Alaska Regional Response Team
February 17, 2022, Business Meeting (Virtual Meeting)
Meeting Summary

Meeting Documentation
• Agenda • Meeting Presentations – Morning Presentations and Afternoon Presentations • Meeting Attendees (attached)
ARRT Documents, Plans and Guidance (New/Updated since last meeting)
None currently

Introductions

Ms. Mary Goolie, EPA ARRT Coordinator conducted a roll call of the ARRT Members and the On-scene Coordinators. Non-member attendance was from the Zoom sign-in list.

Review of Actions Since Last Meeting & Tri-Chairs Report

Ms. Tiffany Larson, ADEC Tri-Chair, Ms. Beth Sheldrake, EPA Tri-Chair, and Mr. Mark Everett, USCG Tri-Chair offered opening remarks.

Mr. Everett, USCG Tri-Chair, presented an overview of the actions of the ARRT since the September 2021 meeting, (See Slide 8). Major events and milestones include the following:

- Version 2 of Regional Contingency Plan, completed
- Update of USCG-EPA FOSC Jurisdictions, completed
- Biennial Work Plan 2022-2023, updated
- Annual ESA Compliance Report and Annual Report to NRT, in process
- Continue COVID tracking/ precautions
- GAO released their report GAO-22-104153, Offshore Oil Spills: Additional Information is Needed to Better Understand the Environmental Tradeoffs of Using Chemical Dispersants

ARRT Committee Reports

Dr. Phil Johnson, USDOI reported on the recent activities of the Wildlife Protection Committee and Cultural Resources Committee, Ms. Catherine Berg, NOAA, reported on the Science and Technology Committee, and Ms. Mary Goolie, EPA, reported on the Statewide Planning Committee. A summary of their major activities of these committees and presentation slides is listed below.

ARRT Committee	Major Activities	Presentation
Cultural Resources Committee	• Met in November 2021 and January 2022, next meeting Fall 2022 • 2022-2023 Goals: o Finalize revisions to the *ARRT Cultural Resources Committee Charter* o Review and revise the *Alaska Implementation Guidelines*	Slide 11
Science and Technology Committee	Tracking several requests for projects, including: • Cook Inlet Spill Trajectory Tool (Oil Spill Recovery Institute (OSRI) funded): First step to evaluate potential oil spill trajectories and identify measurements needed to better characterize circulation in Cook Inlet • NOAA/OSRI Environmental Sensitivity Index (ESI) updates: Cook Inlet/Kenai Peninsula – OSRI funded; Next locations are Kodiak Island/Shelikof Strait, and southeast Alaska • Research Priorities for Food Safety & Security Following an Oil Spill, funded by OSRI • Oil in Ice Research, Phase 2. Joint project with CRREL, NOAA, USCG, Water Mapping LLC, CRRC, USEPA, ARA Associates. Field tests for UAS with thermal and multispectral sensors to detect, characterize, and map surface oil thickness in ice-infested waters. Research in Cook Inlet (March-April 2022)	Slides 16-20
Statewide Planning Committee	• Monthly SPC Meetings • Tracking upcoming ACP Reviews: Prince William Sound and Arctic and Western Alaska • Working on FAQs & Outreach on Plan Review Process & How Area Committees and the ARRT Committees work together • Recommending & coordinating website updates (ADEC and ARRT)	Slides 21-26
Wildlife Protection Committee	• Next full committee meeting – fall 2022 • 2022-2023 Goals: o Review and administrative update of the *Wildlife Protection Guidelines for Oil Spill Response in Alaska* o Support Pribilof Islands Working Group and Sensitive Areas Working Group • Pribilof Island Working Group o Met in January 2022, Next meeting – March 2022 o 2022-2023 Goals: Review and revise the *Wildlife Protection Guidelines: Pribilof Islands* • Sensitive Areas Working Group o 2022-2023 Goals: Review, administrative update, and begin content revision of the *Sensitive Areas Compendium* o Next meeting – TBD	Slide 12-15

ARRT Regional Stakeholder Committee Task Force

ARRT is standing up a task force to make recommendations on a new Regional Stakeholder Committee (RSC) Job Aid and is seeking task force members from a broad range of representation of stakeholders, including agencies and organizations throughout the state. Those wishing to join this task force should contact one of the ARRT Coordinators (contact information on ARRT website).

Area Committee Reports

Each of the four Area Committees provided updates on the activities of the Area Committees and recent major events in the areas. Significant work is being made on each of the four Area Contingency Plans. See presentation slides 28-52.

Area Committee Requests for Support:

The Area Committee submitted the following requests for support:

- Continue conversation on logistic support from ARRT member agencies. Request Fall 2022 ARRT Meeting include exercise, to continue the Yukon River WCD scenario exercised in September 2020 (Alaska Inland ACP)
- Assistance in developing a of statewide vulnerability and risk assessment methodology, including a potential standardization of the process across Area Committees. A standard risk assessment methodology will assist in developing and/ or updating the scenario compendium, prioritize future planning efforts, and feed GRS validation work (AWA and Southeast Alaska [SEAK] AC)
- GIS support and improved technology for planning (trajectory and GRS validation software), including support for converting of GRS documents to GIS format (AWA and SEAK AC)

Area Committee	Next Meeting	Status of ACP	Major Upcoming Exercises/ Trainings
Alaska Inland	• TBD, Fall 2022	• V2020.1, signed in March 2021 • Annual review, spring-summer 2022 • On-going work to ISB OSC Decision-making Checklist	• Tonsina River Alyeska TAPS tabletop exercise (March 30, 2022) • Alyeska Fast water Boom Deployment Training (June 24, 2022) • Proposing Capacity Building Outreach and Training- Coordinated by EPA, ADEC, ANTHC (Summer-Fall, 2022)
Arctic and Western Alaska	• April 19, 2022	• V2020.1 Signed December 2021 • V2020.2: ACP Admin Subcommittee has begun	• Hilcorp/Harvest Cook Inlet (April 20, 2022) • PREP Exercise with Crowley (May-Sep 2022, exact dates TBD)

		identification of prospective changes • Several holdovers from 2020.1 input will be addressed in 2020.2 • Anticipate public comment period beginning mid-August 2022	• MADEX (July 26-28, 2022)
Prince William Sound	• April 6, 2022 *(Note: This is the current date as of 3/1/2022. Date was changed after ARRT meeting)*	• V2020.1 revision planned for this year • Public Comment period: estimated February-March 2022 • Target Final Plan: April 2022	• PWS Tanker Exercise (Crowley): May 16-18, 2022 (Valdez) • PWS VMT Exercise (Alyeska): October 2022 (Valdez and Virtual)
Southeast Alaska	• February 10, 2022	• V2020.1, signed in March 2021 • Admin Subcommittee – Workgroup approved UAS protocols (AWA ACP) for next SEAK ACP update	Ketchikan WCD Scenario Exercises, Organized by ADEC and USCG Sector Juneau IMD. Including DOI, NOAA, Seapro, Western Canada Marine Response Corporation (WCMRC), Delta Western. Scenario worked in multiple exercises: • Ketchikan Tactics Exercise, May 9-13, 2022 • PREP Full Scale Exercise 2023 • CANUSDIX – 2023, further continuation of the Ketchikan exercises but involving Canadian Coast Guard Area Maritime Security Exercise – Ketchikan, 2023

The afternoon session consisted of three special topics presentations. The slides from these presentations are available on the 'Afternoon Presentations.' A summary of these presentations is not included in this meeting summary due the complexity and detail of each presentation, interested parties should review the presentation slides.

ACP & RCP 101 and the Role of the Area Committees & the ARRT in planning

Presentation by CDR Jereme Altendorf, USCG Sector Anchorage, (Afternoon Presentation, Slides 3-41)

Indigenous Knowledge & Science in Decision-Making

Presentation by Dr. Jim Kendall, Bureau of Ocean Energy Management, (Afternoon Presentation, Slides 42-70)

BSEE Development of Response Information for Offshore Oil Spills in Area Contingency Plans,

Presentation by Gabrielle McGrath, RPS Group ADEC, (Afternoon Presentation, Slides 71-124.)

Meeting Close-out

Public Comment

- Ms. Karen Pletnikoff, Aleutian Pribilof Islands Association offer public comments. She spoke on the need for consistent and effective notifications of meetings. She offered her opinion that the USCG needs more than one tribal liaison for the state of Alaska, especially considering that nearly half of the federally recognized tribes in the U.S. are in Alaska.
- Ms. Sierra Fletcher, Nuka Research remarked on a short online survey and project description describing the effort to gain input about research and other needs related to food safety after an oil spill.

Closing Remarks:

The tri-chairs offered closing remarks and thanked all presenters and attendees for their participation.

Upcoming Dates

- ARRT Meeting: September 22, 2022

Participant Summary:

Seventy-five individuals attended the meeting, representing 12 member agencies and additional 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		●

Non-member Organizations in Attendance
Federal Agencies
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 Commerce, NOAA Fisheries
U.S. Department of the Interior, Bureau of Land Management
State Agencies
Alaska Department of Fish and Game
Alaska Department of Natural Resources/ Office of History and Archeology
Federally Recognized Tribes
Aleutian Community of St. Paul Island
Local Governments/Agencies

Industry
ConocoPhillips Alaska, Inc.
Crowley Alaska Tankers
Crowley Fuels LLC
Hilcorp Alaska
Response and Environmental Services
1-Call Alaska/ Resolve Marine
Alaska Clean Seas
Cook Inlet Spill Prevention & Response, Inc (CISPRI)
Nuka Research and Planning, Ltd.
Pearson Consulting
SLR International
Non-Governmental Organizations
International Bird Rescue
Ocean Conservancy
Prince William Sound Regional Citizens' Advisory Council
Aleutian Pribilof Islands Association

ALASKA REGIONAL RESPONSE TEAM

February 17, 2022

Meeting Purpose and "Rules"

- *This is a business meeting of the **ARRT***
  - *Questions and discussion is for ARRT Members and OSCs*

- *Items discussed that the responsibility or content of the Area Committees will be **referred to appropriate Area Committee** and not including in the meeting discussion, expect 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 are invited to sign up for Public Comment.*

Tips: Using Zoom

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

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

Dial-In Options:

669-254-5252 669-216-1590
551-285-1373 646-828-7666

Meeting ID: 161 6961 3152
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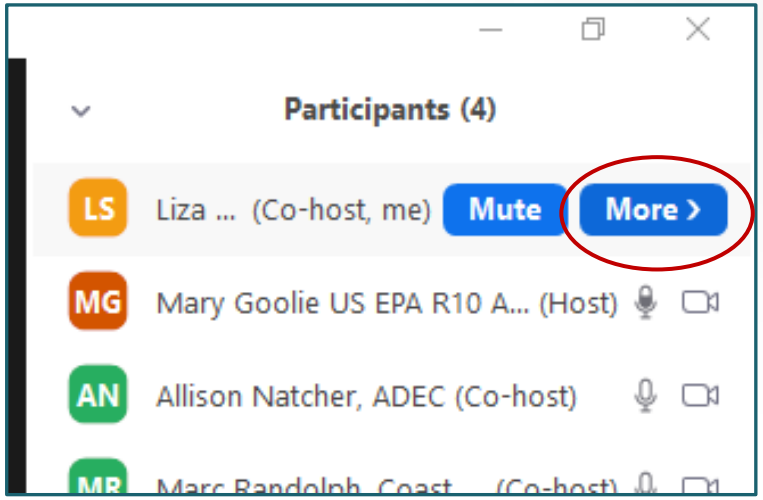
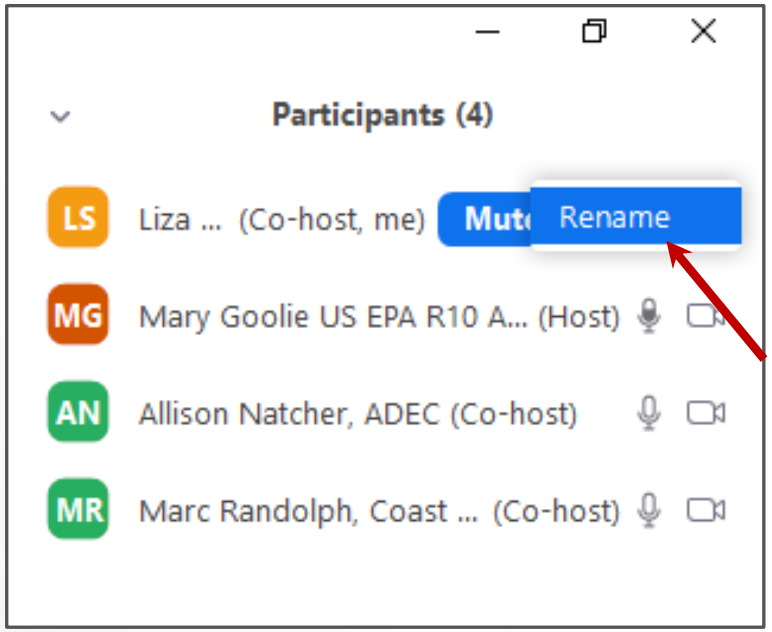
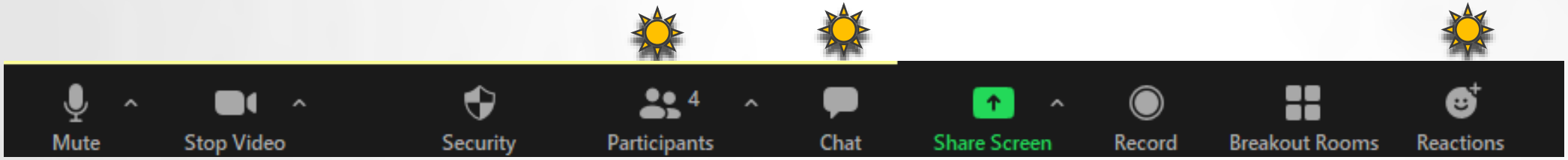




ZOOM TIPS: **RAISE HAND AND CHAT**



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.

Non-ARRT members, sign up for Public Comment by entering your request in Chat.

ALASKA REGIONAL RESPONSE TEAM

INTRODUCTIONS &
REPORT FROM TRI-CHAIRS

Supporting Federal and State On-scene Coordinators

Alaska RRT

INTRODUCTIONS

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

For other attendees and members of the public, the attendee list will be based Participant Names in Zoom.

New Members & OSCs

Tony McKarns, DOE

SINCE LAST MEETING (SEP 2021- VIRTUAL)

- Version 2 of Regional Contingency Plan
- Update of USCG-EPA FOSC Jurisdictions
- Biennial Work Plan 2022-2023
- Annual ESA Compliance Report
- Annual Report to NRT

Relevant Agreements

- Russia-US JCP JPG Meeting & Exercise
- CANUSARCTIC Annex revision
- CANUSDIX 2021 Exercise

National

- Continue COVID tracking/ precautions
- NRT monthly member meetings Cascadia Subduction Zone National Level Exercise scaled back
- GAO released their report *GAO-22-104153, Offshore Oil Spills: Additional Information is Needed to Better Understand the Environmental Tradeoffs of Using Chemical Dispersants*

ALASKA REGIONAL RESPONSE TEAM COMMITTEES

Cultural Resources Committee
Wildlife Protection Committee
Pribilof Islands Working Group
Sensitive Areas Working Group

February 17, 2022

CULTURAL RESOURCES COMMITTEE

- Met in November 2021 and January 2022
- 2022-2023 Goals:
  - Finalize revisions to the *ARRT Cultural Resources Committee Charter*
  - Review and revise the *Alaska Implementation Guidelines*
- Next meeting – Fall 2022

Photo Credit: U.S. Fish and Wildlife Service

WILDLIFE PROTECTION COMMITTEE

Photo Credit: U.S. Fish and Wildlife Service

- 2022-2023 Goals:
  - Review and administrative update of the *Wildlife Protection Guidelines for Oil Spill Response in Alaska*
  - Begin to update content
- Next full committee meeting – fall 2022

PRIBILOF ISLANDS WORKING GROUP

- Met in January 2022
- 2022-2023 Goals:
  - Review and revise the *Wildlife Protection Guidelines: Pribilof Islands*
- Next meeting – March 2022

Photo Credit: NOAA

SENSITIVE AREAS WORKING GROUP

- 2022-2023 Goals:
  - Review, administrative update, and begin content revision of the *Sensitive Areas Compendium*
- Next meeting – TBD

Photo Credit: U.S. Department of the Interior

QUESTIONS?

Contact us:

DOI: grace_cochon@ios.doi.gov

SHPO: judy.bittner@alaska.gov

FWS: angela_matz@fws.gov

NMFS: sadie.wright@noaa.gov

ADFG: jeanette.alas@alaska.gov

ADEC: mike.donnellan@alaska.gov

Photo Credit: U.S. Fish and Wildlife Service

SCIENCE & TECHNOLOGY COMMITTEE

February 17, 2022

RFPs and Research Projects of Interest

- **Cook Inlet Spill Trajectory Tool (OSRI RFP):**
  - FY22: 10-yr hindcast using the NOAA Cook Inlet Operational Forecast Model and compare it against field measurements and previous circulation model results.
  - First step to evaluate potential oil spill trajectories and identify measurements needed to better characterize circulation in Cook Inlet.

- **NOAA/OSRI Environmental Sensitivity Index (ESI) updates:**
  - Cook Inlet/Kenai Peninsula – OSRI funded
  - Next up: Kodiak Island/Shelikof Strait, SE Alaska

RFPs and Research Projects of Interest

Research Priorities for Food Safety & Security Following an Oil Spill

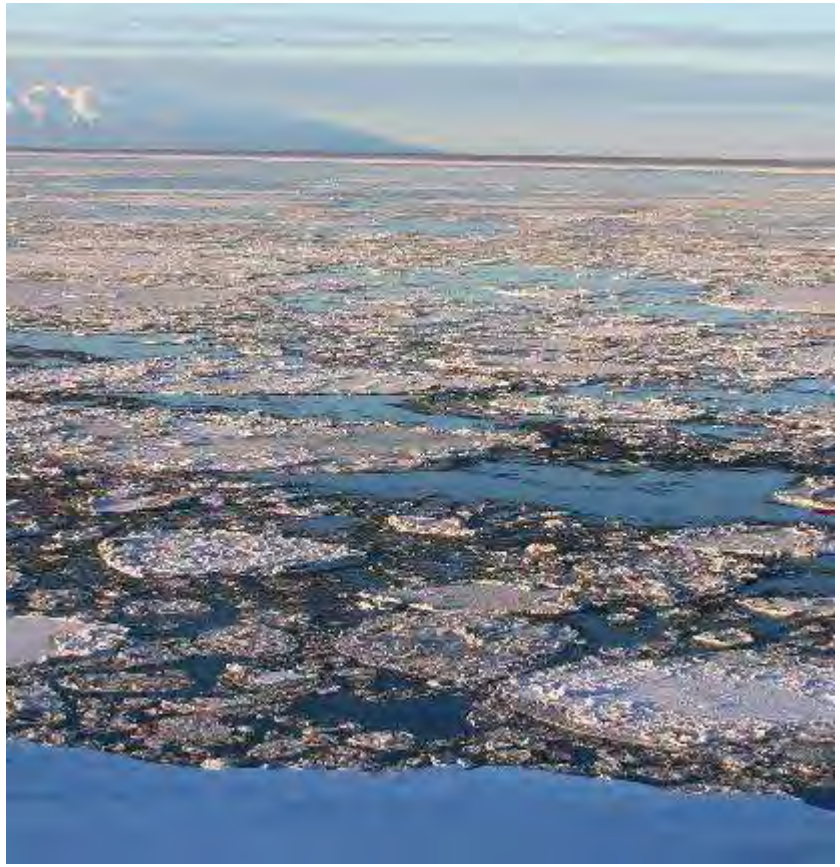
- Nuka Research, funded by Oil Spill Recovery Institute
- Project Steps:
  - Literature Review
  - Community Outreach and Information Gathering, Outreach to Subject Matter Experts
  - Synthesis into Final Report, Sept. 2022

Bearded seal on iceberg. Liz Labunski, USFWS

RFPs and Research Projects of Interest

Oil in Ice Research, Phase 2:

- CRREL, NOAA, USCG, Water Mapping LLC, CRRC, USEPA, ARA Associates
- Field tests for UAS with thermal and multispectral sensors to detect, characterize, and map surface oil thickness in ice-infested waters
- March-April in Cook Inlet
  - Oil and ice, varying thicknesses, in totes
  - Goal is to be able to estimate volumes
  - Spring thaw conditions will be most variable, so good to test then
- Building upon lab (Phase 1) findings: UAS-mounted multispectral sensors differentiated oil thickness; fresh vs. emulsified oil under simulated Arctic conditions.



Ice floes in Cook Inlet, Alaska. Wikimedia/Creative Commons

QUESTIONS?

Contact us:

Catherine.Berg@noaa.gov

Mike.Donnellan@alaska.gov

Latier.Andrea@epa.gov

Andrew.B.Sinclair@uscg.gov

Angela_Matz@fws.gov

Tundra swan, USFWS

ALASKA REGIONAL RESPONSE TEAM
STATEWIDE PLANNING COMMITTEE

Statewide Planning Committee members

ARRT Coordinators

- **EPA:** Mary Goolie
- **USCG D17:** Marc Randolph
- **ADEC:** Allison Natcher

USCG Area Secretaries and ADEC/EPA Area Planners

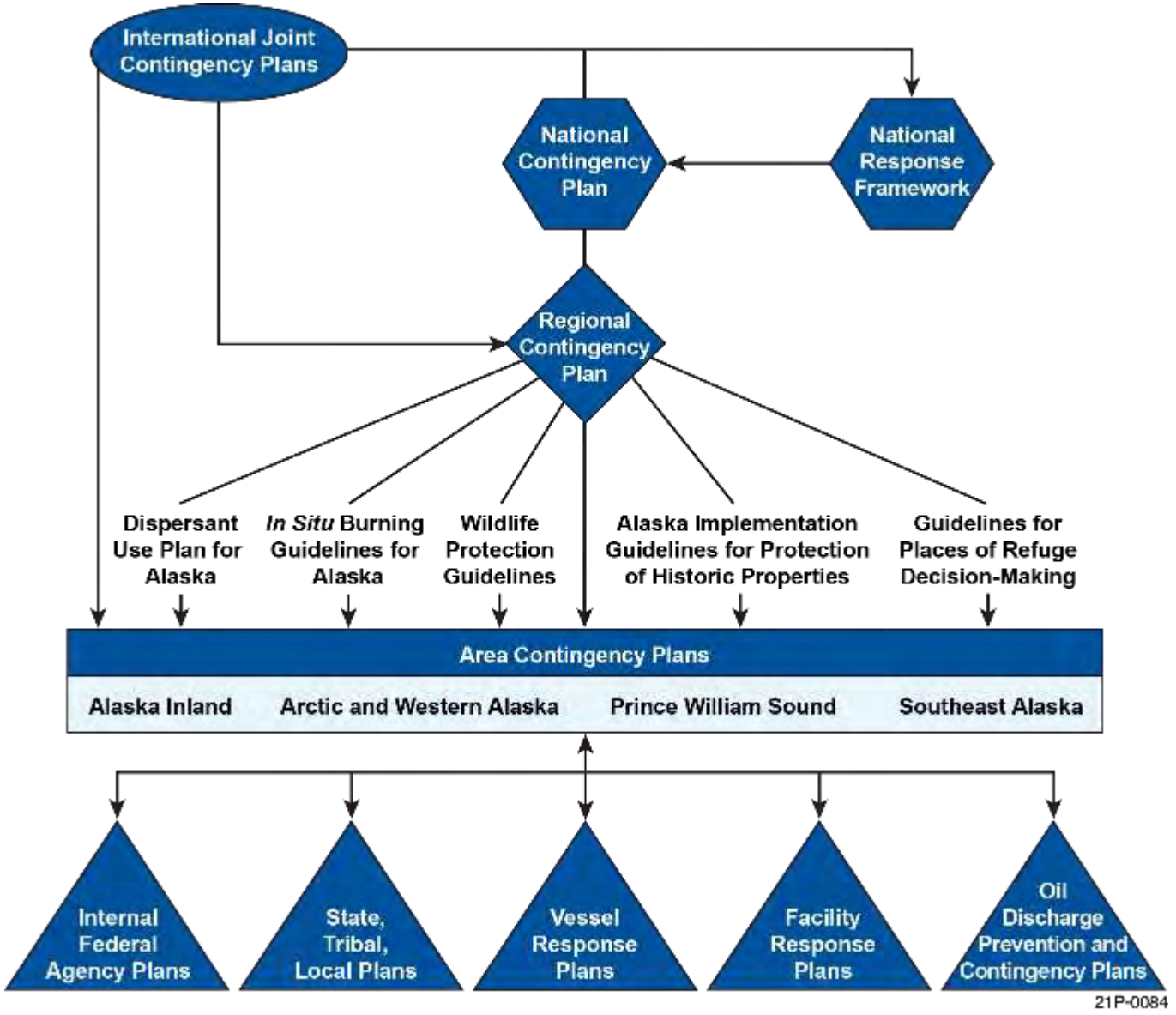
- **USCG PWS:** LT Alex Gomez
- **USCG SEAK:** Kathy Hamblett and LT Joe Zarlengo
- **USCG AWA:** LCDR Matt Richards
- **ADEC:** Victoria Colles
- **EPA:** Mary Goolie

Statewide Planning Committee Activity

- Monthly SPC Meetings
- Upcoming ACP Reviews: PWS ACP, AWA ACP
- FAQs & Outreach: Plan Review Process & How Area Committee, ARRT Committees work together
- Recommending & coordinating Website Updates

- *Interagency coordination of planning efforts*

Plan Relationships



Regional Contingency Plan

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

Area Contingency Plan

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

Questions?

ARRT REGIONAL STAKEHOLDER COMMITTEE TASK FORCE

ARRT Regional Stakeholder Committee Task Force

- ARRT is standing up a task force to make recommendations on a new Regional Stakeholder Committee (RSC) Job Aid.
- Seek task force members from a broad range of representation of stakeholders, including agencies and organizations throughout the state.

If interested in being on this task force, email:

Mary Goolie: mary.goolie@epa.gov

Allison Natcher: allison.natcher@alaska.gov

Marc Randolph: marc.a.randolph2@uscg.mil

Supporting Federal and State On-scene Coordinators

Alaska RRT

BREAK

Meeting will restart at
10:50 AM (Alaska Time)

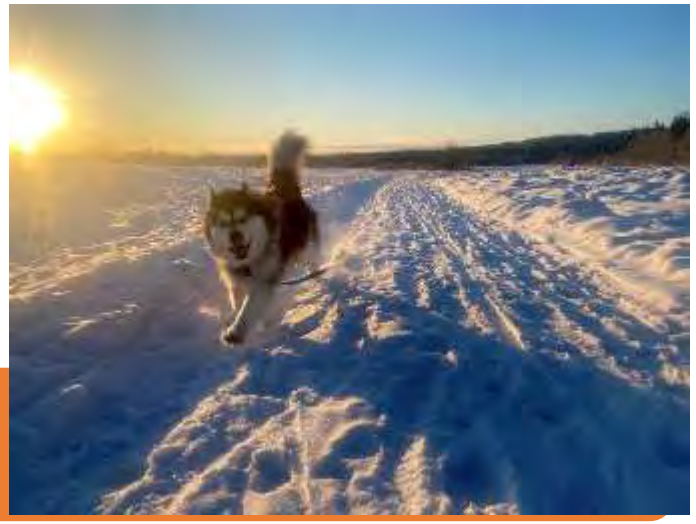
ALASKA REGIONAL RESPONSE TEAM

AREA COMMITTEE REPORTS

ALASKA INLAND AREA COMMITTEE BRIEF

Bob Whittier & Torri Huelskoetter (EPA)
Anna Carey, Kimberley Maher, Sarah Moore (ADEC)

Alaska Inland Area Committee update



Last Meeting Feb 15, 2022

Working Groups Sponsored by AK Inland Area Committee

- **In Situ Burning:** Task Develop ISB Decision-Making Checklist in ACPs *(not an update to ISB Guidelines)* for inclusion.
  - July 7th Kickoff meeting, February 1st Working Group Meeting
- **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 was approved March 2021

Next Tasks: Annual Review *(example - update new OSC contacts).* Proposed Spring-Summer, 2022

Future Public Review Update (Planned for 2023):

- Incorporate products of HazSub, Logistics & ISB Working Groups
- Review & Revise Job Aids for Health & Safety, Radiation, Waste Management & Disposal

Case Summary

Farmers Loop Time Critical Removal Action, Fairbanks, AK September 2021

- *Removed approximately 1.5 cubic yards of stained soil*
- *Removed asbestos-containing pipe insulation*
- *Consolidated refuse and debris*

Assistance to USCG, Unknown Oil Spill at Sitka Sound Science Center, Sitka, AK November-December 2021

Special Announcements:

- Tonsina River Alyeska TAPS tabletop exercise (March 30, 2022)
- Alyeska Fastwater Boom Deployment Training (June 24, 2022)
- Proposing Capacity Building Outreach and Training- Coordinated by EPA, ADEC, ANTHC (Summer-Fall, 2022)

Needs Requiring ARRT Support

- Continue conversation on logistic support from ARRT member agencies
  - Request Fall 2022 ARRT Meeting include exercise, to continue the Yukon River WCD scenario exercised in September 2020

Questions?

ADEC Area Planning website:

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

Contact us:

whittier.robert@epa.gov

huelskoetter.torri@epa.gov

kimberley.maher@alaska.gov

anna.carey@alaska.gov

sarah.moore@alaska.gov

ARCTIC & WESTERN ALASKA AREA COMMITTEE BRIEF

February 15, 2022

AWA-AC@uscg.mil

AREA COMMITTEE UPDATE

Notable initiatives within the Arctic & Western Area Committee (AWA AC):

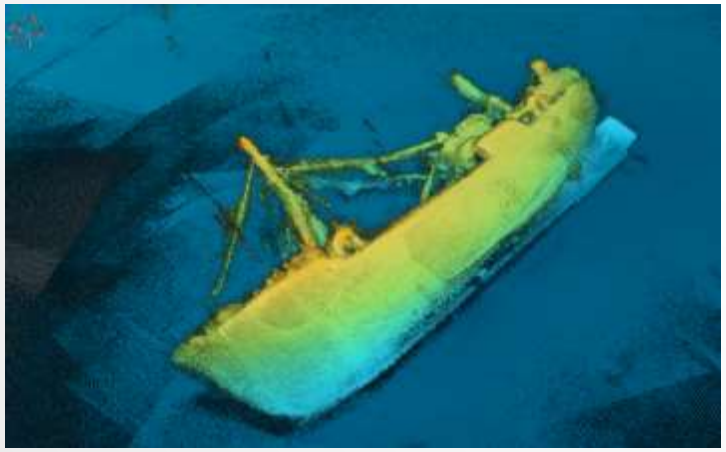
- GRS transition to GIS
  - PDF to GIS layer
  - GRS validation update process
  - Integration of UAS validation data
  - GIS archive MOA with State Geospatial Office
- Finalize risk assessment methodology and update scenario compendium
- Next Meeting: April 19th. Currently evaluating expanding the AC meeting to include Industry Day

AREA CONTINGENCY PLAN UPDATE

- Version 2020.1 signed in December
- Plan updates included:
  - Minor formatting and grammatical changes
  - Added language strengthening the linkage between the ACP and important items located on the References and Tools page
- Next tasks (Version 2020.2)
  - ACP Admin Subcommittee has begun identification of prospective changes
  - Several holdovers from 2020.1 input will be addressed in 2020.2
  - Anticipate public comment period beginning mid August 2022

CASE SUMMARY/ENFORCEMENT

- Incident Action Plan
  - Implemented safety measures to continue operations with COVID-19 restrictions.
  - Use of Army National Guard C-12
- F/V SAINT PATRICK Conclusion – Womens Bay Kodiak, AK
- Northwest Arctic Borough School District – Kivalina, AK



Special Announcements:

- Hilcorp/Harvest Cook Inlet (April 20, 2022)
- PREP Exercise with Crowley (May-Sep 2022, exact dates TBD)
- MADEX (July 26-28, 2022)

AREA COMMITTEE NEEDS FOR ALASKA RRT SUPPORT

- EPA/USCG FOSC MOU
- Development of statewide risk assessment methodology
- GIS support and improved technology for planning (trajectory and GRS validation software)

QUESTIONS?

ADEC Area Planning website:

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

Contact us:

AWA-AC@uscg.mil

July 2020: Facility Inspection, Nome, AK

PRINCE WILLIAM SOUND AREA COMMITTEE BRIEF

February 17, 2022

AREA COMMITTEE UPDATE

Notable Events within Area Committee:

- Plan to submit PWS ACP Version 2020.1 (2022 Update) for Public Comment
- Area Committee Meeting: September 29, 2021

Upcoming Events within Area Committee:

- Steering Committee Meeting: April 5, 2022
- Next Area Committee Meeting: April 7, 2022 (Cordova tentative)
- PWS Tanker Exercise (Crowley): May 16-18, 2022 (Valdez)
- PWS VMT Exercise (Alyeska): October 2022 (Valdez and Virtual)

AREA CONTINGENCY PLAN UPDATE

- Ongoing Work:
  - Administrative Subcommittee:
    - Provided comments on current update for Version 2020.1
    - Public Comment period: estimated February-March 2022
    - Target: April 2022

CASE SUMMARY/ENFORCEMENT

Sunken vessels at the Valdez Small Boat Harbor, 7 DEC – 28 JAN:

- Most have been reported sunk for unknown reasons.
- Most had been cleared of snow just prior.
- Most had caretakers with recent vessel visits

P/C Guys Time Out:	P/C Lonesome Dove	P/C Blue Raven	P/C Lady Mayhem
December 7, 2021, Initial Discovery.	January 12, 2022, Initial Discovery.	January 26, 2022: Initial Discovery.	January 28, 2022, Initial Discovery.
Surface sheen only; Salvage involved federalizing the response.	Surface Sheen (as seen in drone photo); Responsible party salvaged and recovered vessel.	Surface sheen visible; Responsible party salvaged and recovered vessel.	Surface Sheen visible; Responsible Party notified

AREA COMMITTEE NEEDS FOR ALASKA RRT SUPPORT

- Nothing significant to report.

QUESTIONS?

ADEC Area Planning website:

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

Contact us:

Patrick.A.Drayer@uscg.mil

Alex.R.Gomez@uscg.mil

Anna.Carey@alaska.gov

Sunset over Cordova Harbor

SOUTHEAST ALASKA AREA COMMITTEE

Darwin Jensen, CAPT (USCG)
Rachael Krajewski (ADEC)
Southeast Alaska Area Committee Brief
February 17, 2022

AREA COMMITTEE UPDATE

- Area Committee Meeting – 10 Feb 2022

  - Admin Subcommittee – Workgroup approved UAS protocols (AWA ACP) for next SEAK ACP update.

  - GRS Subcommittee – Tactics Exercise planned for May 2022 in Ketchikan

  - Next Meeting – August/September 2022 TBD

    *Transition in membership for both Subcommittees

EXERCISES

Conducted 2021:

- Hoonah GRS
- CANUSDIX – Virtual
- Centerline Logistics Barge Company - Juneau

Planned:

- Tactics 2022
- PREP FSE 2023
- CANUSDIX 2023
- AMSC FSE 2023

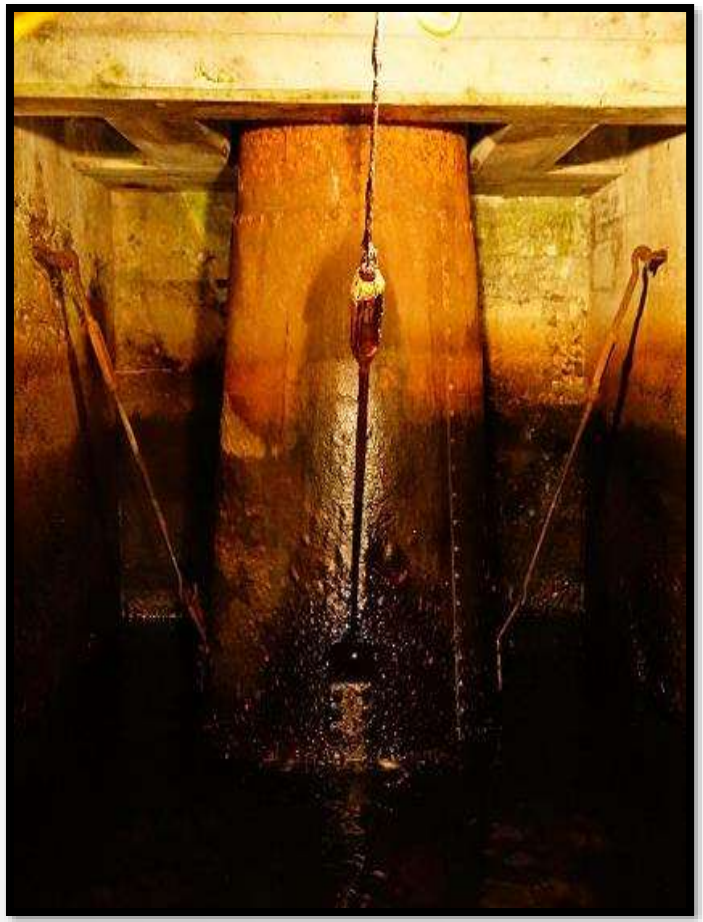
CASE SUMMARY/ENFORCEMENT

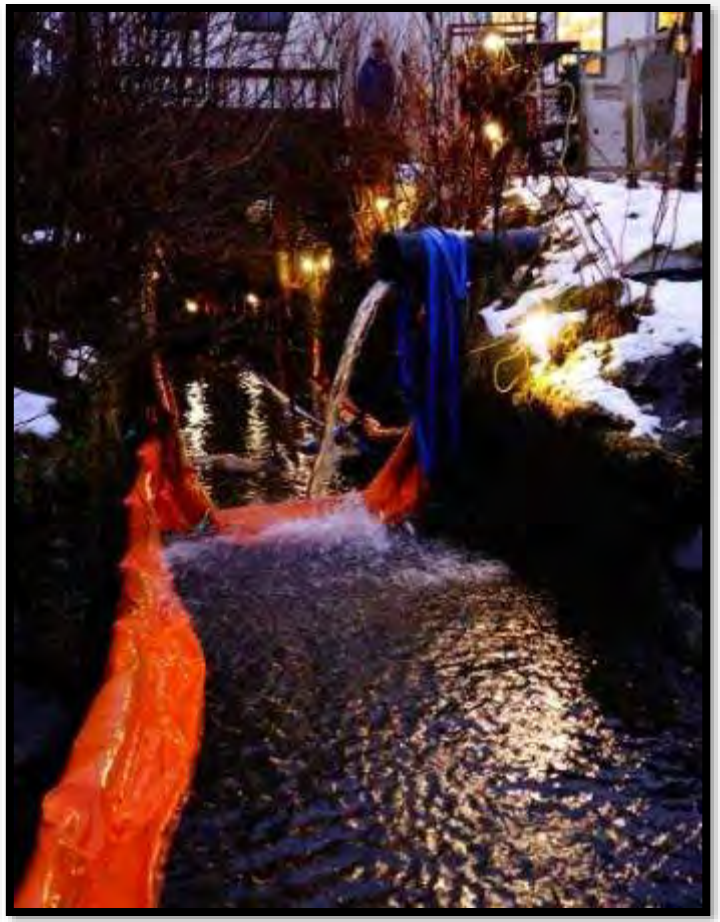
Sitka Sound Mystery Spill – Sitka

18NOV21 – 05JAN22: Oil Discharge from crack in concrete sea wall discovered during construction project at Sitka Sound Science Center

Case Takeaways/Lessons learned

- Complexity of shipping oil samples from SEAK
- Familiarization with PRFA issuance procedures
- Difficulty/inability to effectively assess an unknown oil spill originating from land
- Discovery of significant historic spill activity





SPECIAL ANNOUNCEMENTS

- Ketchikan Tactics Exercise
  - Planned for May 9-13, 2022
  - Organized by ADEC and USCG Sector Juneau IMD
  - Second time running this exercise, and first time outside of Juneau area
  - Develop and maintain relationships with local Industry (Delta Western, Petro Marine, CLAA, and OSROs)
  - Improve proficiency with mitigation and response tactics and evaluate local plans
  - Potential for international engagement

AREA COMMITTEE NEEDS FOR ALASKA RRT SUPPORT

- Request assistance from the ARRT to improve vulnerability and risk assessment for GRS exercise targeting to include potential standardization of the process across Area Committees
- Support for exploration of GRS documents to GIS format and improved technology to conduct validations with modeling software.

QUESTIONS?

ADEC Area Planning website:

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

Retirements and Recognitions

- Phil Johnson, DOI
- Doug Hildebrand, DOE
- CAPT Steve White, USCG
- Dave Rees, EPA
- Marc Randolph, USCG

Supporting Federal and State On-scene Coordinators

Alaska RRT

LUNCH

Meeting will restart at
1:00 PM (Alaska Time)

If you want to offer a public comment,
sign up in "Chat"
or email Mary Goolie
goolie.mary@epa.gov
By the end of this lunch break.

ALASKA REGIONAL RESPONSE TEAM

February 17, 2022

Afternoon Session

Afternoon Agenda

- **ACP & RCP 101 and the Role of the Area Committees & the ARRT in planning,** CDR Jereme Altendorf, USCG Sector Anchorage
- **Indigenous Knowledge & Science in Decision-Making,** Dr. Jim Kendall, Bureau of Ocean Energy Management
- **BSEE Development of Response Information for Offshore Oil Spills in Area Contingency Plans,** Gabrielle McGrath, RPS Group
- **Public Comment**
- **Meeting Close-out**

ACP & RCP 101 and the Roles of the Area Committees & the ARRT in Planning

ALASKA-SPECIFIC REGIONAL AND AREA PLANNING FOR OIL & HAZARDOUS SUBSTANCE RESPONSE

- Introductory Briefing to the National Response System

National hazardous substances and oil pollution contingency plan (NCP)

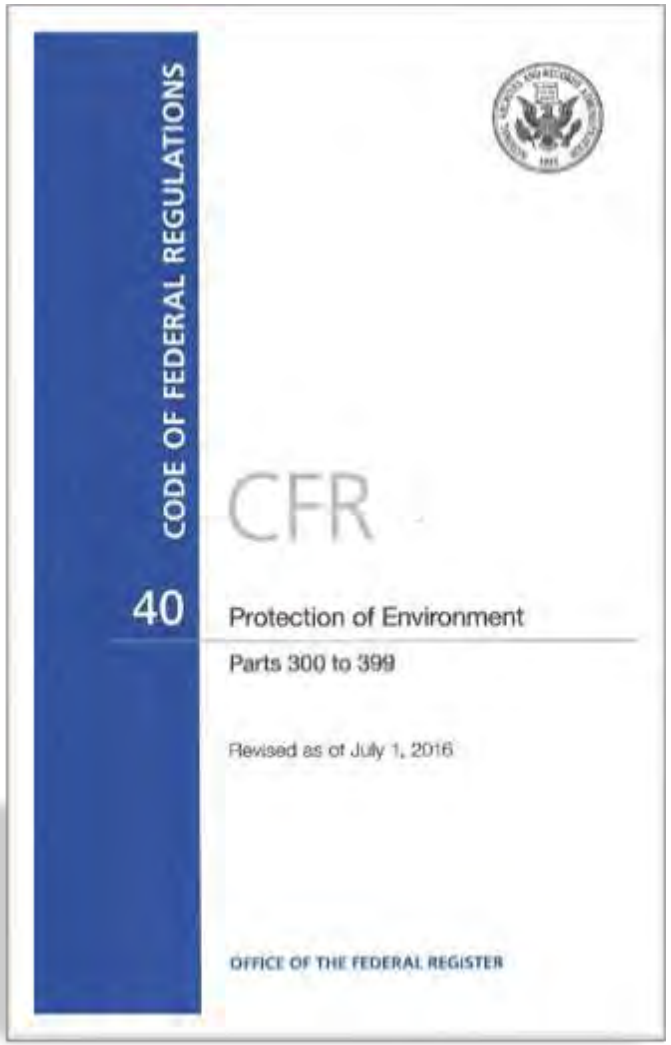
NCP established National Response System (NRS)

Incorporates statutory authority from **Clean Water Act and Superfund (CERCLA)**

Created ***Federal On-Scene Coordinators*** and requires formation of ***Area Committees***

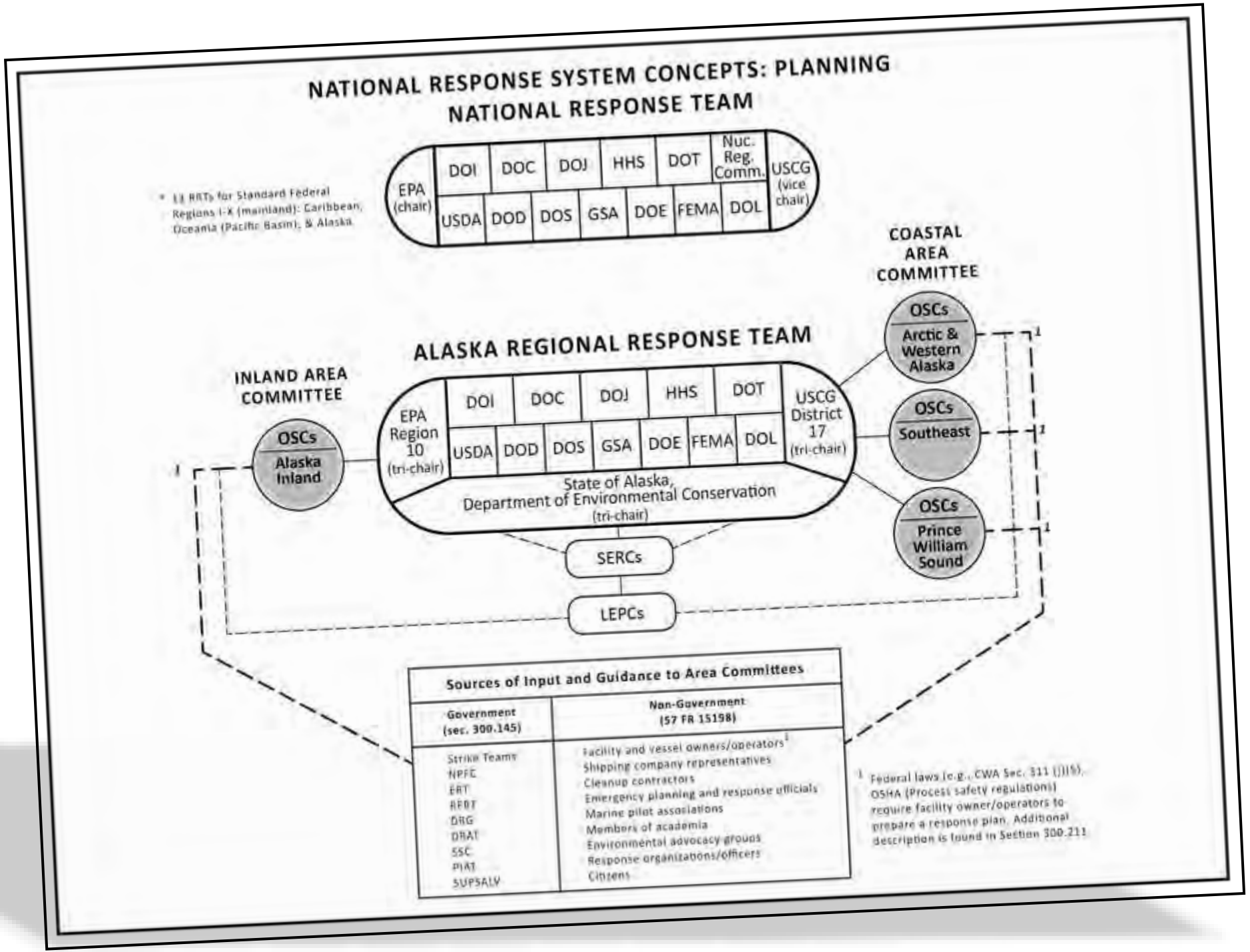
EPA Federal OSCs (Inland zone)

USCG Federal OSCs (Coastal zone)

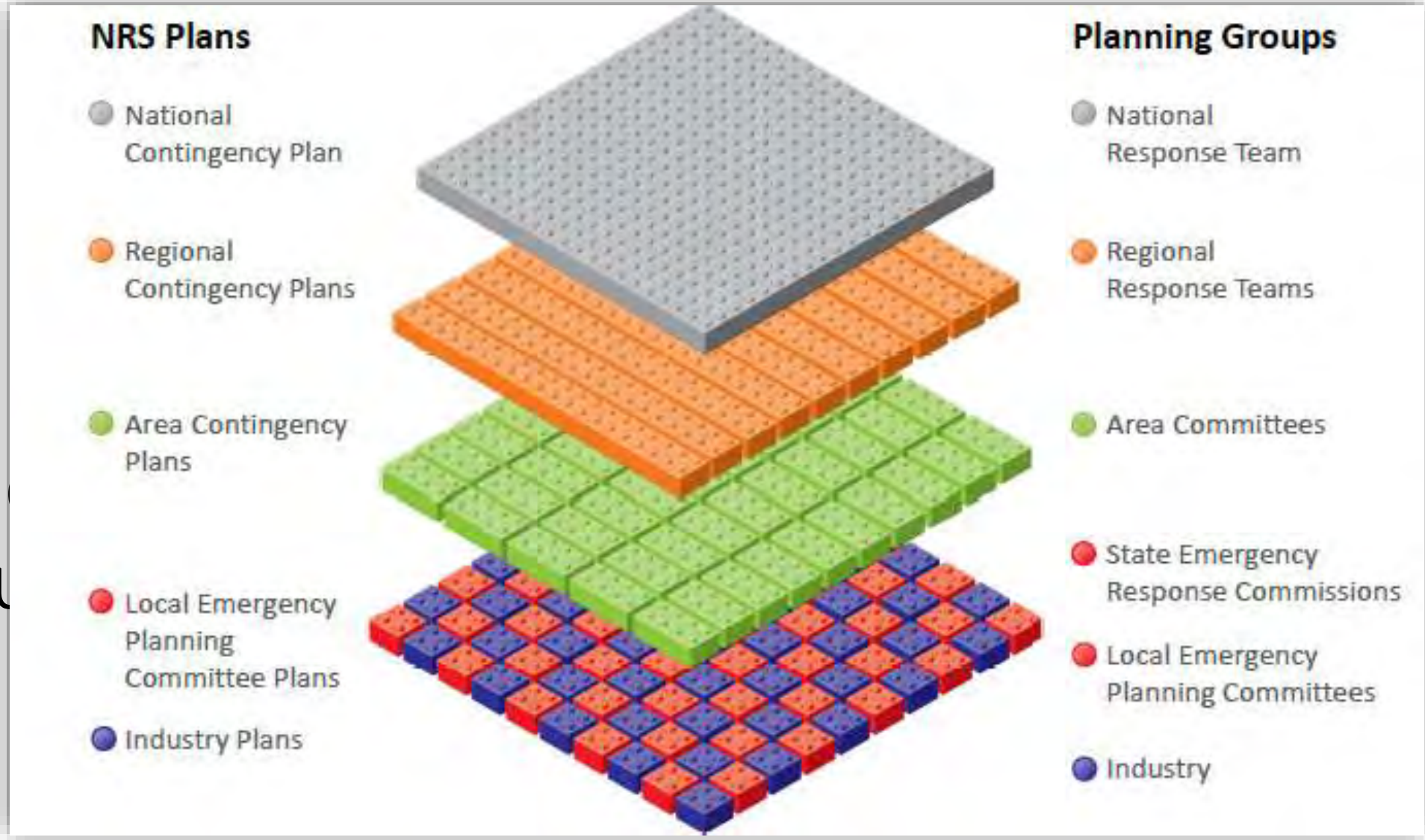


NCP provides Federal/State OSCs broad authority to respond in conservative favor of protecting Human Health, Welfare and the Environment

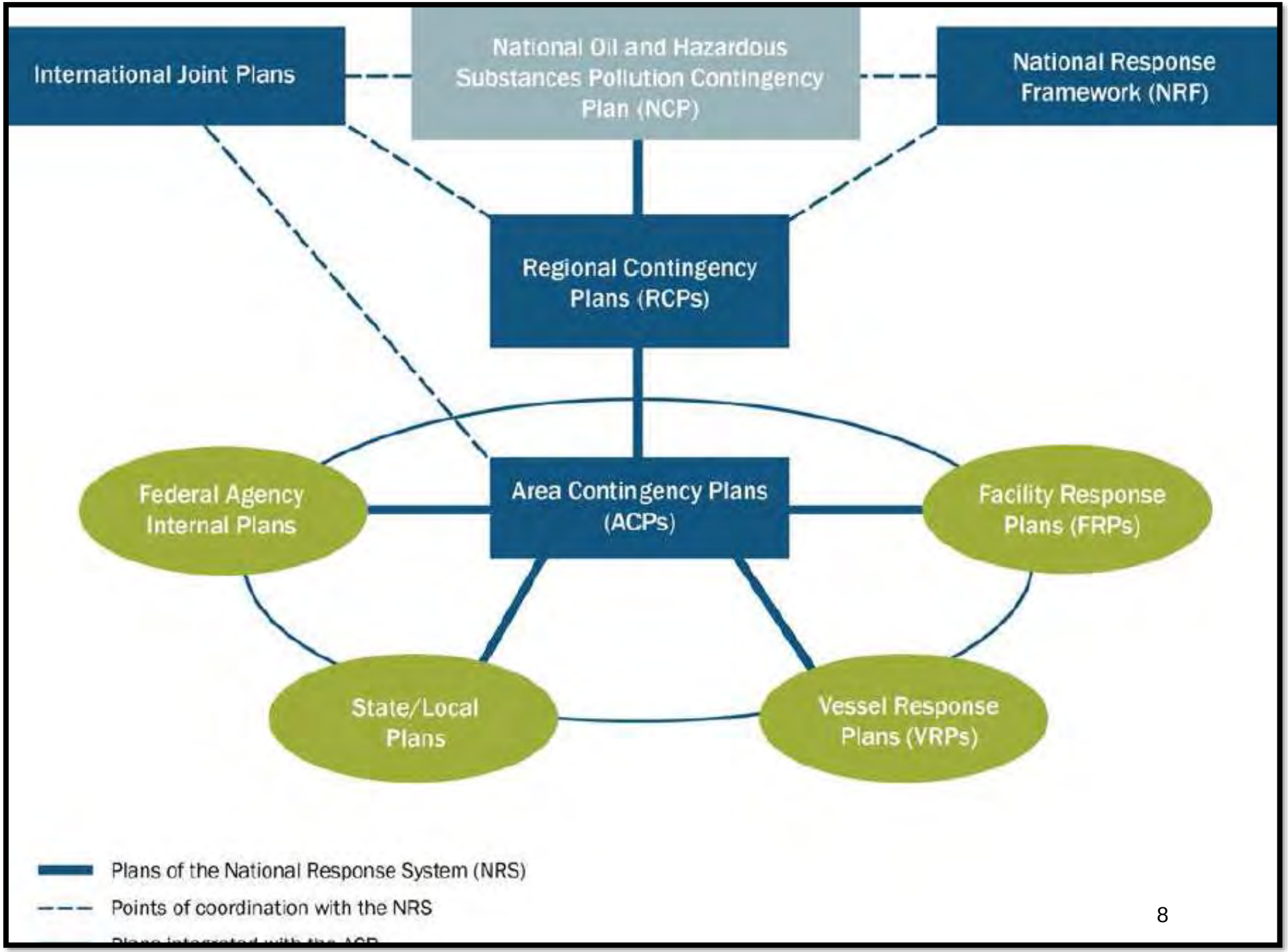
Components of the National Response System (NRS):



NRS Plans an
Planning grou



NRS family of plans



AK NRS Family of plans

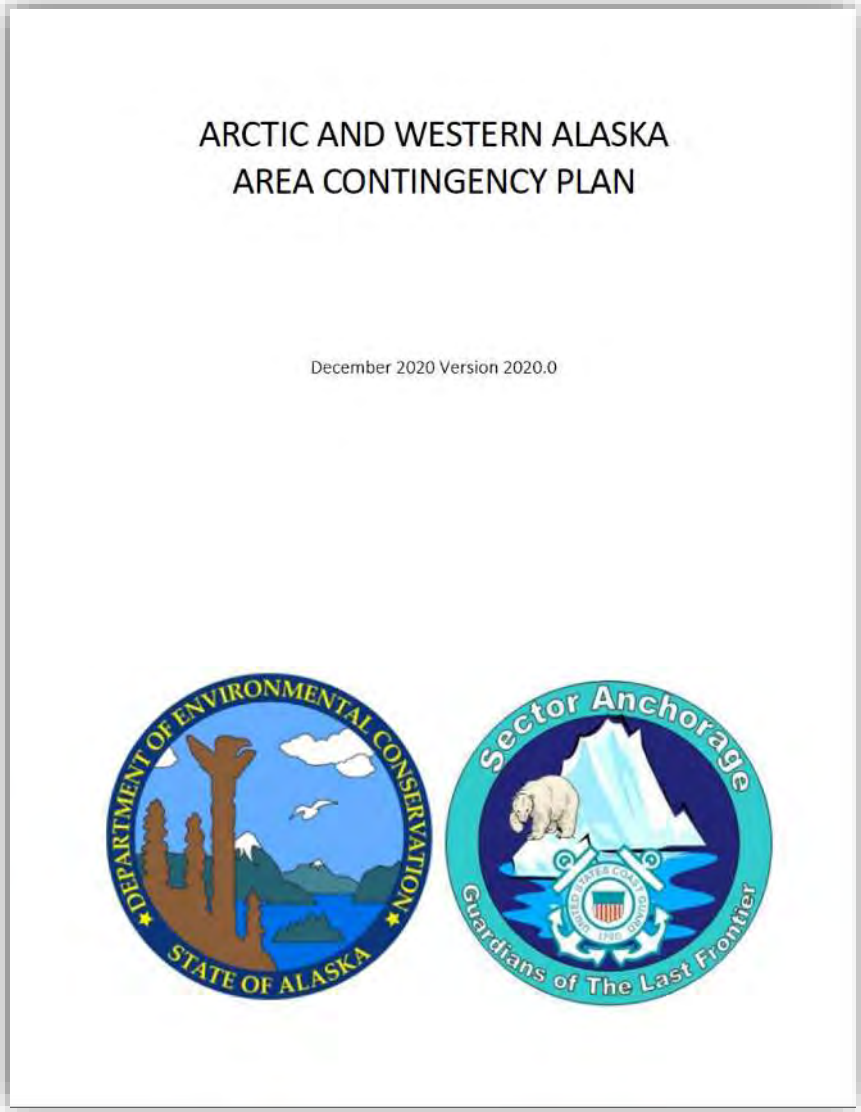
Area Committees and ACPs are co-chaired by Federal and State On-Scene Coordinators

OGAs, NGOs, Industry, and stakeholders participation is critical to the success of Area Planning

The coordinating body between industry, stakeholders and gov't

Where lessons identified become lessons learned

Exposure to preparedness measures (GRSs)



ARCTIC AND WESTERN ALASKA
AREA CONTINGENCY PLAN

December 2020 Version 2020.0

Arctic & Western Alaska
Area Contingency Plan

December 30, 2020

Mission Statement:

Dear Recipient:

Attached is the 2020.0 version of the Arctic and Western Alaska Area Contingency Plan (AWA-ACP). The AWA-ACP serves as tactical and operational instructions and guidance to responders and planners preparing for a coordinated Federal, State and local exercise and/or response to a discharge, or substantial threat of discharge of oil and/or a release of a hazardous substance from a vessel or on/offshore facility operating within the Western Alaska Captain of the Port zone boundaries and surrounding waters. State and Federal On-Scene Coordinators shall use the AWA-ACP, in conjunction with the Regional Contingency Plan and National Contingency Plan, to inform and support the AWA Area Committee (AWA-AC) as it continuously updates and improves upon building the AWA-ACP. The AWA-ACP is compliant with Section 300.210(c) of the National Contingency Plan and Alaska Statute 46.04.210.

The AWA-AC, under the direction of the Co-Chairpersons, will validate the AWA-ACP annually and propose modifications in accordance with relevant agency policy and in response to operational lessons learned. We welcome your ideas to improve the plan. Please direct your correspondence to the following addresses:

Commander, US Coast Guard Sector Anchorage
ATTN: Emergency Management and Force Readiness (ox)
PO Box 5800
JBER, AK 99505-0800

The Alaska Department of Environmental Conservation
Prevention, Preparedness and Response Program
555 Cordova Street
Anchorage, AK 99501

This version of the AWA ACP and the associated references and tools are found at the following website:
https://dec.alaska.gov/spar/ppr/contingency-plans/response-plans/arctic-western-area/

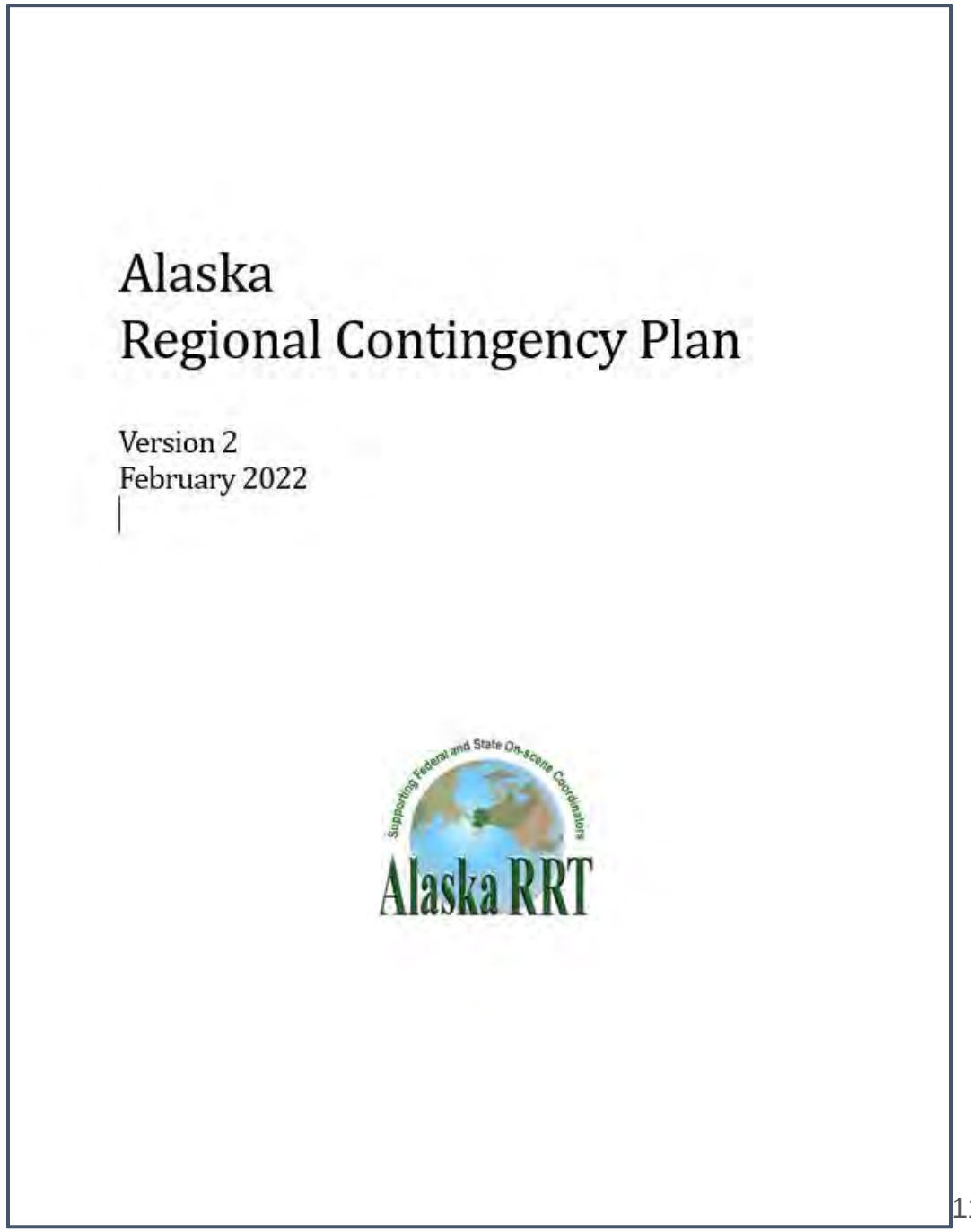
AK Regional Response Team are tri-chaired by reps from EPA Region 10, US Coast Guard D17 and AK DEC

Co-Chaired by EPA and Coast Guard NCP reps; ops-planning & policy focused

Manages Regional Contingency Plan

The coordinating body that aids gov't agencies ISO Federal and State OSCs capability & resourcing requirements

Provides incident specific approval for dispersant use and other subpart-J alternative response technologies

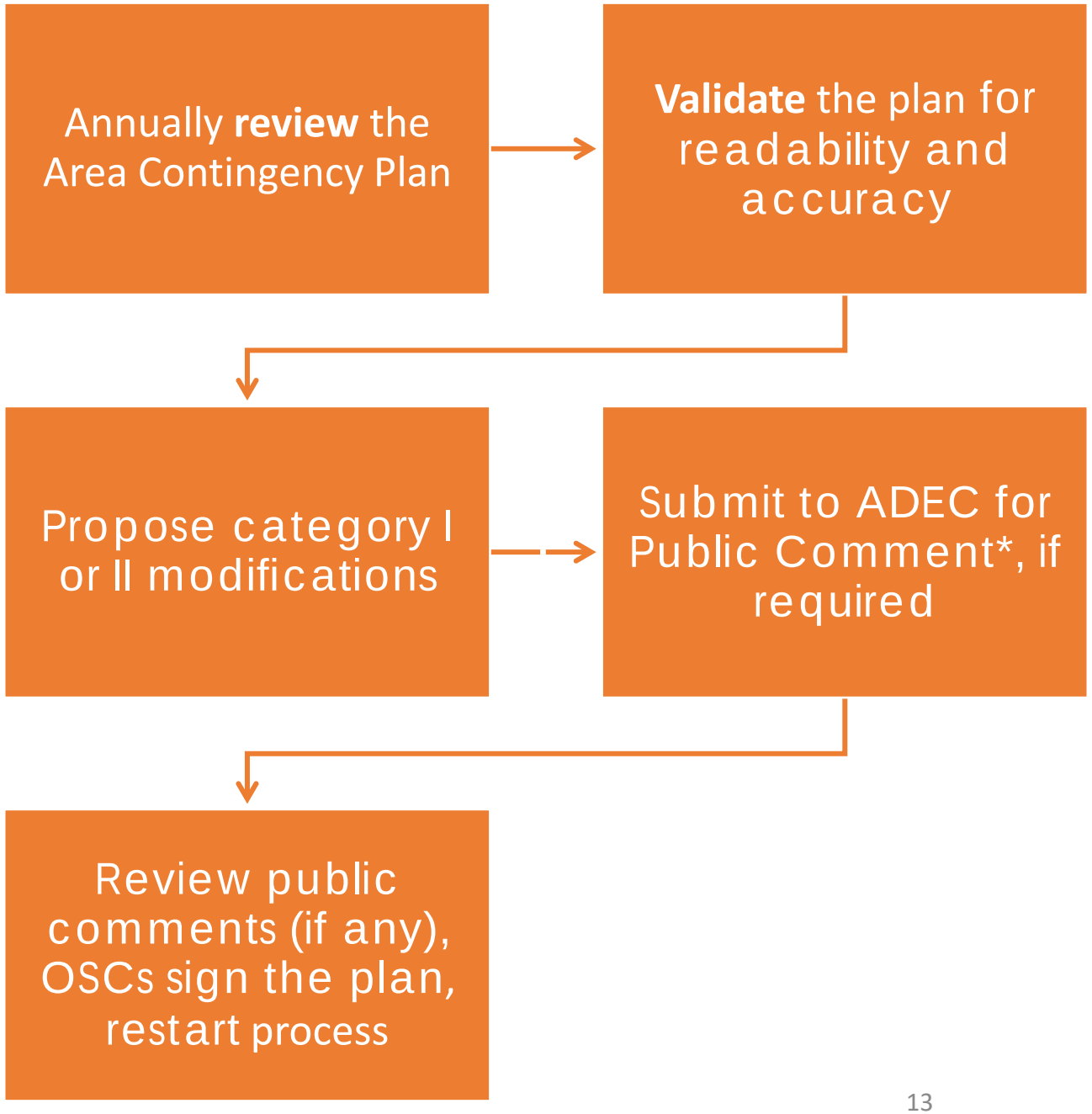


PLan review requirements by agency

Agency	Review Cycle	Plan Review and Outreach Requirements
USCG	Annual Review	Contingency Planning requires invitation for Tribal Coordination
	5-Year National Review Board	Internal metric to USCG, looking for plan progression
EPA	None specified	Engagement of Federally Recognized Tribes per EPA Region 10 Tribal Consultation And Coordination Procedures
ADEC	In accordance with State of Alaska Statutes & Regulations	Mandated public review process when substantive revisions are required to the Regional or Area Contingency Plan. State of Alaska at AS 46.04. 200 (a) prescribes that ADEC “shall prepare, annually review, and revise as necessary a statewide master oil and hazardous substance discharge prevention and contingency plan.”

Plan review process

*Those taking the time to respond to AK's request for public comment, are highly encouraged ***to help with plan review and write the proposed modifications within the subcommittees***

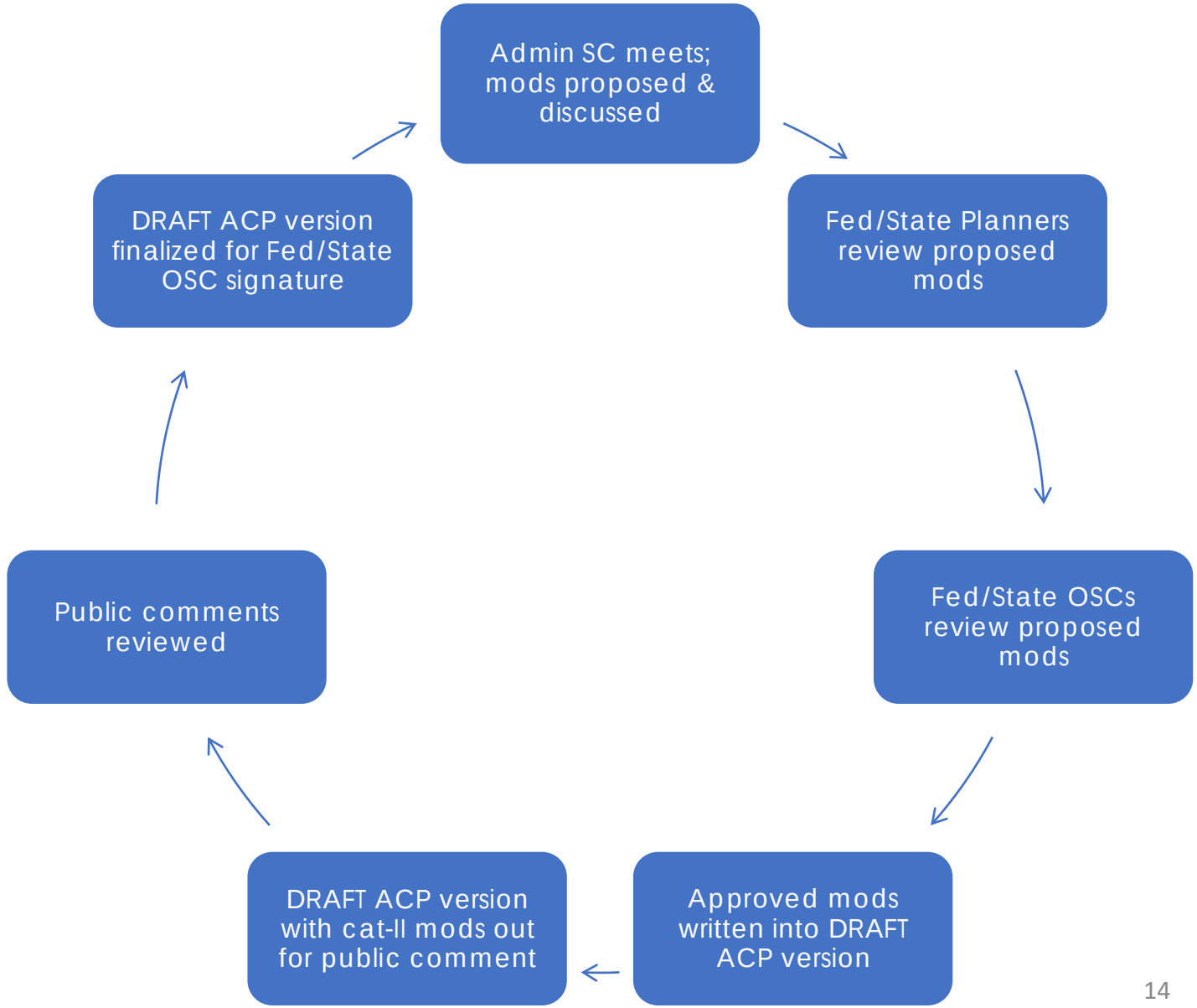


AK Acp modification process

Admin SC is where Area Committees can receive proposed modifications

ACP proposed modification process managed by fed/state planners with assistance from SPC

Exercise lessons learned and/or other SCs may propose modifications to Admin SC

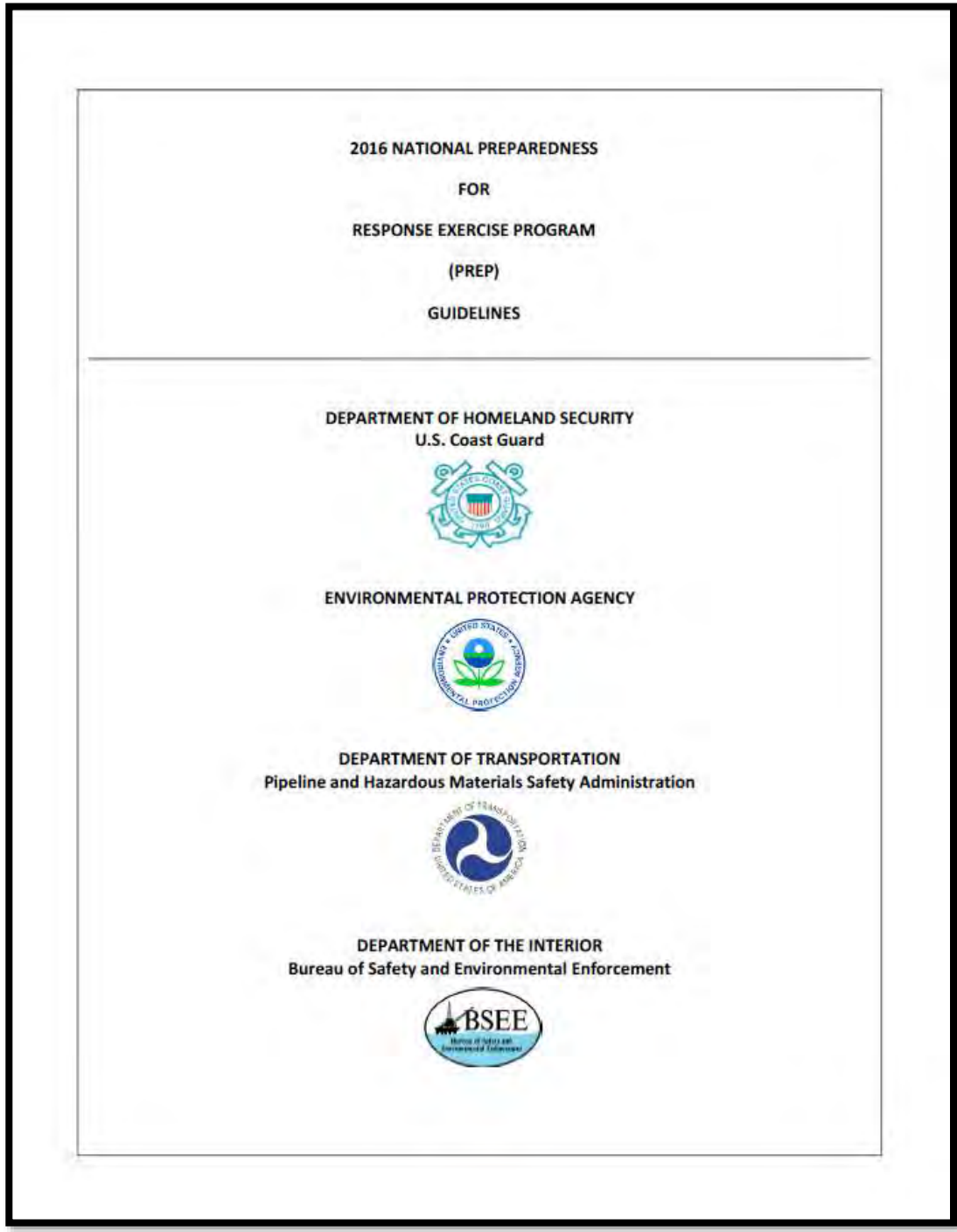


testing Nrs family of plans

Area response drills: 40 CFR 300.211

The OSC periodically shall conduct drills of removal capability (including fish and wildlife response capability), without prior notice…and under relevant tank vessel and facility response plans.

NOTE: Lessons learned may be incorporated into industry or gov't plans



2016 NATIONAL PREPAREDNESS

FOR

RESPONSE EXERCISE PROGRAM

(PREP)

GUIDELINES

DEPARTMENT OF HOMELAND SECURITY
U.S. Coast Guard

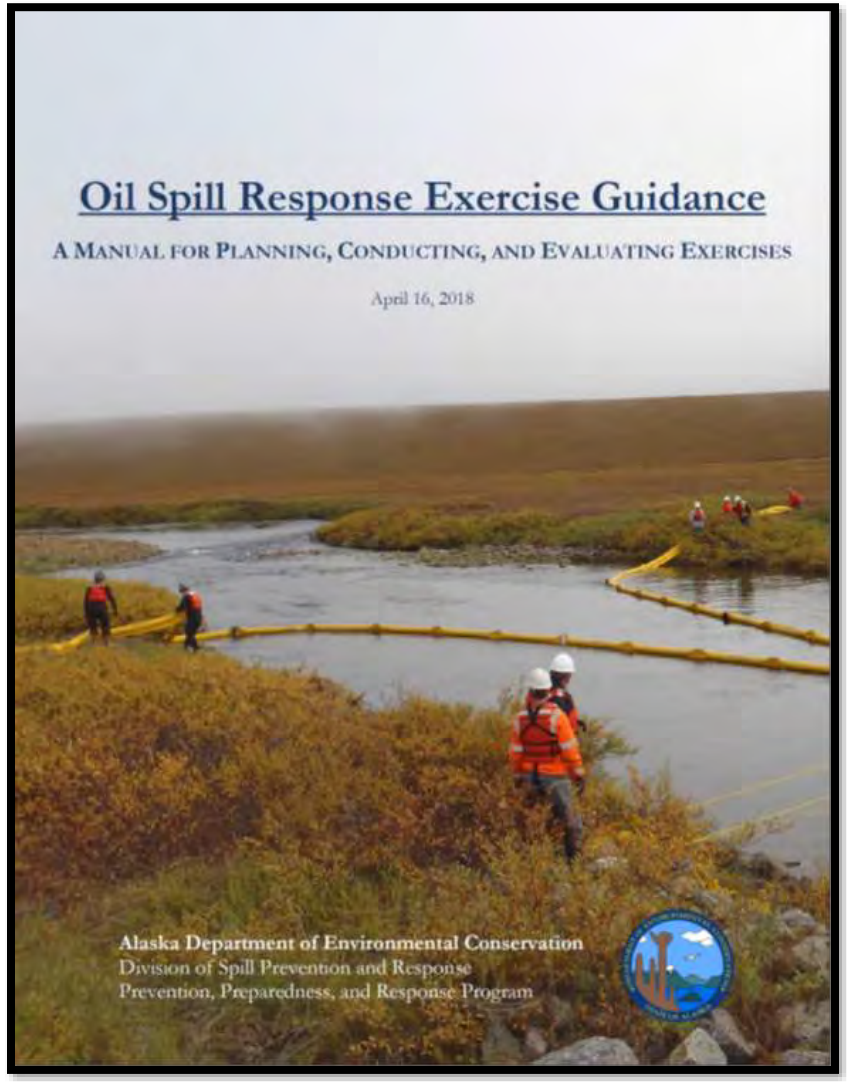
ENVIRONMENTAL PROTECTION AGENCY

DEPARTMENT OF TRANSPORTATION
Pipeline and Hazardous Materials Safety Administration

DEPARTMENT OF THE INTERIOR
Bureau of Safety and Environmental Enforcement

BSEE

State of Alaska Exercise Guidance

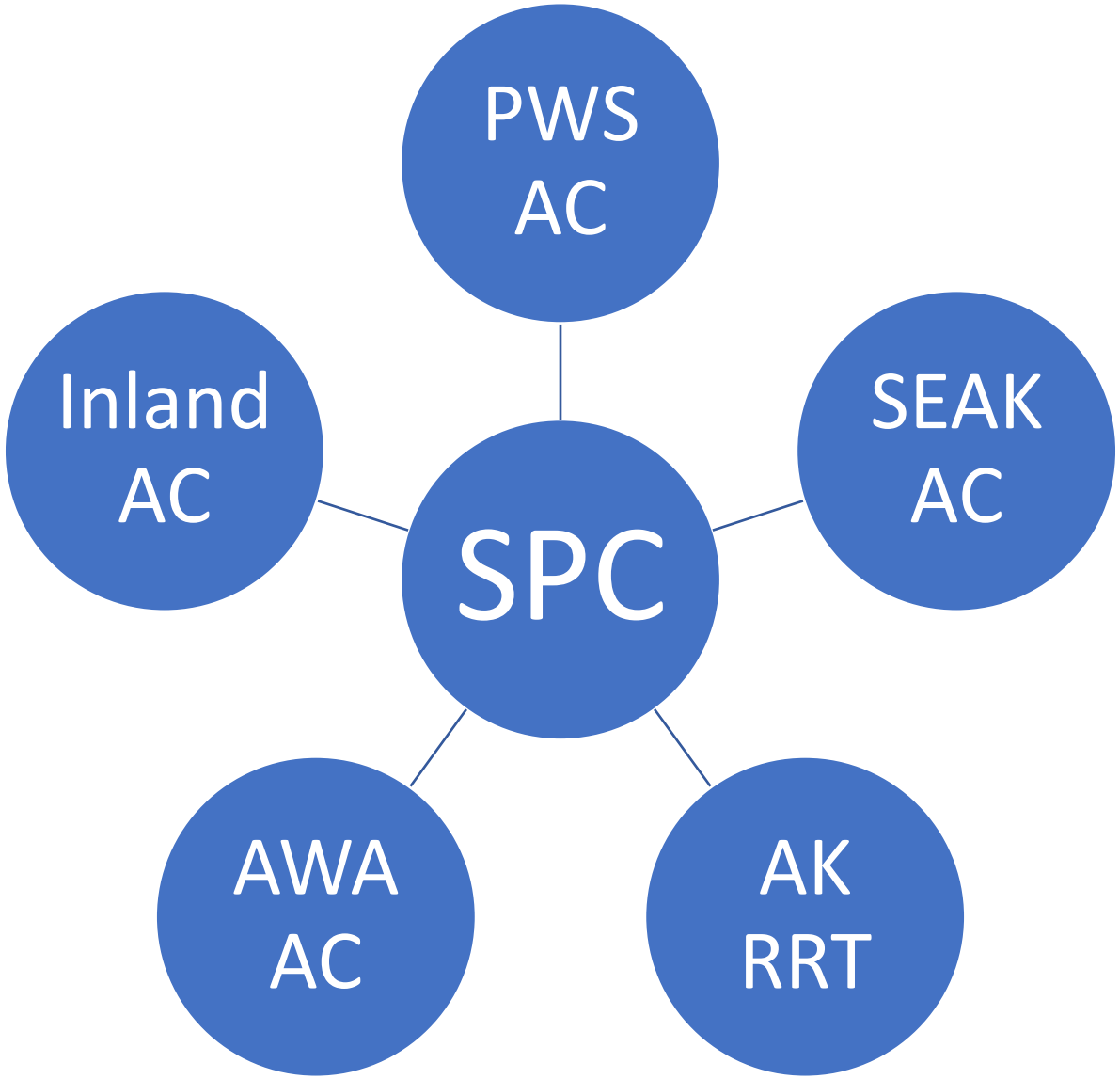


CONTENTS and PROVISIONS

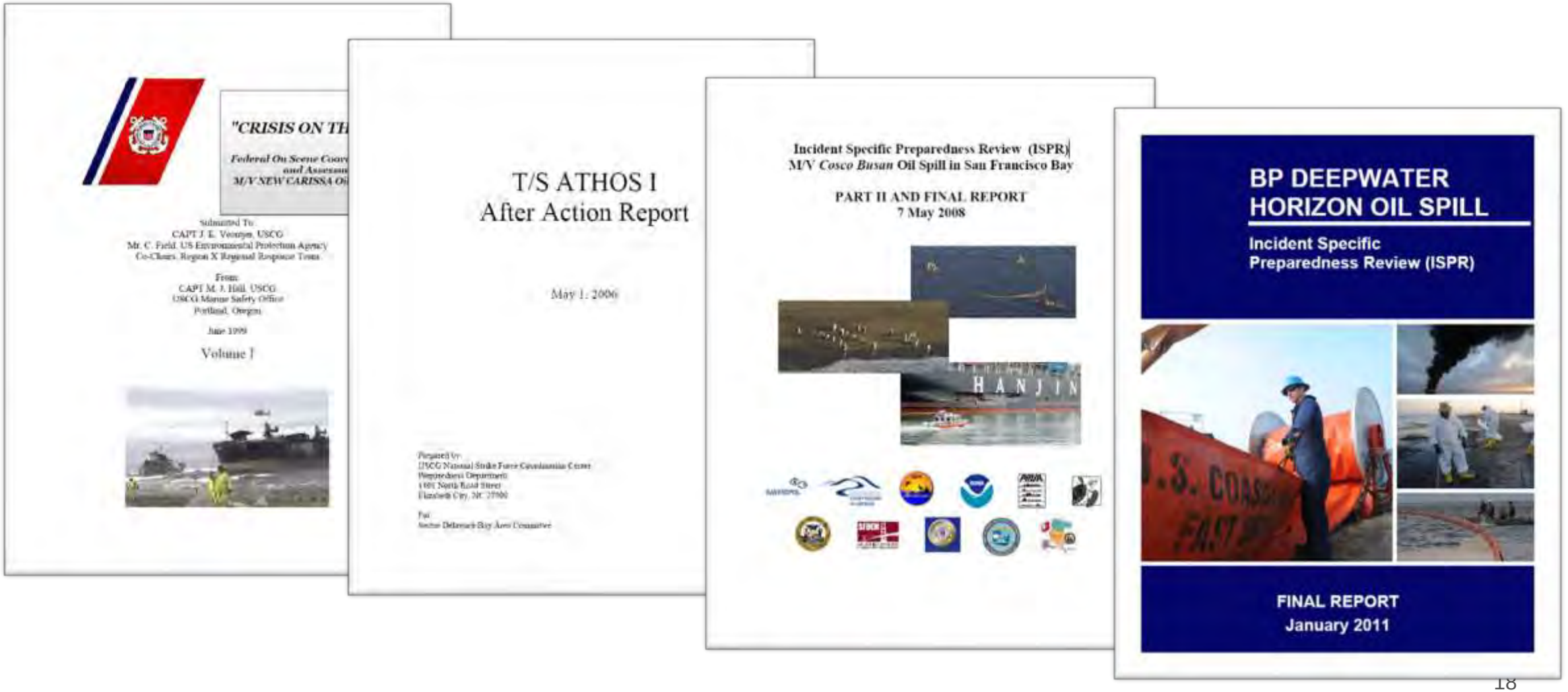
- Ensure preparedness and response capability
- Internal & external document
- Provides a common framework based on HSEEP
- Clarifies ADEC exercise requirements
- Clarifies ADEC staff roles & responsibilities
- Better alignment & coordination between Federal and State requirements
- Living document

Joint planning without joint plans

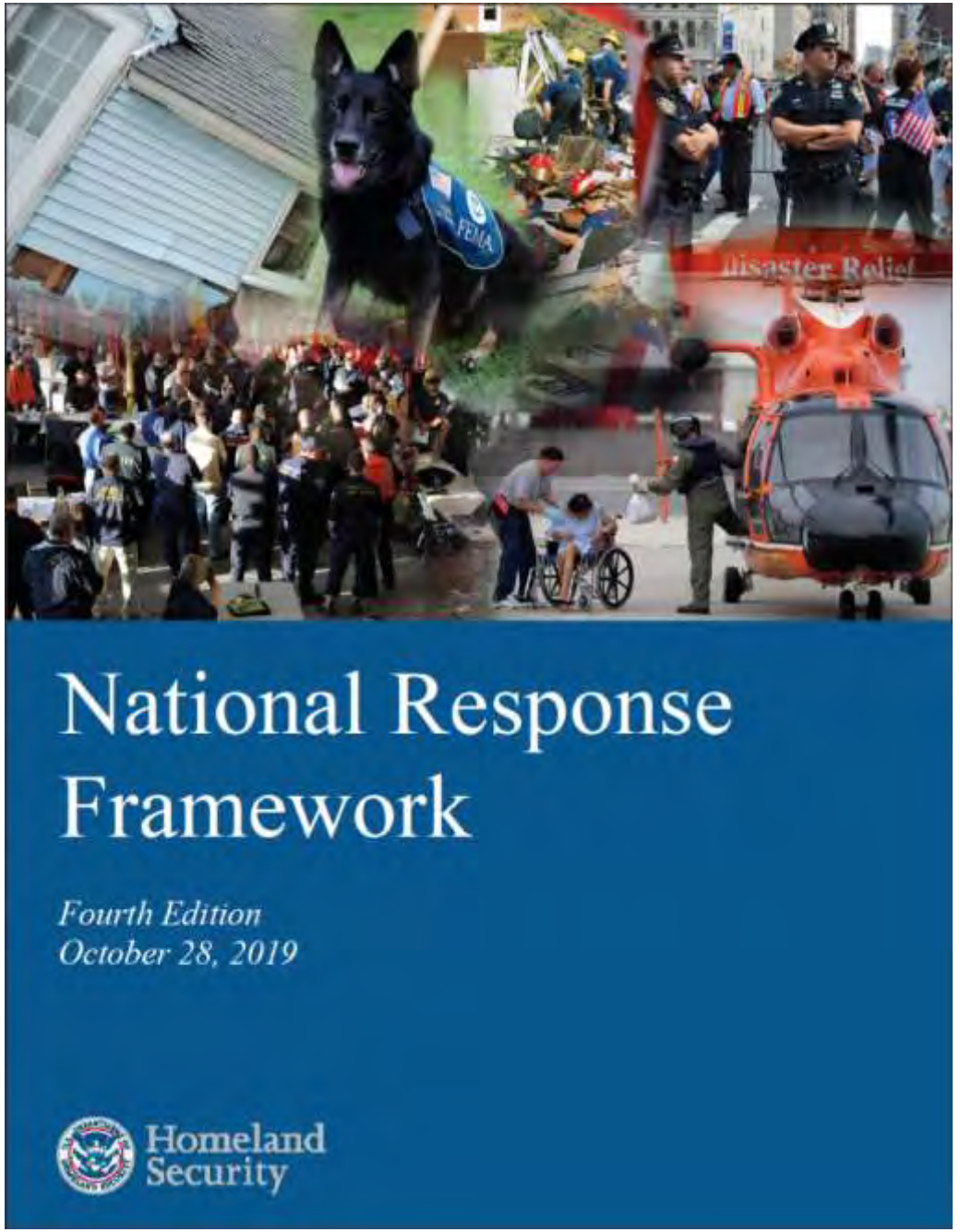
The **Statewide Planning Committee** is a collaborative effort between AK NRS agencies to share resources, expertise and information in order to leverage each agencies resources for the benefit of all and prevent contingency planning communication gaps.



Routine participation with RRT's and Area committees are a proven planning and preparedness system across the country

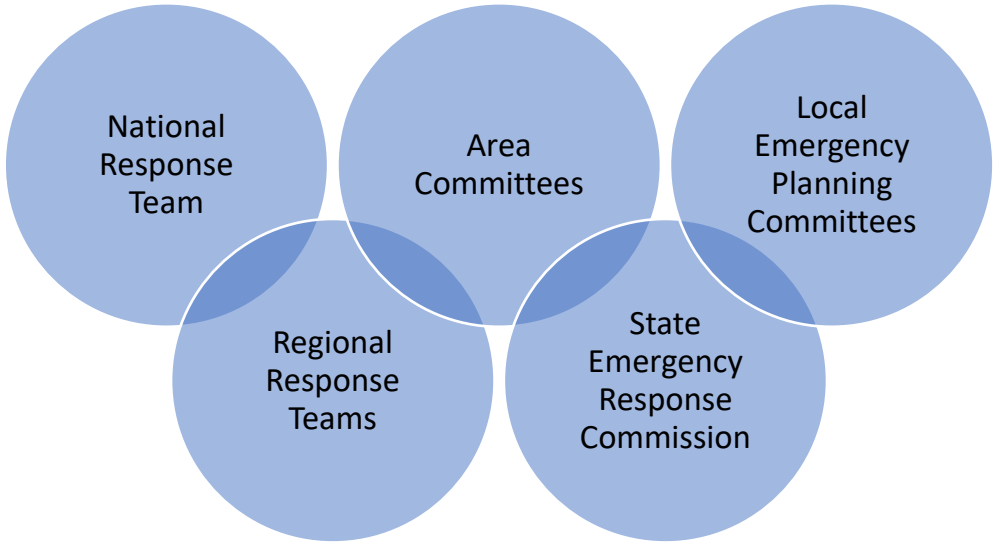


National Response Framework (NRF)

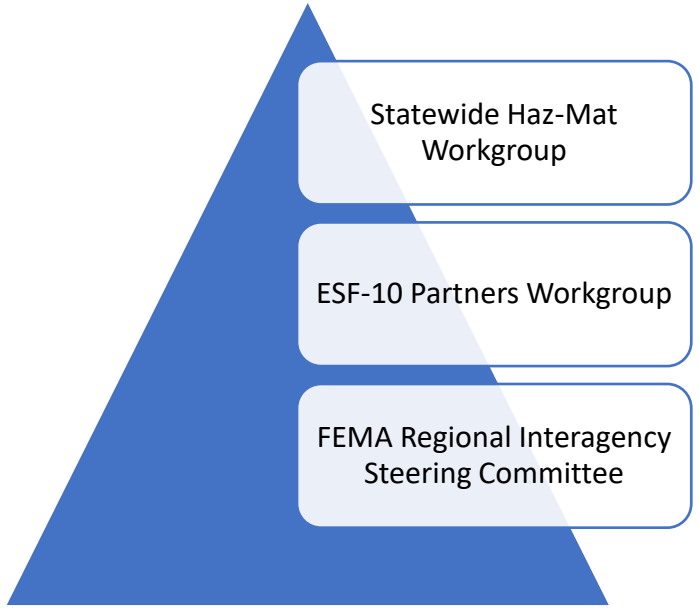


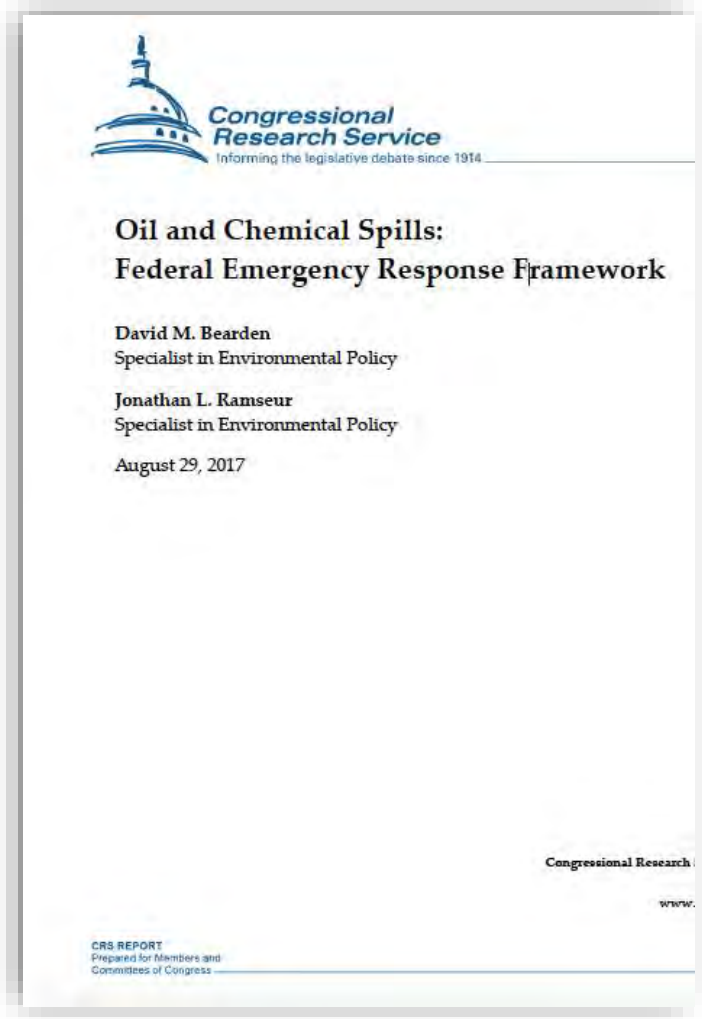
national response system and Emergency management connections

National response system:



National response framework:




Congressional Research Service
Informing the legislative debate since 1914

Oil and Chemical Spills:
Federal Emergency Response Framework

David M. Bearden
Specialist in Environmental Policy

Jonathan L. Ramseur
Specialist in Environmental Policy

August 29, 2017

Congressional Research

www.

CRS REPORT
Prepared for Members and
Committees of Congress

In practice, the federal response to a discharge of oil or a release of a hazardous substance is most often executed under the regulations of the NCP alone, rather than through the coordinating structures of the NRF under ESF #10. The Secretary of Homeland Security's application of the NCP through the NRF appears to be less common and more limited to multifaceted incidents of greater magnitude, scope, and complexity that may necessitate the coordination of multiple federal response plans. For example, the Department of Homeland Security has stated that the NCP still was applied to the Deepwater Horizon oil spill as a stand-alone regulatory authority without involvement of other federal response plans under the NRF. Regardless of whether the NCP is applied as a stand-alone regulatory authority or through the NRF, the procedures for responding to a discharge of oil or release of a hazardous substance are the same because the NCP remains the operative plan in either instance.

NCP & Local Responders Unity of Effort

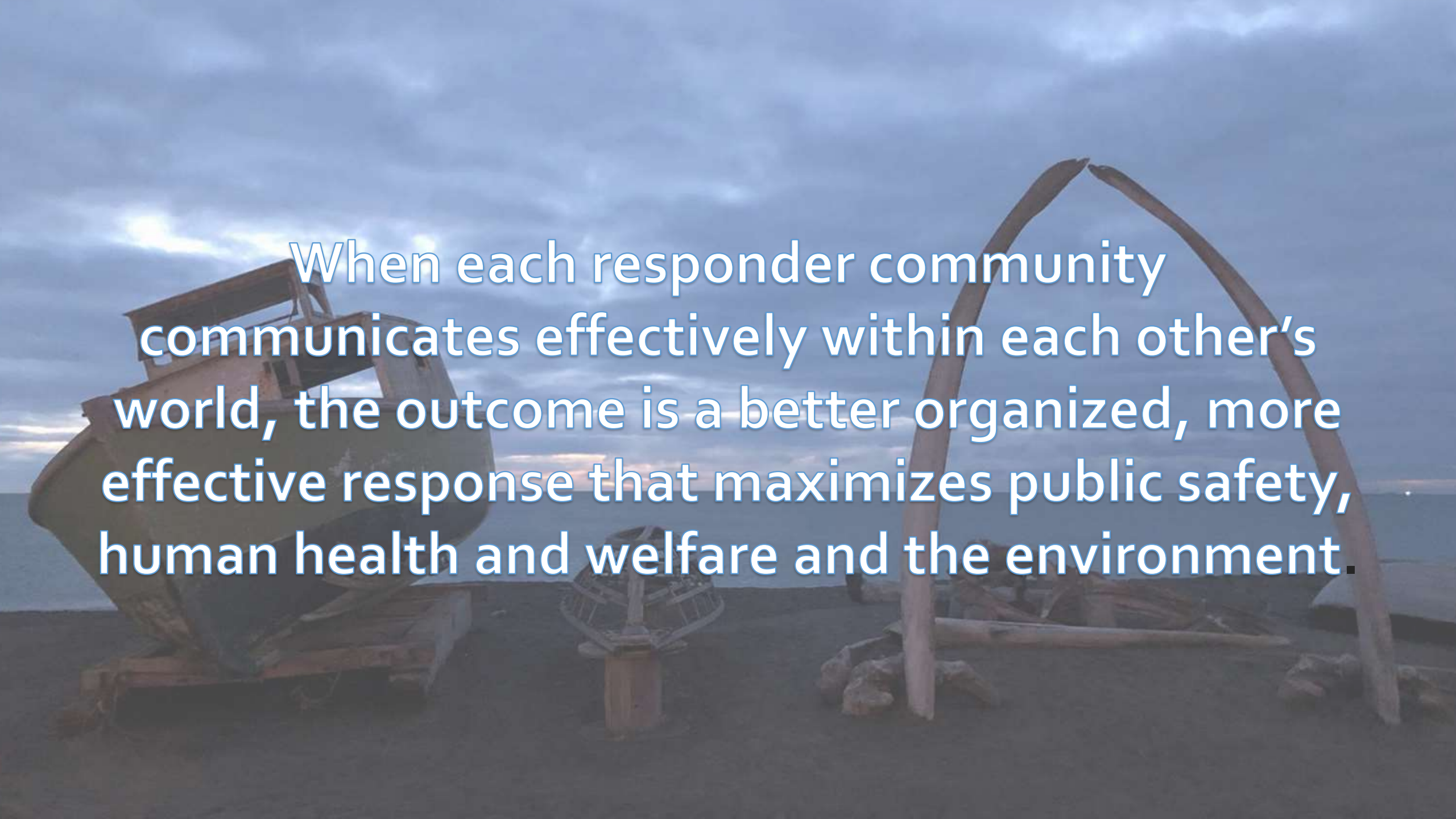
Best Practices

Emergency Managers continue to engage within Area Committees and Area PREP exercises

LEPC and Area Committees work together to enhance each other's contingency plans and planning effort

Continue to work to validate Geographic Response Strategies within the Area Contingency Plan

Establish consistent Liaison Officers between Local and State EOCs


When each responder community communicates effectively within each other's world, the outcome is a better organized, more effective response that maximizes public safety, human health and welfare and the environment.

Arctic and western Alaska area committee construct

One of 4 Area Committees in AK:
(AWA, Inland, PWS, and Southeast)

Arctic and Western Alaska Area Committee

CG Sector Anchorage FOSC:

Co-Chair

AK DEC Central Area SOSC:

Co-Chair

AK DEC Northern Area SOSC:

Co-Chair

Mission Statement

The Arctic and Western Alaska Area Committee (AWA-AC) manages and continuously improves upon the Area Contingency Plan, and provides a platform for consistent coordination between federal, state, tribal and local emergency planners and responders.

Objectives:

1. Provide public transparency and communicate widely the efforts to develop and maintain the Nation's best coordinated system of highly trained and experienced National Response System planners, regulators and responders from all relevant public and private sector stakeholders.
2. The AWA-AC ensures expedited processes exist for exigent circumstances related to dispersant use and other mitigating substances and devices.
3. The AWA-AC is the venue for public input on all relevant government processes and scientific issues related to oil and hazardous substance spill prevention, preparedness, planning and response within the Arctic and Western Alaska.

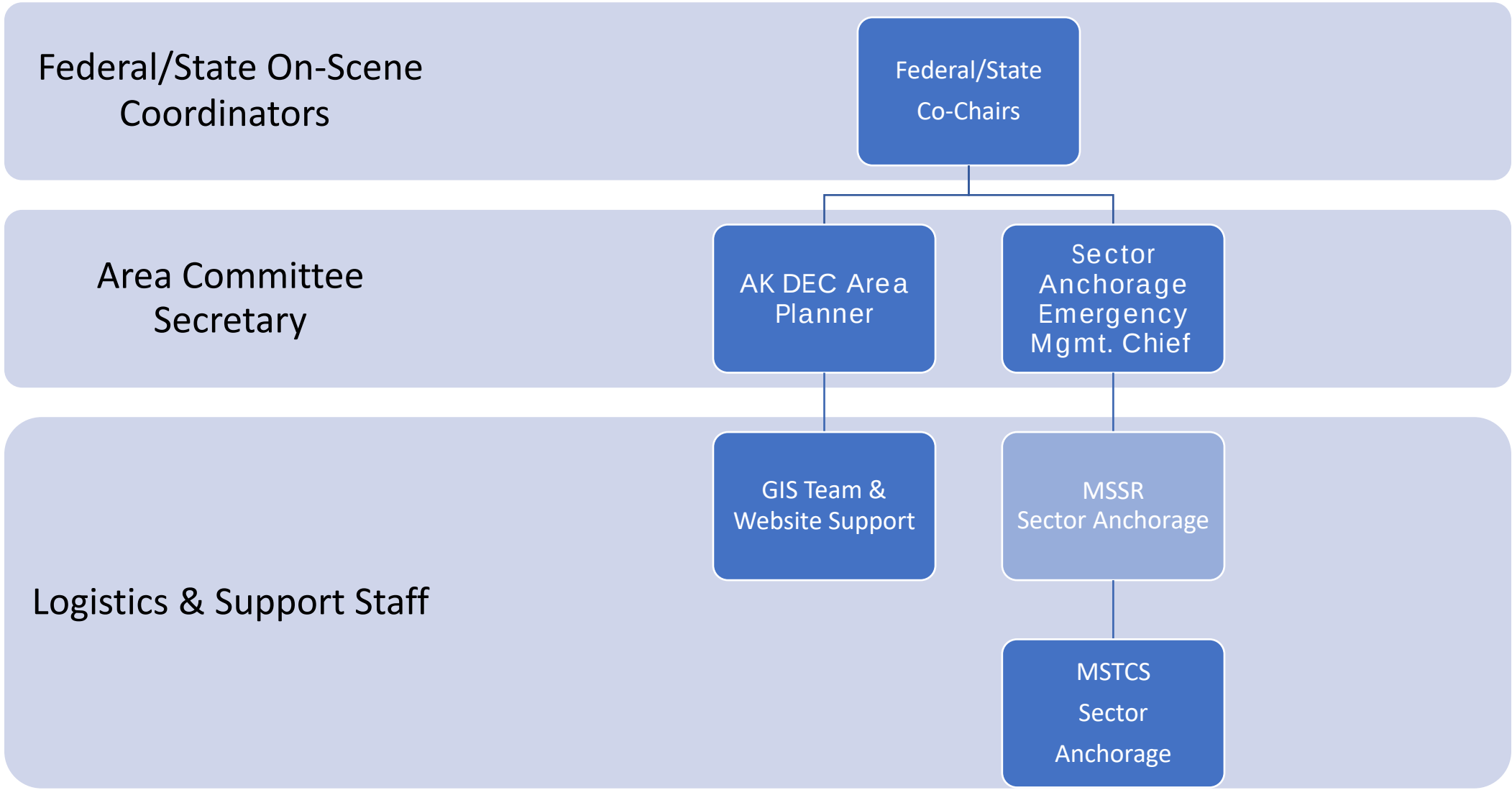
Mission statement

The Arctic and Western Alaska Area Committee (AWA-AC) manages and continuously improves upon the Area Contingency Plan, and provides a platform for consistent coordination between federal, state, tribal and local emergency planners and responders.

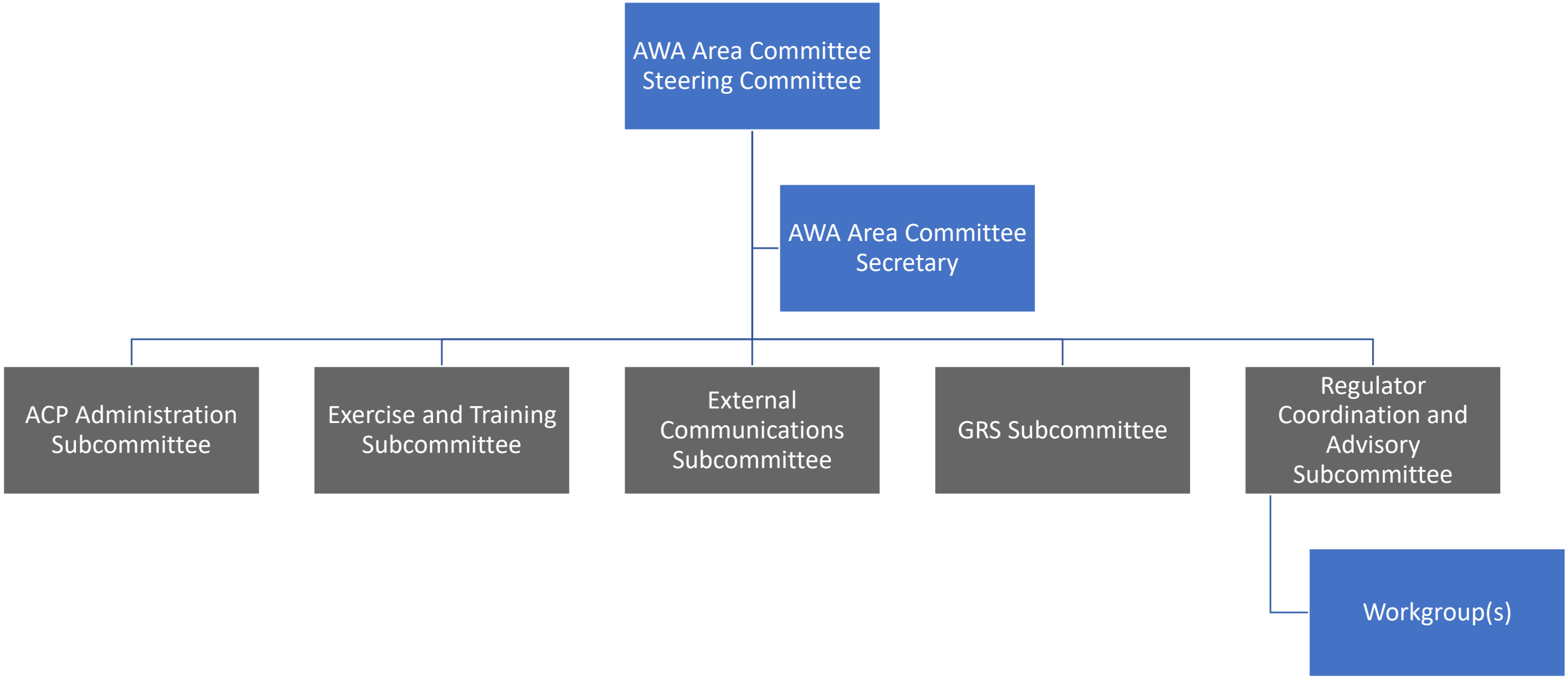
Vision statement

The premier planning, regulatory and response coordination committee that maximizes protection of human health and the environment in the maritime and coastal regions of the Arctic and Western Alaska.

Awa area committee key positions



AWA AC Construct



AK area committees

What else do you need to know about AK Area Committees?

Each reflect their available resourcing; all leverage joint planning without joint plans via SPC

Must maintain formatting requirements established by NRT; but content may differ based on specific needs

Area Committee subcommittees/workgroups also vary depending on personnel and other resources

Follow sponsorship model for individual projects related to contingency planning

Reporting spills in alaska

Federal and State Oil Spill Reporting Placards

IT'S THE LAW!

AS 46.03.755 and 18 AAC 75.300

REPORT OIL AND HAZARDOUS SUBSTANCE SPILLS

During Normal Business Hours

call the nearest response team office:

Central Alaska: Anchorage	(907) 269-3063 Fax: (907) 269-7648
Northern Alaska: Fairbanks	(907) 451-2121 Fax: (907) 451-2362
Southeast Alaska: Juneau	(907) 465-5340 Fax: (907) 465-5245
Alaska Pipeline: Fairbanks	(907) 451-2121 Fax: (907) 451-2362

Outside Normal Business Hours

Toll Free	1-800-478-9300
International	1-907-269-0667

Alaska Department of Environmental Conservation
Division of Spill Prevention and Response
www.dec.alaska.gov/spar/spillreport.htm

Hazardous Substance

Any hazardous substance spill, other than oil, must be reported immediately.

Oil – Petroleum Products

To Water

- Any amount spilled to water must be reported immediately.

To Land

- Spills in excess of *55 gallons* must be reported immediately.
- Spills in excess of *10 gallons, but 55 gallons or less*, must be reported within 48 hours after the person has knowledge of the spill.
- Spills of *1 to 10 gallons* must be recorded in a spill reporting log submitted to ADEC each month.

To Impermeable Secondary Containment Areas

- Any spills in excess of *55 gallons* must be reported within 48 hours.

Additional Requirements for Regulated Underground Storage Tank Facilities

Regulated Underground Storage Tank (UST) facilities are defined at 18 AAC 78.005 and do not include heating oil tanks.

If your release detection system indicates a possible discharge, or if you notice unusual operating conditions that might indicate a release, you must notify the ADEC UST Program within 7 days.

UST Program: (907) 269-3055 or 269-7679

rev. Oct/2015

National Response Center

1-800-424-8802

NRC Background | Reporting a Spill | Legislative Requirements | Chemical/Biological Hotline | Contacting The NRC | National Response System

Report Spills to the NRC at:

1 800 424-8802

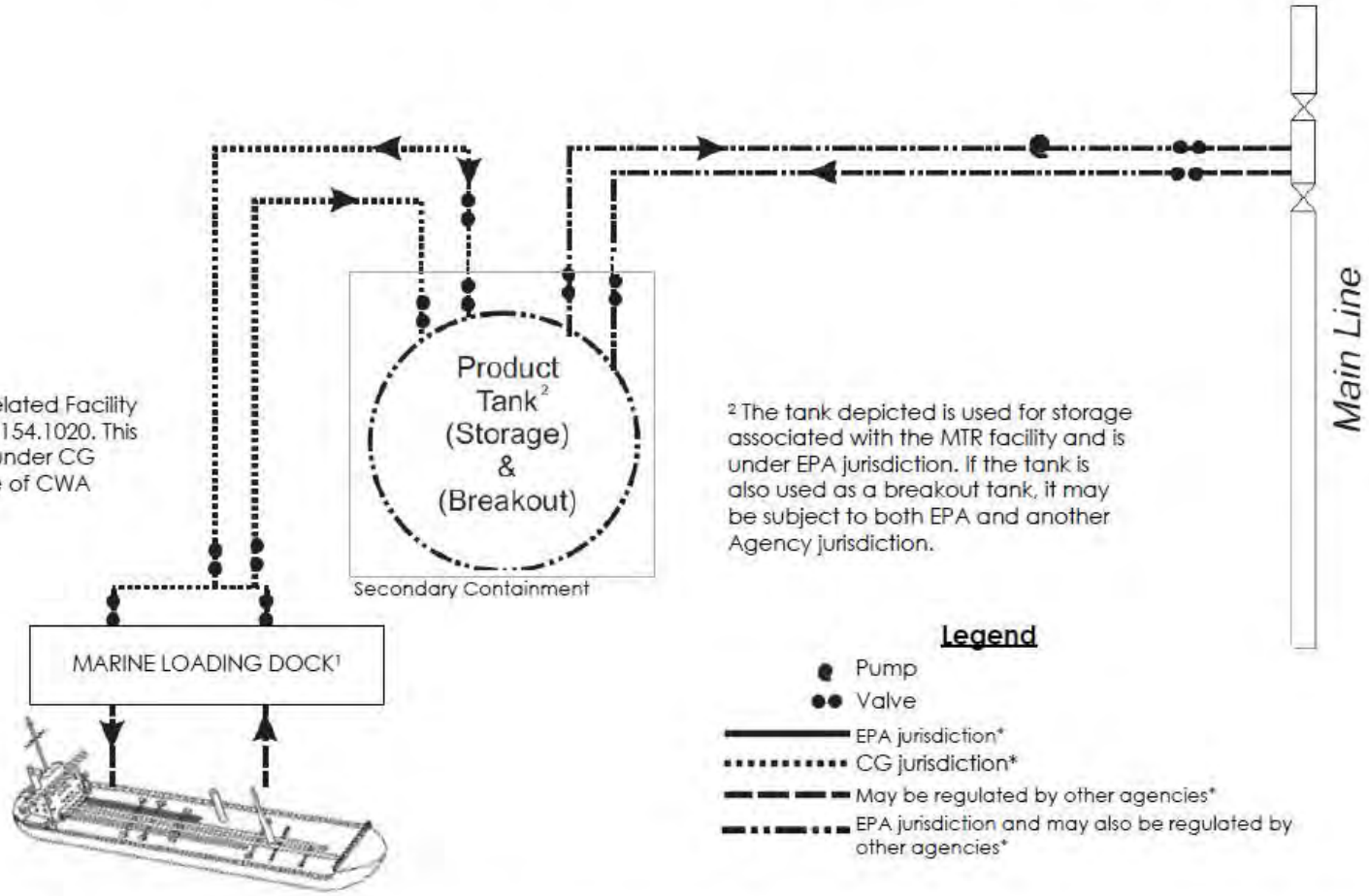
The National Response Center is the SOLE national point of contact for reporting Oil, Chemical, Radiological and Biological discharges.

regulated facilitY Challenges

- Prevention, planning, and preparedness requirements differ based on type of facility (see complex facility, next slide)
- Prevention regulations and relevant inspection program may be different from assigned federal OSC (EPA or CG) during a response
- Inland/Coastal FOSC boundary within AK established within RCP via MOA

Federal Agency jurisdiction for prevention regulations

EPA, COAST GUARD, AND OTHER AGENCIES JURISDICTION AT COMPLEX FACILITY



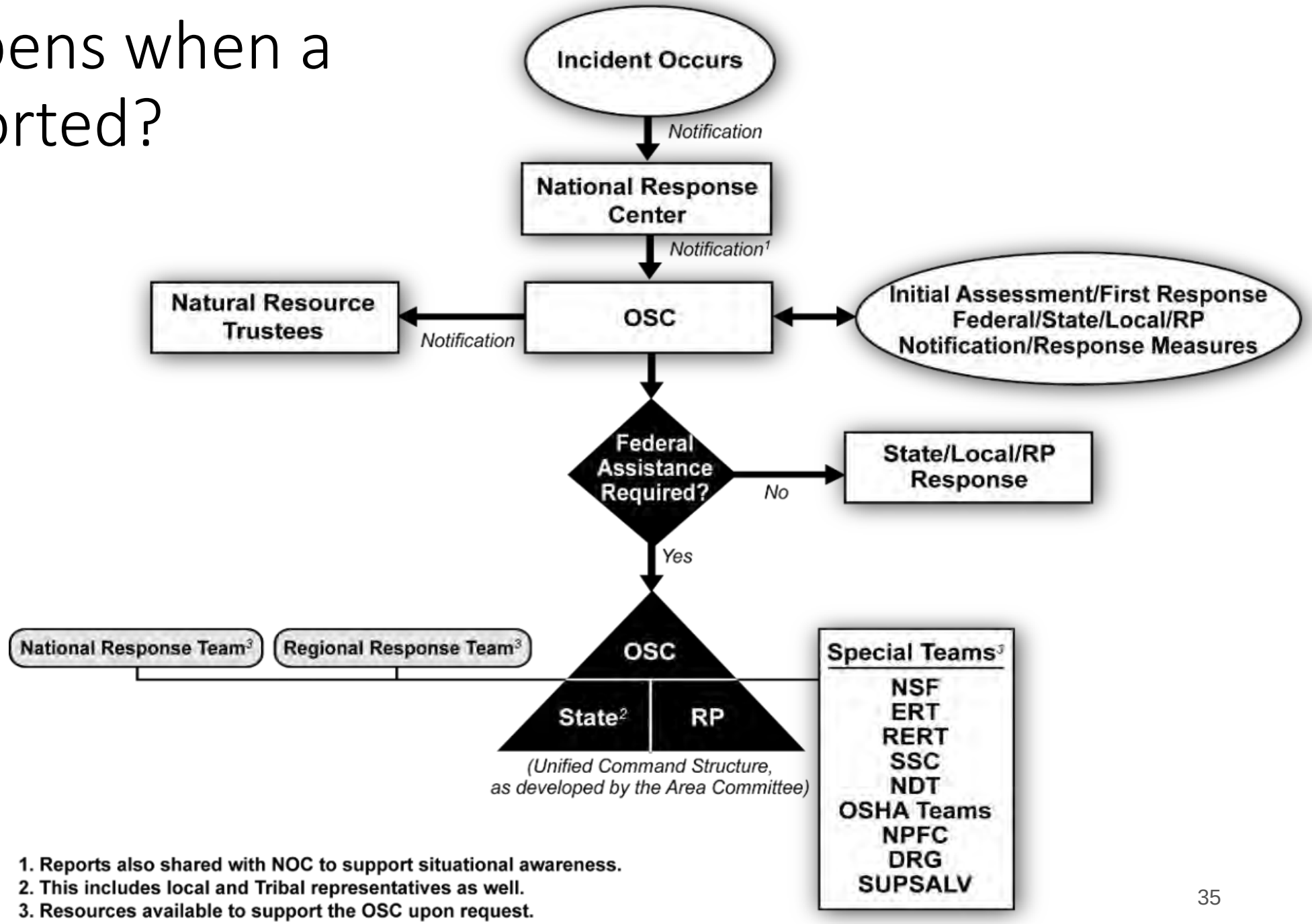
[1] Marine Transportation-Related Facility (MTR) is defined in 33 CFR 154.1020. This segment of a complex is under CG jurisdiction for the purpose of CWA Section 311 (j).

[2] The tank depicted is used for storage associated with the MTR facility and is under EPA jurisdiction. If the tank is also used as a breakout tank, it may be subject to both EPA and another Agency jurisdiction.

* This diagram does not identify the precise location where the change in jurisdiction may occur between EPA and any other agencies for the purpose of the Clean Water Act, Section 311(j) (33 USC 1321(j)). When the pipeline operator and the storage or breakout tank operator remain the same, the change in jurisdiction occurs at the first meter, valve, or isolation flange at or inside the facility property line. When the pipeline operator and the storage or breakout tank operator are not the same, the change in jurisdiction occurs at the change in operational responsibility or at the first meter, valve, or isolation flange at or inside the facility property line. In either of the above situations, the location of the property line should not solely be used to determine jurisdiction when operational activities (loading/offloading) extend beyond the property line.

What happens when a spill is reported?

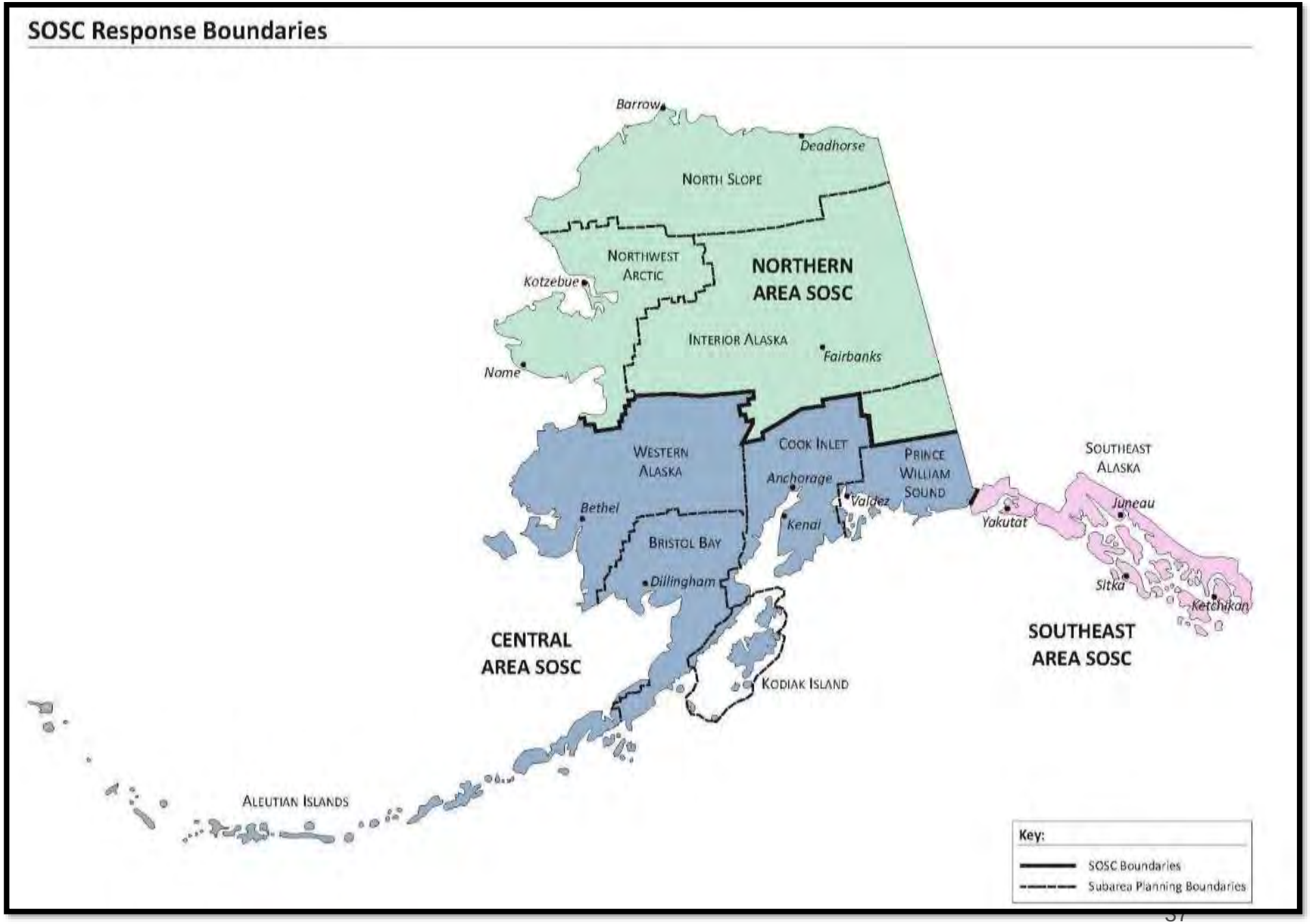
What happens when a spill is reported?



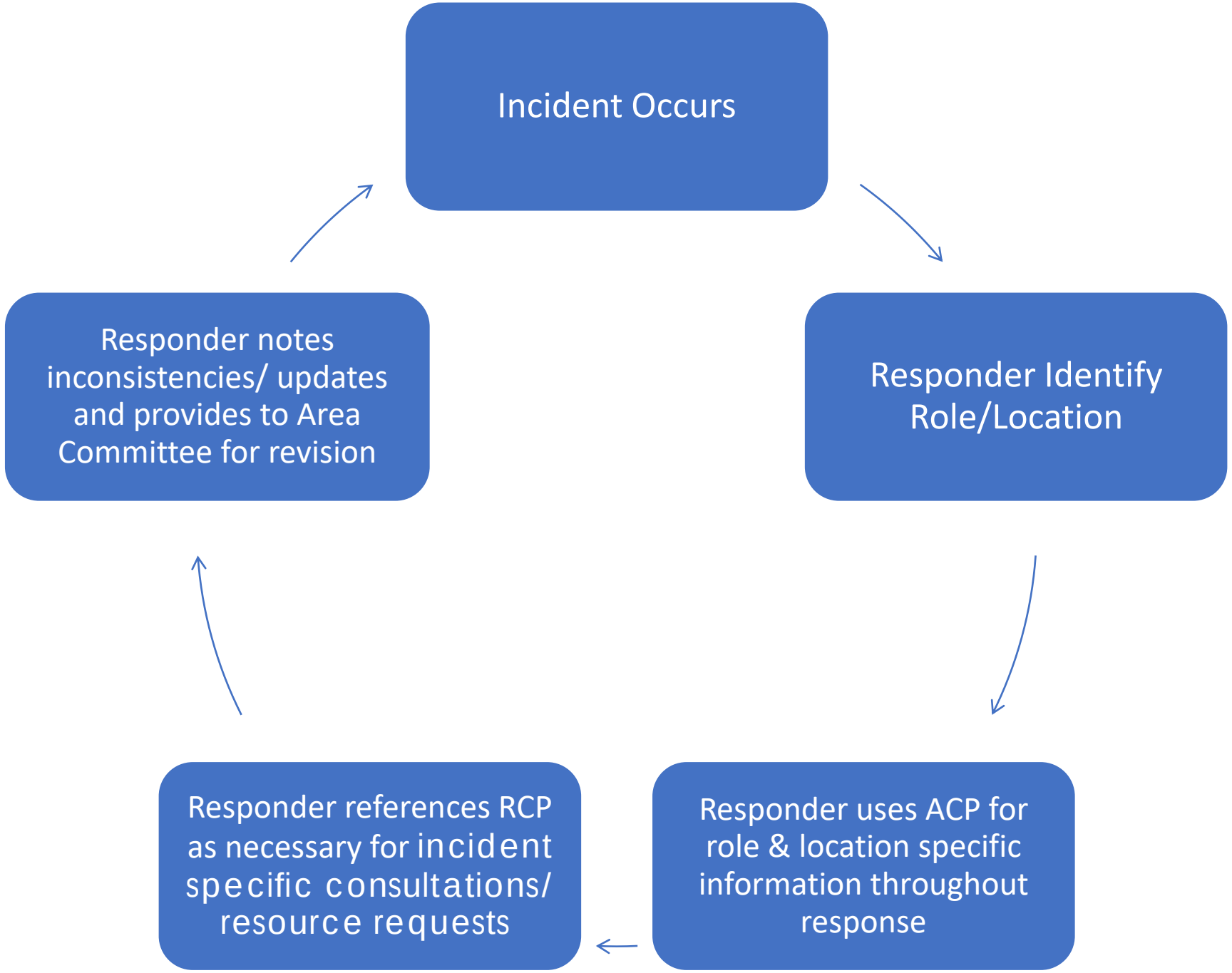
1. Reports also shared with NOC to support situational awareness.
2. This includes local and Tribal representatives as well.
3. Resources available to support the OSC upon request.

EPA and Coast Guard OSC and Area Committee jurisdictional boundaries

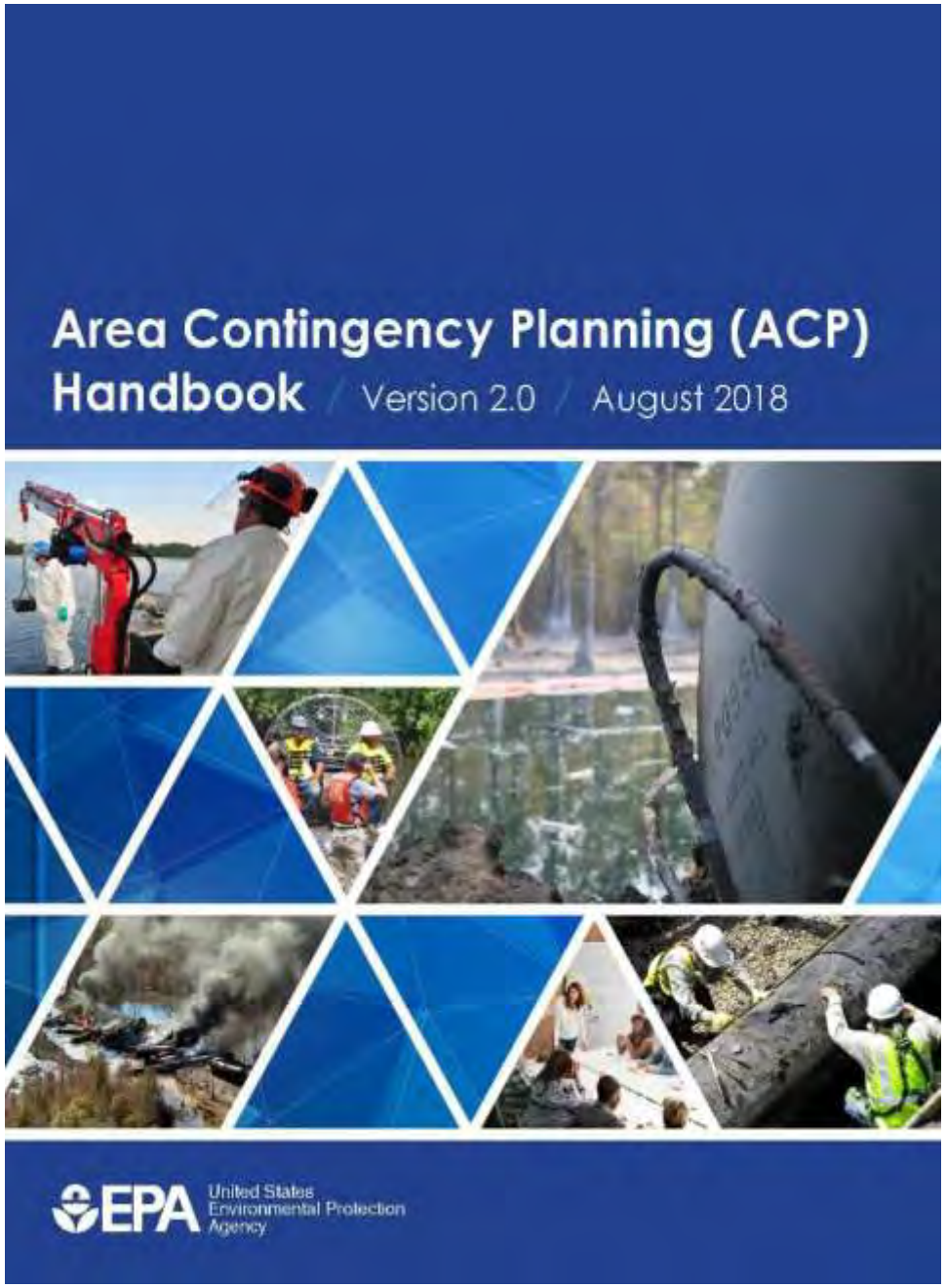
State of Alaska has authority across preparedness and response regulatory activities



Contingency plan lifecycle

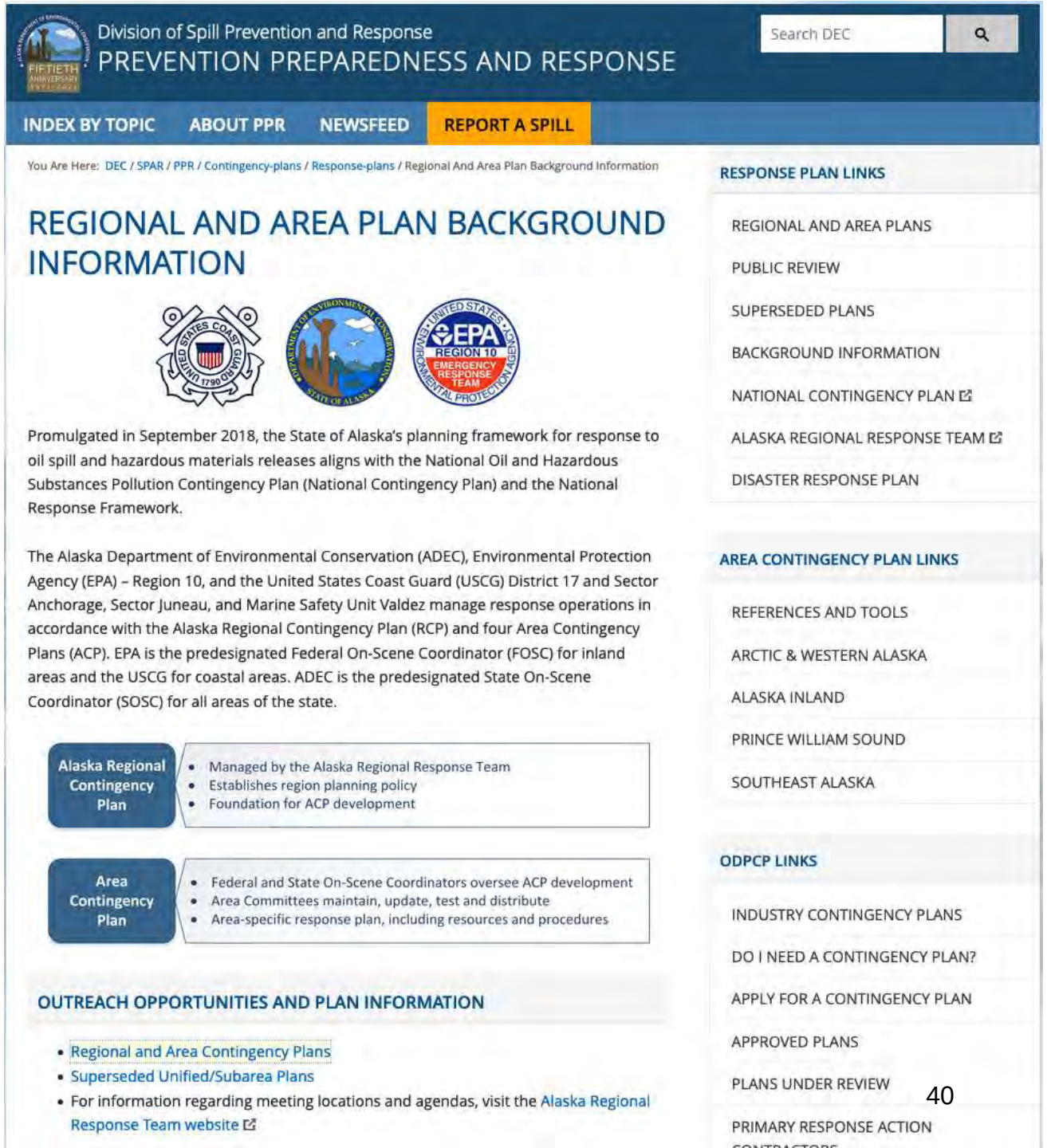


For more information on area planning



For latest info: ADEC Website

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



Division of Spill Prevention and Response
PREVENTION PREPAREDNESS AND RESPONSE

Search DEC

INDEX BY TOPIC | ABOUT PPR | NEWSFEED | REPORT A SPILL

You Are Here: DEC / SPAR / PPR / Contingency-plans / Response-plans / Regional And Area Plan Background Information

REGIONAL AND AREA PLAN BACKGROUND INFORMATION

Promulgated in September 2018, the State of Alaska's planning framework for response to oil spill and hazardous materials releases aligns with the National Oil and Hazardous Substances Pollution Contingency Plan (National Contingency Plan) and the National Response Framework.

The Alaska Department of Environmental Conservation (ADEC), Environmental Protection Agency (EPA) – Region 10, and the United States Coast Guard (USCG) District 17 and Sector Anchorage, Sector Juneau, and Marine Safety Unit Valdez manage response operations in accordance with the Alaska Regional Contingency Plan (RCP) and four Area Contingency Plans (ACP). EPA is the predesignated Federal On-Scene Coordinator (FOSC) for inland areas and the USCG for coastal areas. ADEC is the predesignated State On-Scene Coordinator (SOSC) for all areas of the state.

Alaska Regional Contingency Plan
- Managed by the Alaska Regional Response Team
- Establishes region planning policy
- Foundation for ACP development

Area Contingency Plan
- Federal and State On-Scene Coordinators oversee ACP development
- Area Committees maintain, update, test and distribute
- Area-specific response plan, including resources and procedures

OUTREACH OPPORTUNITIES AND PLAN INFORMATION

- Regional and Area Contingency Plans
- Superseded Unified/Subarea Plans
- For information regarding meeting locations and agendas, visit the Alaska Regional Response Team website

RESPONSE PLAN LINKS
- REGIONAL AND AREA PLANS
- PUBLIC REVIEW
- SUPERSEDED PLANS
- BACKGROUND INFORMATION
- NATIONAL CONTINGENCY PLAN
- ALASKA REGIONAL RESPONSE TEAM
- DISASTER RESPONSE PLAN

AREA CONTINGENCY PLAN LINKS
- REFERENCES AND TOOLS
- ARCTIC & WESTERN ALASKA
- ALASKA INLAND
- PRINCE WILLIAM SOUND
- SOUTHEAST ALASKA

ODPCP LINKS
- INDUSTRY CONTINGENCY PLANS
- DO I NEED A CONTINGENCY PLAN?
- APPLY FOR A CONTINGENCY PLAN
- APPROVED PLANS
- PLANS UNDER REVIEW
- PRIMARY RESPONSE ACTION

Questions??

Alaska specific Regional and AREA planning for oil & HAzardous substance response

Introductory Briefing to the National Response System

Indigenous Knowledge & Science in Decision-Making

Dr. Jim Kendall,
Bureau of Ocean Energy Management

BOEM
Bureau of Ocean Energy Management

A JOURNEY INTO ANOTHER SYSTEM OF KNOWLDEGE

Indigenous Knowledge & Science in Decision-Making




All of the Following Supports…

BOEM's Tribal Program & Responsibilities

- **DOI Tribal Consultation Policy**
https://www.doi.gov/priorities/tribal-consultation

- **Historical Lands**
https://usg.maps.arcgis.com/apps/webappviewer/index.html?id=eb6ca76e008543a89349ff2517db47e6

- **Traditional Knowledge**
https://www.boem.gov/about-boem/traditional-knowledge

- **BOEM Tribal Guidance (June 29, 2018) – revisions under final review**
https://www.boem.gov/about-boem/tribal-engagement

Now an even HIGHER Priority!

BRIEFING ROOM

White House Commits to Elevating Indigenous Knowledge in Federal Policy Decisions

NOVEMBER 15, 2021 • PRESS RELEASES

"Indigenous Knowledge should inform Federal decision making," **said the President's Science Advisor and OSTP Director Dr. Eric Lander.** "This effort will give Federal agencies the tools they need to ensure Indigenous knowledge is appropriately considered and elevated."

BOEM Alaska is already well known for this!

Process has been Peer Reviewed, *but Still Evolving*

Present at the 2017 Arctic Science Summit Week – Prague, Czech Republic

- **Well received by the Arctic Council's Permanent Participants**

Published - Czech Polar Reports: *Kendall et. al,. 2017*

Published – The Journal of Ocean Technology: *Brooks et al., 2019*

Poster Presentation – Alaska Federation of Natives: *Coon et al., 2019*

- Arctic Futures 2050 International Conference 2019

Mark Storzer & Dennis Thurston

Presentations:

- **DOI Arctic Coordination Committee**
- **Interagency Arctic Research Policy Committee (IARPC)**
- **Arctic Offshore Regulators Forum (Pan-Arctic International Forum)**
- **Arctic Research Consortium of the United States (ARCUS)**
- **Environmental Security Working Group - NGA**
- **Alaska Cooperative Planning Group/DOI Region 11**
- **Also shared with the AEWC and the ICC**

Indigenous Knowledge

"A body of evolving practical knowledge based on observations and personal experience of local residents over an extensive, multi-generational time period"
BOEM Ocean Science Journal, 2012

Sometimes perceived as difficult to integrate with "Science"

Our Evolution:

We are not the experts.
We are listening to the experts.

BOEM & DOI have evolved over decades in our understanding and use of Indigenous Knowledge

For example, within BOEM: The first EIS's in the **1970s** didn't mention traditional knowledge.

By the **1980s**, BOEM included IK in a separate sections which quite often consisted of a quote from an elder on a particular subject.

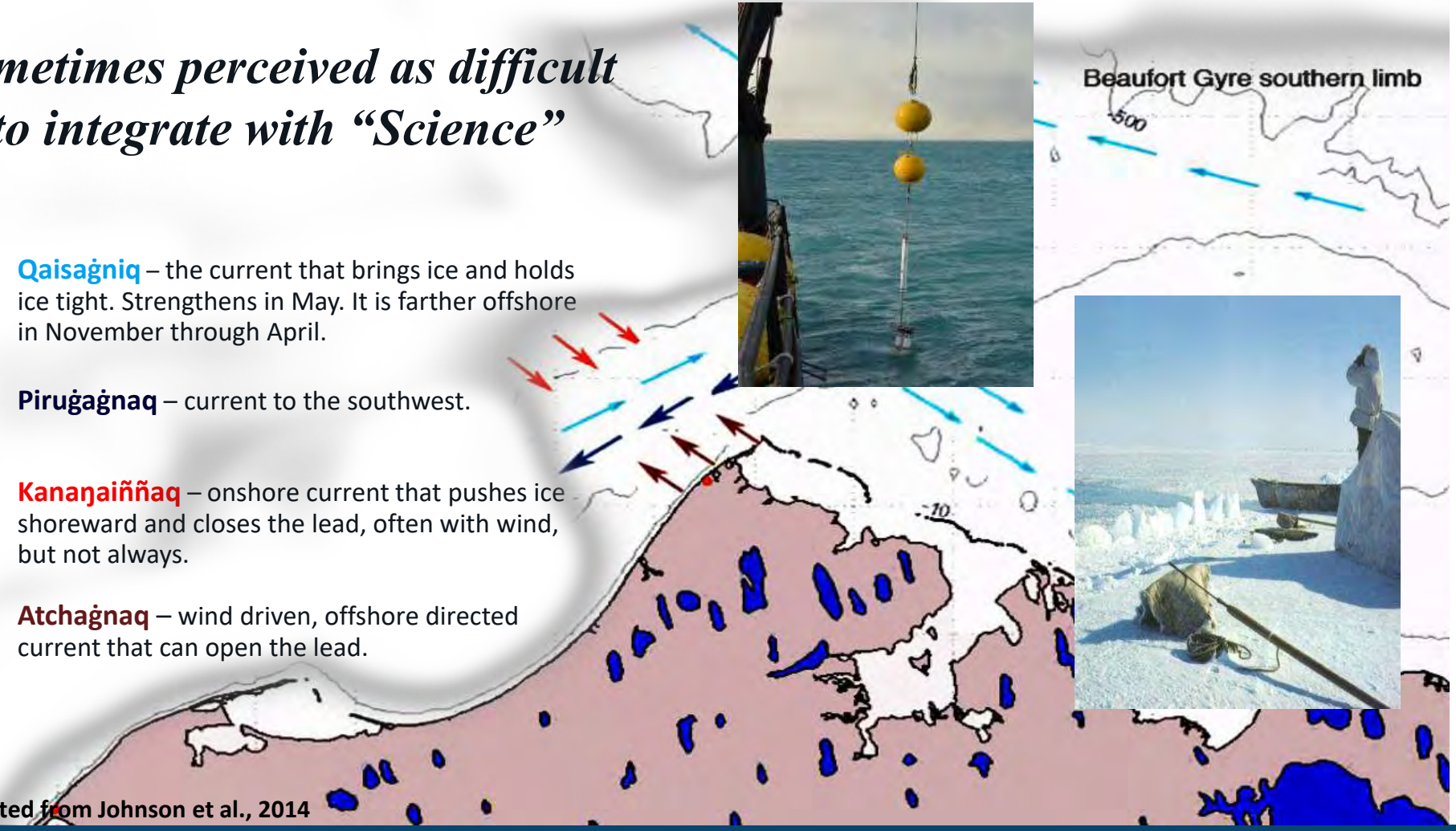
By the **1990s**, BOEM **started** to understand the importance and value of Indigenous Knowledge and began to incorporate it throughout the EISs.

By the **2000s**, BOEM began to understand that science and decision-making would benefit from the appropriate use of this knowledge system.

Ocean Currents: *Example of Two Knowledge Systems*

Sometimes perceived as difficult to integrate with "Science"

- **Qaisaġniq** – the current that brings ice and holds ice tight. Strengthens in May. It is farther offshore in November through April.
- **Piruġaġnaq** – current to the southwest.
- **Kanaŋaiññaq** – onshore current that pushes ice shoreward and closes the lead, often with wind, but not always.
- **Atchaġnaq** – wind driven, offshore directed current that can open the lead.



Adapted from Johnson et al., 2014

The Evolution of a New Paradigm

"It is important to understand and respect that these are two different knowledge systems, with different methodologies that often ask different questions…

These two knowledge systems often complement each other -- providing a whole picture of what is occurring within the Arctic."

Inuit Circumpolar Council, personal communication to J. J. Kendall, at a meeting of the Permanent Participants of the Arctic Council, Iceland, 2014

INUIT

We now treat Indigenous Knowledge and Science as independent, but comparable knowledge systems in our decision-making.

Why venture down this path?

a) The use of Indigenous Knowledge facilitate openness;
b) Co-produces new knowledge;
c) Garners understanding, acceptance, and trust;
d) Enhances our understanding of indigenous perspectives; and,
e) Respects Sovereignty, it's *their* Table

A Lesson from History: *Lasting Trauma*

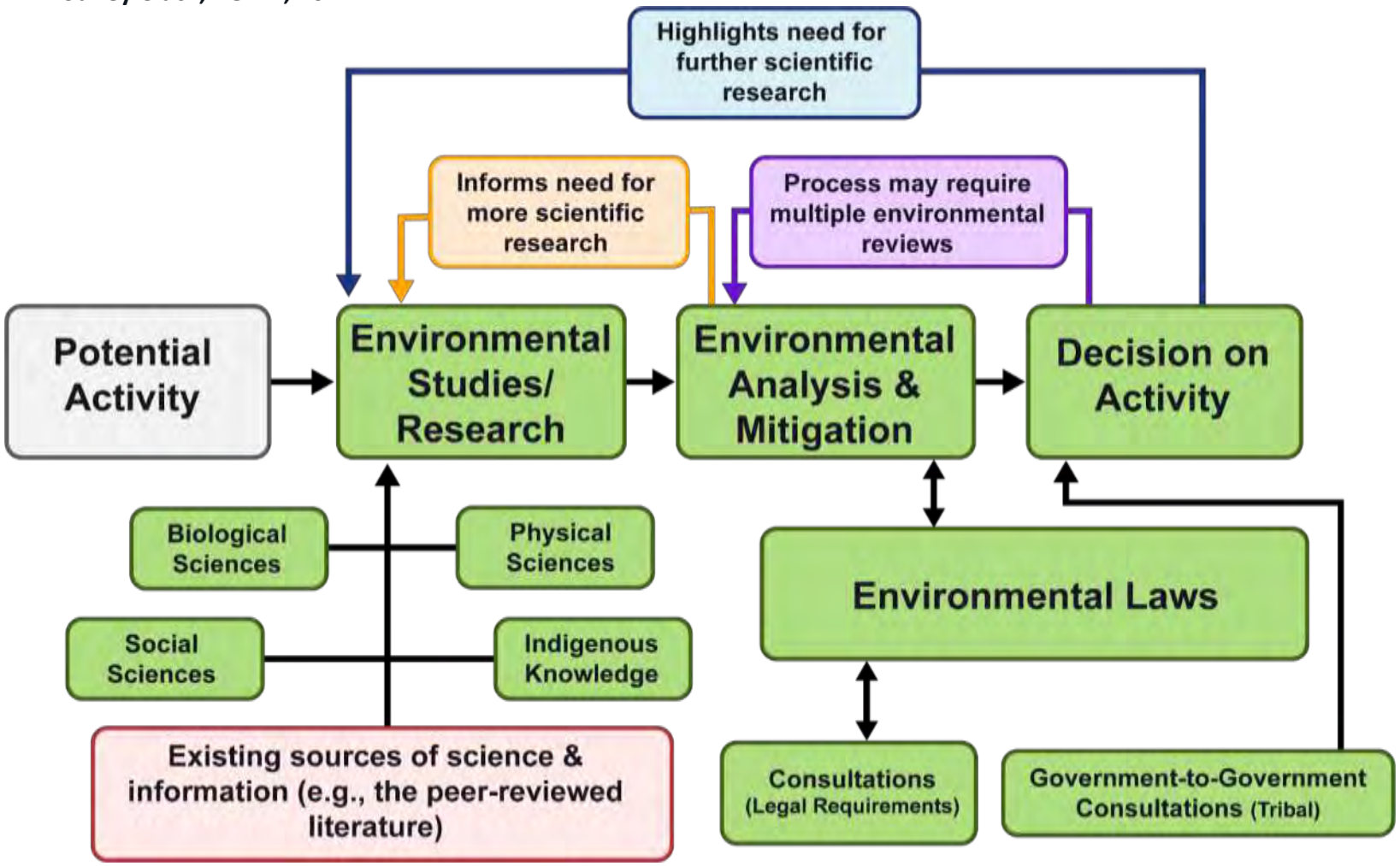
- **International Whaling Commission (IWC) estimated bowhead population at ~600 to 1,800 whales**

- **1977, IWC '<u>banned</u>' subsistence whaling: caused cultural trauma**
  - United States conducted new census of whales
  - Iñupiat proven correct – bowhead population ***<u>five times</u>*** greater than IWC estimated

- **1978, IWC made two important changes:**
  - Banned commercial whaling
  - Implemented new quota system to support subsistence whaling

Science, Analysis, & Decision-making

***Original Model design by*:**
Dr. Rodney Cluck, BOEM, 2012



Science, Analysis, & Decision-making

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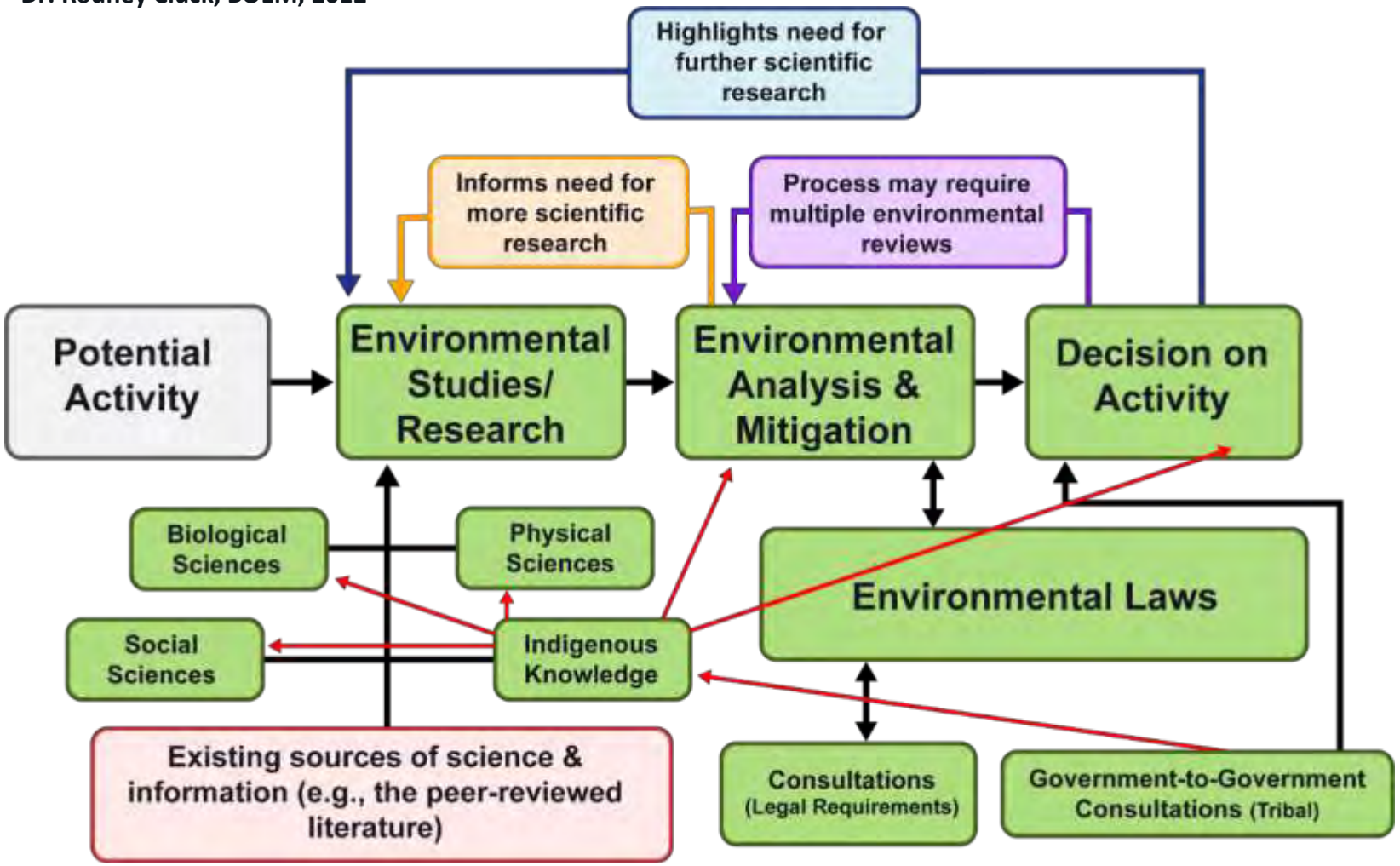
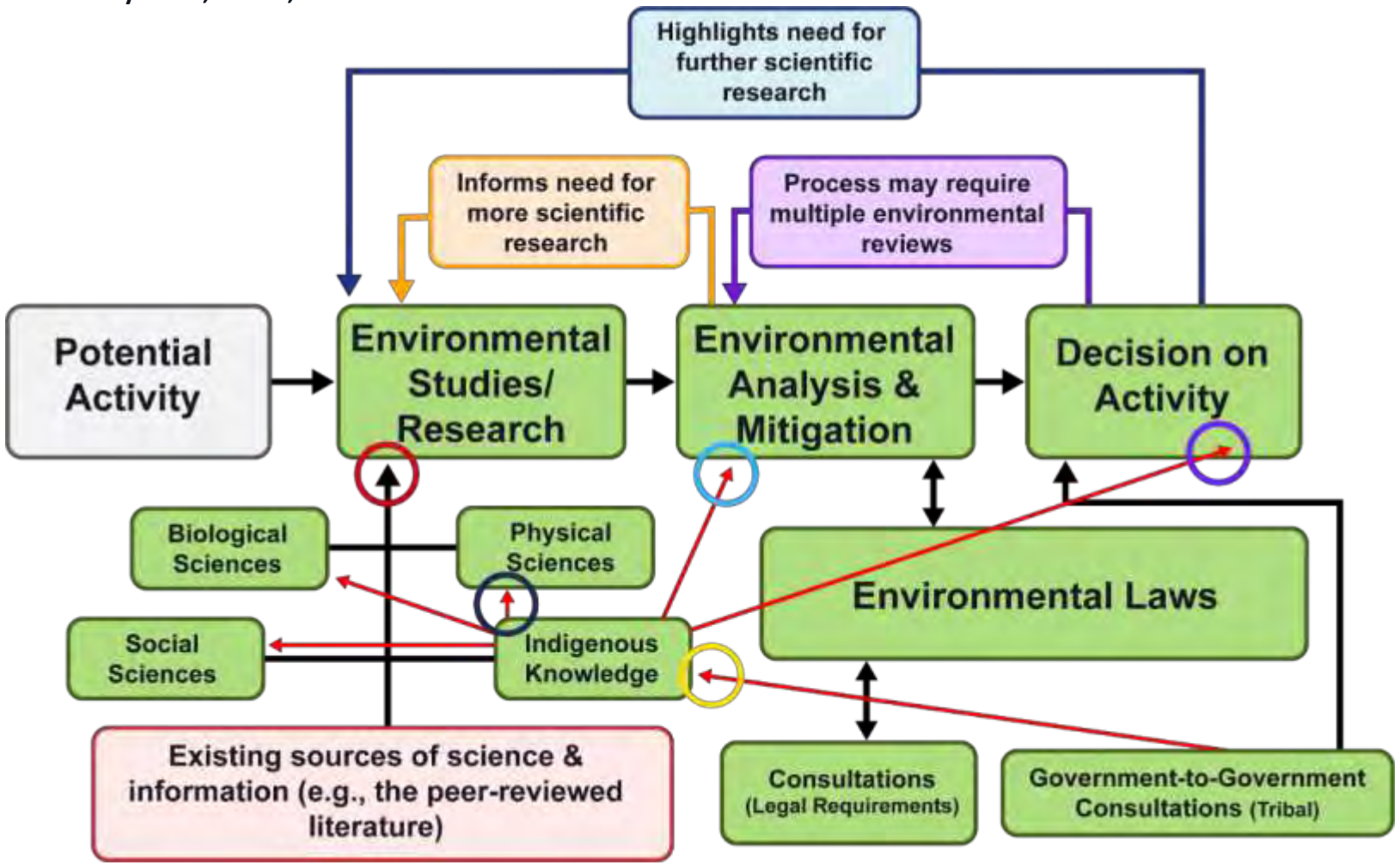


Five Real World Applications

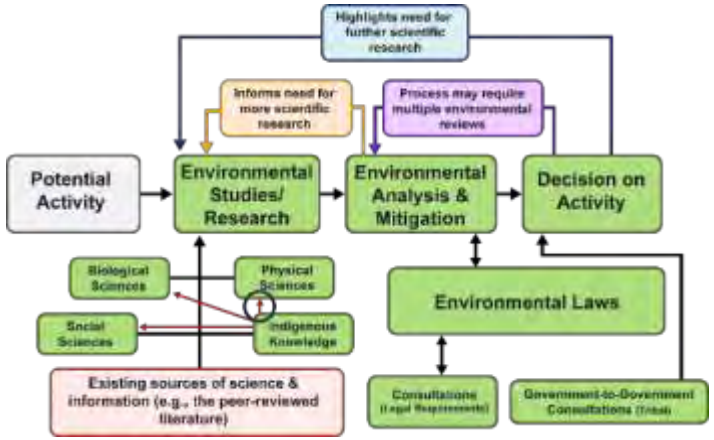
***Original Model design by*:**
Dr. Rodney Cluck, BOEM, 2012



Application 1: Using IK in the Design of Science

Why did the Arctic cisco of the Colville River, an important subsistence fishery, crash?

- BOEM hosted a series workshop of Iñupiat fishers, elders, and scientists to prioritize concerns about the 3-year demise of Arctic cisco.
- A panel of indigenous experts guided the research from the hypothesis stage to preparing the final report.
- The beginning of our *next* Journey – *Co-production of knowledge*



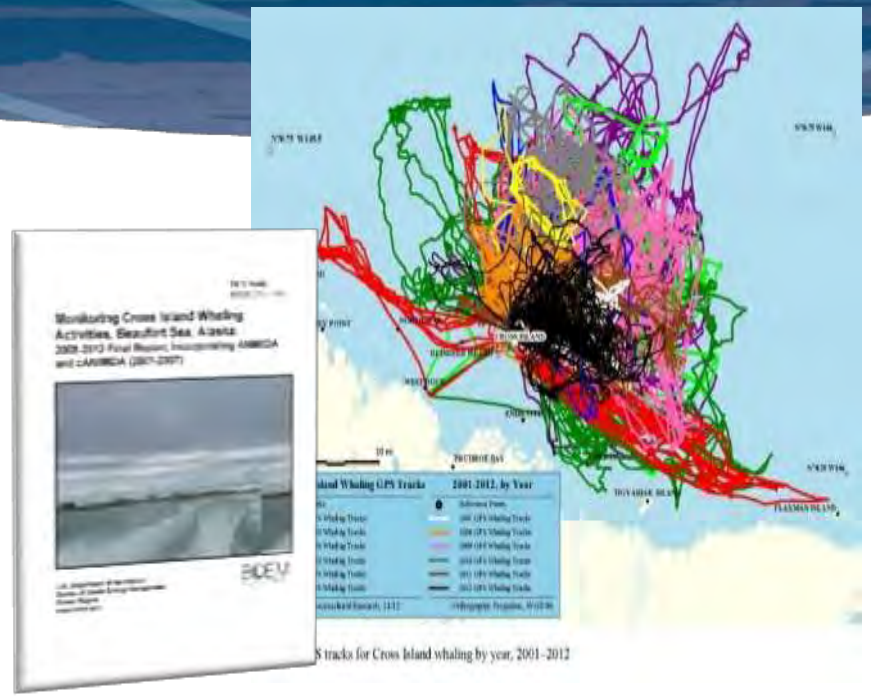
Why is Co-production of Knowledge Important?

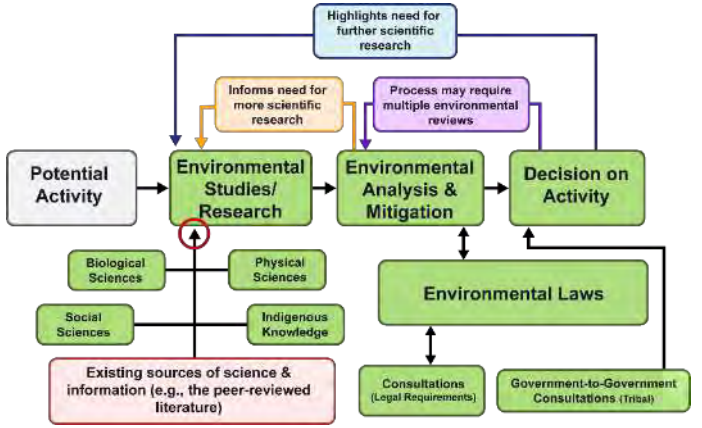
- **Co-production adds equality of knowledge & intellectual authority.**
- **Co-production allows for mutual benefits.**
- **Role of IK Holders**
  - **Inform research proposals & goals at early stages**
  - **Provide accurate & detailed information across time**
  - **Provide interpretations & recommendations**
  - **Contribute insights into new models of the environment**
  - **Work with agencies to develop co-production guidelines**

Application 2: Using BOTH Knowledge Systems

Cross Island Subsistence Bowhead Whale Hunt Mapping

- IK about whale behavior underscored Iñupiat concerns that industrial activities would impact hunting success.
- Hunters provided GPS Units to record boat tracks and whale strikes.
- **<u>Result</u>: Convergence of BOTH knowledge systems, enabling conflict avoidance.**
- **Co-production of Knowledge**



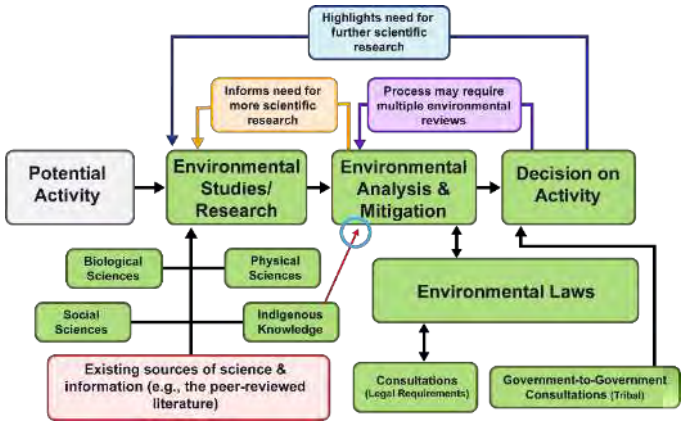


Application 3: Using IK in Environmental Analysis

Whalers wrote letters (2015 & 2016) to decision-makers regarding the construction of Liberty, a gravel island in Beaufort Sea
BOEM's Goal: Incorporate IK into our analysis & mitigations
Objective: Reduce/avoid impacts to subsistence whaling

Mitigation provided by the Indigenous knowledge holders (whalers)

- **Quiet periods** during whale migration & harvest season
- **Communication center** for whalers and industry to minimize conflicts
- Industry vessels use **best efforts** to avoid whales and whalers
- With the whalers, develop **best practices** when vessels approach active subsistence hunting
- Establish a **conflict resolution process**



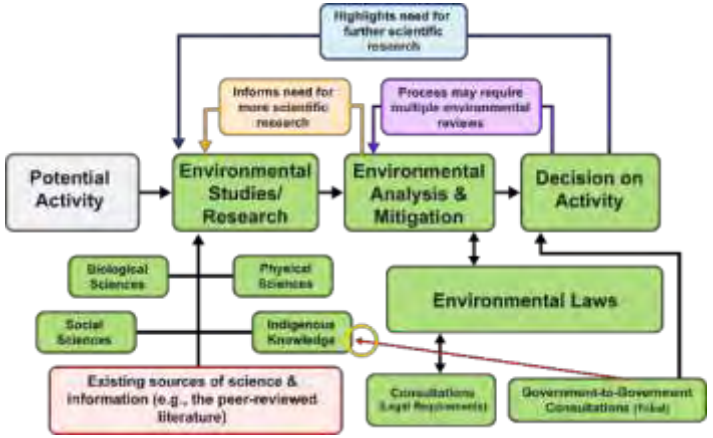
Application 4: Consulting with Indigenous Leaders

Legal Requirements – Laws, Executive Orders, and Policies

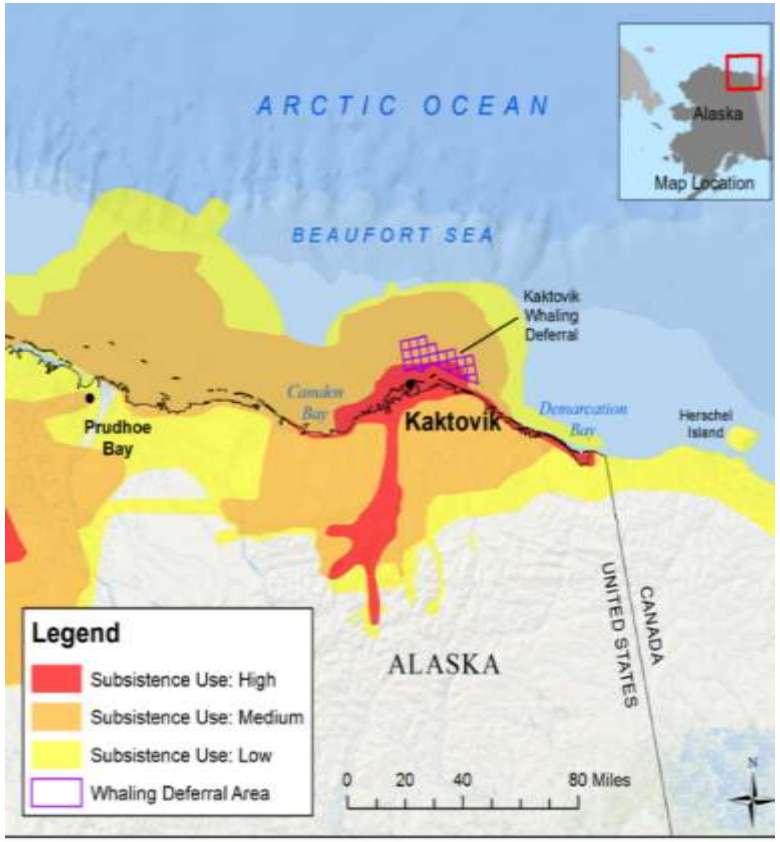
- Following the law is a cornerstone of a Government-to-Government relationship.

BOEM Protocol – Initiate consultation early in the planning process

- Listen to the experiences and perspectives of tribal partners; and,
- Use this information to minimize potential adverse impacts to tribal interests

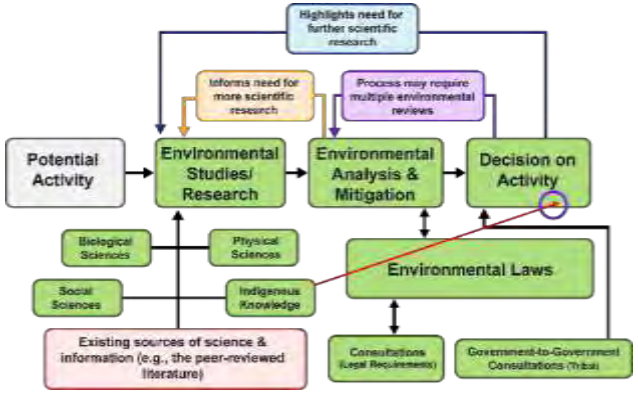


Application 5: Programmatic Decision-making Stage



Kaktovik Marine Subsistence Use

- IK informs the Iñupiat about the most productive areas for hunting.
- Subsistence foods include Bowhead whales, Beluga whales, and seals.
- Kaktovik hunters depend on these resources for their food security.
- An area was deferred from leasing during the 2012 -2017 period to avoid conflict between subsistence use and OCS activities.



Our Best Practices

- Show respect for values & traditions
- Active listening
- Collaboration *(the highest level of Partnership)*
- Engagement – frequent conversations
- Exchange of reports & findings

* *"It's all about sharing"*

Photo: https://www.north-slope.org/

Harry Brower, Jr.*
Mayor, North Slope Borough

Documenting Our Evolution:

CZECH POLAR REPORTS 7 (2): 151-163, ASSW 2017

Use of traditional knowledge by the United States Bureau of Ocean Energy Management to support resource management

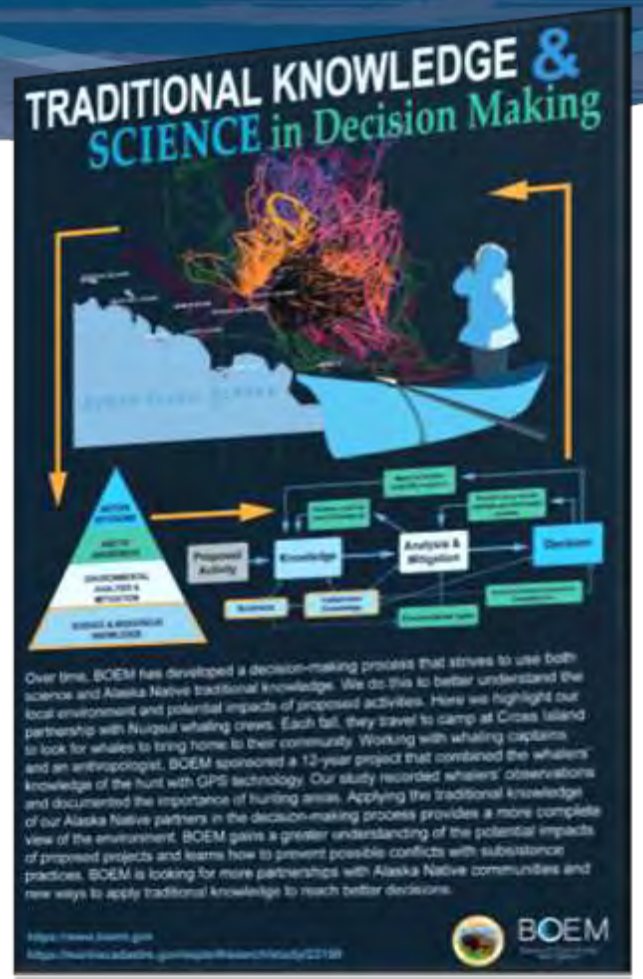
James J. Kendall Jr.[1], Jeffrey J. Brooks[1], Chris Campbell[1], Kathleen L. Wedemeyer[1], Catherine C. Coon[1], Sharon E. Warren[1], Guillermo Auad[2], Dennis K. Thurston[1], Rodney E. Cluck[2], Frances E. Mann[1], Sharon A. Randall[1], Mark A. Storzer[1], David W. Johnston[1], Deanna Meyer-Pietruszka[3], Michael L. Haller[1]

[1]*Bureau of Ocean Energy Management, Department of the Interior, Anchorage, AK, USA*
[2]*Bureau of Ocean Energy Management, Department of the Interior, Sterling, VA, USA*
[3]*Bureau of Ocean Energy Management, Department of the Interior, Washington DC, USA*

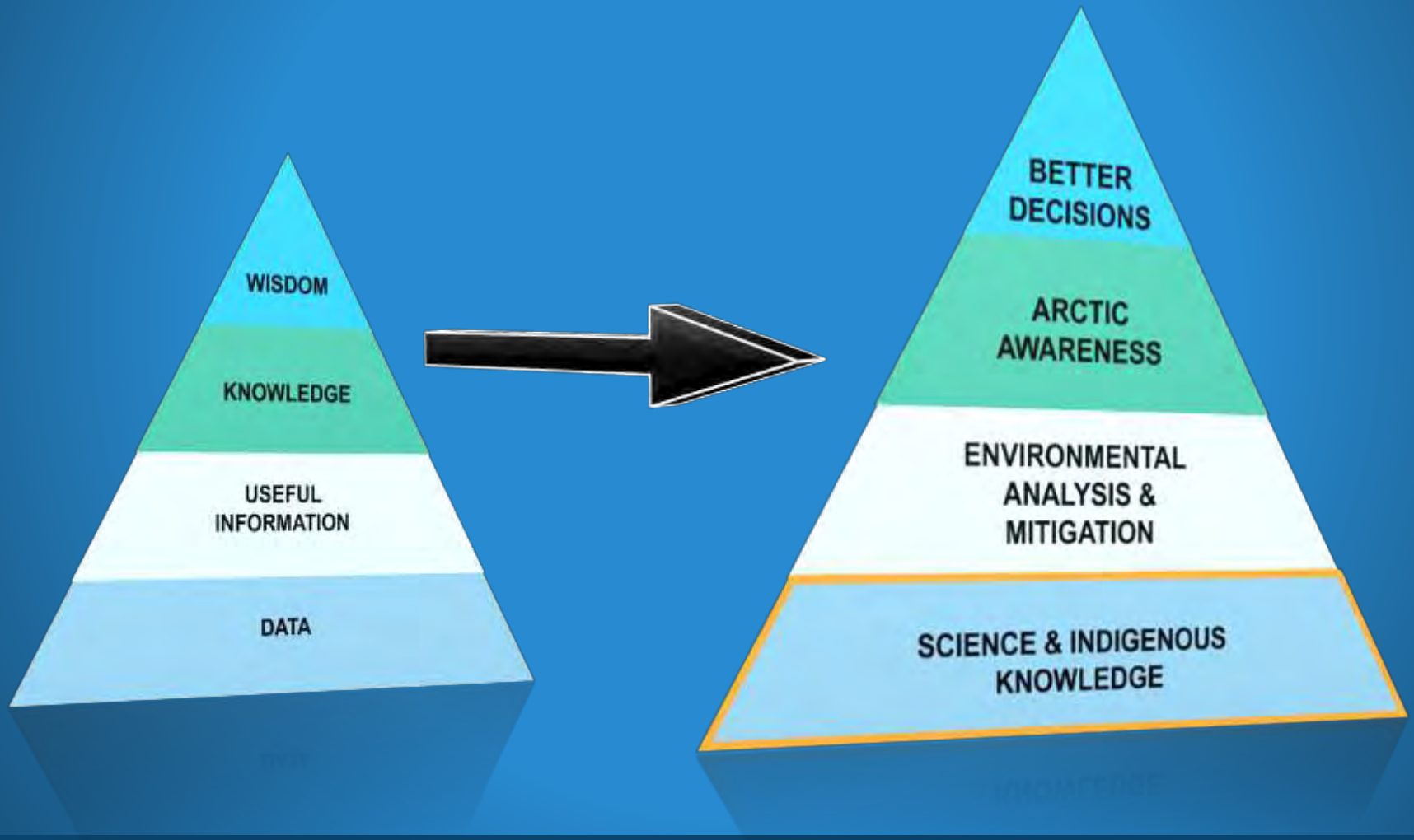
Abstract

Professionals who collect and use traditional knowledge to support resource management decisions often are preoccupied with concerns over how and if traditional knowledge should be integrated with science. To move beyond the integration dilemma, we treat traditional knowledge and science as distinct and complementary knowledge systems. We focus on applying traditional knowledge within the decision-making process. We present succinct examples of how the Bureau of Ocean Energy Management has used traditional knowledge in decision making in the North Slope Borough, Alaska: 1) using traditional knowledge in designing, planning, and conducting scientific research; 2) applying information from both knowledge systems at the earliest opportunity in the process; 3) using traditional knowledge in environmental impacts assessment; 4) consulting with indigenous leaders at key decision points; and 5) applying traditional knowledge at a programmatic decision level. Clearly articulating, early in the process, how best to use traditional knowledge and science can allow for more complete and inclusive use of available and pertinent information.

DOI: 10.5817/CPR2017-2-15

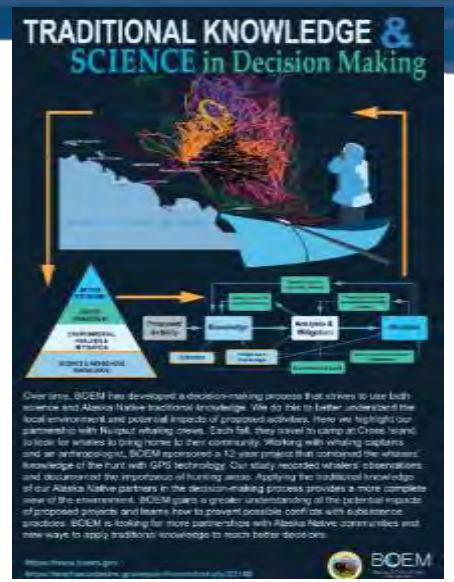


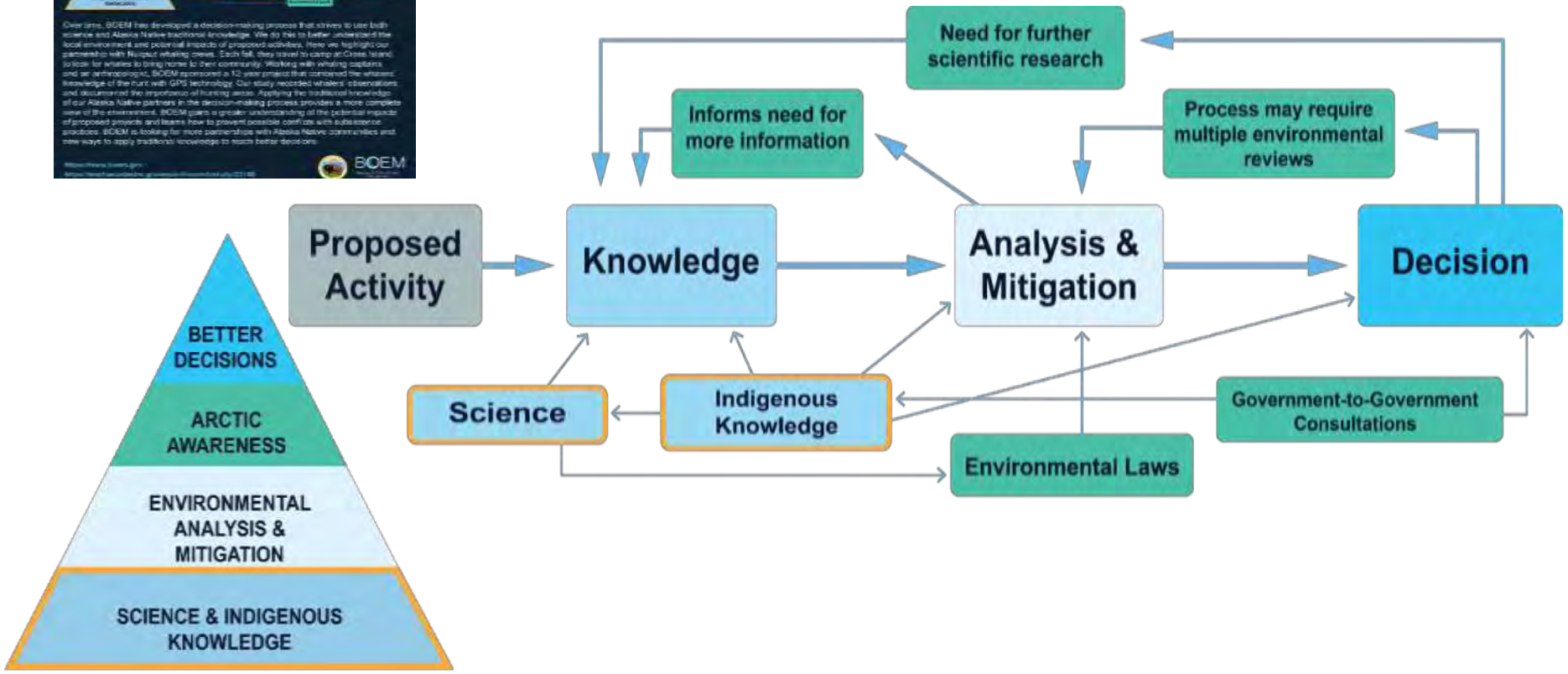
Our Process has Evolved!



A Better Decision-Making Process:

Knowledge, Analysis, Awareness





New Study with Indigenous Knowledge Holders

- 3-year study: Subsistence Harvest and Iñupiaq Knowledge of Beluga Whales for Kaktovik, Alaska
- IK holders from Kaktovik Tribal Council, City Council, hunters, & other local indigenous experts
- Scientist from Alaska Department of Fish and Game, Subsistence Division and Department of Anthropology, University of Alaska
- Focus on harvest practices & cultural importance of beluga whales for the community
- Co-production of knowledge design
- Education product for high school students and teachers plus final report and graduate student thesis

STEM Efforts: *Future Alaskan Scientists*

STEM is a full-contact, hands-on, two-way effort

- **Ongoing support for the Kaktovik Summer Science Camp – partnering with the Tribe, Community, and University of Texas**
- **Sustained support for the Alaska Native Science & Engineering Program – through the University of Alaska Anchorage**
  - **Developing and facilitating addition of ANSEP internship(s) with BOEM Alaska Region**
- **Continuing support for Alaska Science Fairs at public and private schools** (ready to go when schools give a post-pandemic green light)
- **BOEM Alaska Region – Evening of Science Village Outreach Program**
- **Student Engineers Advancing Ocean Technology (SEA [O]Tech): A new project where a team of educators will work with students in rural communities to build ocean drifters and CTD's.**

“Sharing” Information Sessions with Cook Inlet Tribes

2-Day Information Sessions with Cook Inlet Tribes

- Tribes requested, and we obliged ; partnered with EPA
- Highlighted BOEM’s unique missions and processes

Six Tribes and Two Tribal Entities Took Part, including:

- Chickaloon Native Village
- Eklutna Native Village
- Kenaitze Indian Tribe
- Native Village of Port Graham
- Seldovia Tribe
- Native Village of Tyonek,
  Cook Inlet Tribal Council, & Chugach Regional Resources Commission

Opportunities for Increased Momentum!

- **<u>Investment</u>: Inclusive and intentional decision-making takes time to build trust, respect, & relationships**

- **<u>Equitability</u>: Steps must include addressing capacity issues and associated costs of engagement**

  - Appropriate Compensation for IK Holders
  - Broad Band
  - Staffing
  - Training for tribal partners

QUESTIONS?

Development of Response Information for Offshore Oil Spills in Area Contingency Plans

Gabrielle McGrath,
RPS Group

Supporting Federal and State On-scene Coordinators

Alaska RRT

PUBLIC COMMENT

Supporting Federal and State On-scene Coordinators

Alaska RRT

_REVIEW OF PARKING LOT ISSUES
_PLANNING FOR NEXT MEETING
_CLOSING REMARKS

Save the dates

Area Committee Meetings

- **AWA GRS Subcommittee Meeting,** February 22, 2022, 01:00 PM
- **Southeast Alaska Area Committee Meeting,** February 10, 2022, 10:00 AM to 11:30 AM
- **Prince William Sound Area Committee**, April 7, 2022, Cordova, AK
- **AWA Area Committee**, April 19, 2022

ARRT 2022 Fall Meeting: September 22, 2022

DEVELOPMENT OF RESPONSE INFORMATION FOR OFFSHORE OIL SPILLS IN AREA CONTINGENCY PLANS

Alaska RRT Meeting
February 17, 2022

Gabrielle G. McGrath
Portfolio Manager – Spill Response Specialist
RPS Ocean Science

Goal of Project

Improve the content of ACPs to address oil spill planning and response for offshore oil and gas infrastructure

Deepwater Horizon
Incident Specific Preparedness Review (ISPR) – 2011

"ACPs in the Gulf generally did not contain WCD scenarios involving offshore oil exploration activities, resulting in a lack of preparedness."

"BOEMRE (now BSEE) should participate in Area Committees…to ensure integration of OSRPs and ACPs and the availability of equipment, trained personnel, OSROs, vessel programs, and other response resources to implement recovery and protection strategies"

"Most Gulf ACPs are inadequate with regard to Environmentally Sensitive Areas (ESAs)…protection strategies were incomplete or missing from ACPs."

BSEE Study Oil Spill Response Plan (OSRP) Capabilities Review – February 2016

- As part of a BSEE effort to model responses to WCDs on the Outer Continental Shelf, a review was conducted of response strategies and tactics in the appropriate RCPs and ACPs.

  .

- Overall finding -- offshore response information lacked detail and required further development.

"There were many lessons learned during the Macondo response that have not been transferred to the ACP and RCPs. BSEE should work with RRTs and Area Committees to develop strategic and tactical guidance for employing response countermeasures in RCPs and ACPs based on lessons learned from the Deepwater Horizon response efforts. This guidance is especially needed in the offshore and open ocean zones."

BSEE Offshore ACP Development Project
Multi-year, $1.9M Contract (52 months)

1. Gulf of Mexico – October 2019 to March 2023

- South Texas ACP *(Corpus Christi, TX)*
- Central Texas ACP *(Houston-Galveston, TX)*
- Southeast Texas and Southwest Louisiana ACP *(Port Arthur, TX)*
- South Central Louisiana ACP *(Houma, LA*)
- Southeast Louisiana ACP *(New Orleans, LA)*
- Alabama, Mississippi and Northwest Florida ACP *(Mobile, AL)*

2. Arctic & Western Alaska ACP (15 months)

3. Los Angeles-Long Beach ACP (8 months)

Key Information Elements Required in ACPs

- Description of the Area
- WCD Scenarios
- Coordination Structures
- Response Equipment
- Sensitive Resources
- Response Strategies

Review: Gather Offshore Infrastructure & WCD Information

Task 1

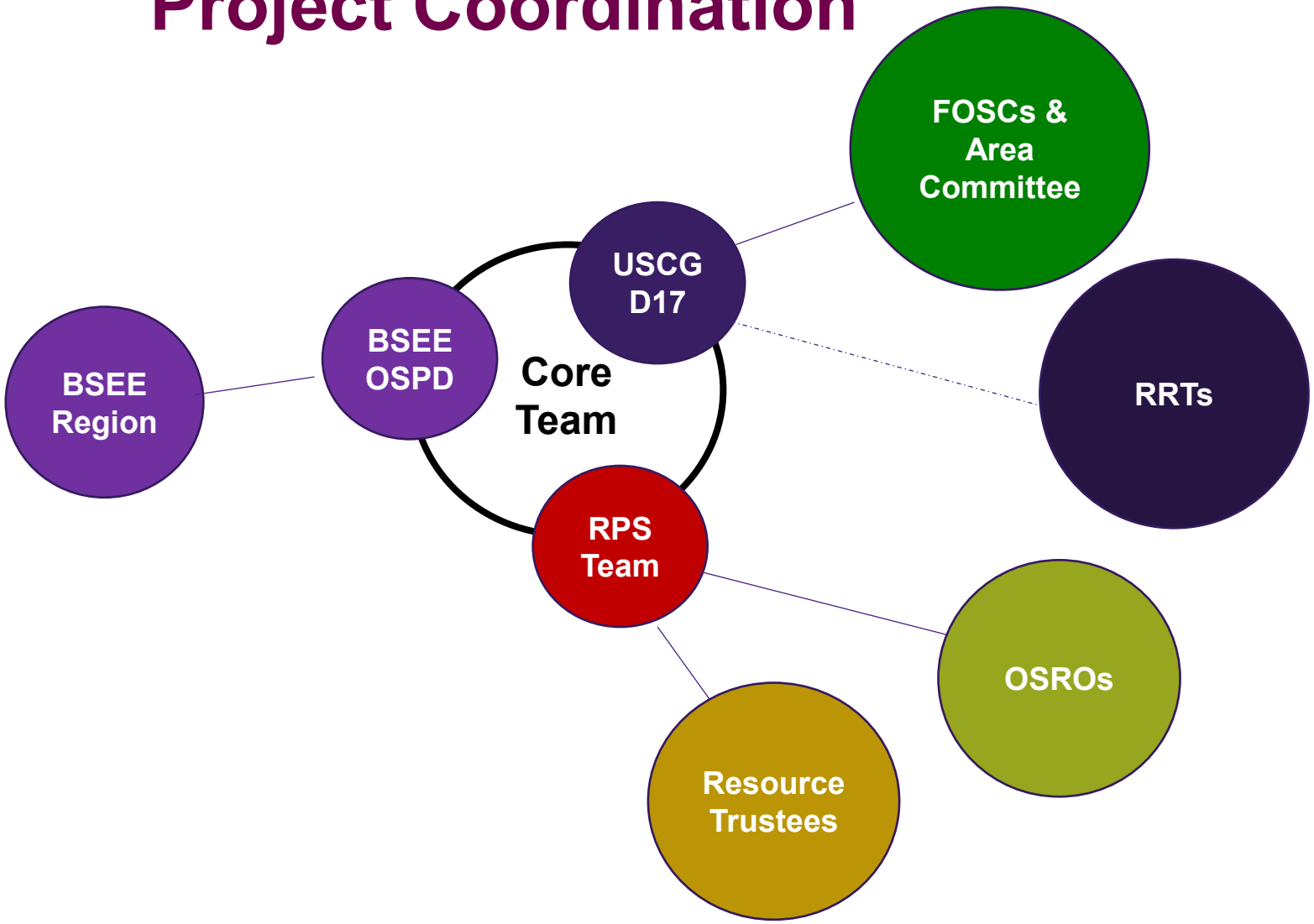
Assess: RCP / ACP Gap Analysis

Task 2

Develop:

- Infrastructure — **Task 3**
- WCD Scenarios — **Task 4**
- Response Equipment — **Task 5**
- Sensitive Resources — **Task 6**
- CONOPS, Response Strategies, & BMPs — **Task 7**

Project Coordination



RPS Project Team – Key Personnel and Subcontractors

- Gabrielle McGrath (RPS)
- Dr. Deborah French-McCay (RPS)
- Dr. Jacqui Michel (RPI)
- Dr. Dagmar Etkin (ERC)
- Ann Hayward Walker (SEA Consult)
- John Joeckel (SEAConsult)
- Paul Schuler (OSRL)
- Dr. Oscar Garcia (Water Mapping Inc.)
- Dr. David Dickins (DF Dickins Associates)

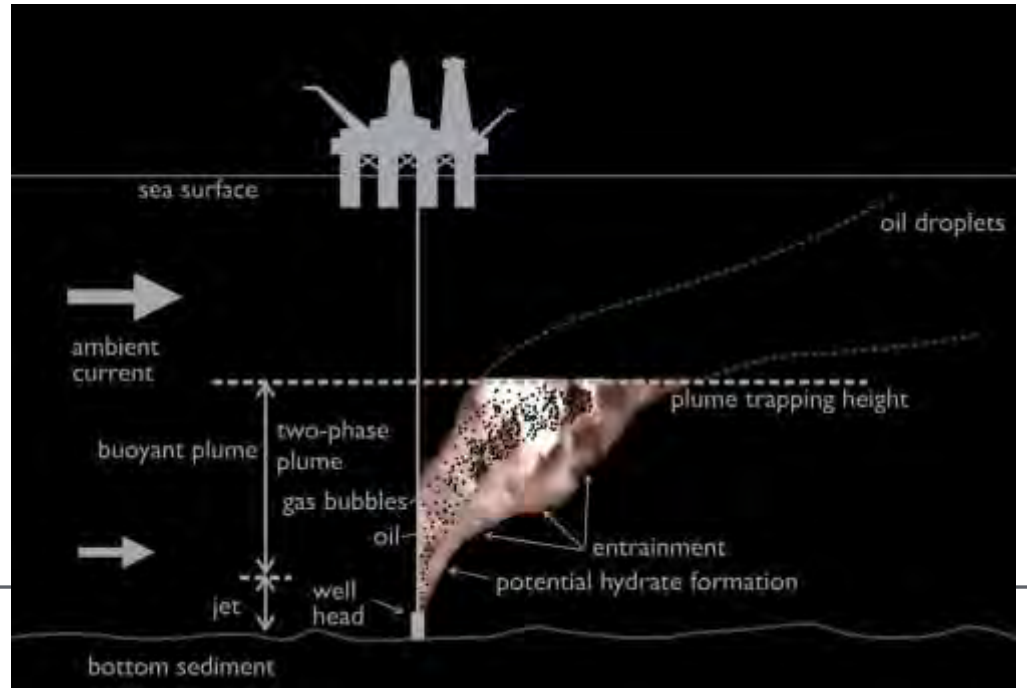
Arctic and Western Alaska Area

Geographic Zones

Relationship of Applicable Plans

Task 1 – WCD Scenario Selection

- *Work with BSEE SMEs to identify oil and gas infrastructure seaward of coastline in the ACP area.*
- *Identify possible WCD scenarios based on largest volume discharge and greatest environmental threat.*
- *Rank order WCDs for possible inclusion in ACP.*

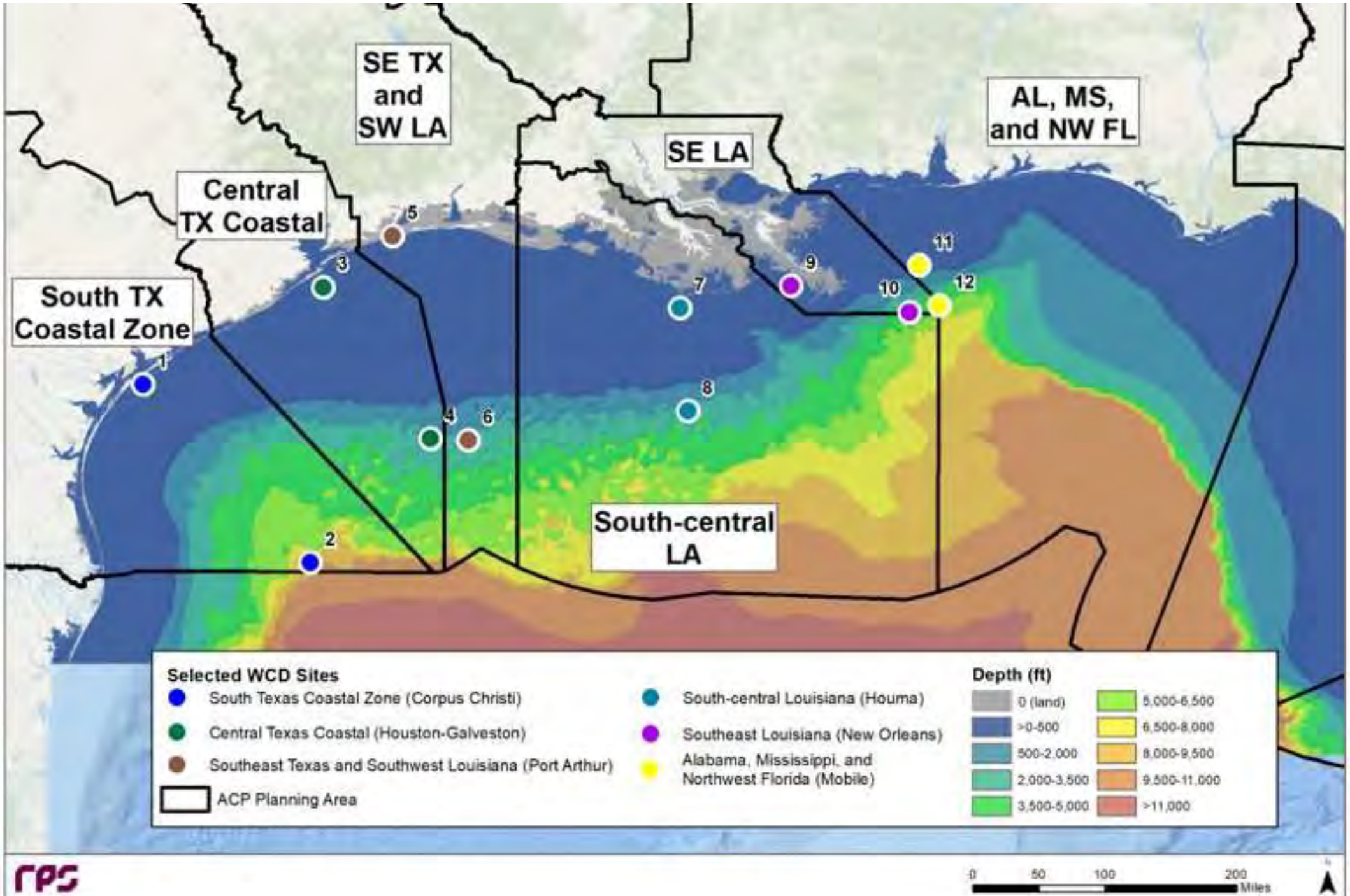


Task 4 – Develop ACP Content, WCD Scenarios

- *Perform stochastical oil spill trajectory analysis showing fate and transport of discharged oil including geographical probabilities and amounts of oil contacting the water column, surface, and shorelines for an uncontrolled discharge occurring over 30 days with no response actions taken.*
- *Model for both (1) Largest volume discharge and (2) Greatest environmental threat.*
- *In Alaska, model additionally for (1) Open water and (2) Broken/solid ice conditions*

Gulf of Mexico Example
Tasks 1/4 – Identify and Select WCD Scenarios

- Initially selected 4 WCD Scenarios per ACP Planning Area to consider.
- Conducted Statewide Stakeholder Meetings to select scenarios.
- Goal to select 1-2 WCD Scenarios per ACP Planning Area for inclusion as planning scenarios in the ACPs.
- Scenarios chosen based on overall impact, diversity of scenarios, and stakeholder priorities.


SE TX and SW LA
AL, MS, and NW FL
SE LA
Central TX Coastal
South TX Coastal Zone
South-central LA
1
2
3
4
5
6
7
8
9
10
11
12
Selected WCD Sites
South Texas Coastal Zone (Corpus Christi)
Central Texas Coastal (Houston-Galveston)
Southeast Texas and Southwest Louisiana (Port Arthur)
ACP Planning Area
South-central Louisiana (Houma)
Southeast Louisiana (New Orleans)
Alabama, Mississippi, and Northwest Florida (Mobile)
Depth (ft)
0 (land)
>0-500
500-2,000
2,000-3,500
3,500-5,000
5,000-6,500
6,500-8,000
8,000-9,500
9,500-11,000
>11,000
rps
0
50
100
200
Miles

Oil Spill Scenario Parameters								Environmental Oil Exposure at Designated Thresholds				
ID	ACP Planning Area	Scenario Name	Total Volume Discharged (bbl)	Discharge Duration (days)	Discharge Depth (m)	Approximate Distance to Shore (nm)	Oil Type + (API Gravity)	Swept Surface Area (mi^2) Exceeding 0.04 µm	Swept Surface Area (mi^2) Exceeding 10 µm	Shore Length (mi) Exceeding 10 µm	Water Column Volume (m^3) Exceeding 10 ppb Dissolved PAH	Time to Shore
1	South TX Coastal Zone	White Marlin Storage Tank, Pipeline, and Well Blowout	19,503	30	Surface	5	Heavy Crude (24)	794	12	240	21 million	9.5 hours
2		Shell Perdido Drilling Well Blowout	3,870,000	30	2,571	120	Med-Light Crude (34)	197,150	21,944	948	79,200 million	32.5 days
3	Central TX Coastal	American Midstream Pipeline Discharge	16,873	1	17.5	9	Light Crude (39.9)	8,515	47	193	219 million	6.9 days
4		Kosmos Energy Drilling Well Blowout	12,912,000	30	596	125	Medium Crude (31)	275,605	40,184	610	229,682 million	18.6 days
5	SE TX + SW LA	Genesis Crude Pipeline Discharge	21,875	1	Surface	12	Med-Light Crude (32)	10,011	139	246	309.million	5.9 days
6		Kosmos Sioux Falls SL 1 Well Blowout	10,645,350	30	589	130	Med-Light Crude (35)	159,874	36,390	1,546	120,900 million	12.9 days
7	South-central LA	Talos Drilling, No. 69 Well Blowout	2,771,250	30	Surface	10	Medium Crude (31.4)	90,103	7,397	1,152	26,019 million	1.4 days
8		Fieldwood Drilling TA009 Well Blowout	13,998,300	30	772	80	Med-Light Crude (32)	322,554	35,866	2,288	254,300 million	12.8 days
9	Southeast LA	Energy XXI Platform J Storage Tank, Pipeline, and Well J-5 Blowout	3,721,764	30	Surface	7	Med-Light Crude (34)	123,676	10,344	1,383	33,344 million	1.5 days
10		Chevron Drilling Hoffe Park Well Blowout	13,971,270	30	1,223	42	Light Crude (38.2)	301,496	29,079	2,189	204,320 million	14.9 days
11	AL, MS, & NW FL	Panther Operating Pipeline Discharge	3,052	1	63	43	Med-Light Crude (34)	6,776	10	222	96 million	29.3 days
12		Anadarko Drilling King North Well H Blowout	11,843,940	30	1,552	57	Med-Light Crude (33)	330,117	41,575	2,052	258,175 million	13.4 days

Gulf of Mexico WCD Scenario Selection Process

- Review all scenarios in the ACP Planning Area
- Facilitated discussion of selections
- Ask for concurrence on proposed scenarios:
  - State agencies
  - Any local entity
  - Federal agencies (other than USCG)
  - USCG
  - Any alibis from Area Committee members
- Make WCD Scenario Selection

Gulf of Mexico Project Team WCD Recommendations

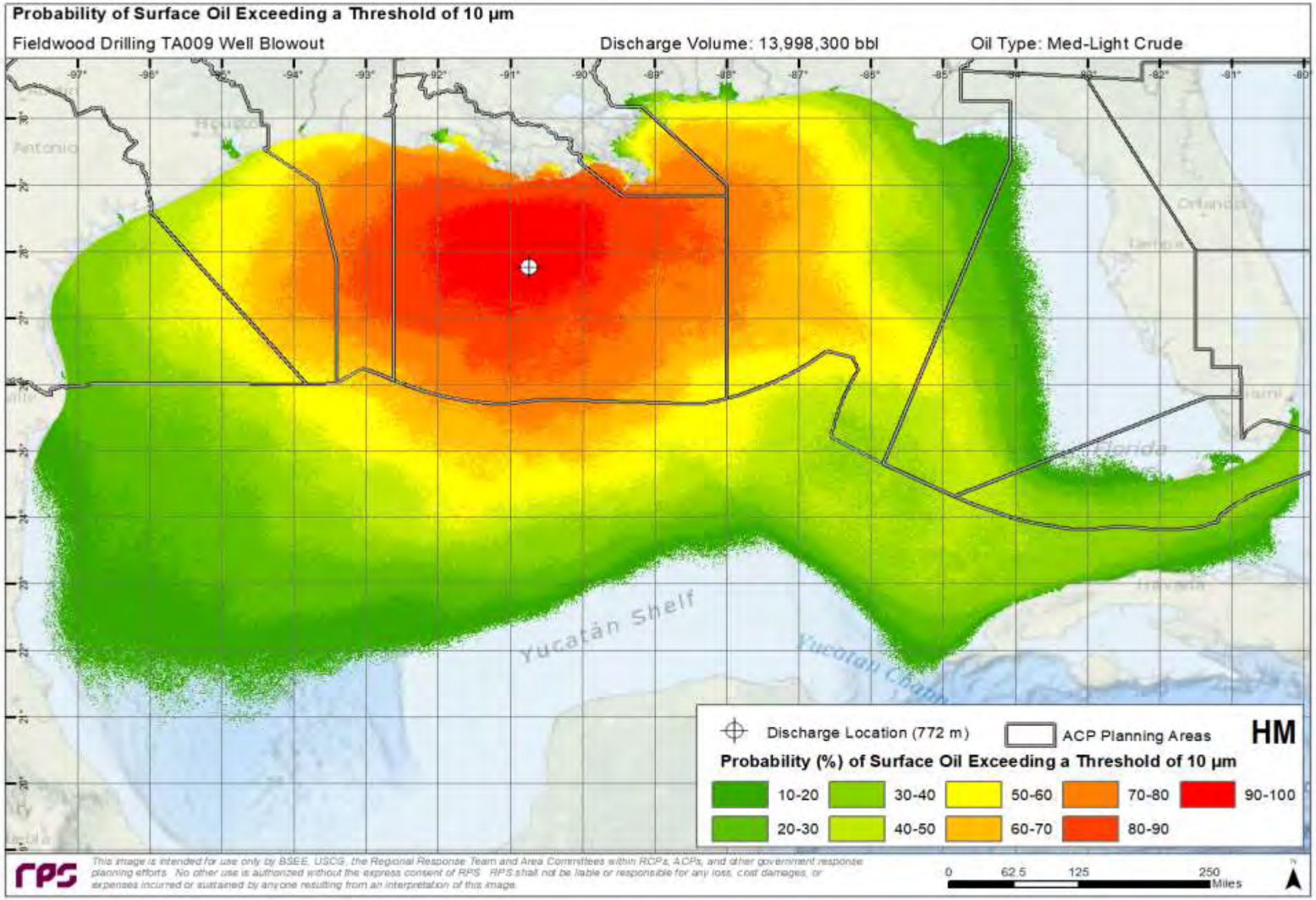
Rationale for Rating Scenario Parameters & Environmental Oil Exposure					
Parameters	**Red (Most Significant)**	**Orange**	**Yellow**	**Green (Least Significant)**	**Comments**
Discharge Volume	Millions of Barrels. The largest discharge volume is red.	Second largest discharge in a zone when over 1 million bbls	Greater than 10,000 bbls Less than 1 million bbls	Less than 10,000 bbls	Relative ratings by size. The scenario with largest volume discharge in each zone is automatically selected and scored red.
Discharge Depth	Deepest subsea discharges	Deep subsea discharges	Shallow subsea discharges	Surface discharges	Deeper subsea discharges are rated higher due to the increased difficulty in securing the source quickly.
Distance to Shore	Very close to shore, less than 10 nautical miles	Greater than 100 nautical miles from shore	Less than 100 nautical miles from shore	N/A	Discharges less than 10 nm from shore are rated **red** due to rapid response times required. Discharges further than 100 nm from shore are rated **orange** due to the logistical challenges present with responding to a spill that far offshore.
Time to Shore	Discharges with shoreline impacts that occur in less than one day	Shoreline impacts in less than 10 days	Shoreline impacts in less than 20 days	Shoreline impacts after 20 days	Spills with the shortest response times for shoreline impact received highest rating.
Oil Type/API Gravity (persistence)	Heavy Crudes less than 25 API Gravity	Medium Crudes (26-31 API Gravity) & Medium-Light Crudes less than 35 API Gravity	Medium-Light Crude greater than 35 API Gravity & Light Crudes (36-40 API Gravity)	Condensates are ultra-light, non-persistent hydrocarbons that initially exist in a gaseous state but have liquefied due to changes in temperature or pressure. API Gravity approaching or exceeding 50.	The heavier the grade of crude oil, the more persistent it will be in the environment.
Surface Oil Concentrations – 0.04 μm*	Greater than 50,000 $mi.^2$	Greater than 10,000 $mi.^2$	Greater than 100 $mi.^2$	Less than 100 $mi.^2$	
Surface Oil Concentrations – 10 μm*	Greater than 5,000 $mi.^2$	Greater than 1,000 $mi.^2$	Greater than 5 $mi.^2$	Less than 5 $mi.^2$	
Shoreline Oil Concentrations	Greater than 1,000 miles	Greater than 250 miles	Greater than 50 miles	Less than 50 miles	
Water Column Oil Concentrations *	Greater than 100,000 million cubic meters	Greater than 50,000 million cubic meters	Greater than 500 million cubic meters	Less than 500 million cubic meters	

State of Texas Scenario Considerations

Oil Spill Scenario Parameters								Environmental Oiling at Designated Thresholds				
ID	ACP Planning Area	Scenario Name	Total Volume Discharged (bbl)	Discharge Duration (days)	Discharge Depth (m)	Approximate Distance to Shore (nm)	Oil Type + (API Gravity)	Swept Surface Area ($mi.^2$)** Exceeding 0.04 µm	Swept Surface Area ($mi.^2$)** Exceeding 10 µm	Shore Length (mi.) Exceeding 10 µm	Water Column Volume ($mi.^3$) Exceeding 10 ppb Dissolved PAH	Time to Shore (days/hrs)
1	South TX	White Marlin	19,503	30	Surface	5	Heavy Crude (24)	7,926	7,924	71	<0.01	12 hrs
2		Magellan E&P Platform #1	5,318	30	Surface	2	Heavy Condensate (46)	2,227	1,710	10	<0.01	3 hrs
3		GOM Shelf Platform	475	30	Surface	36	Heavy Condensate (49)	9,811	250	-	<0.01	-
4*		Shell Perdido Exploratory Drilling	3,870,000	30	2,571	120	Med-Light Crude (34)	6,290,000	6,206,000	142	19.76	43.2 days
5	Central TX	Genesis Crude Pipeline	28,304	1	Surface	<1	Medium Crude (30)	5,907	5,907	75	<0.01	< 1 hr
6		American Midstream Pipeline 4879	16,873	1	17.5	9	Light Crude (39.9)	90,730	90,430	144	0.03	8.2 days
7*		Kosmos Energy Subsea Drilling	12,912,000	30	596	125	Medium Crude (31)	6,902,000	6,902,000	1,460	46.67	23.7 days
8		BHP Sphinx Drilling	6,253,740	30	1,192	140	Medium Crude (30)	7,269,000	7,244,000	326	24.19	26.2 days
9	SE TX and SW LA	Fieldwood Platform	60,560	30	Surface	4	Light Crude (40)	239,000	232,400	438	0.12	6.3 days
10		Genesis Crude Pipeline	21,875	1	Surface	<1	Med-Light Crude (32)	106,400	106,300	147	0.02	< 1 hr
11		Cox Operating Pipeline	30,902	1	36	60	Med-Light Crude (35)	96,900	96,280	117	<0.01	23.3 days
12*		Kosmos Sioux Falls SL 1	10,645,350	30	589	130	Med-Light Crude (35)	6,874,000	6,874,000	1,496	55.30	20.3 days

South-central LA – Scenario 8 – Fieldwood Drilling

- Well Blow Out Scenario
- Area – GC, Block – 200, 80 NM from shore
- 466,610 bbl/day of Med-Light Crude at 772 m
- 30-day continuous discharge simulated for 75 days
- 13,998,300 bbls – Total Discharged (Largest Volume in Gulf of Mexico)
- 12.8 days to reach shore
- Impacts:
  - Swept Surface Area > 0.04 μm = 322,554 mi^2
  - Swept Surface Area > 10 μm = 35,866 mi^2
  - Shoreline Length > 10 μm = 2,288 mi (Largest in Gulf of Mexico)
  - Water Column Volume > 10 ppb Dissolved PAH = 254,300 million m^3


Probability of Surface Oil Exceeding a Threshold of 10 µm
Fieldwood Drilling TA009 Well Blowout
Discharge Volume: 13,998,300 bbl
Oil Type: Med-Light Crude
Yucatán Shelf
Discharge Location (772 m)
ACP Planning Areas
HM
Probability (%) of Surface Oil Exceeding a Threshold of 10 µm
10-20
20-30
30-40
40-50
50-60
60-70
70-80
80-90
90-100
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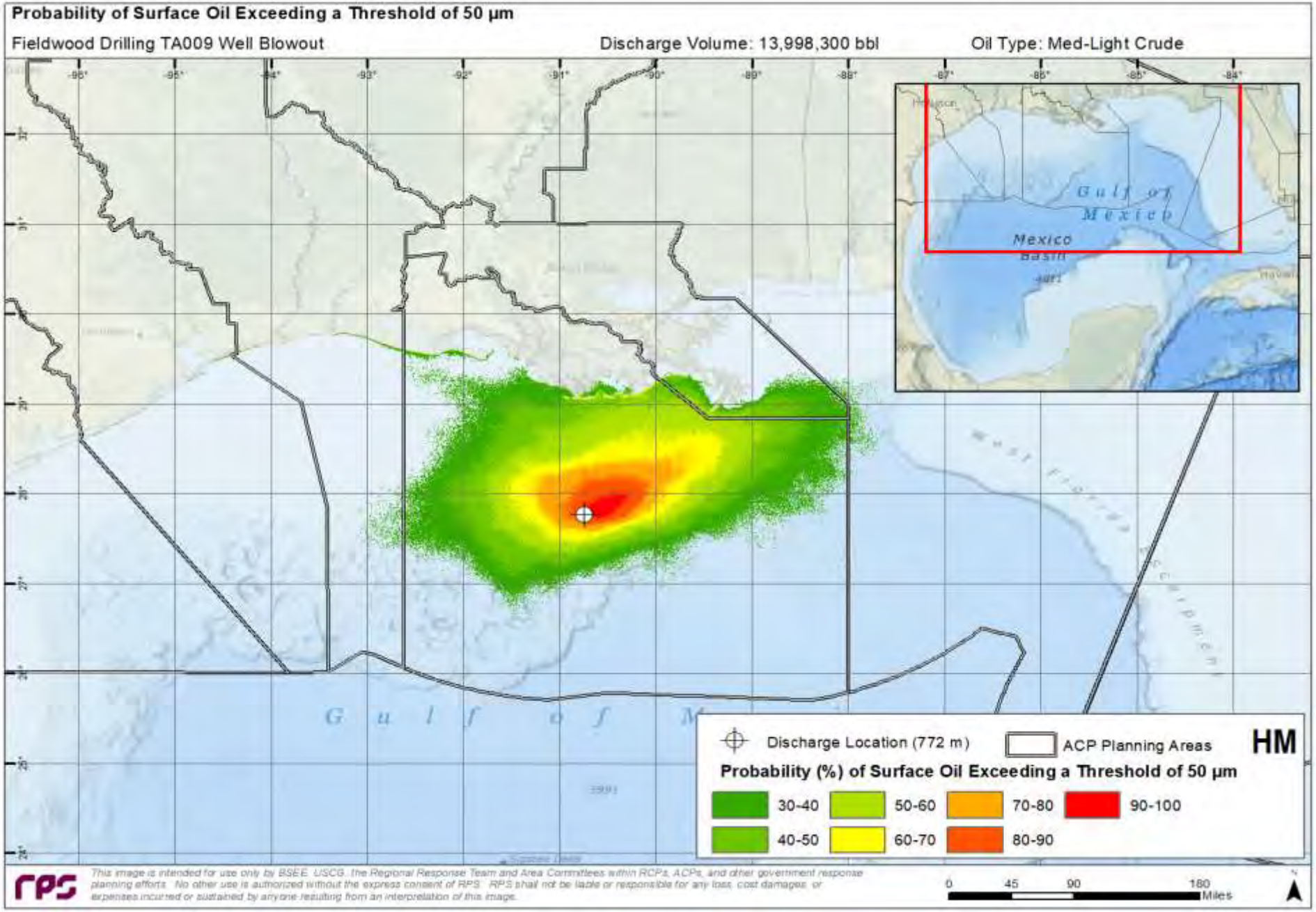
0
62.5
125
250
Miles


Probability of Surface Oil Exceeding a Threshold of 50 µm
Fieldwood Drilling TA009 Well Blowout
Discharge Volume: 13,998,300 bbl
Oil Type: Med-Light Crude
Gulf of Mexico
Mexico Basin
Discharge Location (772 m)
ACP Planning Areas
HM
Probability (%) of Surface Oil Exceeding a Threshold of 50 µm
30-40
40-50
50-60
60-70
70-80
80-90
90-100
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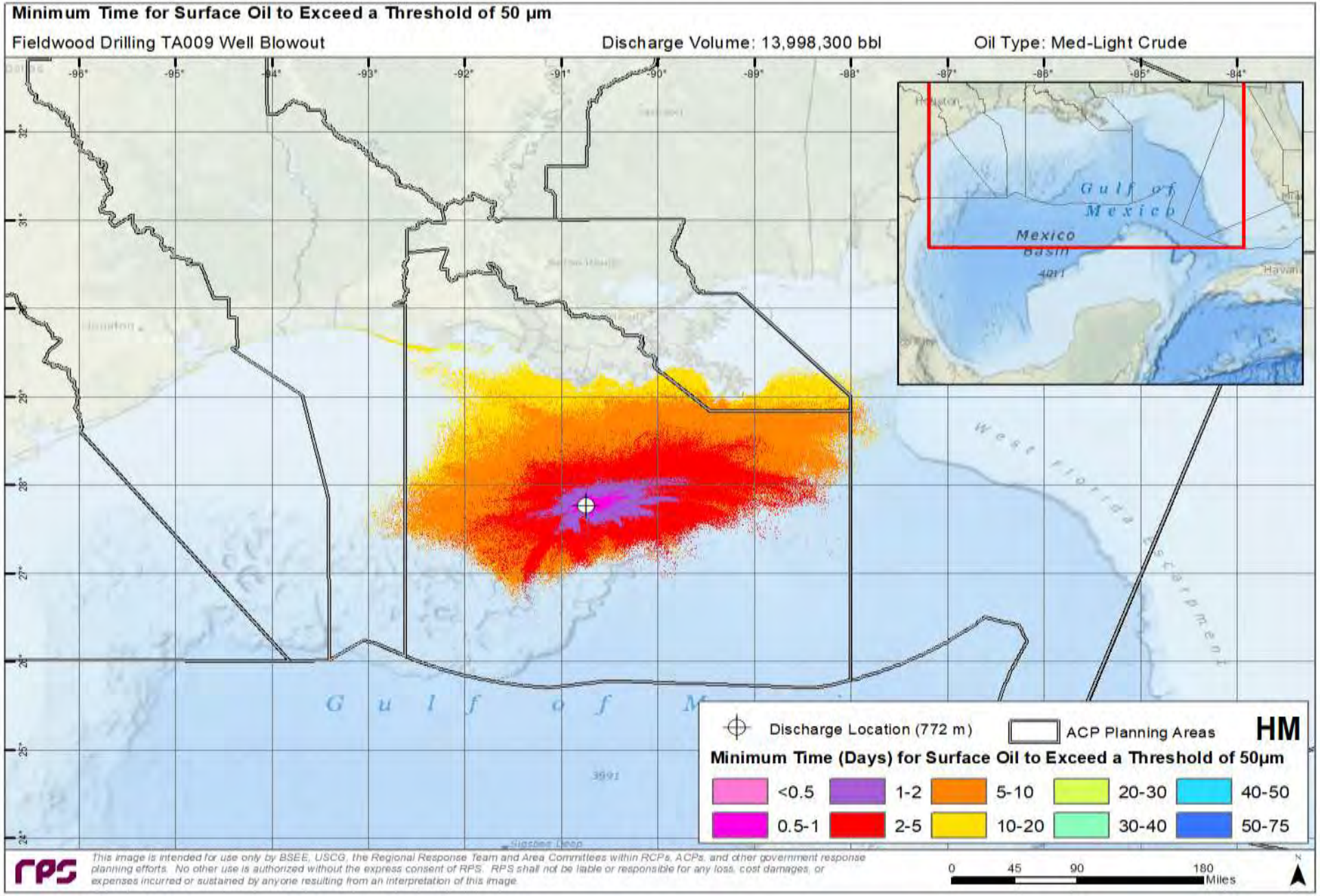
0
45
90
180
Miles


Minimum Time for Surface Oil to Exceed a Threshold of 50 µm
Fieldwood Drilling TA009 Well Blowout
Discharge Volume: 13,998,300 bbl
Oil Type: Med-Light Crude
Gulf of Mexico
Mexico Basin
Discharge Location (772 m)
ACP Planning Areas
HM
Minimum Time (Days) for Surface Oil to Exceed a Threshold of 50µm
<0.5
1-2
5-10
20-30
40-50
0.5-1
2-5
10-20
30-40
50-75
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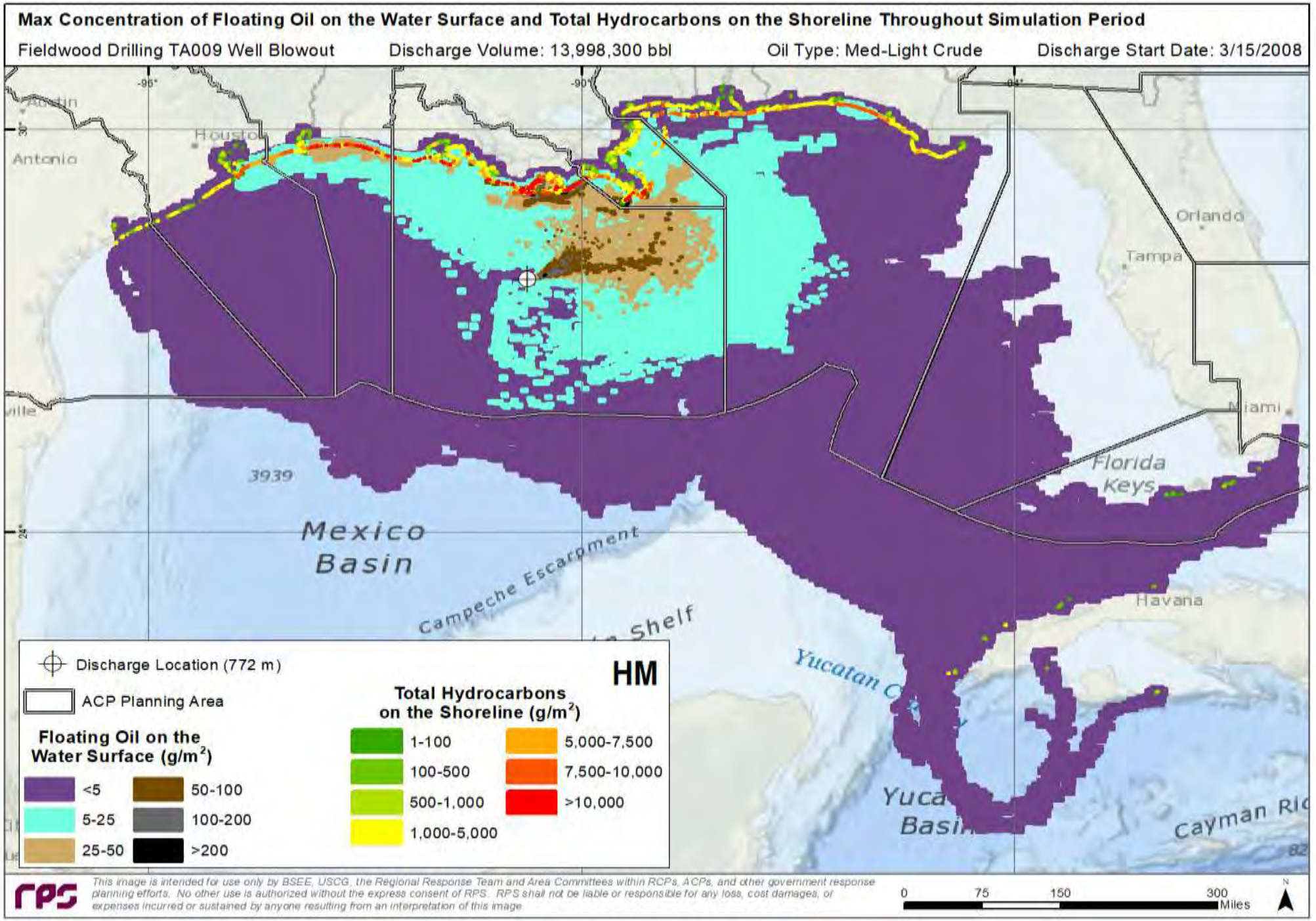
0
45
90
180
Miles


Max Concentration of Floating Oil on the Water Surface and Total Hydrocarbons on the Shoreline Throughout Simulation Period
Fieldwood Drilling TA009 Well Blowout
Discharge Volume: 13,998,300 bbl
Oil Type: Med-Light Crude
Discharge Start Date: 3/15/2008
Houston
Antonio
Orlando
Tampa
Miami
Florida Keys
Havana
3939
Mexico Basin
Campeche Escarpment
Yucatan Shelf
Yucatan Basin
Cayman Ridge
Discharge Location (772 m)
ACP Planning Area
Floating Oil on the Water Surface (g/m²)
<5
5-25
25-50
50-100
100-200
>200
HM
Total Hydrocarbons on the Shoreline (g/m²)
1-100
100-500
500-1,000
1,000-5,000
5,000-7,500
7,500-10,000
>10,000
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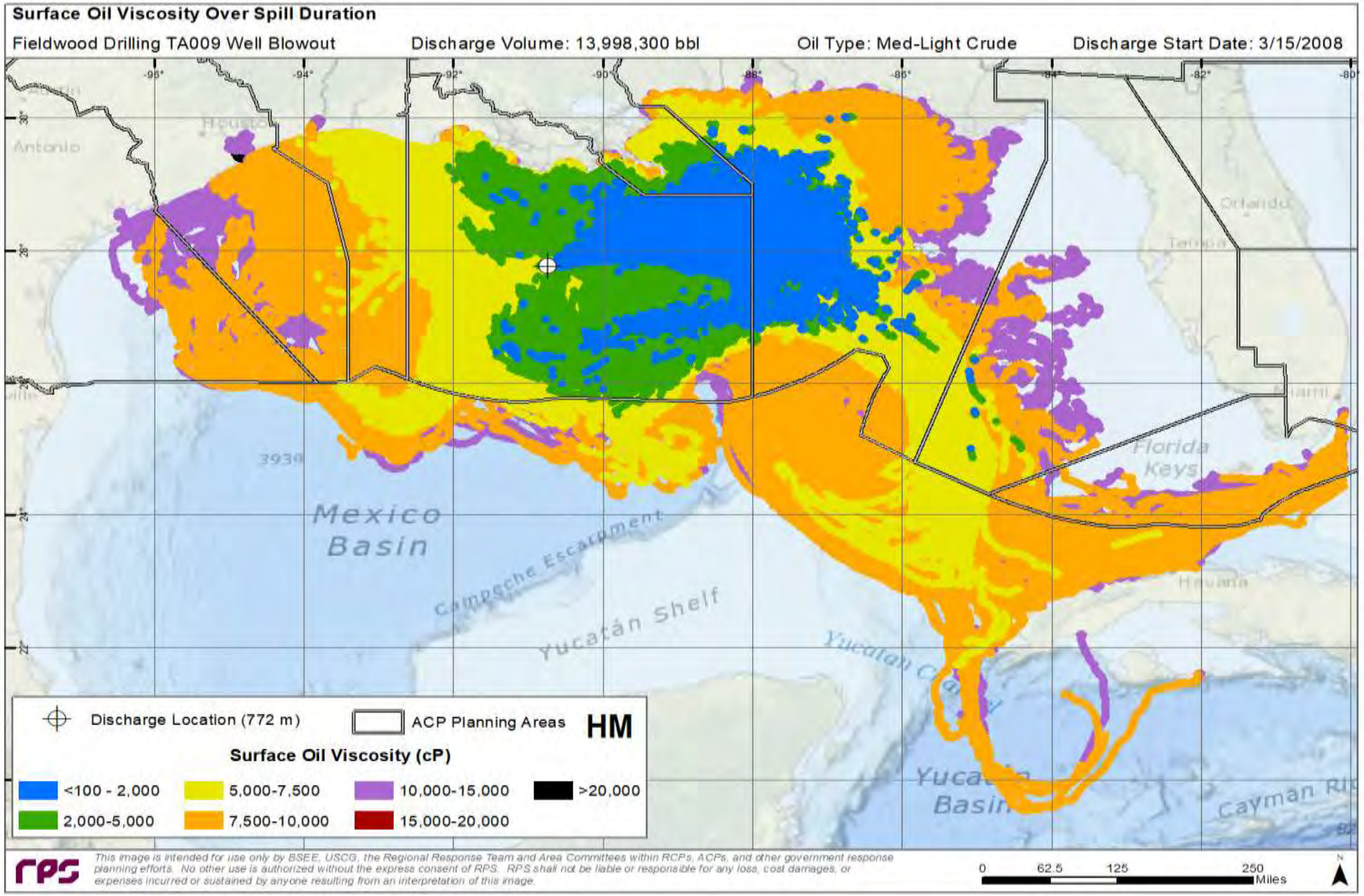
0
75
150
300
Miles
N


Surface Oil Viscosity Over Spill Duration
Fieldwood Drilling TA009 Well Blowout
Discharge Volume: 13,998,300 bbl
Oil Type: Med-Light Crude
Discharge Start Date: 3/15/2008
Mexico Basin
Campeche Escarpment
Yucatán Shelf
Florida Keys
Discharge Location (772 m)
ACP Planning Areas
HM
Surface Oil Viscosity (cP)
<100 - 2,000
2,000-5,000
5,000-7,500
7,500-10,000
10,000-15,000
15,000-20,000
>20,000
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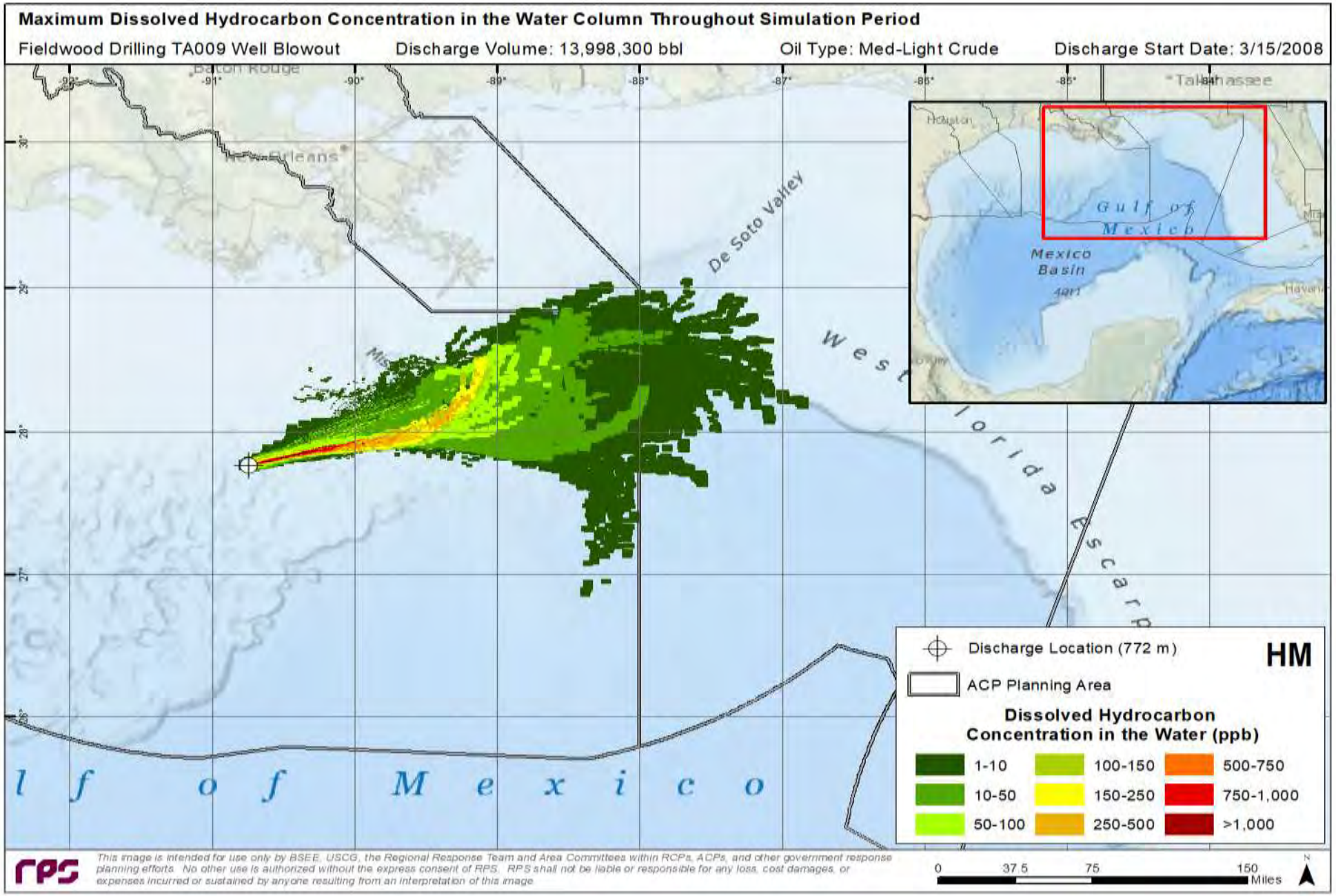
0
62.5
125
250
Miles


Maximum Dissolved Hydrocarbon Concentration in the Water Column Throughout Simulation Period
Fieldwood Drilling TA009 Well Blowout
Discharge Volume: 13,998,300 bbl
Oil Type: Med-Light Crude
Discharge Start Date: 3/15/2008
Baton Rouge
New Orleans
Tallahassee
Houston
De Soto Valley
Gulf of Mexico
Mexico Basin
Discharge Location (772 m)
HM
ACP Planning Area
Dissolved Hydrocarbon Concentration in the Water (ppb)
1-10
10-50
50-100
100-150
150-250
250-500
500-750
750-1,000
>1,000
0
37.5
75
150
Miles
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Task 2 – Perform Gap Assessment

- *Create checklist of offshore requirements for RCPs and ACPs.*
- *Review all RCPs and ACPs in the three regions (Gulf of Mexico, Alaska, and California).*
- *Prepare Gap Assessment Report for submission to BSEE/USCG outlining action items for project and others for RRT/Area Committee.*

ACP Preliminary Gap Assessment

April 2019

Contingency Plan	Key Response Planning Items (KRPI)							
	1	2	3	4	5	6	Date Published	Notes
Base Period – Gulf of Mexico Area Contingency Plan								
Central Texas							Jun 2018	No offshore response info; small amount of response resource info for mechanical, ISB, & dispersants. No IAP for WCD
South Texas							May 2018	Identifies Maragorda Island 629 as WCD scenario; describes BOEM OSRAM trajectory, but no figures; includes some response strategies & personnel/equipment needs & resources. No IAP for WCD
Southeast Texas & Southwest Louisiana							May 2018	Identifies AUGER TLP & GB 426A as WCD scenarios; some response resource inventory. No IAP for WCD.
South Central Louisiana							Aug 2018	Short description of infrastructure; identifies MC 807 as WCD scenario; includes some response strategies and explanation of countermeasures implemented. No IAP for WCD. Little offshore response resource information.
Southeast Louisiana							Aug 2017	Duplicate of South Central Louisiana ACP.
Alabama, Mississippi, Northwest Florida							Aug 2017	Identifies 4 WCD scenarios; includes Source Control ICS structure; Description of CONOPS and response strategies are good and could be used as template for other ACPs. No trajectories or IAP for WCD.
Region VI RCP							May 2015	No specific information on offshore response.
Region IV RCP							Jun 2016	No specific information on offshore response.
Optional Task 1 – Pacific Area Contingency Plan								
Los Angeles / Long Beach							Feb 2016	Includes infrastructure description; describes platform discharge in Santa Barbara of 2200 bbl with expected impacts & response strategies; details shortfalls. Difficult to access ACP online.
Region IX RCP							Sep 2017	No specific information on offshore response.
Optional Task 2 – Arctic/Western AK Area Contingency Plan								
Beaufort Sea Chukchi Sea Cook Inlet							Aug 2018	Combined into the Arctic/Western AK ACP. Some description of BSEE/USCG coordination; ecological Resources at Risk, Lists PDF links for planning scenarios in Cook Inlet and the North Slope, but they could not be accessed online.
Alaska RCP							Aug 2018	Includes same BSEE/USCG coordination description as ACP.

KEY RESPONSE PLANNING ITEMS (KRPI)

1 – Describes Oil and Gas Infrastructure
2 – Worst Case Discharge Scenarios Included
3 – Describes Coordination between BSEE and USCG
4 – Provides Inventory and Description of Offshore Response Resources
5 – Describes Ecological Resources at Risk
6 – Describes Offshore CONOPS, Strategies, and BMPs

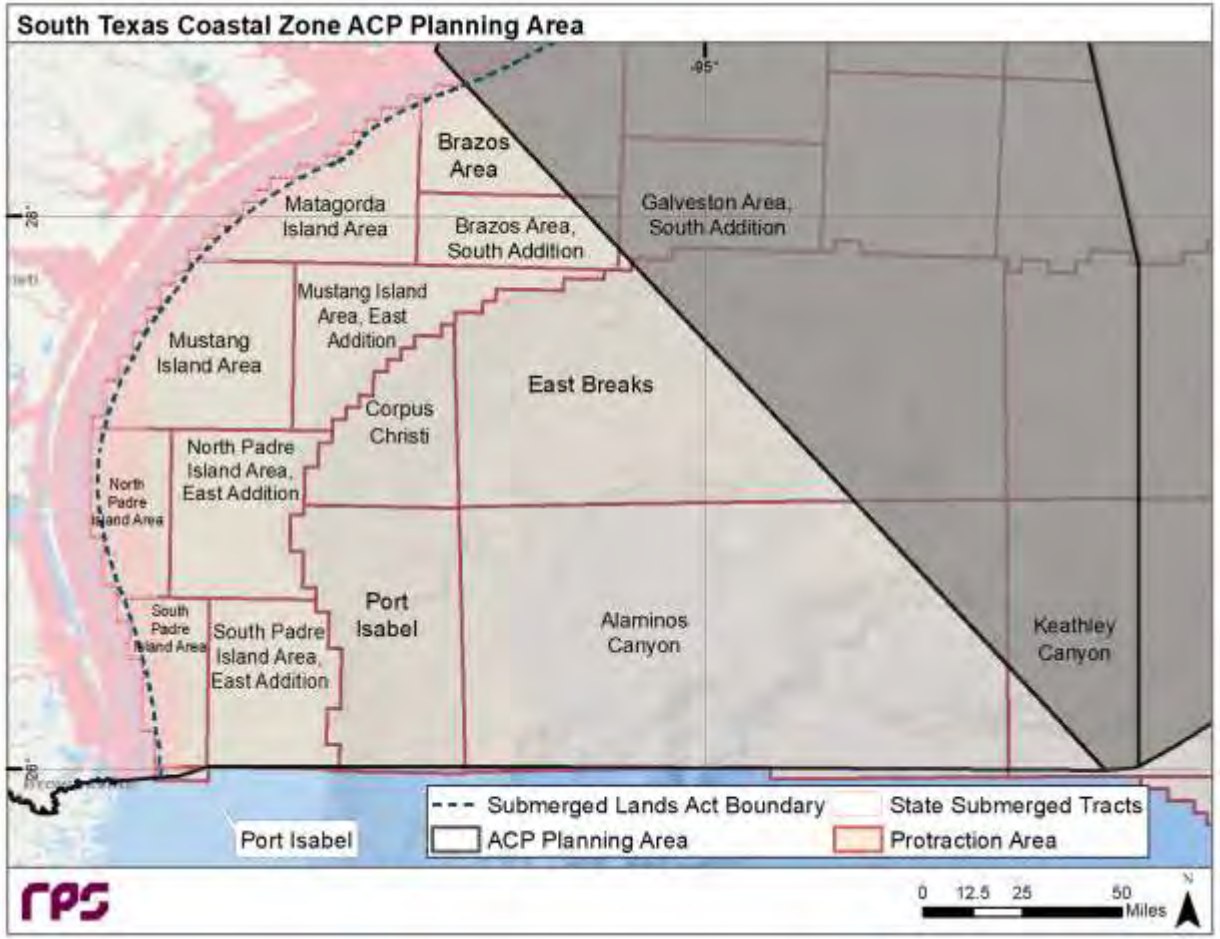
	ACP contains **ADEQUATE** content for this KRPI
	ACP contains **SOME** content for this KRPI
	ACP contains **NO** content for this KRPI

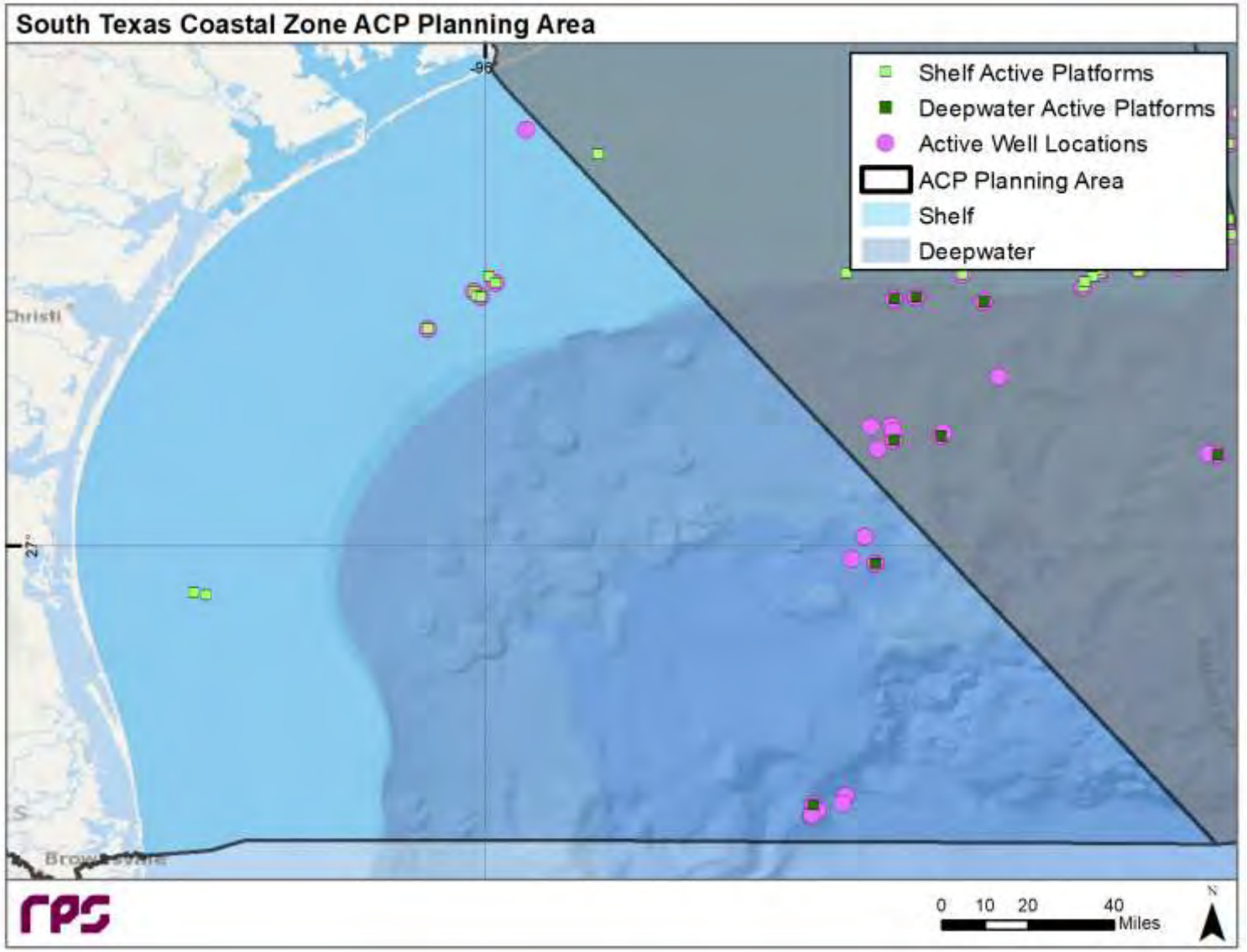
Task 3 – Develop ACP Content, Oil and Gas Infrastructure

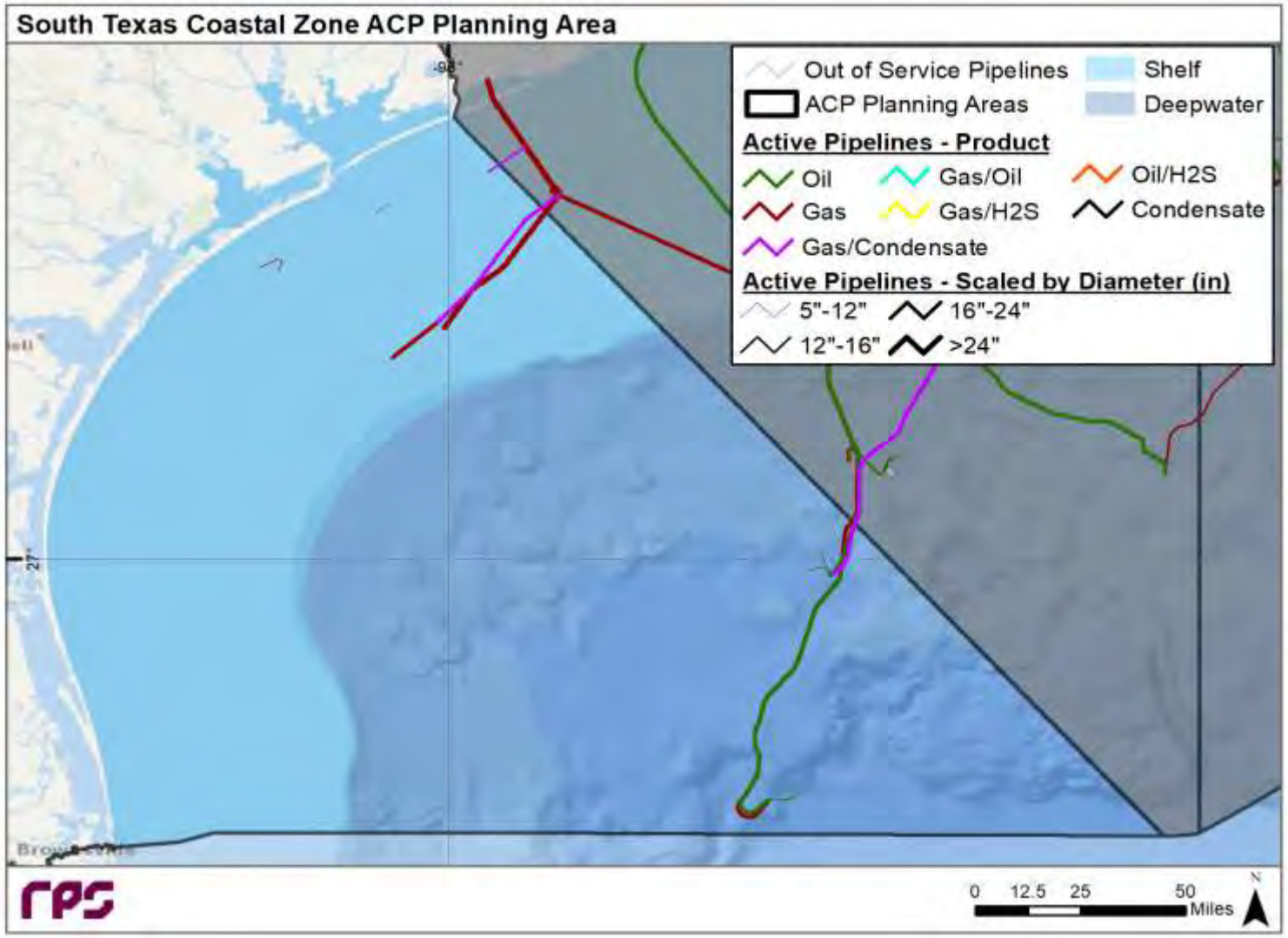
Draft description of offshore oil and gas infrastructure located seaward of the coastline in the ACP Planning Area.

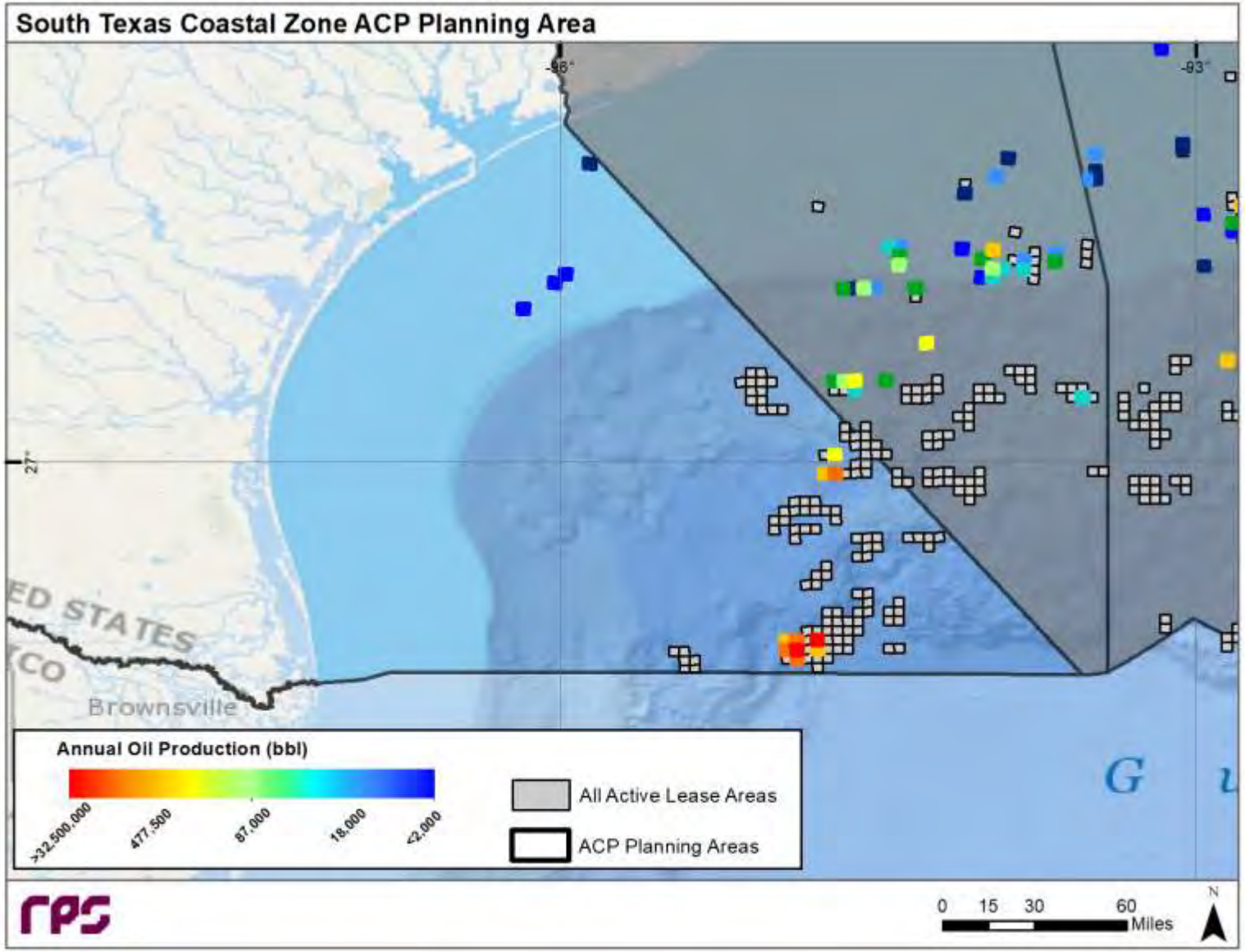
Gulf of Mexico Example
Task 3 – Develop Infrastructure Content

- Developed content on offshore infrastructure.
- Provides information on Oil and Gas Infrastructure (wells, platforms, pipelines, oil production) for the Gulf of Mexico overall and by ACP Planning Area.

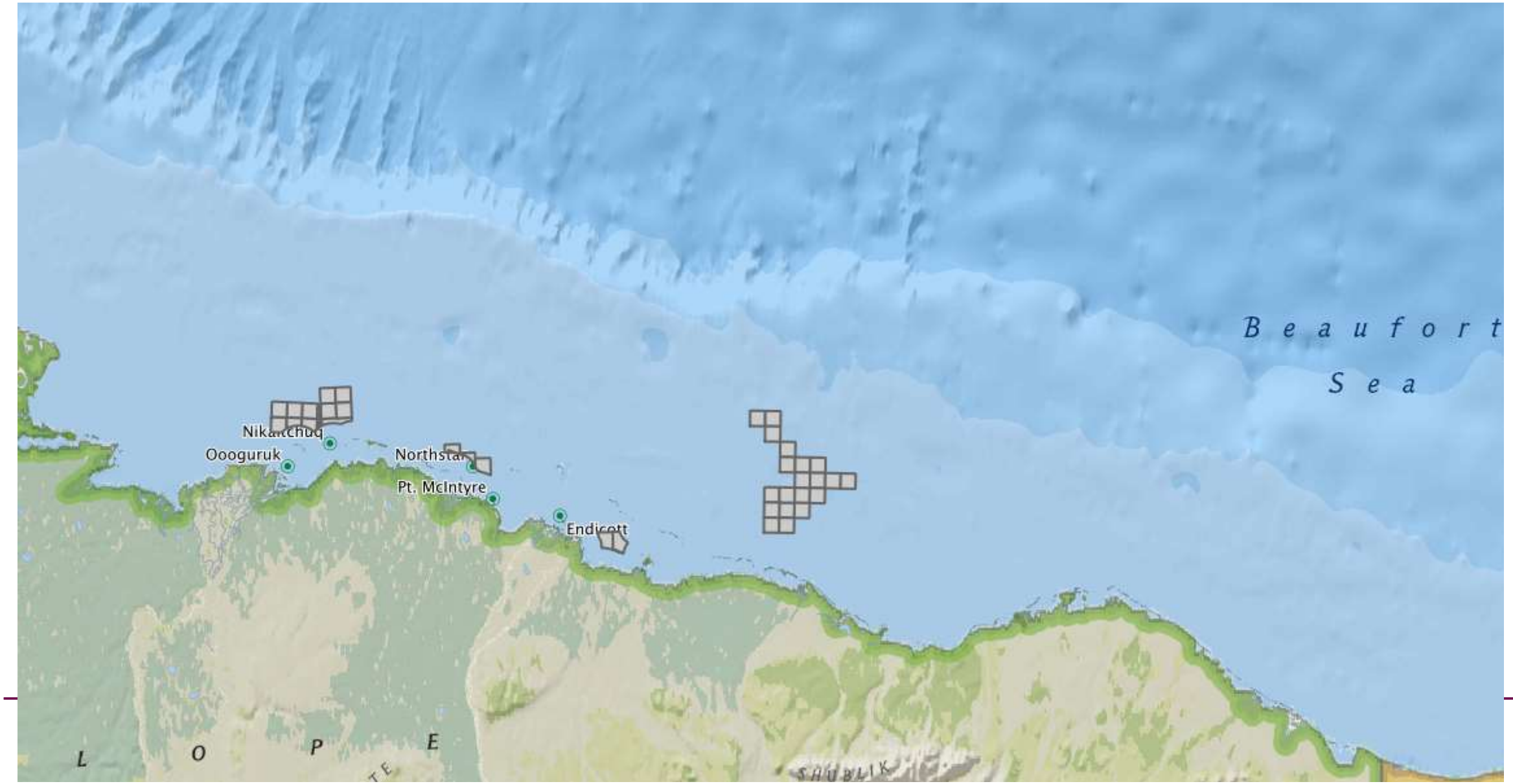



South Texas Coastal Zone ACP Planning Area
Shelf Active Platforms
Deepwater Active Platforms
Active Well Locations
ACP Planning Area
Shelf
Deepwater
-96°
27°
0 10 20 40
Miles
N

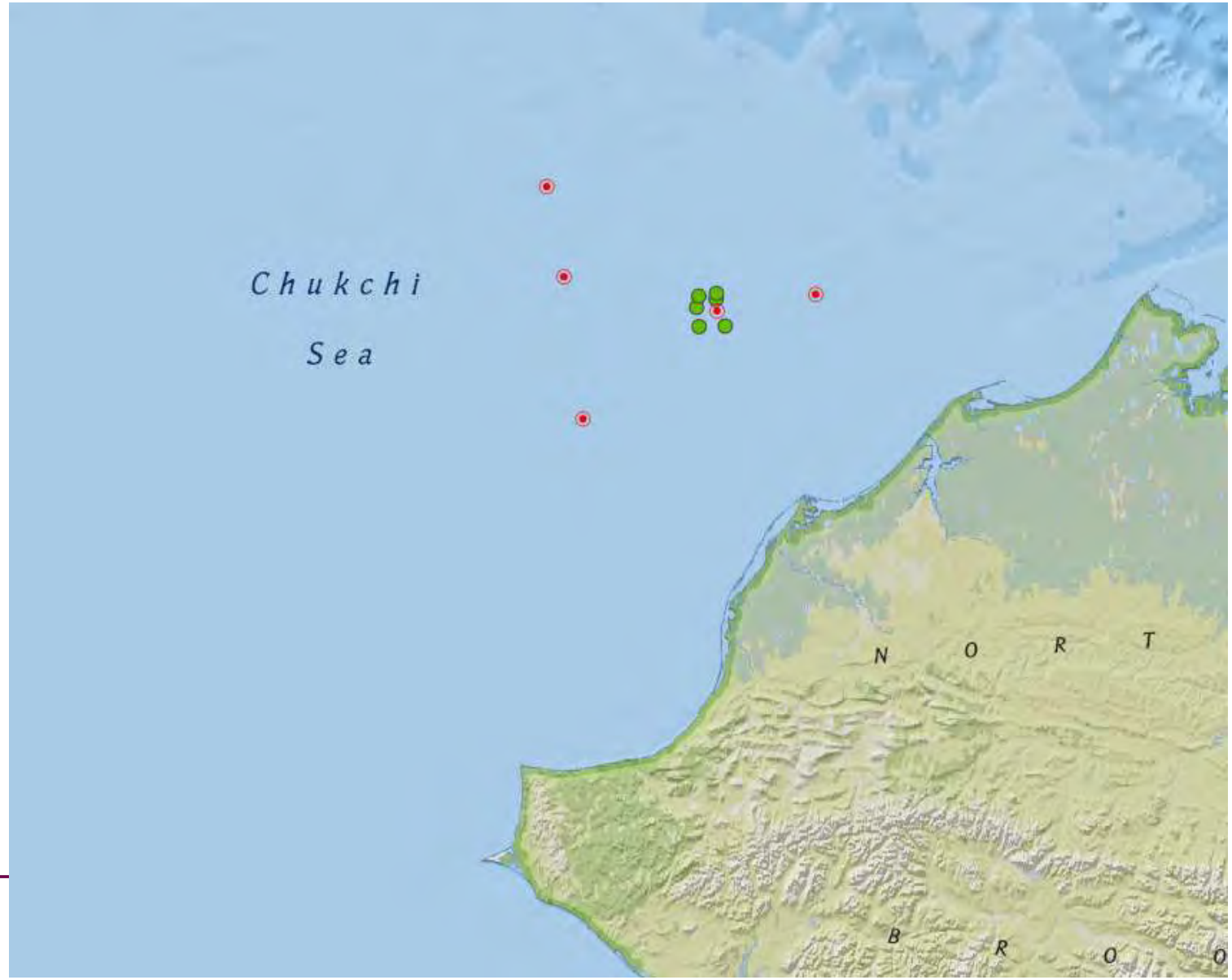

South Texas Coastal Zone ACP Planning Area
Out of Service Pipelines
Shelf
ACP Planning Areas
Deepwater
Active Pipelines - Product
Oil
Gas/Oil
Oil/H2S
Gas
Gas/H2S
Condensate
Gas/Condensate
Active Pipelines - Scaled by Diameter (in)
5"-12"
16"-24"
12"-16"
>24"
-98°
27°
0 12.5 25 50
Miles
N


South Texas Coastal Zone ACP Planning Area
-96°
-93°
27°
ED STATES
CO
Brownsville
Annual Oil Production (bbl)
>32,500,000
477,500
87,000
18,000
<2,000
All Active Lease Areas
ACP Planning Areas
rps
0 15 30 60
Miles
N

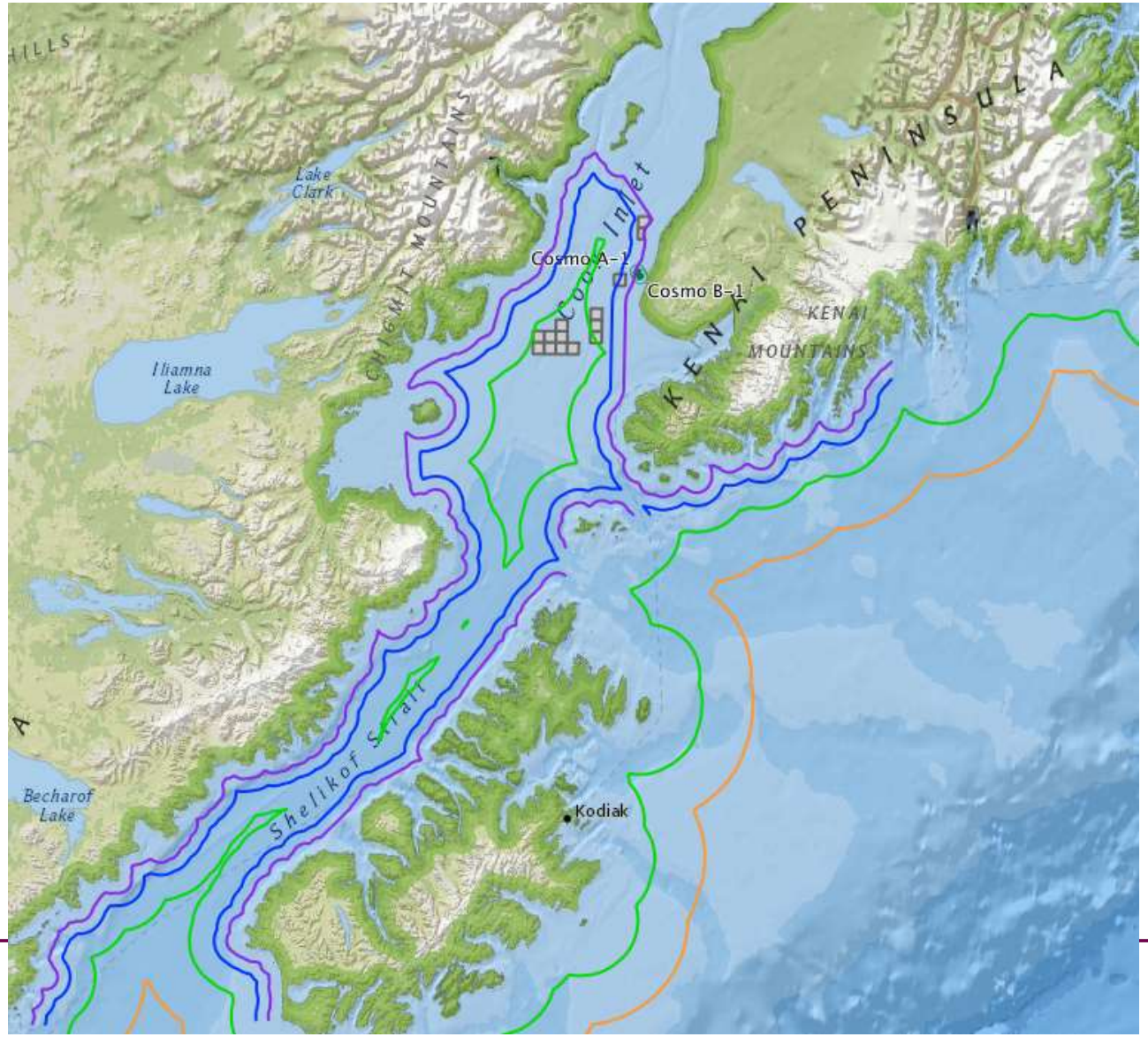
Task 3 – Beaufort Sea



Task 3 – Chukchi Sea



Task 3 – Cook Inlet



Task 5 – Develop ACP Content, Response Resource Inventory

- *Develop and validate listing of offshore response resources located in relevant ACP Planning Area and BSEE Region.*
- *Include provider name, emergency number, location, type and amount of equipment, and highlights of new response technologies.*
- *Address all relevant countermeasures:*
  - *Mechanical Recovery*
  - *In Situ Burning*
  - *Dispersants*
  - *Oil Spill Surveillance and Tracking*
  - *Source Control*

Gulf of Mexico Example
Task 5 – Develop Response Resource Inventory

- Developed Response Resource Inventory for Gulf of Mexico under the following categories:
  - Source Control
  - On Water (includes In-Situ Burn equipment)
  - Dispersants
  - Surveillance
- Used survey to gather data from OSROs and equipment providers
- Inventory will be available as data layer in NOAA's ERMA.
- For Alaska, will begin with recently completed BSEE inventory for Alaska available in ERMA and cascading resources captured in Gulf of Mexico work.

Gulf of Mexico Example
Task 5 – Develop Response Resource Inventory

Source Control Response Resources	
Region	
Company:	
Company Mailing Address:	
Company Contact(s):	
Office Telephone:	
24 Hour Emergency Telephones:	
Contact Emails:	

In order to reduce double counting of resources, prime OSROs with contracted/affiliated secondary OSROs providing resourc
resources separate in the CONTRACTED table to avoid the potential of double counting . NOTE: Mobilization Time is defined
depart its storage location.

OWNED Well Containment Equipment				
Equipment Type	Manufacturer	Location	Source	Mobilizati
			N/A	
			N/A	
			N/A	

CONTRACTED Secondary Temporary Storage (Tank Barges, Tank Ships or Other Device)				
CONTRACTED Temporary Storage Asset	Home Port of Asset	Mobilization Time (hrs)	Certified and Capable of Operating in the Nearshore, Offshore, and/or Ocean Environment?	If Temporary Storage is a Non-Self-propelled Vessel/Device, is Towing Service Owned or Contracted?

CASCADING Mechanical Recovery Systems (located outside of the region)								
Owned & Contracted Oil Spill Recovery Platform from Outside GOM Available for Cascading to GOM for Deployment	Home Port of Asset	Mobilization Time (hrs)	Transit Speed to Spill (kts)	Operating Environments This Sytsem Can Work In	Operating Period (hrs)	Skimming Speed of Advance (kts)	Standard Swath Width used for system (ft)	Transfer Pump Type and Pumping Rate (GPM)

Mechanical Recovery and Storage | Boom | In-Situ Burn | Surface Collection Agents

Task 6 – Develop ACP Content, Ecological Resources at Risk

Develop spatial and temporal profiles for the abundance and distribution of sensitive offshore resources.

- *For Beaufort Sea, nearshore out to 50 miles from coastline*
- *For Chukchi Sea, nearshore out to 100 miles from coastline*
- *For Cook Inlet and Kodiak Island, nearshore out to 50 miles from coastline*

Task 6 – Develop ACP Content, Ecological Resources at Risk

- *Spatial and temporal profiles for the abundance and distribution of sensitive offshore resources will focus on:*
  1. *Critical habitat for threatened or endangered species*
  2. *Concentration areas or mapped habitats for marine birds, marine mammals, and sea turtles*
  3. *Fish spawning areas*
  4. *Essential Fish Habitat*
  5. *Sensitive Benthic Habitats*
- *Offshore Sensitive Areas Annex/Offshore ESI will be developed.*
- *No shoreline ESI will be developed or updated.*

Gulf of Mexico
Task 6 – Develop Spatial and Temporal RAR Profile

- Developing Offshore Environmental Sensitivity Index (ESI) for Gulf of Mexico.
- Based largely on BOEM Gulf of Mexico Marine Assessment Program for Protected Species (GoMMAPPS) data.
- Spatial and Temporal Data will be available in NOAA's ERMA.
- Due to delay in BOEM Gulf of Mexico Marine Assessment Program for Protected Species (GoMMAPPS) data, task will not be complete until March 2023.

Task 7 – Develop ACP Content, CONOPS / Strategies / BMPs

- *Develop offshore response Concept of Operations. For Alaska, address open water, broken ice, and solid ice conditions.*
- *Prepare information on potential response strategies for all countermeasures (Mechanical, In situ Burning, Dispersants, Aerial Surveillance, Source Control Operations). Include intentional well head ignition response strategy for the Arctic and Western AK ACP.*
- *List potential Best Management Practices to protect sensitive wildlife and habitats*
- *Include information in ACP Section 3100, Operations Organization or Section 9400, ACP Planning Documentation*

Gulf of Mexico Example
Task 7 – Develop CONOPS, Response Strategies, & BMPs

- Developed the following content:
  - Offshore Concept of Operations (CONOPS)
  - Response Strategies
  - Best Management Practices & Species Profiles
- CONOPS Stakeholders Workshop held in June/July 2021.

Gulf of Mexico Concept of Operations

- CONOPS = the process and strategy involved in preparing for, responding to, and mitigating the impacts from a large offshore oil spill.
- Strategies are geographically and functionally layered in a temporal sequence.
- CONOPS creates divisions and zones set up based on the availability of resources, site-specific circumstances, and the changing properties and location of the oil.
- CONOPS is centered on the response activities that would be taken for a ***subsea well blowout*** occurring in ***deep waters offshore*** on the OCS but recognizes that there are differences in the response to alternate spill scenarios.

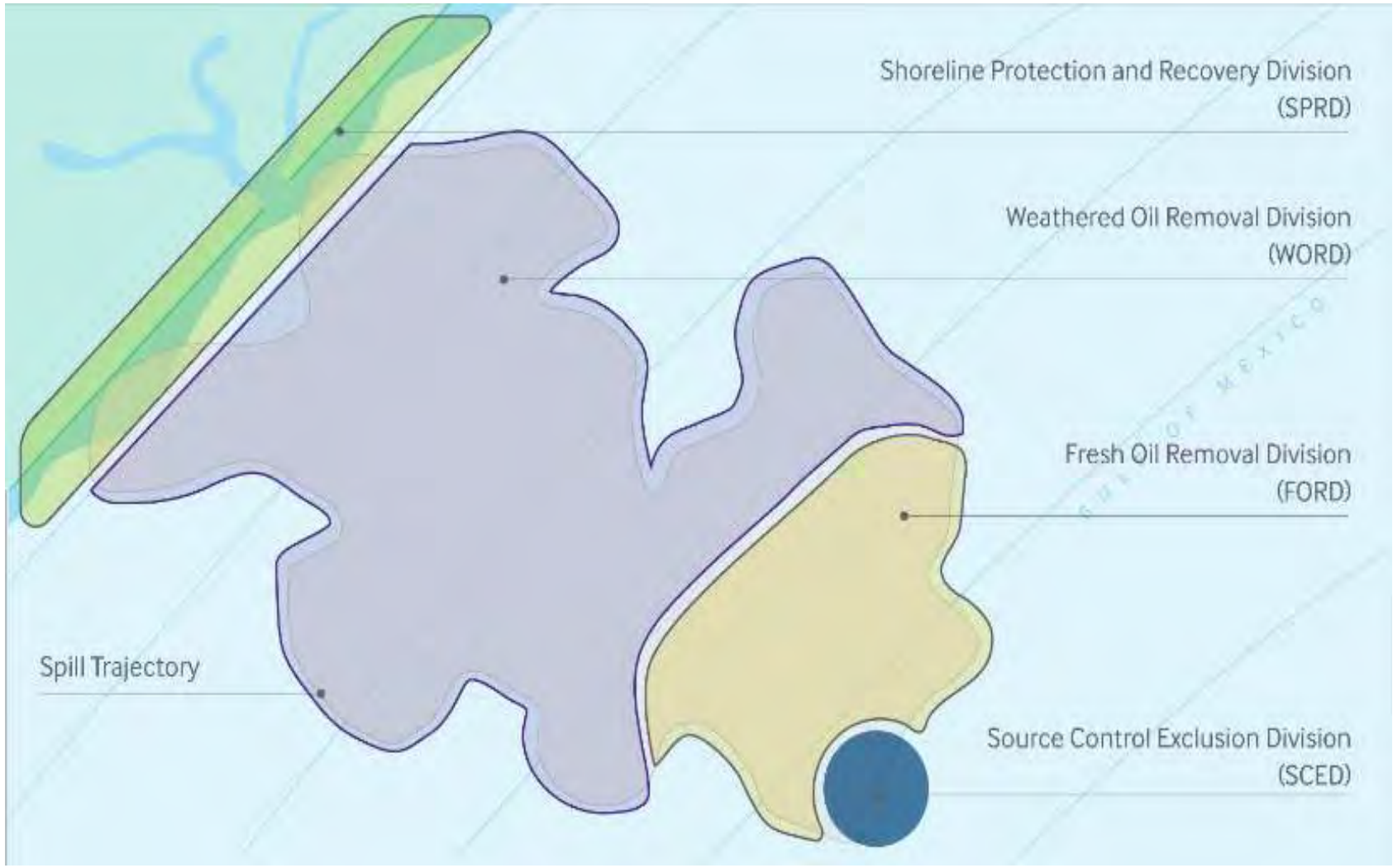
Gulf of Mexico Concept of Operations (cont.)

- CONOPS does not prioritize response strategies.
- During an incident, the geographic laydown and prioritization of countermeasures should be continuously reassessed and adjusted based on incident specific conditions as they develop.
- It is critical to understand how one strategy will impact others.
  - Dispersant application ~ Mechanical Recovery
  - ISB ~ Air quality for responders, Visibility for dispersant and surveillance aircraft

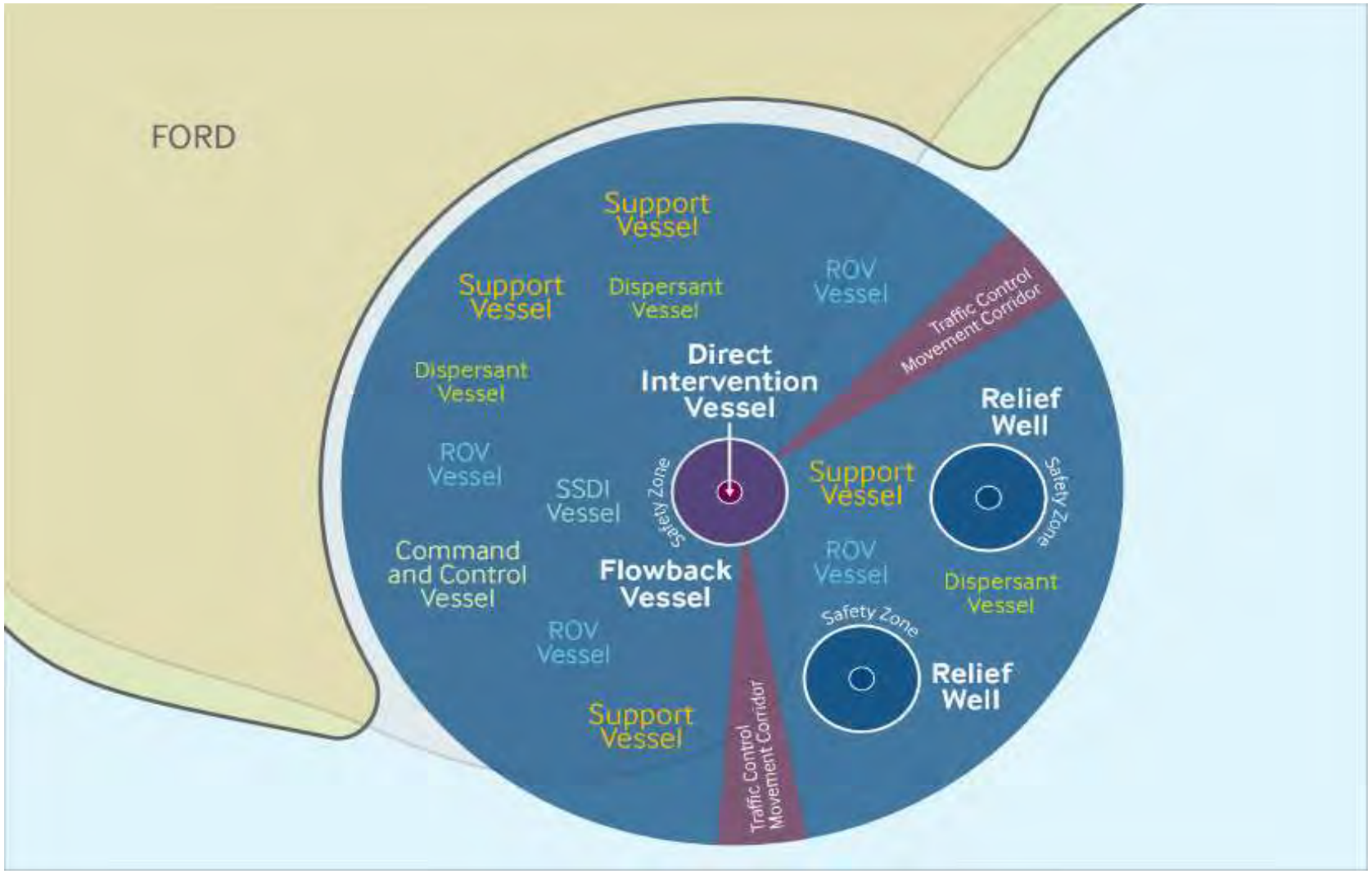
Gulf of Mexico Temporal Phases

Response Phase	Inflection Point
Assessment	Arrival of surveillance and monitoring capabilities
Initial Response	Arrival of first mitigation resources (dispersant aircraft, fast recovery vessels) and initial on-site Command and Control capabilities
Primary Removal Operations – Mechanical Recovery, Subsea Dispersant Injection (SSDI), and In-Situ Burning (ISB)	Arrival of high-volume mechanical recovery, SSDI, and ISB assets
Expanded Source Control Operations	Arrival of assets for implementing temporary source control solutions
Post Discharge Removal Operations	Successful installation of temporary source control measures

Gulf of Mexico CONOPS Geographical Divisions



Gulf of Mexico Source Control Exclusion Division (SCED)

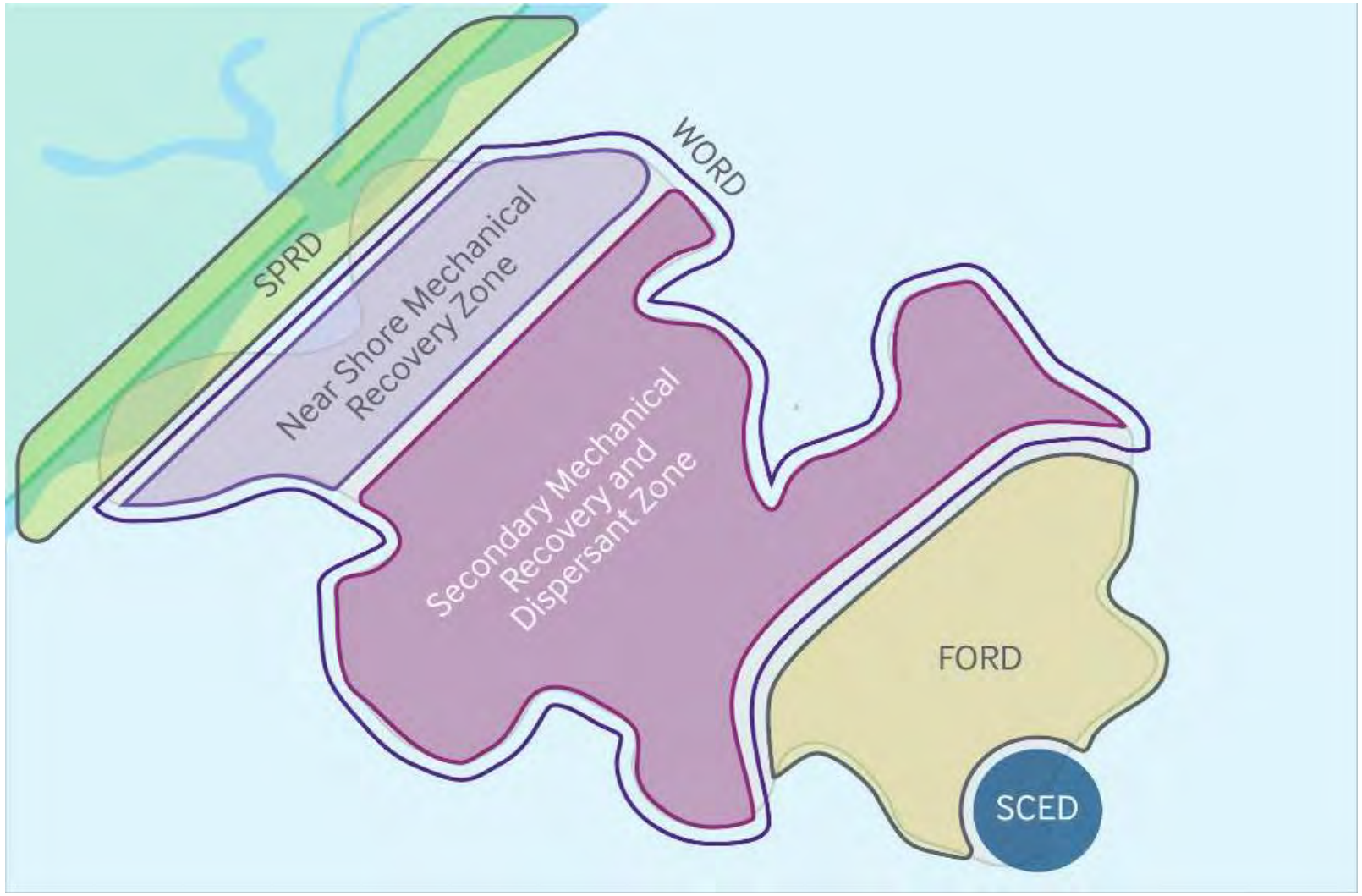


- Monitoring of VOCs and LELs
- SSDI and Aerial Dispersant Application
- Will expand as more source control equipment arrives on scene
- Will limit access to thickest oil

Gulf of Mexico Fresh Oil Removal Division (FORD)

- Least weathered oil, thickest concentrations.
- Operations focused on High Volume Oil Removal Assets.
- Task forces established including temporary storage assets.
- Surveillance of oil is critical for defining zones.

Gulf of Mexico Weathered Oil Removal Division (WORD)



- Typically, larger area than FORD.
- Weathered, more viscous oil in thinner, more scattered distribution.
- Operational strategy & equipment used will differ from FORD.
- May be opportunity for surface dispersants/ISB.
- Nearshore draft limitations

Task 8 – Presentation Materials

- *Develop presentation materials for briefing OSPD and USCG personnel, the Area Committee, and other stakeholders summarizing the ACP content developed.*

Overall Timeline

- BSEE/USCG/RPS Kick-Off Meeting for the Alaska phase planned for March 22, 2022.
- 15-month phase, estimated completion June 2023.

QUESTIONS?

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