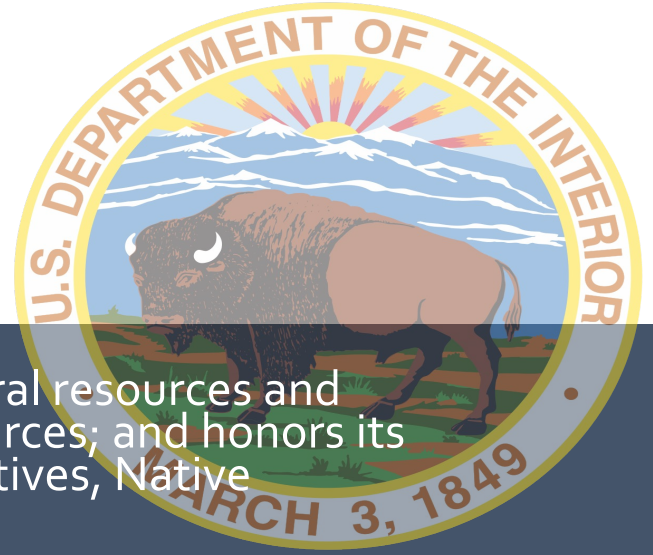
DEPARTMENT OF THE INTERIOR



The U.S. Department of the Interior protects and manages the Nation's natural resources and cultural heritage; provides scientific and other information about those resources; and honors its trust responsibilities or special commitments to American Indians, Alaska Natives, Native Hawaiians, and affiliated Island Communities.

- Land Management Agency
  - U.S. Fish and Wildlife Service (FWS)
  - National Park Service (NPS)
  - U.S. Geological Service (USGS)
  - Bureau of Land Management (BLM)
  - Bureau of Indian Affairs (BIA)
  - Bureau of Reclamation, Office of Surface Mining, Bureau of Ocean Energy Management, Bureau of Safety and Environmental Enforcement
- Natural Resource Trustee
  - 40 CFR 300.600
  - Migratory birds, threatened and endangered species, interjurisdictional fish, some Tribal natural resources, etc.

DEPARTMENT OF THE INTERIOR OVERVIEW

- Representative to Region Response Team 5 - 40 CFR 300.175(b)(9)
  - Planning – Fish, Wildlife and Sensitive Environments Annex - 40 CFR 300.210(c)(4)
  - Exercises
  - Concurrence/Consultation
- Federal Trustee for Natural Resources – 40 CFR 300.600(b)(2)
  - Threatened and Endangered Species
  - Migratory Birds
  - DOI Lands (NPS, BLM, FWS)
  - Tribal trust resources
- Interest in ensuring consideration of cultural resources and Tribal interests during spill response.
  - Unanticipated Discovery Plan
- Provide support to OSC during a response on compliance with environmental issues, wildlife impacts, etc.
  - On-Scene or virtual support; Environmental Unit, Wildlife Branch, etc.
  - Hydrologic and Geomorphic assistance
  - Pollution Removal Funding Authorizations

NOTIFICATION

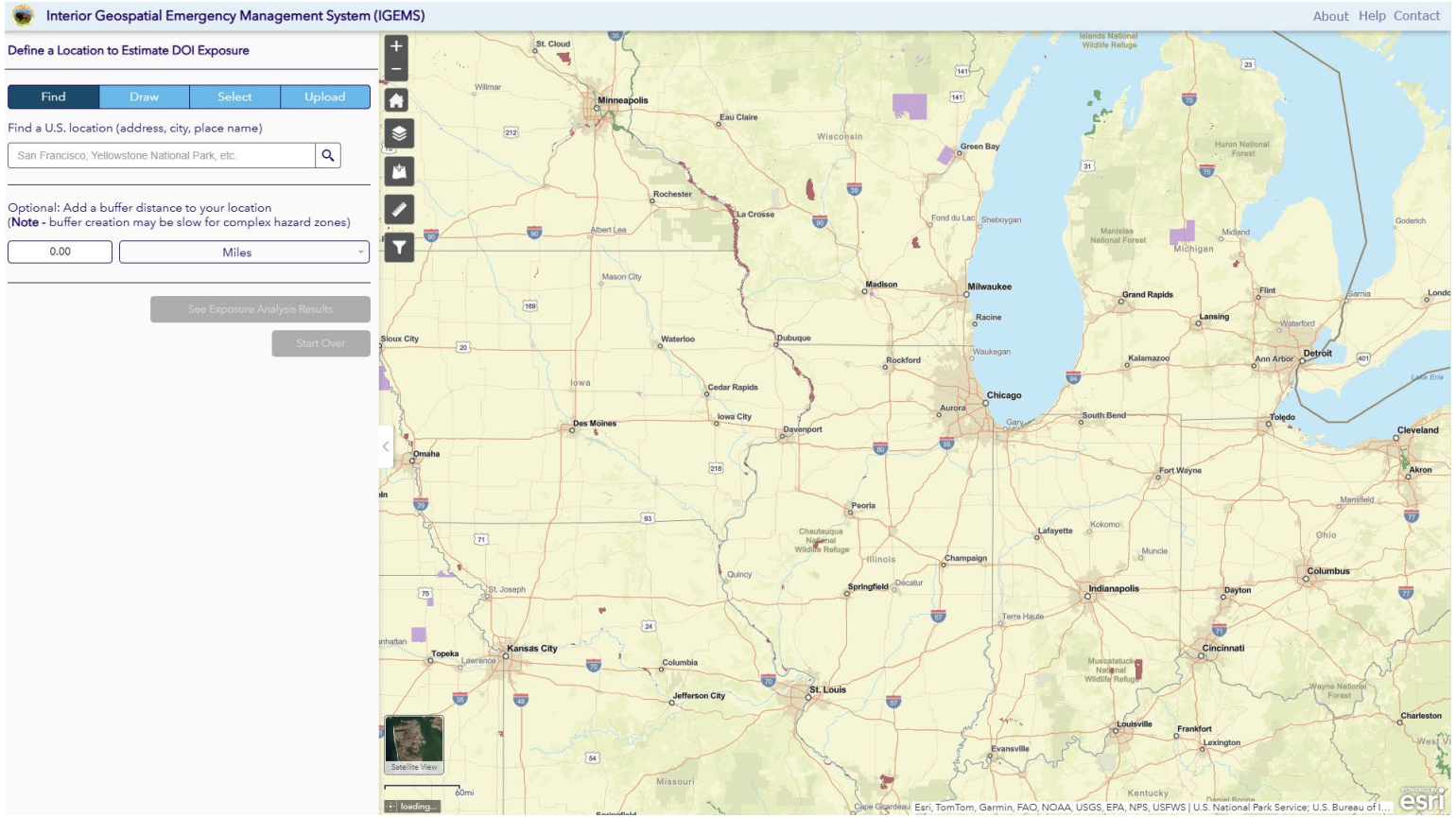
- 40 CFR 300.135(j)
  - (1) The OSC/RPM shall ensure that the trustees for natural resources are promptly notified of discharges or releases.
  - (2) The OSC or RPM shall coordinate all response activities with the affected natural resource trustees and, for discharges of oil, the OSC shall consult with the affected trustees on the appropriate removal action to be taken.

- National Response Center Notifications
- Direct notification from the OSC

REGIONAL ENVIRONMENTAL OFFICER ROLE

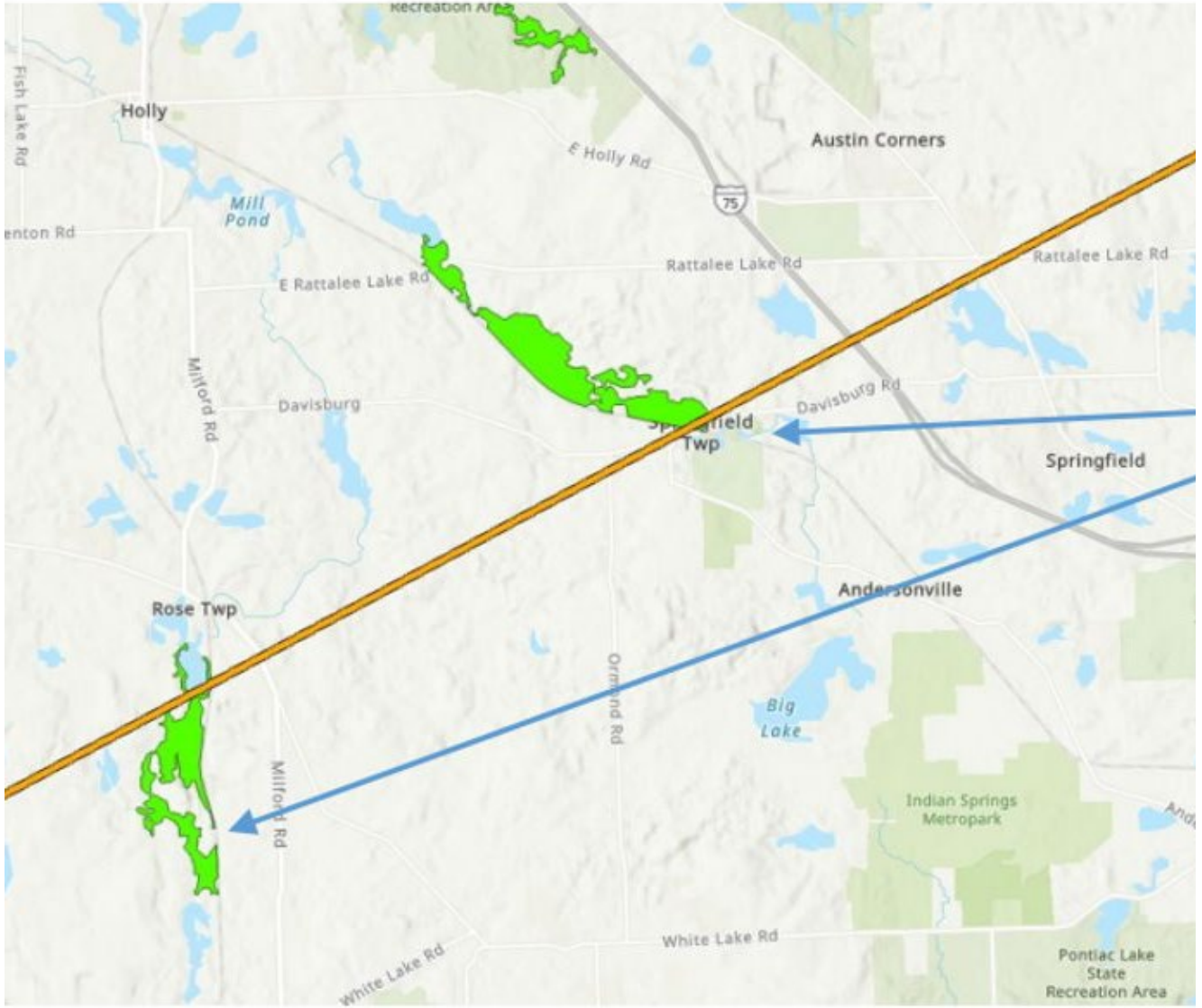
- Upon learning of a release or discharge:
  - Information for Planning and Consultation (IPaC)
  - Interior Geospatial Emergency Management System (IGEMS)
  - Impact to waterway/wetland?

- If there is potential for impacts to DOI trust resources:
  - Provide preliminary notification to DOI bureau(s) for their benefit and additional information
  - Gather additional information through EPA WebEOC/NOAA ResponseLink
  - Reach out to OSC (if one has been deployed) or the Regional Spill Desk
  - Provide preliminary BMPs and questions for OSC
    - Additional response specific BMPs may be provided once additional information is obtained (e.g. is there existing survey data confirming the presence of a T&E species in the area?)



PLANNING

- Inland Oil Spill Preparedness Project
  - streamstatsTOT
- Geographic Response Plan Development
- Biological Evaluation/Opinion identified priority species for the Region
- Partner and review updates to GRPs
- Mapping
- Fish and Wildlife and Sensitive Environments Plan
- Unanticipated Discovery Plan



TRAINING

- Great Rivers Sub-Area TTX
  - Identify concerns for area
  - Discuss coordination, roles, responsibilities for partners and stakeholder in the area
  - Focus on resources at risk and protection priorities
- 3.5 Days –half-day optional with field visits on first and last day
  - Class scheduled for June 9-12, 2026, in Cape Girardeau, MO for Great Rivers sub-area.
- Historic Property Specialist Training – November 2024 in Minneapolis

Overview of FWS Roles during Spill Response

- FWS may provide support (remote or on-site) for protecting trust resources
  - Assistance to the Planning Section
    - Information for resources-at-risk, resource protection, and development/review of cleanup techniques
    - Assist in identifying and obtaining appropriate FWS permits
    - Emergency consultation for the Endangered Species Act (Section 7)
  - Assistance to the Operations Section
    - Early reconnaissance of natural resources in the vicinity of the spill
    - Protection strategies to avoid and minimize impacts to trust resources and habitats
    - Technical assistance to wildlife response, implement or coordinate wildlife response (e.g., FWS can fill the Wildlife Branch Director role)

Natural Resource Damage Assessment and Restoration (NRDAR)

- FWS may pursue NRDAR with Co-Trustees to assess damages from spill and response action
- While separate from response, some NRDAR activities may be conducted at the same time as spill response activities
- Ephemeral data collection occurs during the spill
  Source oil sample, samples from oiled wildlife, information on extent of oiling and responses
- Assessment work can lead to settlement or litigation
- NRDAR Goal: Return the injured resources to baseline

US FISH AND WILDLIFE SERVICE

	Point of Contact	Phone	E-Mail
FWS Regional Spill Coordinator	Aleshia Kenney	309-737-9128	aleshia_kenney@fws.gov
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Michigan ESFO	Kaylyn Flanigan	517-256-0231	kaylyn_flanigan@fws.gov
Minnesota-Wisconsin ESFO	Trina Soyk (WI) Betsy Galbraith (MN) Robert Tawes (MN)	612-590-6662 920-794-9528 651-895-5433	trina_soyk@fws.gov betsy_galbraith@fws.gov robert_tawes@fws.gov
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REGIONAL FWS SPILL CONTACT

Aleshia Kenney

Regional Spill Response and NRDAR Coordinator

U.S. Fish and Wildlife Service, Midwest Region 3

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UNITED STATE GEOLOGICAL SURVEY

Lake Superior State University, and Natural Resources Canada

FluOil—A Tool for Estimating the Transport and Deposition of Oil-Particle Aggregates in Rivers

Plain Language Summary

The FluOil tool helps oil spill planners and responders estimate how fast and far oiled sediment (called oil-particle aggregates [OPA]) can travel in rivers during an oil spill, and where it may settle out on the riverbed. The user interface makes it easy to run the tool for a range of river flow conditions and OPA characteristics.

Why a FluOil Tool?

Spilled oil can quickly travel long distances in rivers and create oil slicks that are easily broken up from turbulence, allowing oil to mix with river sediment in the water column and eventually sink. It is important to know where the oil-sediment mixtures, called oil-particle aggregates (OPA), are transported and accumulated so the potential impacts on drinking water intakes, burial of sensitive habitat beds, toxicity to aquatic biota (including benthic organisms), and prolonged sheening problems from resuspension and breakup can be better understood.

The FluOil tool was developed to aid preparedness, response, and restoration activities associated with oil spills in rivers (Lee and others, 2001, 2002; Fitzpatrick and others, 2015; Li and others, 2022). The turbulence and varying flows in a natural river channel may cause an oil slick to break up into small droplets and mix with sediment or organic detritus in the water column and form OPA. This process is similar to the mixing of oil and sediment when waves break along a shoreline (Stoffyn-Egli and others, 2000; Fitzpatrick and others, 2015; Boufadel and others, 2019; figs. 1, 2*A–D*). Natural channels vary in width, depth, and roughness, which varies velocities and patterns of turbulence over short distances. OPA have different densities, shapes, and sizes and may be floating, neutrally buoyant, or negatively buoyant (Waterman and Garcia, 2015; Berens and others,2021; Ji and others, 2021a). The FluOil tool estimates how fast OPA travel downstream in rivers and when and where they may deposit (Li and others, 2022).

The FluOil tool relies on preexisting channel hydraulic data combined with user-specified OPA characteristics of size, settling velocity (considers shape and density of OPA), and critical shear stress to compute OPA transport (Zhu and others, 2022). The OPA settling velocity affects the modeled vertical distribution of OPA in the water column, and the OPA critical shear stress affects where OPA may be deposited and resuspended. OPA tend to accumulate with fine-grained (silt and clay) sediment deposits (mud or muck) in backwater areas, oxbows, side channels, pools, and other slow-moving reaches of rivers during low flows. Deposited OPA can be resuspended during high flows, driving environmental concerns that may extend beyond typical oil spill response timelines (U.S. Environmental Protection Agency, 2016).

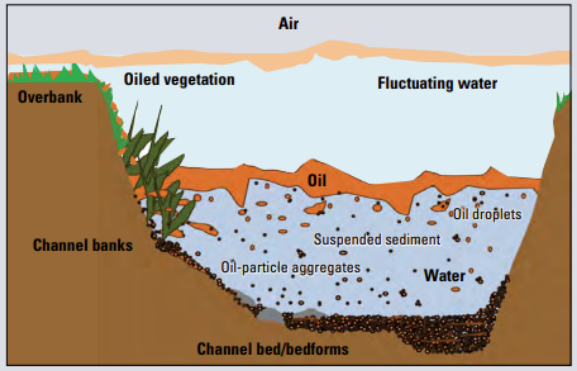

Figure 1. Conceptual diagram of OPA formation (modified from Fitzpatrick and others, 2015).

U.S. Department of the Interior
U.S. Geological Survey

Fact Sheet 2025–3055
January 2026

- Hydrologic technicians in our Water Science Centers can provide context and insights for most river conditions
- Streamflow monitoring sites help give context to river flows and velocities
- Participate in RRT and exercises
- Provide science support for environmental planning and operations during river spill response

USGS SPILL CONTACT

Faith Fitzpatrick, Ph.D.

Research Hydrologist

U.S. Geological Service's Upper Midwest Water Science Center

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NATIONAL PARK SERVICE

- Can provide general biological, natural, and cultural resource managers to evaluate, measure, monitor, and contain threats to park system lands and resources
- Archaeological and historical expertise in protection, preservation, evaluation, impact mitigation, and restoration of cultural resources – Historic Property Specialist in National Programmatic Agreement
- Parks have response plans and staff

NATIONAL NPS SPILL CONTACT

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National Spill Response Coordinator and Program Manager

National Park Service

email: Lyndsey_Nguyen@nps.gov | phone: 240-205-3203

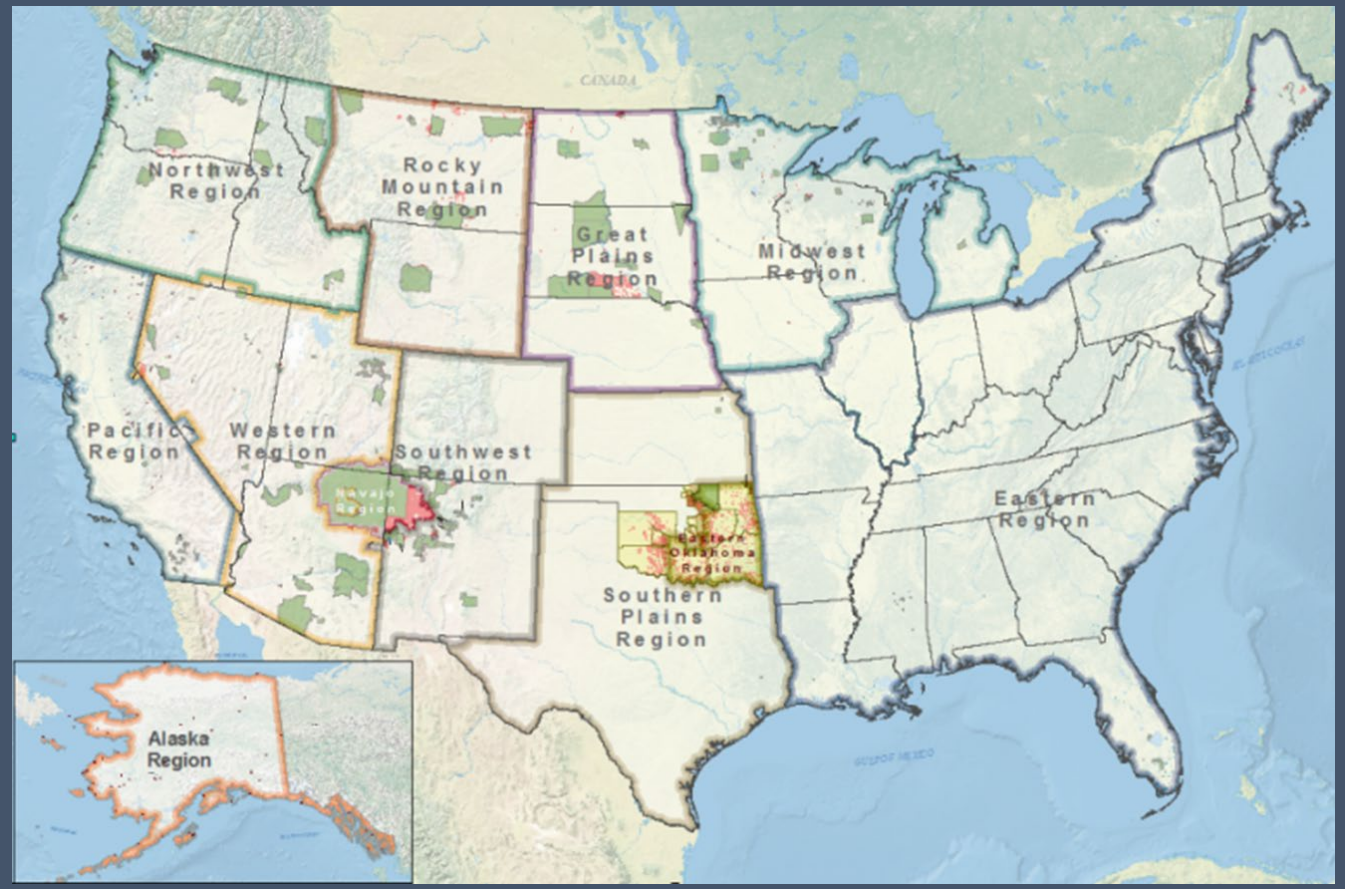
BIA OFFICE OF EMERGNECY MANAGEMENT

- The mission of the Office of Emergency Management is to ensure Tribal communities, local and regional BIA offices, BIA leadership, and external emergency management responders work together to build, sustain, and improve the capability to prepare for, protect against, respond to, recover from, and mitigate all hazards.
- Supports tribal response to emergencies and disasters through the BIA Region and Agency Offices as requested
- Facilitates communication and coordination with other EM partners for tribal response and recovery as requested
- Offer direct support to tribes during emergency incidents, coordinating resources and assistance to ensure an effective response.

TRIBAL ASSISTANCE COORDINATION GROUP

- Led by BIA Office of Emergency Management
- Multi Agency Coordination of federal capabilities
  - Presidential Declared disasters
  - Non-Declared disasters
- TAC-G consists of federal, state, local, Tribal, and non-governmental organizations.
- Communication & Coordination
  - Incident specific coordination conference calls
  - Monthly conference calls

BIA REGIONAL POINTS OF CONTACT



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QUESTIONS?

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Office of Environmental Policy and Compliance

U.S. Department of the Interior

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