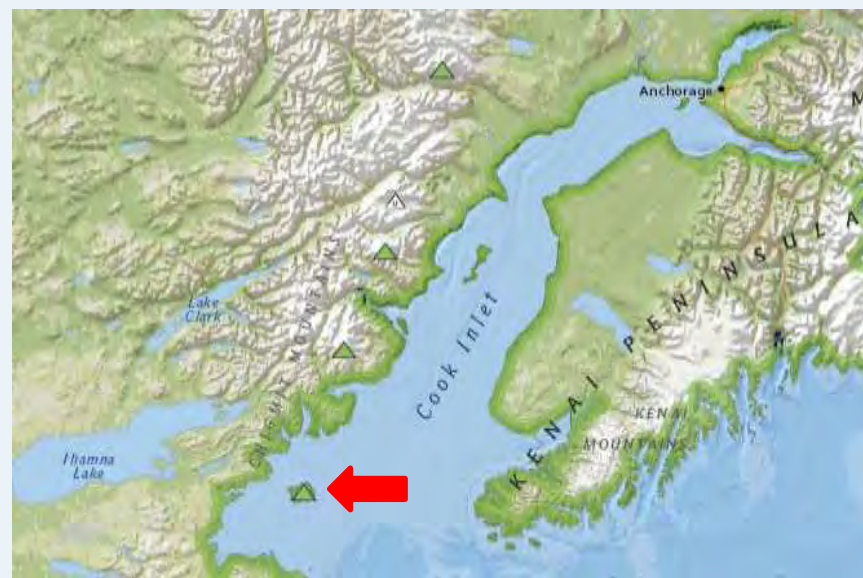




# Augustine Volcano



- History of flank collapses every ~150-200 yrs
- 1883: Large north flank collapse/ debris avalanche triggered local tsunami
  - Nanwalek: 6m above sea level
  - Kodiak: 20 cm peak-to trough
- Last explosive eruption was in 2005-2006







# Summary



Due to its tectonic setting, Alaska has a wide variety of natural hazards that pose risks to infrastructure.

## Earthquakes

at plate boundaries and within a plate  
Strong shaking  
Liquefaction

## Volcanoes

Eruption hazards

Sudden ground or ocean floor level changes  
Triggering of landslides above or below water

Local tsunami hazard

Seward, 1964



## Tsunami

Strong Currents  
Coastal Flooding





# Further Resources



## U.S. Tsunami Warning Centers

[www.tsunami.gov](http://www.tsunami.gov)

## ADGGS interactive fault map

<http://maps.dggs.alaska.gov/qff/>

Alaska tsunami hazard level by community, and tsunami evacuation maps: <https://www.ready.alaska.gov/Plans/Mitigation/Tsunamis>

Alaska tsunami inundation maps:

<https://earthquake.alaska.edu/tsunamis/atom>

## Alaska Volcano Observatory

<https://www.avo.alaska.edu/>

## NOAA NCEI searchable tsunami database:

<https://www.ngdc.noaa.gov/hazard/tsu.shtml>

## USGS searchable earthquake catalog:

<https://earthquake.usgs.gov/earthquakes/search/>

## National Tsunami Hazard Mitigation Program

<https://nws.weather.gov/nthmp/>

## National Earthquake Hazards Reduction Program

<https://www.nehrp.gov/>



# Supplemental Slides



# Tsunami impact at various wave heights

Wave Height (m)	Location and Damage	Year
0.5	Crescent City, CA; 1 mooring broke loose	1963
0.5+	San Diego, CA; boat/dock damage	1957
0.51	Adak, AK; no damage	1996
0.55	Port Orford, OR; no damage	2006
0.6	Arena Cove, CA; no damage	2006
0.6	Port San Luis, CA; no damage	2006
0.6	Ketchikan, AK; no damage	1964
0.6	LA, CA; \$200K damage to boats	1964

# Tsunami impact at various wave heights

Wave Height (m)	Location and Damage	Year
0.8+	Los Angeles, CA; \$1 million damage, 1 drowning	1960
1-1.5	San Francisco Bay, CA; \$1 million damage	1964
1.2	Seldovia, AK; \$500K damage to boats	1964
1.4	Ilwaco, WA; streets flooded	1964
2.2	Half Moon Bay, CA; 3 near drownings, flooding, boat damage	1960
4.8	Crescent City, CA; 10 dead, \$15 million damage	1964



# 1964 Earthquake and Tsunami



2<sup>nd</sup> largest earthquake ever recorded

Caused over \$2 billion damage

Tsunami caused by the earthquake displacement offshore, as well as local landslide tsunamis

Loss of life:  
Earthquake: 9 people  
Tsunami: 122 people



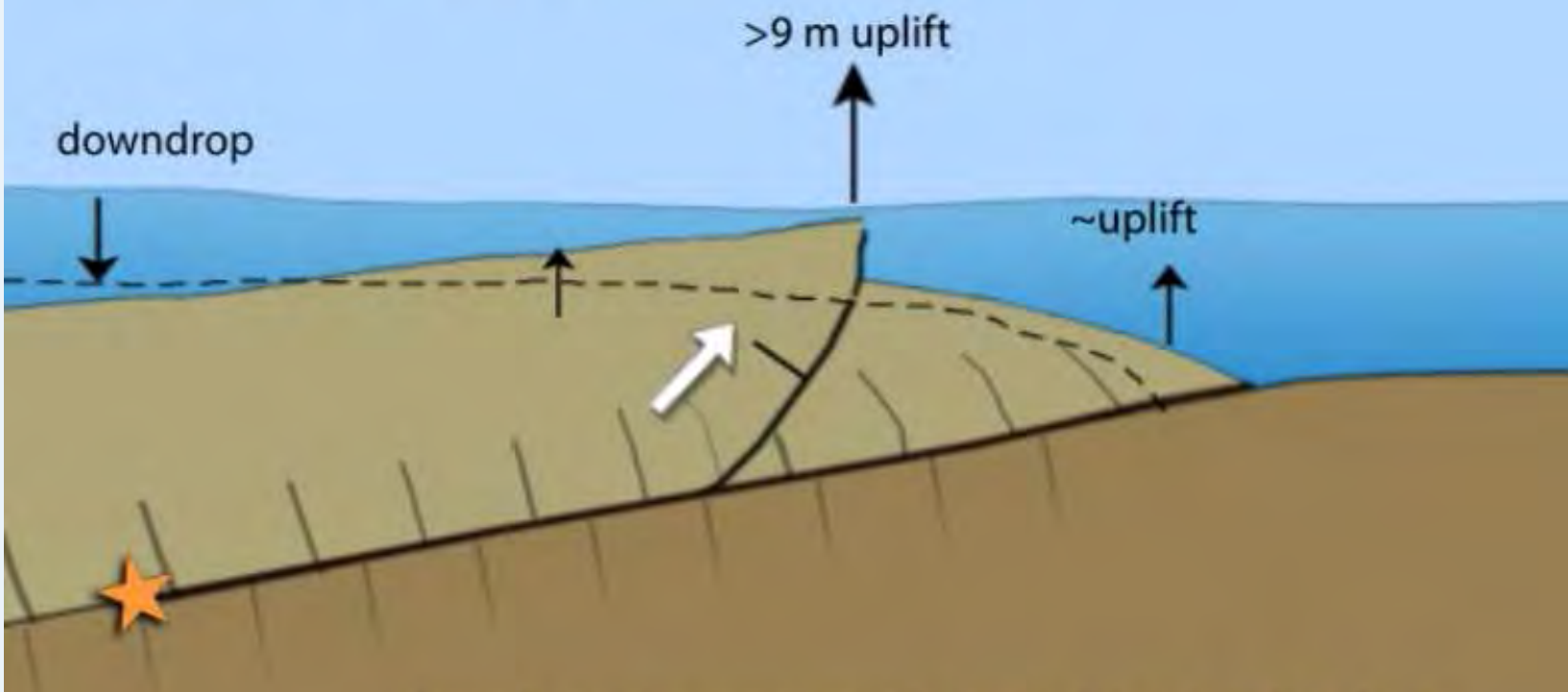




# Prince William Sound Cross Section



## 1964 M 9.2 Great Alaska Earthquake



Simplified & exaggerated to emphasize splay fault process on the submarine part of the Patton Bay fault





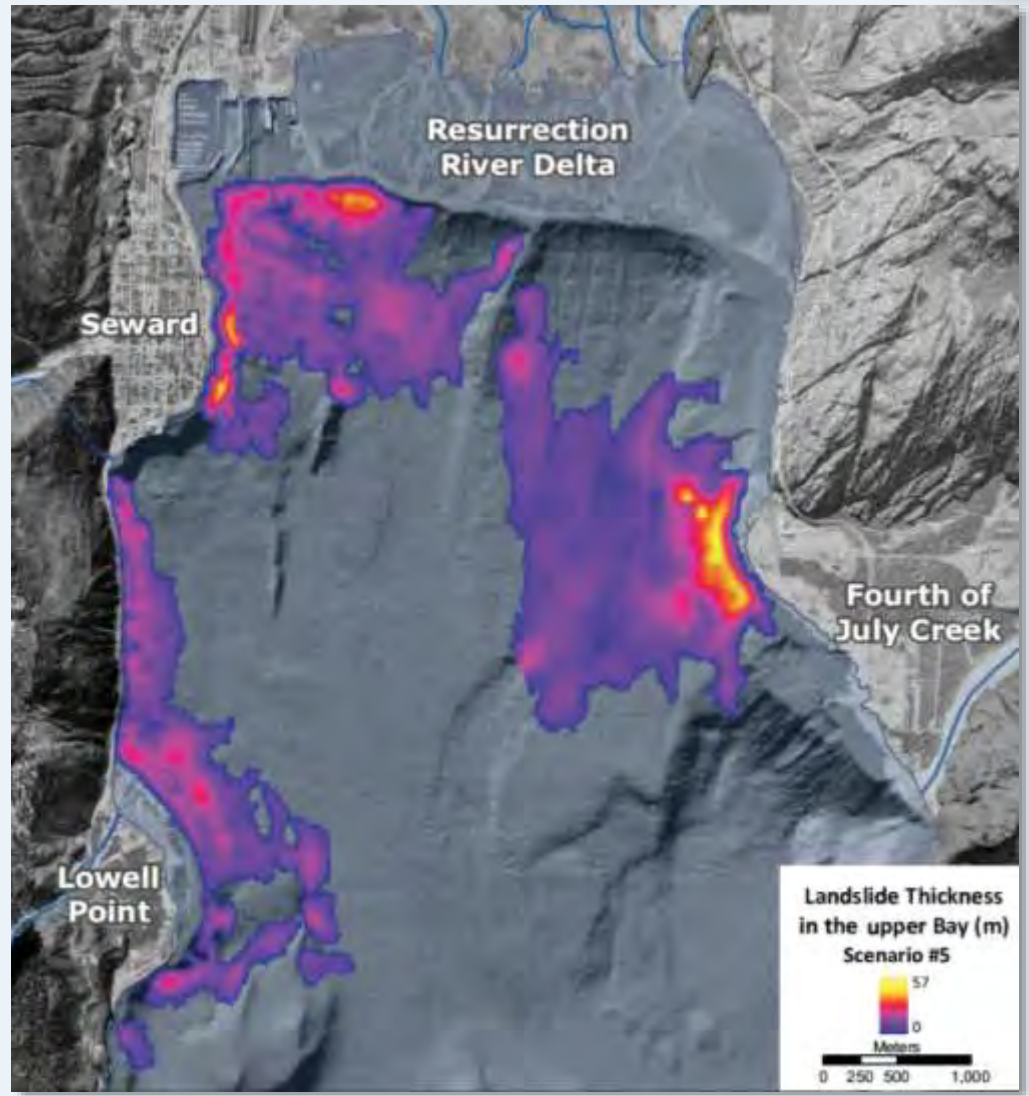
# Seward 1964 Landslides



Detailed bathymetric studies allow reconstruction of sizes of landslides.

Modeling suggests that there were three main local landslides at the head of the bay.

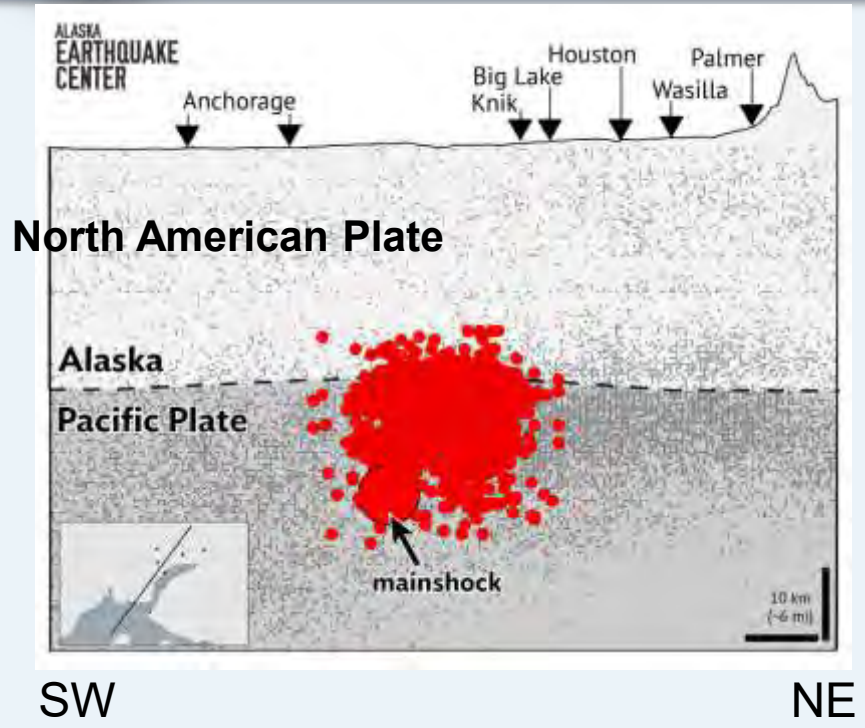
The tectonic tsunami produced longer period waves.



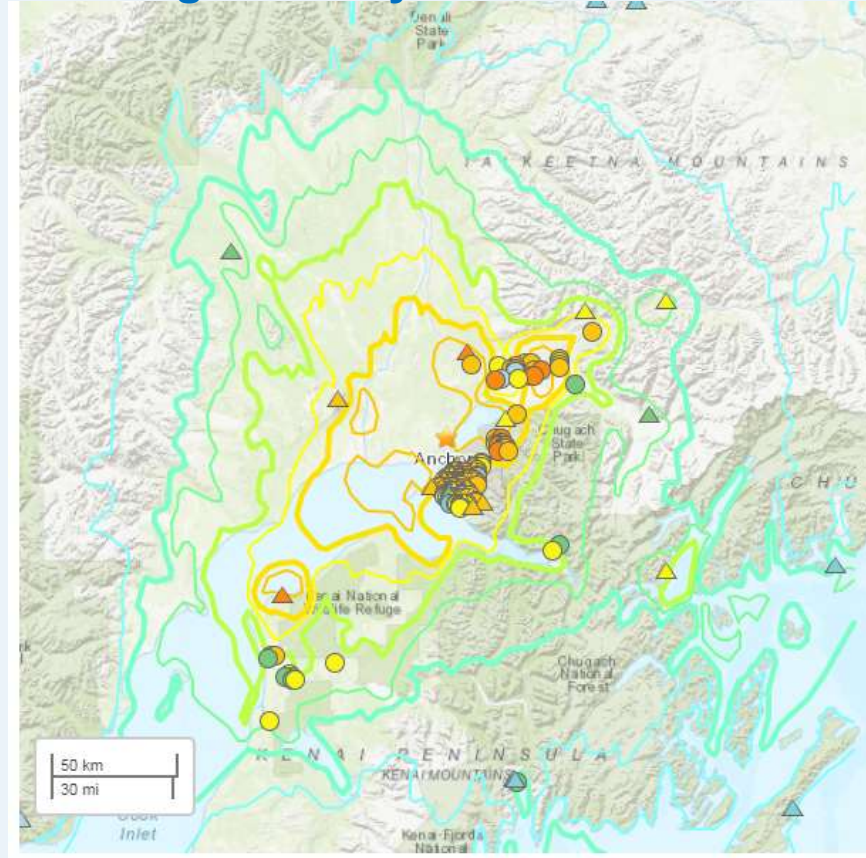




# 2018 M 7.0 Anchorage, AK



## Shaking Intensity in Southcentral AK



❖ The M7.0 Anchorage earthquake occurred 46 km (29 mi) below the earth's surface in the downgoing (subducting) Pacific Plate.

PERCEIVED SHAKING	Not felt	Weak	Light	Moderate	Strong	Very strong	Severe	Violent	Extreme
POTENTIAL DAMAGE	none	none	none	Very light	Light	Moderate	Mod./Heavy	Heavy	Very Heavy
PEAK ACC.(%g)	<0.05	0.3	2.8	6.2	12	22	40	75	>139
PEAK VEL.(cm/s)	<0.02	0.1	1.4	4.7	9.6	20	41	86	>178
INSTRUMENTAL INTENSITY	I	II-III	IV	V	VI	VII	VIII	IX	X+

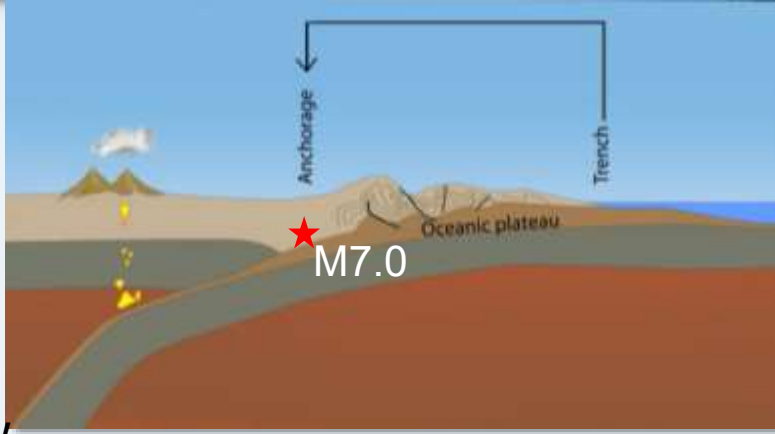
Scale based upon Worden et al. (2012)





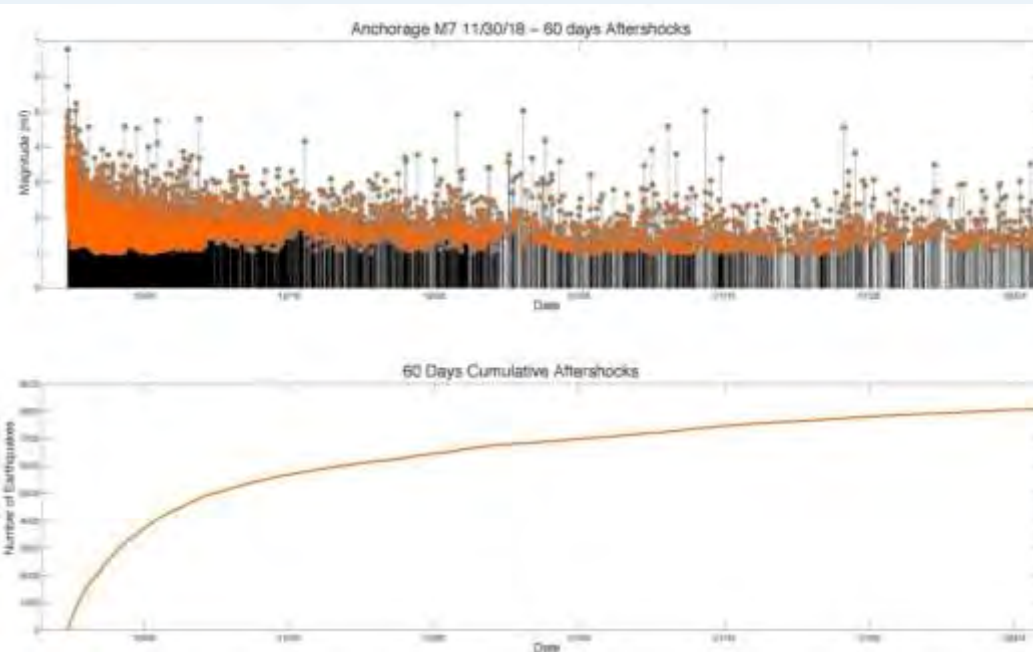
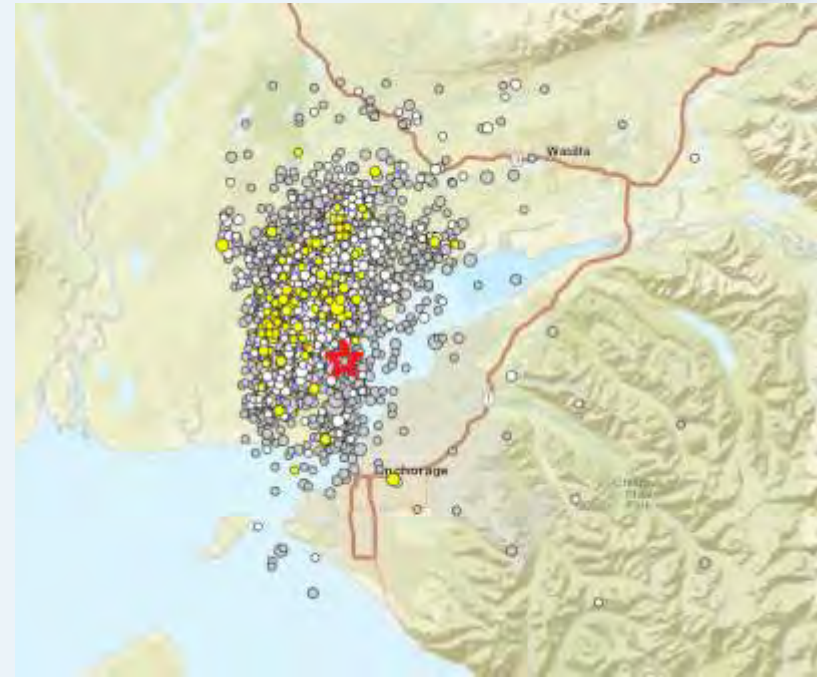


# 2018 M 7.0 Anchorage, AK



NW

SE



**Over 8000 aftershocks of the Nov. 30<sup>th</sup> quake have been recorded—and counting!**



## Initial alert level based on:

- Earthquake size (magnitude) > length/width/slip
- Earthquake depth (deeper -> less surface displacement)
- Location: distance from shore (further onshore -> less likely to displace sea water)

## Later refined alert levels based on:

- Adjustments to magnitude
- Sea level measurements (DART, tide gauges)
- Forecasts

- \* Not explicitly considered:  
Fault mechanism  
(horiz. or vertical slip?)
- \* Partially considered:  
Water depth

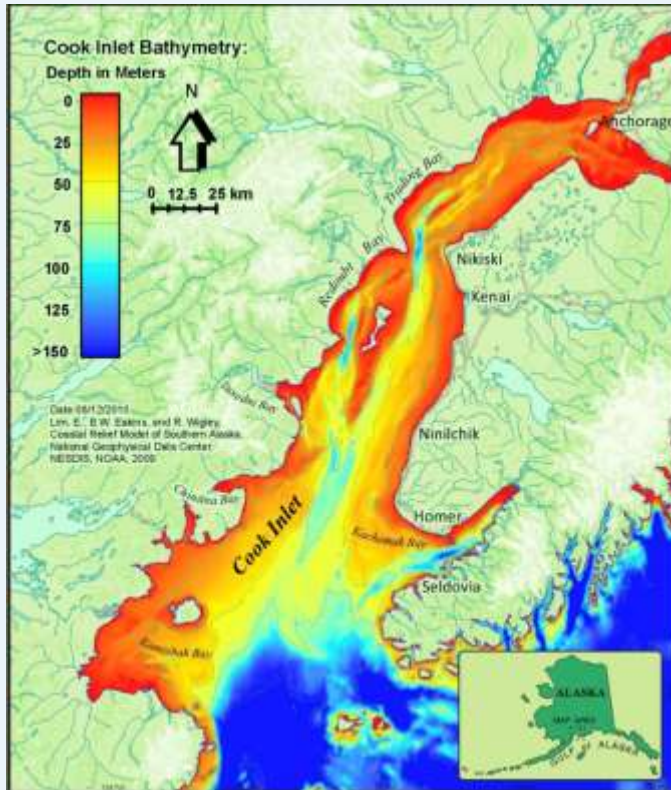






# Upper Cook Inlet tsunami hazard: low

Tsunami waves lose energy as they travel up from the Pacific through the relatively shallow water of the Inlet, to the point that they are no longer dangerous



**\*\*No tsunami damage to upper Cook Inlet from 1964 earthquake\*\***







# What makes a tsunami different from other waves?



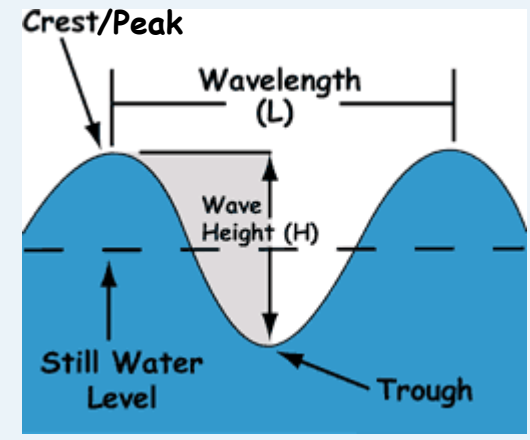
- Moves whole water column instead of just surface
- Much longer and consists of a lot more water
- Series- not a single wave. ~15 min. – 1 hr apart.
- First wave might not be biggest
- Usually like a fast flood
- Speed is dependent on water depth

Deep ocean: ~500 mph  
Near shore: ~30 mph



Typical Tsunami Wave vs. Typical Wave

WAVE FEATURE	WIND-GENERATED WAVE	TSUNAMI WAVE
Wave Speed	5-60 miles per hour (8-100 kilometers per hour)	500-600 miles per hour (800-965 kilometers per hour)
Wave Period	5 to 20 seconds apart	10 minutes to 2 hours apart
Wavelength	300-600 feet apart (100-200 meters apart)	60-300 miles apart (100-500 kilometers apart)





# PORT WILLIAMS SHUYAK ISLAND SPILL: USCG LESSONS LEARNED

Alaska RRT Meeting  
March 5, 2019

# INCIDENT SUMMARY

- 3000 gallons of Bunker C oil stored in a bladder on a pier at Port William, on Shuyak Island, Alaska
- A wind-storm led to collapse of the pier and discharge of the oil on 26 Feb 2018
- There was no action on the part of the owner, so the FOSC assumed the response and formed a Unified Command with ADEC
- Response continued until 29 APR 2018 and was funded by Oil Spill Liability Trust Fund and CERCLA Superfund
- Participants included USCG, State of Alaska, DOI, NOAA, Northern Land Trust, Alaska Chadux Corp., Global Diving & Salvage, Inc., NRC Alaska LLC, and The Response Group



# PORT WILLIAMS, SHUYAK ISLAND, AK



# INCIDENT TIMELINE

- 26 February: Discharge Incident
- 01 March: Initial on-scene assessment & containment booming
- 10 March: Structural Engineer deems structure unsafe
- 17 March: HAZMAT classified and removal begins
- 24 March: Removal of large oiled debris with barges
- 28 March: SCAT team recommends cleanup actions
- 05 April: Major debris removed
- 06-13 April: Pressure washing and deluge systems on oiled beaches
- 16 April: UC stands down IMT and begin disposal phase

# LIMITATIONS

- Remote incident location
- Weather
- Communication: satellite phones with limited internet connectivity
- No shore side berthing
- Hazards related to collapsed pier and remaining pier structure



# LESSONS LEARNED: INCIDENT MANAGEMENT TEAM (IMT)

- All IMT personnel:
  - Co-located within same geographic location
  - All Section Chiefs within IMT
  - All Sections within same geographic location
- USCG Sector Anchorage staffing and hosting of IMT
  - Maximize local staffing prior to external request for forces
  - Sector Anchorage requires infrastructure and IT improvements to host extended IMT

# LESSONS LEARNED: IMT

- Logistics Sections for rural/remote Alaska incident response requires maximum flexibility
  - Multiple OSRO's, contractors and/or RPs should provide the IMT with logistics specialists
  - To maintain span of control and oversight, logistics specialists can be deputies with a qualified Coast Guard Logistics Section Chief providing oversight and coordination

# LESSONS LEARNED: PROFICIENCY

- As a Response Community, we should increase our proficiency through training & exercises on:
- IMT development of spill cleanup and removal endpoints - "How clean is clean?"
- The response to, and mitigation and removal of, persistent oils in the Alaskan environment.



# LESSONS LEARNED: INVESTIGATIONS

- USCG Sectors do not have the staffing nor training to conduct concurrent pollution response and investigation.
  - Investigation requires NCP compliant preliminary assessments, removal investigations, responsible party inquiries, etc.
  - USCG Sectors must request external investigation support early in a response

# LESSONS LEARNED: PREVENTION

- The Importance of Prevention
  - 3000+ gallons of persistent oil should not have been permanently stored in this manner.
  - Administrative controls by agencies must be maintained to reduce or eliminate risk of discharge

# LESSON LEARNED: AREA COMMITTEE

- This incident predates formation of NCP Compliant Area Committees in Alaska
- After Action Reports for future incidents of this magnitude should be led by Area Committees
- Area Committee led After Action Reports should incorporate lessons learned from all participants of the response for collective learning and comprehensive improvement across the response community.





# PORT WILLIAMS SHUYAK ISLAND SPILL: USCG LESSONS LEARNED

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