Northwest Area Committees (NWAC) Meeting
Hosted by ECY and USCG Sector Puget Sound Planning Partners
Boise, ID; Remote Participation Via Zoom
Tuesday 06 June 2023, 0830-1530 hours

Welcome and Opening Statements
This meeting is hosted by IDEQ and EPA. Attendance is open to all planning partners in the Northwest Area (Washington, Oregon, and Idaho). Mark Dietrich (IDEQ) and Beth Sheldrake (EPA Region 10) provided introductions and opening statements.

OSC Reports

USCG Sector Columbia River (SCR) (Stephen Brink)
- NRC Notifications: 27
- RRT Activations: 0
- Federal Projects: 1
- CERCLA Projects: 1
- Notable Incidents Presented: UCGP23007 CFV MARLINS II (Westport, WA)
- Trainings: Pollution Responder Break In, FOSC Break In, Oil Spill Recovery Tech, HAZMAT Incident Response, FOSCR Course
- Planning/Coordination: SCR ACP Meeting in July 2023, AC/RRT Meeting in July 2023, Ongoing with CTSLUSI,
- Exercises/Workshops: BNSF, Quarterly Notification Exercise,

View Presentation

USCG Sector Puget Sound (SPS) (MSSR CWO Dean Johnston, LCDR Brian Dykens)
- NRC Notifications: 394
- RRT Activations: 0
- Federal Projects: 3
- CERCLA Projects: 1
- Notable Incidents Presented: F/V Kodiak Enterprise vessel fire (Tacoma, WA), Tug VIGOROUS (Seattle, WA), Seattle Marina Fire
- Exercises and Training: NOAA SSC Training 101, USCG Visit to EPA R10 Emergency Response Logistics Center FOSC Spring Training, GIUE Shell Seattle (passed), GIUE US Oil Tacoma (passed), Quarterly Notification Drill
- Staff Changes: CWO Dean Johnston is rotating out in July 2023; CAPT Patrick Hilbert will also depart in the coming months.

View Presentation

EPA Region 10 (FOSC Eric Vanderboom)
- NRC Notifications: 371 (262 oil, 109 hazmat/other)
- RRT Activations: 0
- OPA Projects: 262

- CERCLA Projects: 109
- Notable Incidents Presented: East 16th Street Mercury Spill (Mountain Home, ID), Amerities Wood Treatment Tank Fire (Dalles, OR), Swinomish Train Derailment (Anacortes, WA), Kodiak Enterprise Vessel Fire (Tacoma, WA), Payette Lake Mystery Spill (McCall, ID)
- Training: Clean Waterways Conference
- Planning/Coordination: Trans Mountain Pipeline TTX, Trans Mountain Pipeline Deployment Drill
- Exercises/Workshops: Salem Oregon Fire Department Mercury Training, Idaho HazMat Training, Boise, ID. North ID HazCat Training in Lewiston, and Coeur d'Alene
  View Presentation

Idaho Department of Environmental Quality (IDEQ) (Mark Dietrich)

- Agency representatives from Idaho will present updated information on the Pocatello River Mineral Oil Spill and the State Emergency Medical Services Communication Center (StateComm) capabilities later.

Oregon Department of Environmental Quality (ODEQ) (Don Pettit)

Oregon is developing a Seismic Vulnerability Assessment of Hazardous Materials Storage in Oregon. Most of Oregon's fuel and chemical storage is in areas at risk of significant earthquakes, and ODEQ worked with Sector Columbia River to update worst-case discharge (WCD) estimates for facilities.

- Critical Energy Infrastructure (CEI) Hub – Oil Storage
  - 17 tank farms located in CEI Hub
  - Tank farms located on instable landfill materials, making the area vulnerable to liquefaction and lateral spreading.
  - Modeled WCD at four tank farms in the CEI Hub area
  - Oregon Senate Bill 1567 passed in 2022 requires facilities in the CEI Hub with a fuel storage capacity of over 2 million gallons to assess their seismic vulnerability, improve their infrastructure to withstand earthquakes better, and develop mitigation plans
- Hazmat Storage Facilities in Oregon
  - Oregon is developing plans to address facilities which house hazardous substances that pose a toxic inhalation risk if released
  - Multnomah County Risk Assessment 2023
    - 12 facilities pose a risk of toxic gas release and are seismically vulnerable.
    - ODEQ performed Casualty Estimates for four facilities. The results showed the potential for thousands of deaths, injuries, and irritation exposures on Day 1-Day 2.
    - Resources for threat assessments include Cascadia Playbook, Oregon Resilience Plan, Oregon Fuel Action Plan, and facility-specific plans and risk assessments.
- The Assessment Report is scheduled to be released later in June 2023
  View Presentation

WA Department of Ecology (Ecology) (Dave Byers)

- Notifications / Incidents Count: Total: 4562, Oil: 3161; Hazmat/Pollutant: 1,287; Vessel Incidents: 68; Drug Labs: 46
- Notable Incidents Presented: BNSF Engine Derailment (Anacortes, WA), Kodiak Enterprise Fire (Tacoma, WA), Fuel Tank Truck Crash (Lacey, WA),

- Presentation of the Washington State Emergency Planning and Community Right-to-Know Act (EPCRA) Viewer App and contact information for Diane Fowler, EPRCA Coordinator at Ecology.
- Overview of River Restoration projects
- Grant Updates:
    - 2023 Coastal Protection Fund Restoration Grants: $370,000 has funded ten projects this year, and $300,000 remains for future restoration projects.
    - Hazmat Firefighting Grant: $3.1 will be awarded by the grant closing date of June 30, 2023;
    - Grant applications will open for biennium on September 13, 2023.
- General Updates:
    - Ecology has purchased a 28-foot catamaran to provide timely resources and access to Puget Sound areas such as the San Juan Islands.
    - The State of Washington passed a bill budgeting $270,000 to support pollution events in San Juan County and support a San Juan-based responder.

View Presentation

Case Study: Pocatello River Mineral Oil Spill

Presenters: Amanda Hardy (IDEQ), Stephen Ball (EPA R10), and Eric Vanderboom (EPA R10)

A citizen reported 4,000-5,000 gallons of a clear petroleum-type liquid in Pocatello Creek, an intermittent tributary to the Portneuf River. The Pocatello Fire Department deployed boom to capture the free product. Responders from IDEQ and the City of Pocatello observed free product and reviewed MS4 stormwater plans to track the spill origin. The spill source was determined to be Virginia Transformer, located in a nearby industrial park. IDEQ notified Virginia Transformer of the release and initiated a Bridge Call according to the State of Idaho Emergency Plan. EPA and IDEQ initiated Unified Command the following day.

General Observations

- Estimated a potential release of up to 30,000 gallons of product into Pocatello Creek, with a ½-inch thick discharge on the creek. It was later confirmed to be 6,000 gallons of 99% petroleum distillate (mineral oil).
- EPA issued a Notification of Federal Interest
- Joint Information Center (JIC) established with IDEQ and the City of Pocatello
- No release to the Portneuf River
- Mineral oil generated a grey/silver sheen (no rainbow)
- Virginia Transformer (RP) contracted Clean Harbors to clean after approximately one week.
- Response actions included boom deployment, skimming, and hydro jetting of the storm sewer.
- Virginia Transformer developed a cold weather winter operations plan at EPA's request, including weekly activity throughout the winter.
- EPA, IDEQ, City of Pocatello, Shoshone-Bannock Tribe, Virginia Transformer agreed on final closure in Spring 2023
- Low concentrations of the mineral oil remain at the initial spill site.

Challenges

- Responsible Party Virginia Transformer was reluctant to take responsibility for the discharge and was unresponsive and unprepared. They acted and responsibility after approximately one week.

- Freezing temperatures and snow/ice made skimming ineffective on the 10th day of the response and brought health and safety concerns.

Successes

- Response relationships in place between local, state, and federal responders are strong in Pocatello, which enabled effective mitigation and response despite the challenges.
- Agencies and contractors shared resources, including a response trailer, boom, lights, and contact information of property ownership.

Questions

- Question: Were there ASTs on site that would require an SPCC Plan? Answer: There is an SPCC plan in place for the AST. However, the spill was from a tanker car parked on the property that is not covered under the SPCC Plan.
  View Presentation

Presentation: Idaho State Emergency Medical Services Communications Center Program and Procedures

Presenter: Michelle Carreras (IDH&W)
The Idaho Department of Health and Welfare and State Public Health operate the Idaho State Emergency Medical Services Communication Center, known commonly as StateComm. StateComm provides all notifications for hazardous material incidents in Idaho. This resource for local, state, and federal responders connects multi-agency responders to address various needs and incidents. Carreras presented the general emergency notification process in Idaho according to the Idaho Emergency Operations Plan, including the Bridge Call procedures.

General Observations:

- In the event of a hazmat incident, Idaho OEM hazmat responders would call StateComm and report information on the spill and site conditions. IDEQ and IOEM Duty Officers then determine if StateComm should establish a coordination call, known as a Bridge Call. If one is determined to be appropriate, StateComm establishes a Bridge Call within 10 minutes and the Incident Commander provides a situational brief, and responding agencies make decisions.
  - Some agencies are included in every call.
  - IOEM and DEQ classify calls, and StateComm does a follow-up email summary to affected agencies.
- StateComm receives calls for 250-350 hazmat incidents per year, including calls involving drinking water contamination concerns.
- Idaho notifies EPA on all incidents involving Waters of the US and mercury release.
- StateComm assists in railroad and dam incident response coordination.
- StateComm can connect to an interpreter service.

View Presentation

Presentation: National Weather Service Capabilities for Response

Presenters: Jay Breidenbach and Stephanie Henry Matt Slolum (NOAA NWS)

Presenters gave an overview of NOAA offerings for response support capabilities in Region 10. They also provided information on weather watches, warnings, and advisories, and conditional warnings for avalanches, floods, landslides, and wildfires.

NOAA 's support capabilities include:

- Interagency Modeling and Atmospheric Assessment (IMAAC) coordination
    - Aerial dispersion modeling using HYSPLIT and ALOHA and data interpretation.
- Spot weather forecasts
- Advanced Hydrologic Prediction Service (hydrology forecasting)
- support at exercises responses

Questions:

- Question: How much advance notice is available for warning of an atmospheric river? Answer: It takes about 6-7 days but determining which atmospheric rivers will make it past the Sierra and Cascade Mountain ranges is more complicated.
- Question: Can NWS run one standard model in HYSPLIT and ALOHA for time-critical responses? Answer: If NWS has all the data, it can generate models in about 45 minutes.
- Question: Are weather balloons recoverable for recycling? Answer: Yes, an envelope is attached to each balloon and can be returned by mail. NWS receives about 18% of balloons launched by return. The public tends to hunt down fallen balloons and keep them as relics. The balloons are not biodegradable.

View Presentation

Presentation: Overview of the Kootenai River GRP

Presented by Cody Harris (Whitewater Rescue Institute)

WRI worked with IDEQ on the Kootenai River Geographic Response Plan (GPR). The Kootenai GRP covers 60 miles of the river from the Montana/Idaho border to the Canadian border and includes Deep Creek. The Kootenai River is the third largest tributary of the Columbia River, and the Libby Dam controls the flow. Harris presented an overview of the GRP coverage areas, protected wildlife, cultural resources, potential spill origin points, and hazard prioritization tables within the GRP.

General Observations:

- Response partners have trained on challenging strategy areas four times.
- Response partners must practice GRP strategies for the response to be effective.
- Railroads have pre-staged equipment and boom in remote areas.
- Responders must access remote areas of the Kootenai River with no roads access points by boat (e.g., responders access the river by boat at Bonners Ferry and pull resources upriver).
- WRI engaged stakeholders during the draft phase of the GRP and opened it to public comment.

View Presentation

Environmental Justice in Emergency Response

Presenter: Beth Sheldrake (EPA R10)

The Biden administration has issued four Executive Orders (EOs) affecting response. Sheldrake presented information on how the four EOs affect the emergency response, summarized in the slides below.

- EO 13985
- EO 14008
- EO 14091 updating EO 13985
- EO 14096

General Observations:

- Though Environmental Justice is a focus for the administration, EPA responds to incidents within the agency's jurisdiction and does not prioritize responses based on proximity to Environmental Justice communities.
- EPA issued guidance on compliance with the above EOs to internal agency responders in November 2022

View Presentation

Northwest Area Planning Agency Updates

Northwest Area planning partner agencies share information from their respective agencies regarding legislation, initiatives, trainings, and updates to individual agency plans.

USCG D13 (Kara Pinetti)

- Kara Pinetti will participate in the National Review Panel of both SPS and SCR ACPs on August 7-11, 2023. The ACP focus areas include Potential Places of Refuge, HAZMAT, Salvage & Marine Firefighting. ACP review cycle: the new five-year review cycle will focus on several key issues.
- Sector Staff Changes: Brandon Sulfridge will retire in June 2023. Dean Johnston will transfer to the National Strike Force on the East Coast in June 2023.
- Upcoming Meetings:
  - Joint Response Team and CANUSPAC; Kitsilano, BC (near Vancouver, BC); July 19, 2023
  - Sector Puget Sound Area Committee; Tacoma, WA; July 25, 2023
  - Regional Interagency Steering Committee (RISC); Boise, ID; August 19-20, 2023
  - Sector Columbia River Area Committee; Portland, OR; September 26, 2023

WA Dept. of Ecology (Carlos Clements, Spills, Prevention, Preparedness, and Response Program Manager)

- Rulemaking:
  - Adopted two rules today June 6, 2023, going into effect on July 7:
    - Chapter 173-180 WAC concerning facility oil handling standards for regulated oil-handling facilities
    - Chapter 173-184 WAC for vessel oil transfer advance notice and containment requirements
  - Ecology is working with the Board of Pilotage Commissioners (BPC) on a rulemaking to amend a rule that describes the training, licensing, and regulation of Washington State maritime pilots.
  - Ecology conducted a risk assessment to evaluate the effectiveness of tug escort and towing vessels in the Salish Sea. A report is forthcoming.
  - Certificates of Financial Responsibility (COFR) legislation – Ecology is drafting legislation requiring regulated oil facilities and vessels to demonstrate financial capacity to fund response and reparations. Ecology welcomes Diana Davis, who will be leading the new COFR Unit.
- Upcoming Drills and Training
  - BNSF WCD Drill (multi-state response); The Dalles, OR; June 13-14, 2023
  - MSRC Wildlife Deployment Drill; Everett, WA; 29 June, 2023
  - Large-scale Equipment Deployment (LSED) Drill; Eastern WA; July 19,2023
  - Olympic Pipeline Company WCD Drill; Oregon; August 2, 2023
  - Northwest Oil Spill Control Course; Port Angeles; August 21-24, 2023
  - Worldwide Response Resource List (WRRL) User's Meeting; September 14, 2023

Closing Comments

IDEQ and EPA R10 thank presenters and participants for their continued support and planning efforts.

The next regular meeting of the NWACs will be on 26 September 2023 in Portland, OR, hosted by Sector Puget Sound and the State of Oregon. A virtual attendance option will be offered. Information will be posted at http://rrt10nwac.com.

End Meeting

Attendance record provided following summary notes

USCG Sector Columbia River Federal OSC Report

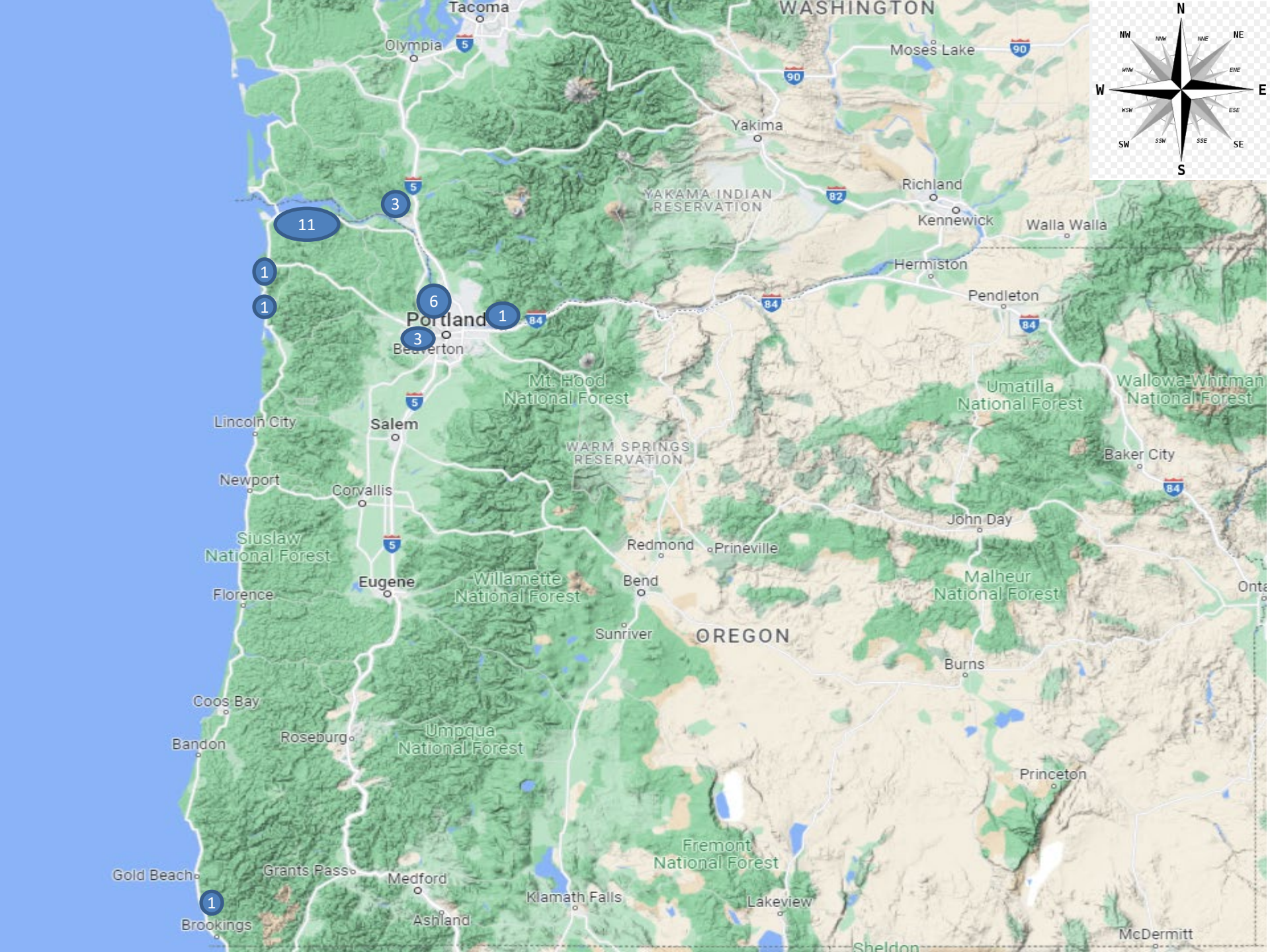
Sector Commander:
Justin W. Noggle, CAPT USCG

Since March 1, 2023

NRC Notifications	RRT Activations	Federal Projects	CERCLA Projects
27	**0**	1	1

Calendar Year 2023

NRC Notifications	RRT Activations	Federal Projects	CERCLA Projects
56	**0**	5	3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Moses Lake
Yakima
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Walla Walla
Hermiston
Pendleton
Portland
Beaverton
Mt. Hood National Forest
Umatilla National Forest
Wallowa-Whitman National Forest
Lincoln City
Salem
WARM SPRINGS RESERVATION
Baker City
Newport
Corvallis
John Day
Siuslaw National Forest
Redmond
Prineville
Eugene
Willamette National Forest
Bend
Malheur National Forest
Florence
Sunriver
OREGON
Burns
Coos Bay
Bandon
Roseburg
Umpqua National Forest
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MARLINS II

UCGPS23007 (CFV MARLINS II)

RRT Activation:	No
Type and amount of product:	Oil – up to 5000 gallons of diesel
Cause:	On 09MAR22 the CFV MARLINS II caught fire while moored in Westport Marina. Started as an electrical fire.
Date of spill:	09MAR23 (Potential discharge)
Responsible Party:	PRP Identified
Key operational activities:	- Secure fire - Ensure stability of vessel - Determine owner/insurance intentions with vessel
Major lessons learned:	- Removal of catch - Working with Owner/ Insurance to removal vessel. Vessel remains afloat in Westport.
Lead Coordinator Contact Information:	MSSR2 Brandon Sulfridge (USCG) MST3 Sergey Hartshorne (USCG) 503-861-6479

USCG

Training

Description	Dates
Pollution Responder Break-In (01 personnel)	Ongoing
FOSCR Break-In (02 personnel)	Ongoing
Oil Spill Recovery Tech	11-15 Sep 23
Hazardous Material Incident Response	19-23 Jun 23
FOSCR Course (02 Personnel)	17-21 Jul 23

USCG

Federal, State, Tribal, and Local Planning and Coordination Efforts

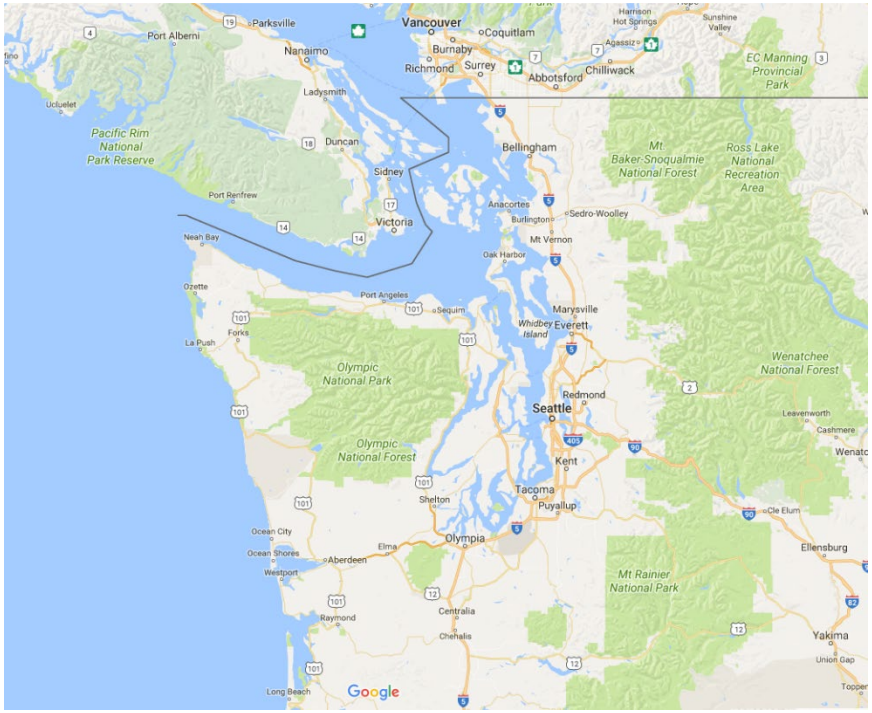
Description	Dates
SCR ACP open comment period	April 19, 2023 – July 31, 2023
CTCLUSI MOU (Mr. Connor POC)	Ongoing
AC/RRT Meeting in Portland, OR	September 26-27, 2023

Exercises and Workshops

Description	Dates
BNSF	June 7, 2023
PREP Quarterly Notification Exercise	June 30, 2023
Olympic Pipeline WCD	August 2, 2023
Maritime Fire & Safety Association Full scale	September 21-22, 2023

Sector Puget Sound

Captain Patrick Hilbert, Sector Commander



Past three months

NRC Notifications	RRT Activations	Federal Projects	CERCLA Projects
394	0 Surface Washing Agents 0 In-Situ Burns 0 Dispersants	3	1

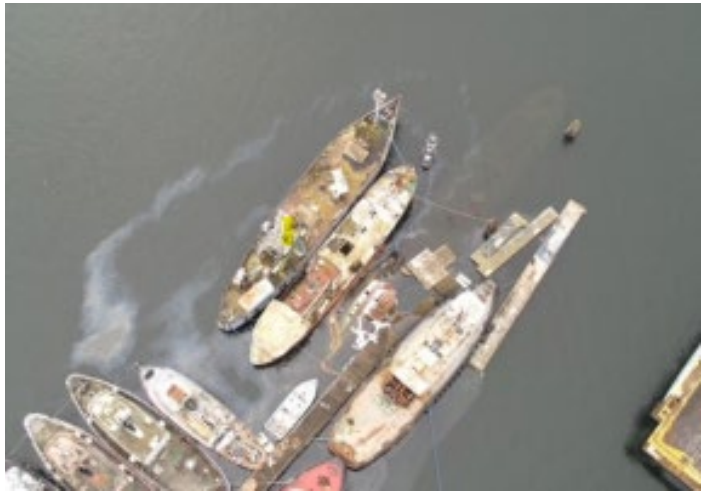
Notifications:
230

F/V Kodiak Enterprise

RRT Activation:	No (RRT Notified, Not Activated)
Type and amount of product:	Diesel Max Potential: 55,000 Gallons 20,000 lbs. of Freon
Cause:	Fire
Date of spill:	April 2023
Location:	Tacoma, WA
Key operational activities:	- Vessel caught on fire at the pier - RP hired Resolve Firefighting and Marine Salvage and MSRC - Multiple Drone flights identified a small amount of sheening
Major lessons learned:	- Engage with EPA early to develop a PRFA for air monitoring.

Tug VIGOROUS

RRT Activation:	No (RRT Notified, Not Activated)
Type and amount of product:	Diesel Potential: 45 Gallons Max Potential: 50 Gallons
Cause:	Sinking
Date of spill:	20 March 2023
Location:	Ballard Oil Facility (Seattle), WA
Key operational activities:	- Vessel sank during the preliminary assessment. - US Ecology was hired as the OSRO. - Discharging from engine.
Major lessons learned:	- FOSC removed fuel in 2021. - Working with DNR and Ballard to remove the vessel.



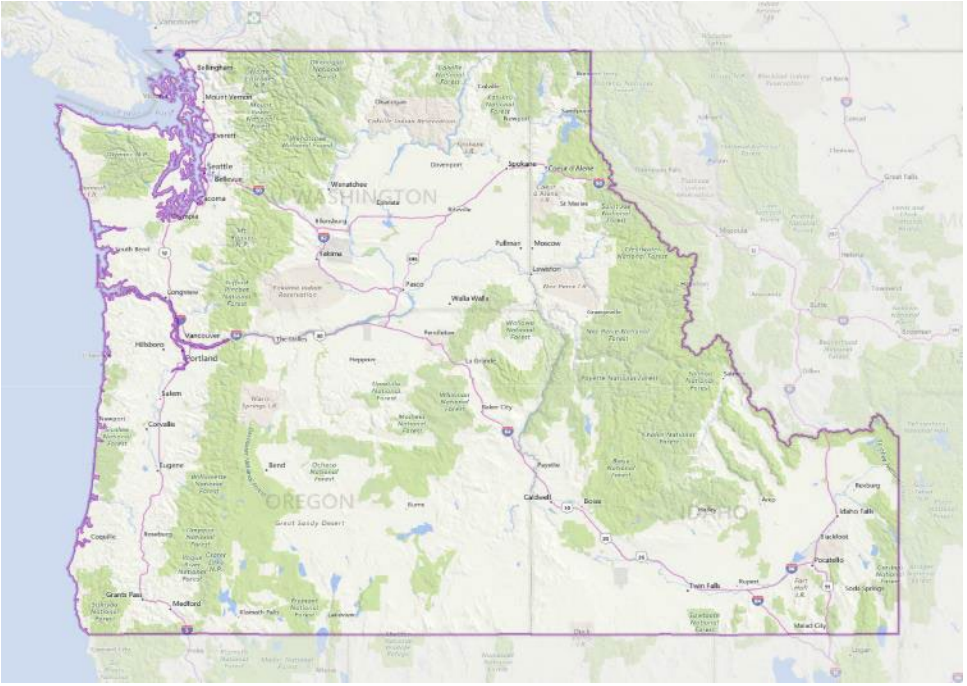
Exercises and Training

Description	Dates
NOAA Scientific Support Coordinator Training 101	
USCG Visit to EPA Headquarters	May 16, 2023
GIUE – Shell Seattle (Passed)	February 03, 2023
GIUE – US Oil Tacoma (Passed)	April 27, 2023
Quarterly Notification Drill	May, 2023

Future Outlook

Description	Dates
Government Initiated Unannounced Ex.	1 additional
Oil Spill Control Course (TX)	June 12-16, 2023
Coastal Area Committee Meeting	July, 2023
Hazardous Material Response (MD)	June 5-9, 2023
NOAA Science of Oil Spill	July 10-14, 2023

EPA Region 10



From February 27, 2023 to June 1 2023

NRC Notifications	RRT Activations	OPA Projects	CERCLA Projects
371 Total Reports 262 Oil 109 Other (HazMat, etc.)	None	3 ERs – Swinomish Locomotive Derailment, Kodiak Vessel Fire, Payette Lake Mystery Spill	2 ERs – East 16th Street Hg Spill, Amerities Wood Treatment Tank Fire

East 16St Mercury Spill

Mountain Home, ID (Elmore County)

RRT Activation:	No
Type and Amount of Product Spilled:	Mercury – Small Quantity
Cause of Spill:	Broken mercury barometer
Date of Spill:	2/26/2023
Responsible Party:	Homeowner
Key Operational Activities:	• Assessment • Mercury Removal • Remediation and clearance
Lead Coordinator Contact Information:	FOSC Eric Vanderboom Vanderboom.Eric@epa.gov

Amerities Wood Treatment Tank Fire

The Dalles, OR (Wasco County)

RRT Activation:	No
Type and Amount of Release:	Wood Treatment Tank Fire
Cause of Incident:	Wood Treatment Tank Fire
Date of Spill:	03/10/2022
Responsible Party:	AmeriTies
Key Operational Activities:	• Community air monitoring
Lead Coordinator Contact Information:	FOSC Randy Nattis Nattis.Randy@epa.gov

Swinomish Channel Derailment

Anacortes, WA (Skagit County)

RRT Activation:	No
Type and Amount of Product Spilled:	Diesel Unknown amount spilled (up to 6,000 gal)
Cause of Spill:	Locomotive Derailment
Date of Spill:	3/16/2023
Responsible Party:	BNSF
Key Operational Activities:	• Community Air monitoring • PRP Oversight • RP Spit sampling of soil and groundwater
Lead Coordinator Contact Information:	FOSC Mike Sibley sibley.michael@epa.gov

Kodiak Enterprise Vessel Fire

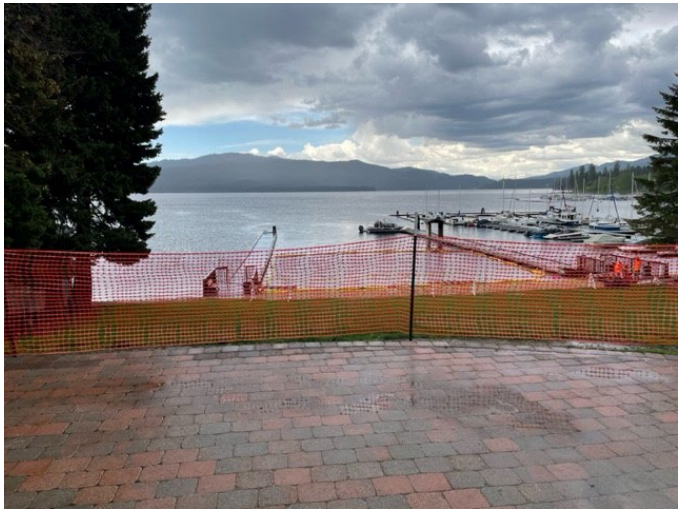
Tacoma, WA (Pierce County)

RRT Activation:	No
Type and Amount of Product Spilled:	Community Air Monitoring (Potential Freon Release)
Cause of Spill:	Fishing Vessel Fire
Date of Spill:	4/8/2023
Responsible Party:	Trident
Key Operational Activities:	• Community air monitoring
Lead Coordinator Contact Information:	FOSC Brooks Stanfield stanfield.brooks@epa.gov

Payette Lake Mystery Spill

McCall, ID (Valley County)

RRT Activation:	No
Type and Amount of Product Spilled:	Diesel, unknown amount
Cause of Spill:	Cause unknown, potential illegal dumping
Date of Spill:	5/8/23
Responsible Party:	Unknown
Key Operational Activities:	• Deploy containment boom at conveyance line outfall (into the lake) • Jet conveyance line, clean out vaults and vortex system (oil water separator) • Open city parks
Coordinator Contact Information:	FOSC Eric Vanderboom Vanderboom.Eric@epa.gov



EPA Region 10

Training

Description	Dates
Clean Waterways Conference	April 2023

Exercises/Workshops

Description	Dates
Trans Mountain Pipeline TTX	March 2023
Trans Mountain Pipeline Deployment Drill	June 2023

Federal, State, and Local Planning and Coordination Efforts

Description	Dates
Salem Oregon Fire Department Mercury Training	February 2023
Idaho HazMat Training, Boise, ID	April 2023
North ID HazCat Training in Lewiston and Coeur d'Alene	May 2023

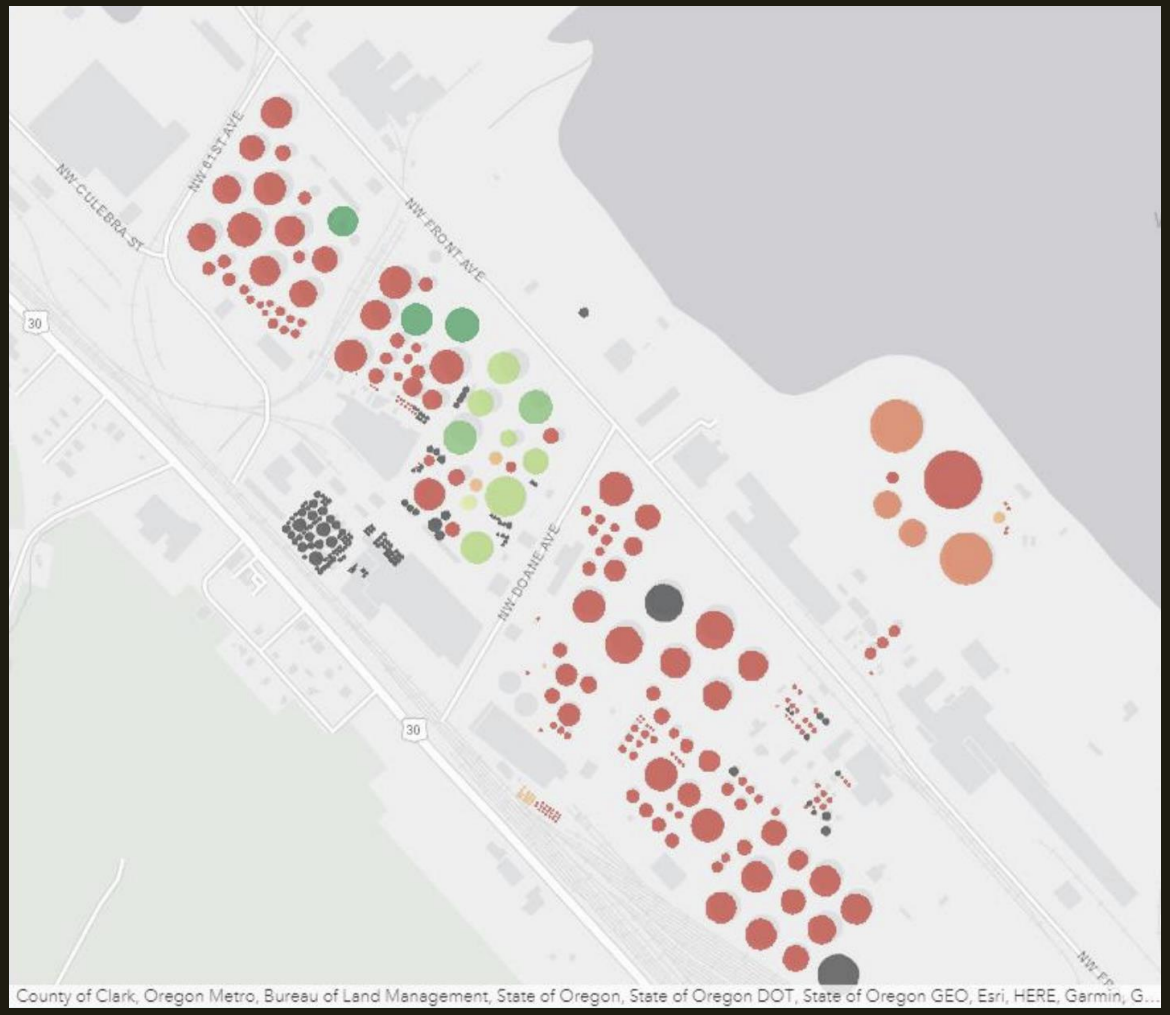
Seismic Vulnerability Assessment of Hazardous Materials Storage in Oregon

- Recognition that PNW is somewhat unique in its vulnerability to large infrequent subduction zone earthquakes
- The bulk of Oregon's fuel and a large extent of its hazardous materials storage facilities are located in areas with significant risk to earthquakes
- Questions regarding scope and severity of releases that will occur have been asked for decades
- Ability to respond and recover will depend on actions we take to stabilize and secure against (or at least lessen) releases

State of Oregon
DEQ Department of Environmental Quality

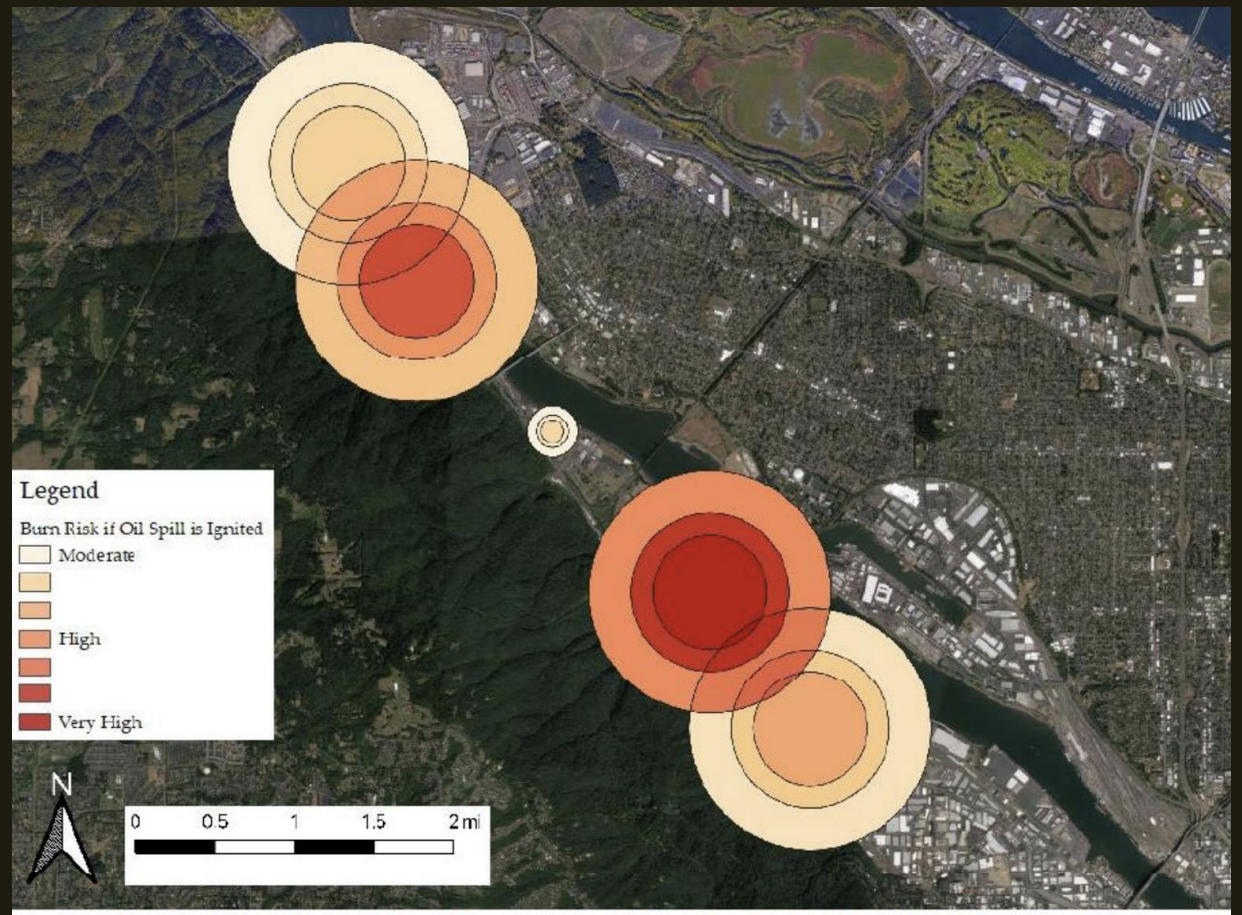
The Critical Energy Infrastructure Hub…

- 17 Tank Farms in the CEI Hub
- Situated near Downtown Portland
- 6 mile zone previously wetlands & Lakes
- Filled in with dredge spoils, likely to experience liquefaction and lateral spreading
- 350 Million Gallons of all types of refined oil and crude oil
- 3 pipelines, 537 Above-Ground Storage Tanks

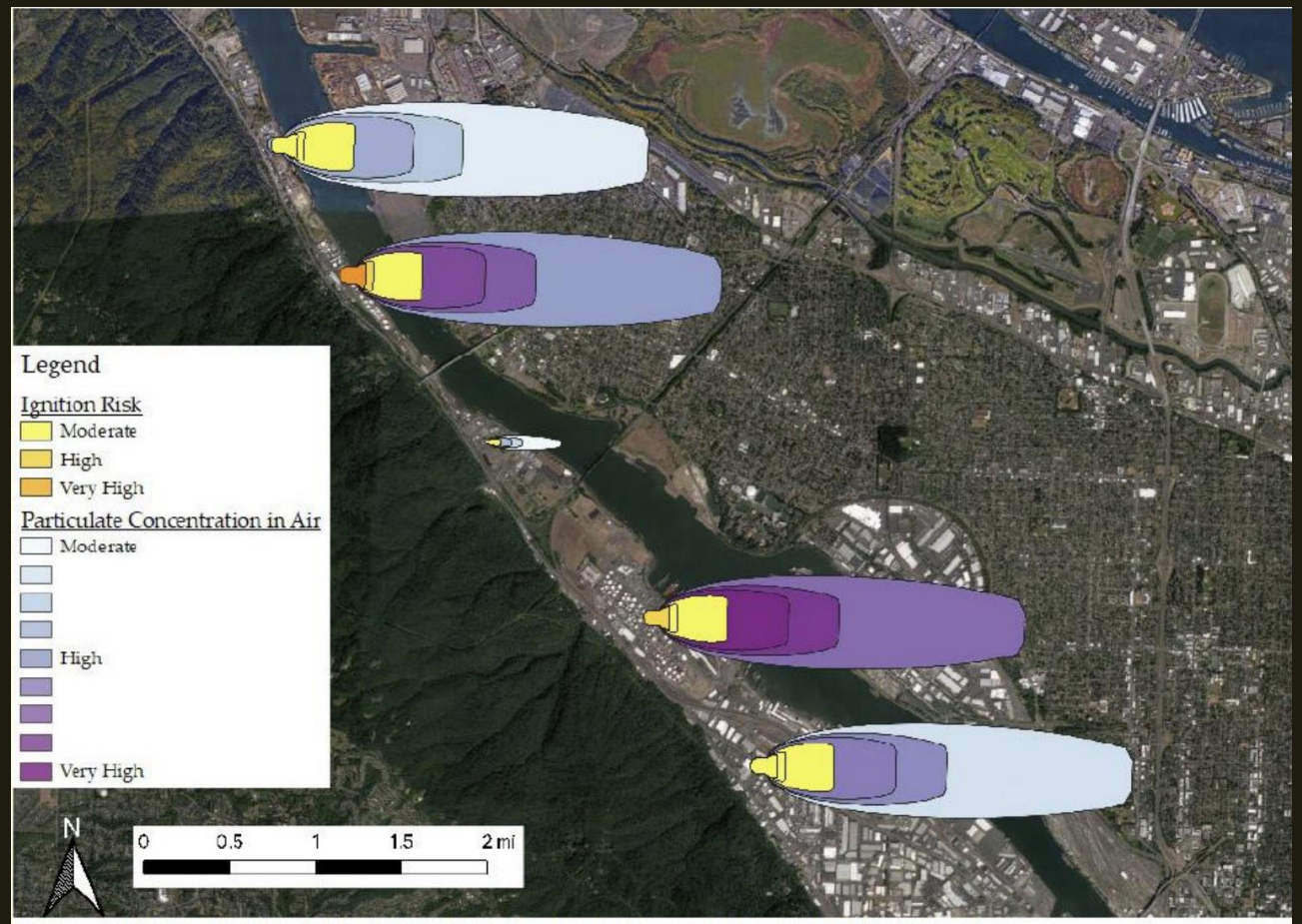


State of Oregon
DEQ Department of Environmental Quality

The CEI Hub…



Source: NOAA and EPA ALOHA software, output created by ECONorthwest

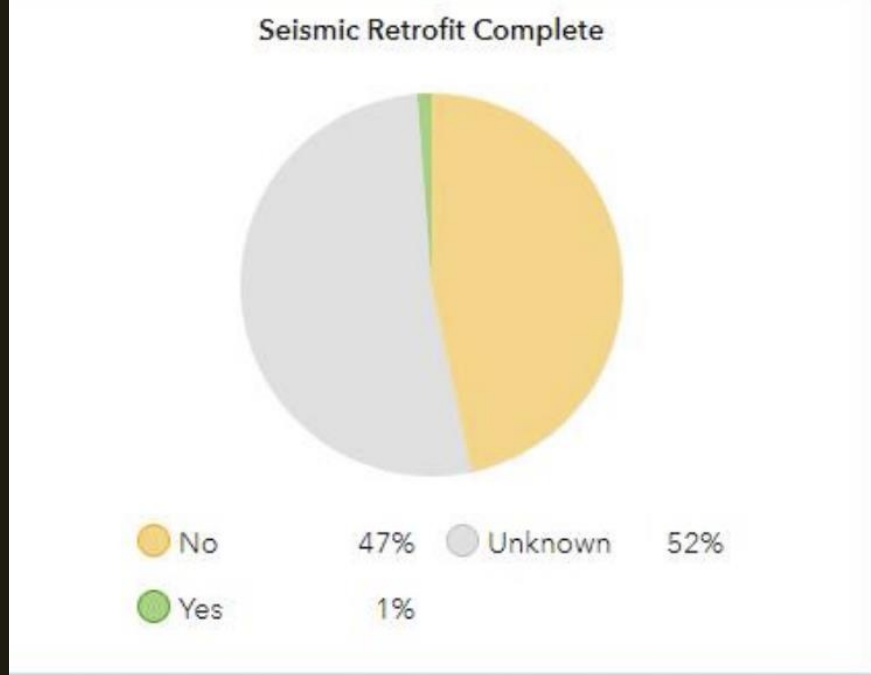


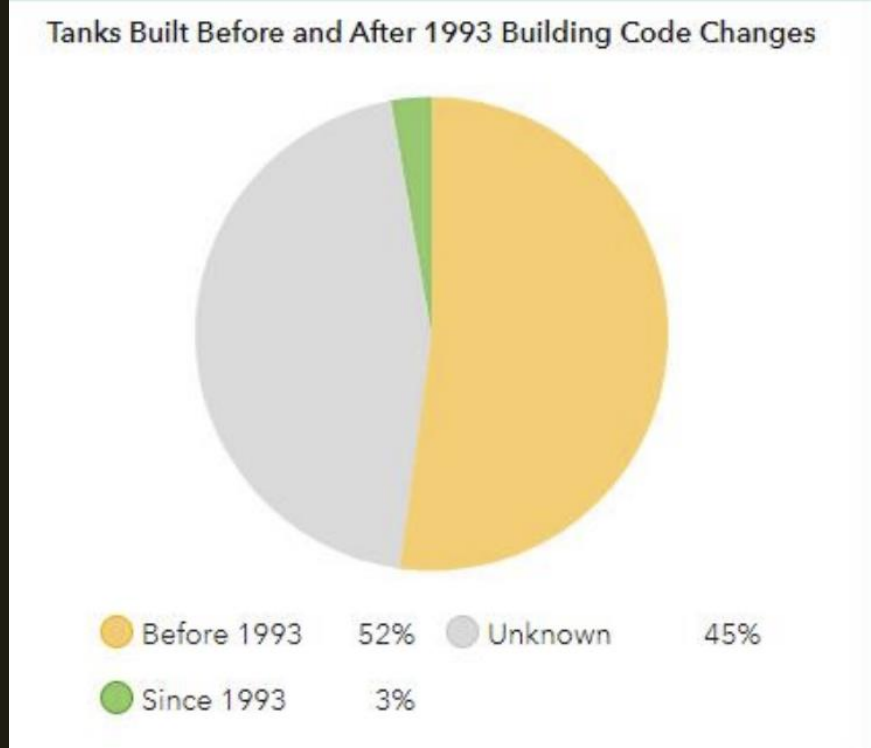
Source: NOAA and EPA ALOHA software, output created by ECONorthwest

State of Oregon
DEQ Department of Environmental Quality

Oregon Senate Bill 1567 (2022)

- Requires 17 facilities across Oregon with fuel storage capacity over two million gallons to assess their seismic vulnerability and improve their infrastructure to better withstand earthquakes





Oregon Seismic Stability Assessment and Mitigation

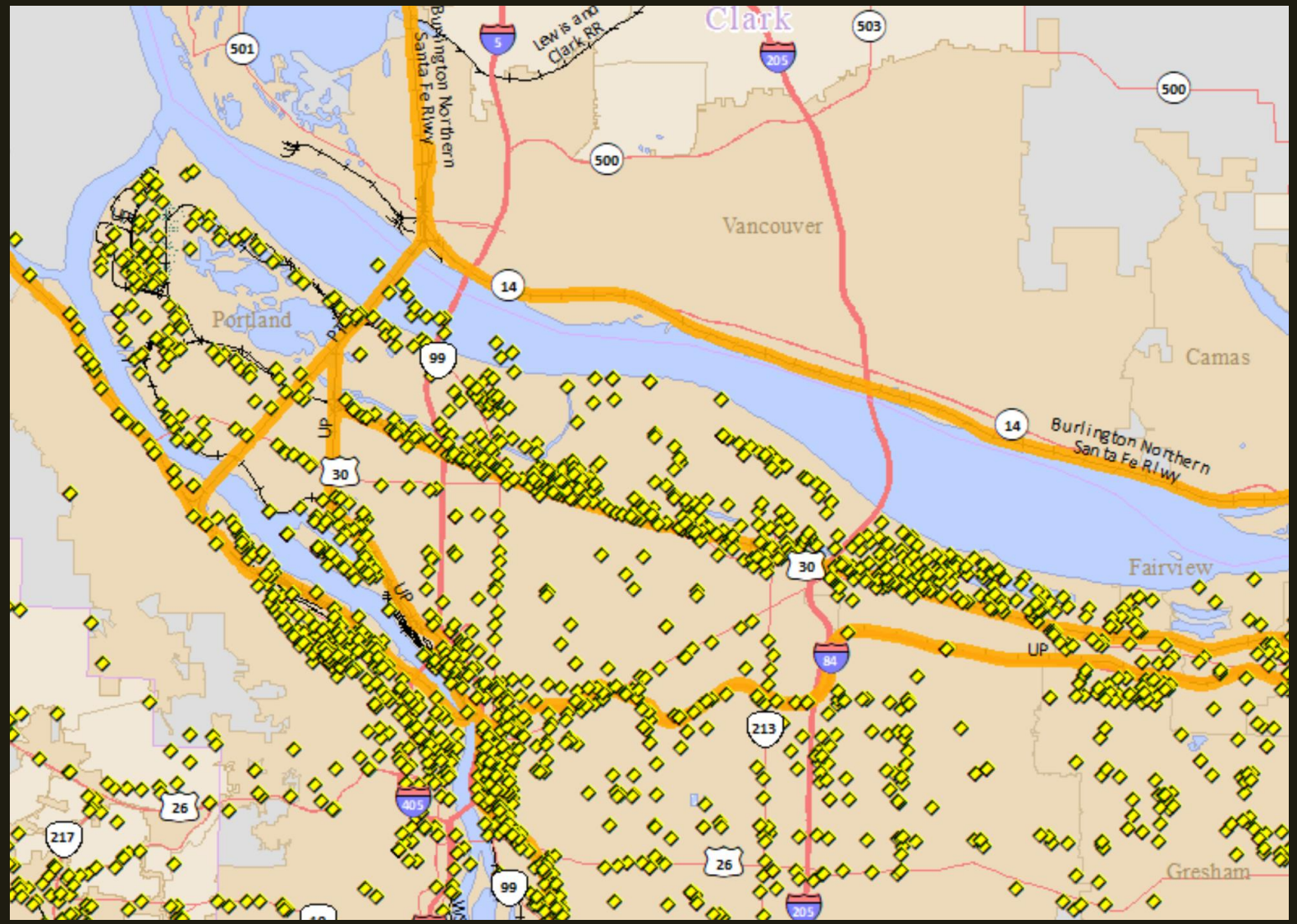
2022 Senate Bill 1567:

- Requires facilities to submit Vulnerability Assessments and Mitigation Plans by June 2024
- Currently in Rulemaking through an Advisory Committee
- Risk mitigation plans are due within 6 months of DEQ’s approval of the vulnerability assessment

State of Oregon
DEQ Department of Environmental Quality

Hazardous Materials Storage Facilities

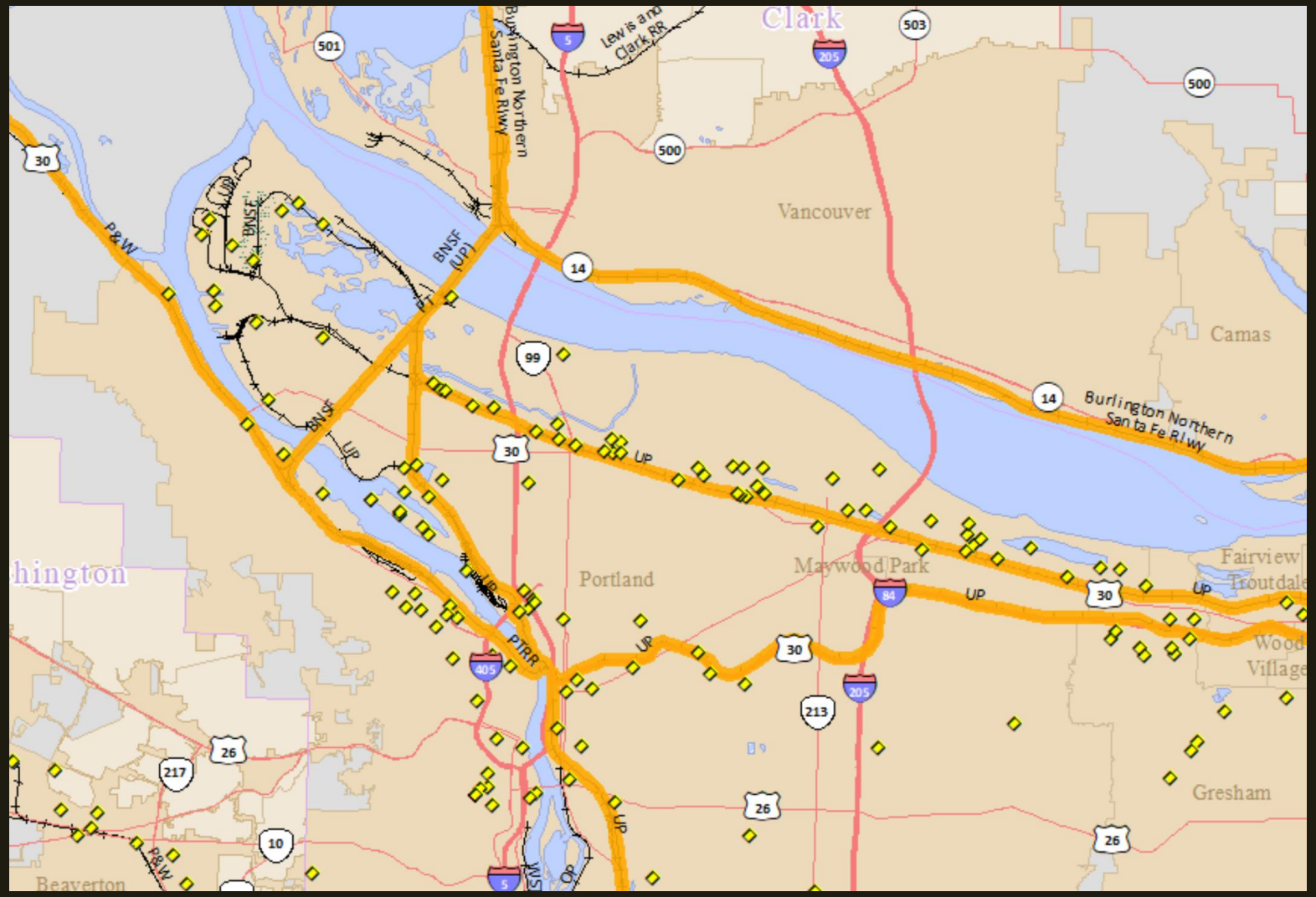
- All facilities required to file with Oregon State Fire Marshal in the Portland Area



State of Oregon
DEQ Department of Environmental Quality

Facilities with Toxic Inhalation Hazard Substances

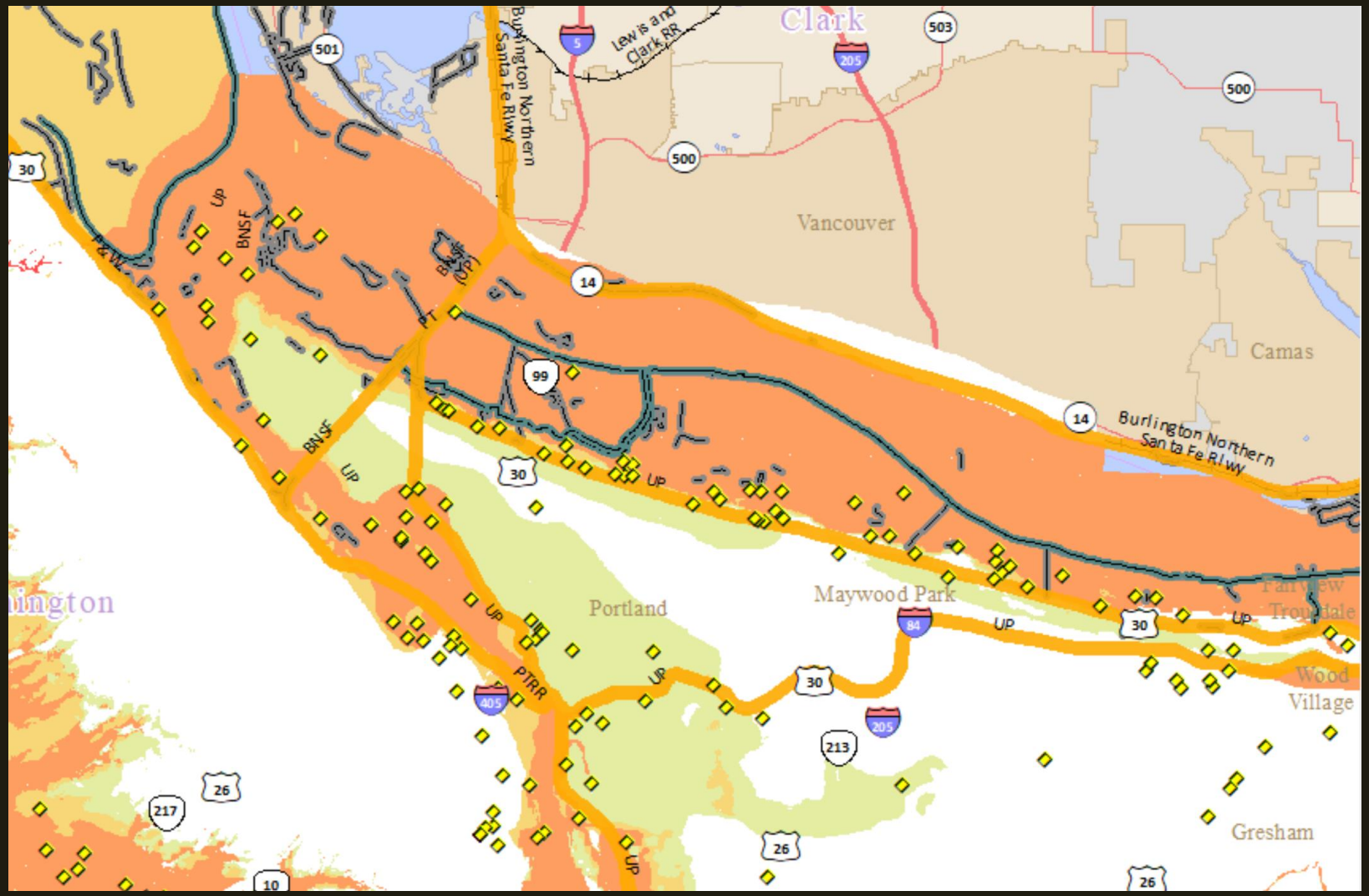
- These are the materials which present acute risks to humans through the inhalation pathway
- Does not include normal asphyxiants



State of Oregon
DEQ Department of Environmental Quality

TIH Chemicals and the Susceptibility to Soil Liquefaction

- Liquifaction Susceptibility
  - Oregon_Liquefaction_Susceptibility_
    - Liquifaction Susceptibility
    - None
    - Very Low
    - Low
    - Moderate
    - High
    - Very High



State of Oregon
DEQ Department of Environmental Quality

Multnomah County Risk Assessment 2023

- Started with 70 facilities listed in the LEPC Hazardous Materials Response Plan
- 23 facilities assumed to be seismically vulnerable based on date of construction
- All located in areas expected to receive at least moderate or heavy damage
- 15 pose risks of toxic gas plumes
  - 11 of these are stored in either above ground tanks or pressurized cylinders
  - 12 of 15 are seismically vulnerable
- From these, selected 4 facilities with the highest life-safety threat based on LEPC preliminary modeling

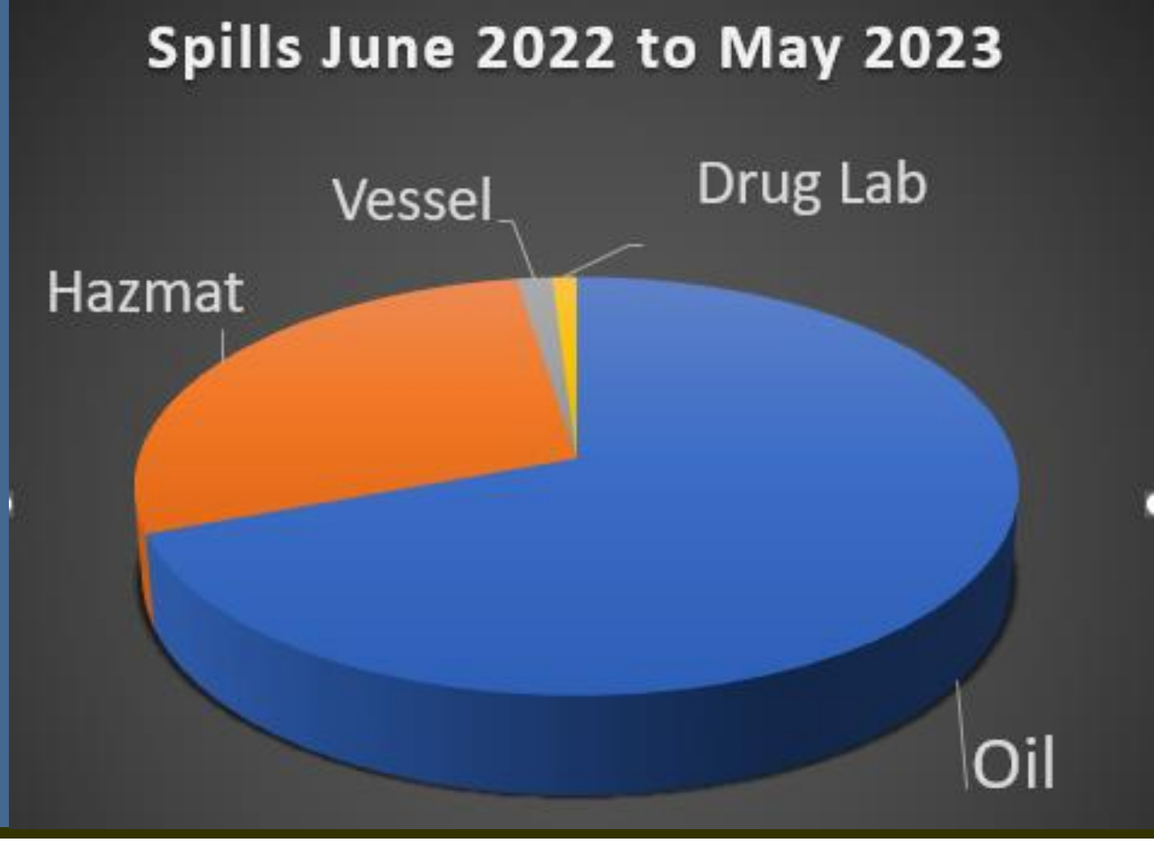
State of Oregon
DEQ Department of Environmental Quality

Multnomah County Risk Assessment 2023

- **Casualty Estimates:**
  - Facility 1
    - 535 possible deaths
    - 3284 possible injuries
    - 110000 irritation exposures
  - Facility 2
    - 541 possible deaths
    - 5138 possible injuries
    - 16000 irritation exposures
  - Facility 3
    - 1649 possible deaths
    - 9263 possible injuries
    - 220000 irritation exposures
  - Facility 4
    - 38 possible deaths
    - 81 possible injuries
    - 4640 irritation exposures

State of Oregon
DEQ Department of Environmental Quality

Oil	3,161
Hazmat/Pollutant	1,287
Vessel Incident	68
Drug Lab	46
	4,562



Washington SOSC

Spills Prevention, Preparedness, and Response Program

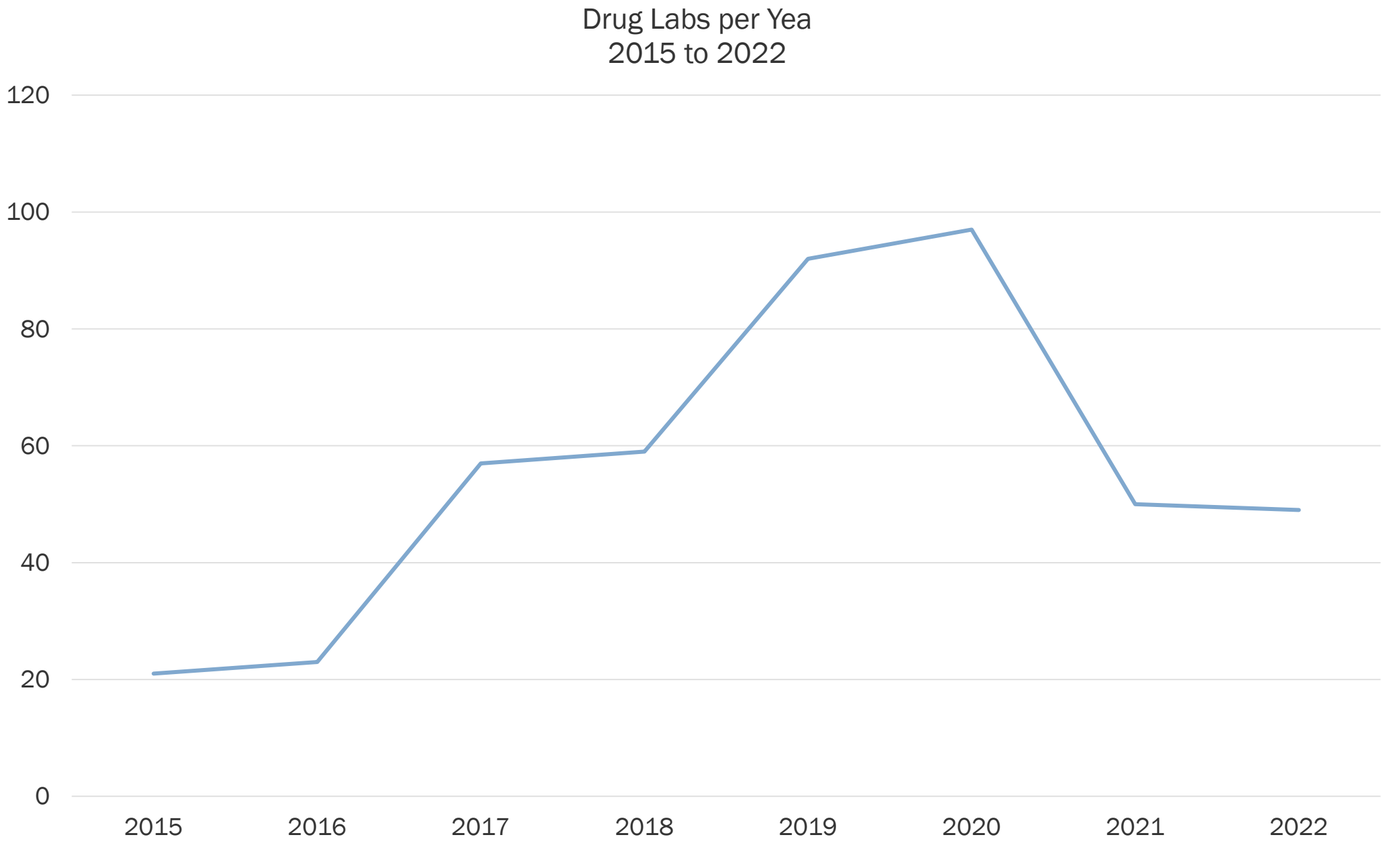
DEPARTMENT OF ECOLOGY
State of Washington

Incidents Reported

by County

County	Incidents	County	Incidents
King	1441	Kittitas	33
Pierce	573	San Juan	32
Snohomish	332	Benton	29
Whatcom	241	Walla Walla	25
Kitsap	198	Franklin	24
Clark	196	Chelan	24
Thurston	165	Stevens	18
Yakima	130	Klickitat	17
Skagit	121	Columbia	15
Spokane	116	Whitman	14
Cowlitz	88	Skamania	13
Grays Harbor	84	Pend Orielle	12
Jefferson	74	Adams	8
Vessel Emergency	73	Wahkiakum	8
Clallam	64	Okanogan	8
Lewis	60	Douglas	7
Pacific	51	Ferry	4
Island	50	Garfield	4
Mason	49	Lincoln	4
Grant	44	Asotin	1

Illegal Drug Manufacturing Facilities



Anacortes Derailment

Anacortes
Mar 13, 2023

SS-01	
Analyte	Surface
DRO	< 25
HO	< 50
Benzene	< 0.005
Toluene	< 0.010
Ethylbenzene	< 0.010
Xylenes	< 0.020
Naphthalene	
cPAHs	

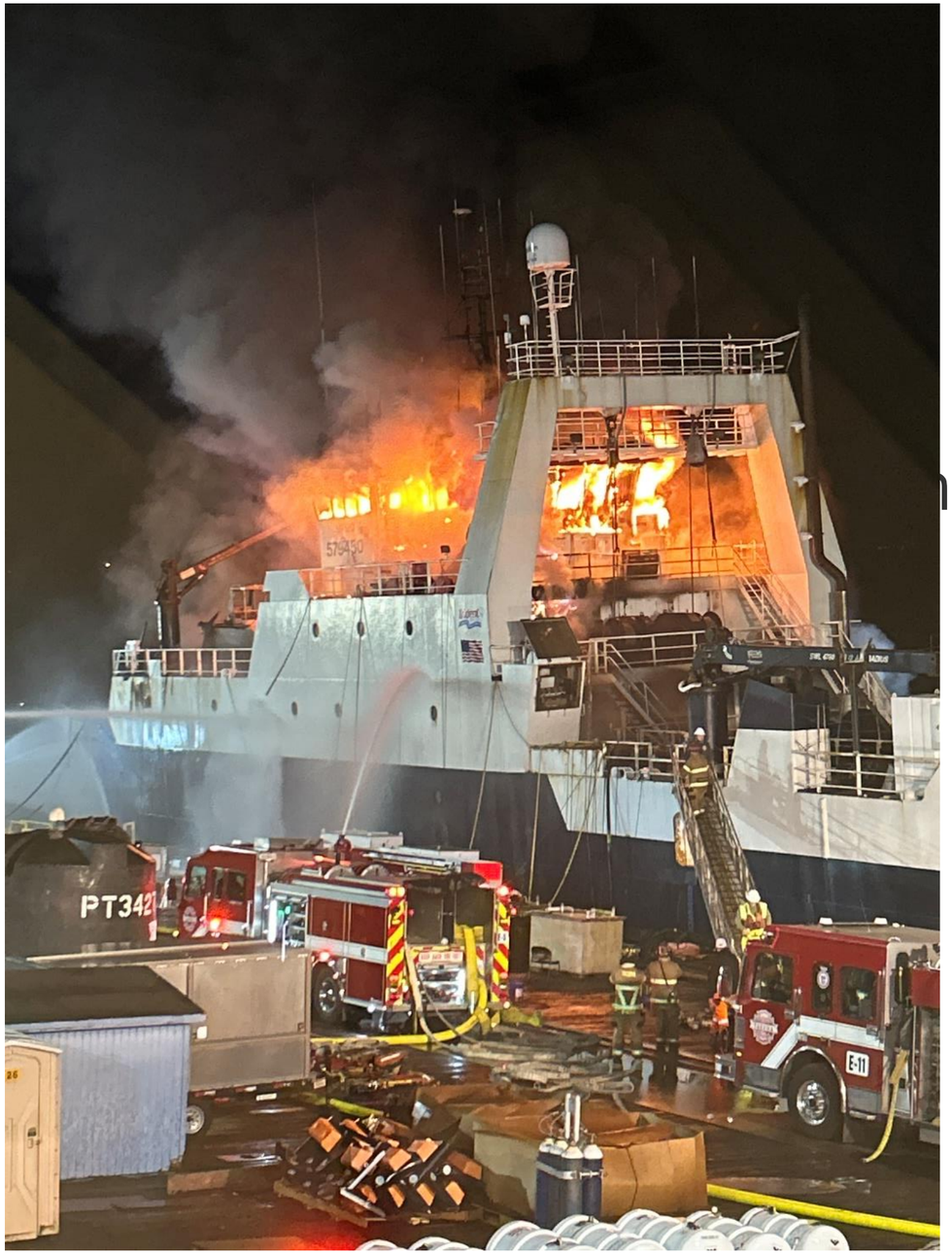
SS-02	
Analyte	Surface
DRO	< 25
HO	< 50
Benzene	< 0.005
Toluene	< 0.010
Ethylbenzene	< 0.010
Xylenes	< 0.020
Naphthalene	
cPAHs	

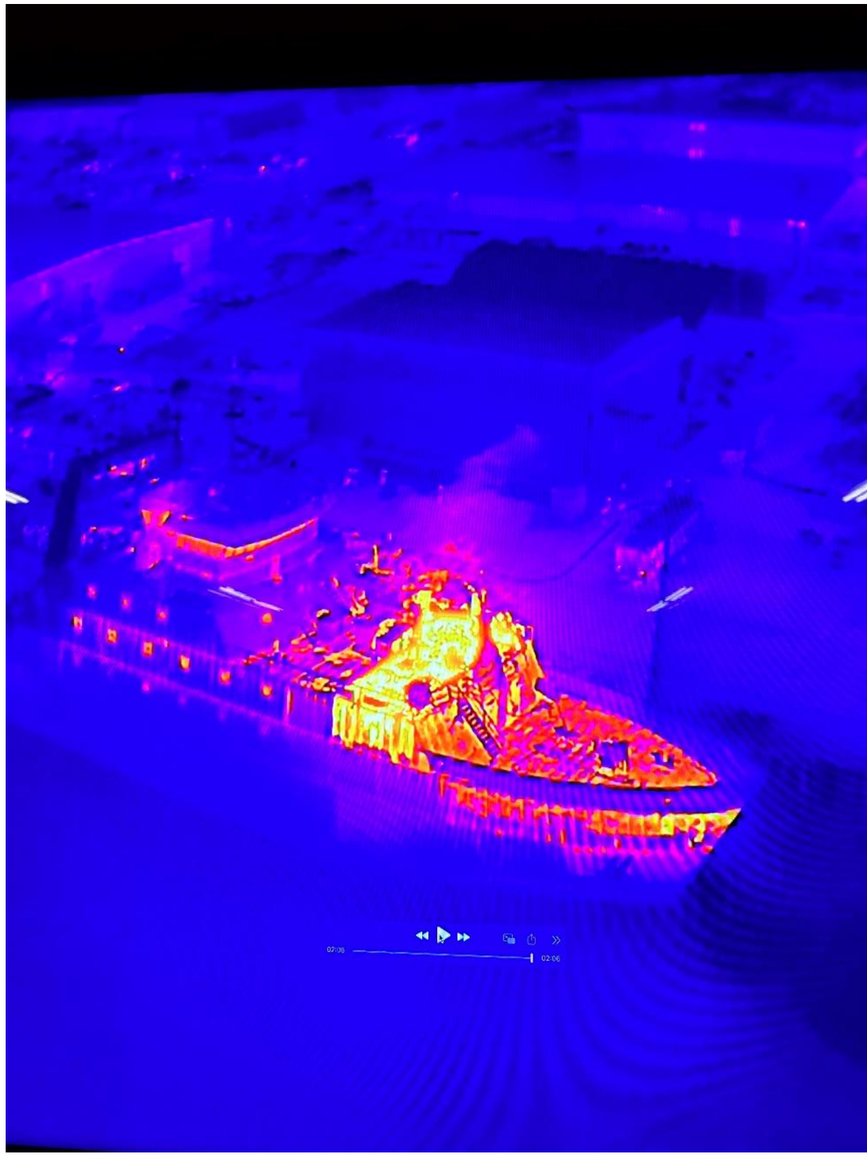
SS-03	
Analyte	Surface
DRO	< 25
HO	< 50
Benzene	< 0.005
Toluene	< 0.010
Ethylbenzene	< 0.010
Xylenes	< 0.020
Naphthalene	
cPAHs	

SS-04	
Analyte	Surface
DRO	< 25
HO	< 50
Benzene	< 0.005
Toluene	< 0.010
Ethylbenzene	< 0.010
Xylenes	< 0.020
Naphthalene	
cPAHs	

Kodiak Enterprise Fire

Tacoma
Apr 8, 2023





Fuel Tank Truck Crash

Lacey
Mar 13,2023

Accident Investigation

DEPARTMENT OF ECOLOGY
State of Washington

DEPARTMENT OF ECOLOGY
State of Washington

2023 Coastal Protection Fund Restoration Grants

DEPARTMENT OF ECOLOGY
State of Washington

2023 Coastal Protection Fund Restoration Grants

Questions?

Pocatello Creek Mineral Oil Release

A Community Response

Mineral Oil Release Source Discovery, November 2-3, 2022

STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

Doug Tanner &
Amanda Hardy
Pocatello DEQ

Background

- Citizen called the City of Pocatello and was referred to DEQ
  - Mayor’s Office received complaint about the substance being discharged from Pocatello Creek to the Portneuf River

- DEQ receives call from concerned citizen
  - Caller says clear petroleum like liquid is going down Pocatello Creek he estimates 4,000 – 5,000 gallons

DEQ Staff Notification

- Amanda emails PRO Remediation Manager (Doug) and IPDES Compliance Officer (Aaron) during the call with high priority (2:25 pm)

I am on the phone with a couple guys saying there is an active oil spill on the Portneuf River in the Pacific Steel Recycling Park. They estimate 4-5k gallons have been released. It is coming from a junkyard. It is near where the highway goes under a train bridge.. I think? Down from camping world and you go under the bridge…. Do we need to call the fire department? I'm not exactly sure how to proceed. I am on the phone with him.

DEQ Initial Response

- Aaron goes to Pacific Steel Recycling Park
  - Talks with citizen that called DEQ (2:35)
- Doug calls Pocatello Fire Department
  - FD deploys to park & starts booming Pocatello Creek before it enters the Portneuf (2:40)
- Doug, Amanda, surface water manager Jenni, and surface water analyst Matt, go to park (3:00)

DEQ Initial Response

- Aaron
  - Followed Pocatello Creek upstream and looked for the source of the release. He took pictures and documented along the way
    - Met up with Drew Riemersma, City of Pocatello, and they worked together to find source
- Matt
  - Started farther upstream and worked his way down, looking for the source of the release
- Doug, Amanda, Jenny
  - Meet with FD, walk up the trail that goes along City Creek further to investigate the material and try and determine a source. The material was very hard to see at first. It was clear and only gave a sheen at certain angles or light. Once you spotted the material you could see it looked like it was thick and sitting on top of the water and sometimes you could smell petroleum. It appeared to be a clear oil, based on the properties observed. We walked up as far as where a culvert goes under the railroad tracks at that point the material appeared to be further upstream.

Pocatello Fire Department

- Deployed absorbent boom across Pocatello Creek preventing material to reach the Portneuf River
- Checked on boom throughout the night
- Offered to sample material for identification
- Added another absorbent boom next morning

Unknown Material on Pocatello Creek

- Oily
- Clear
- Viscous
- Looks petroleum based

DEQ and City of Pocatello Search for Source of Release

- DEQ and City of Pocatello discuss strategy (4:00)
  - Facts so far:
    - Pocatello Creek goes underground throughout most of Pocatello
      - Pocatello Creek is dry before it goes underground
      - Material is present when Pocatello Creek daylights
        - » Conclusion is that it most likely coming from a storm drain
  - City of Pocatello provides MS4 plan to look at stormwater connections
    - 3 connections identified

DEQ and City of Pocatello Search for Source of Release

- DEQ and City of Pocatello start at the furthest MS4 connection
  - Look in stormwater vaults and manholes
- First Connection (Yellowstone) is ruled out.
  - No flow (4:40)

DEQ and City of Pocatello Search for Source of Release

- 2nd Connection NOP Park and Titan Center
  - Stormwater vault has sheen on water (4:50)
  - 3rd connection, down gradient from 2nd connection but is not connected to NOP, no sheen
  - Release most likely coming from Titan Center, a large industrial complex
    - Drive through park looking at stormwater drains

Navel Ordinance Plant

Suspected Responsible Party

- Virginia Transformer (VTC)
  - Company that manufactures large electrical transformers (much larger than what would be used on a power pole)
  - Known to store large amounts of mineral oil

Source Identification

- Stained soil going from under a railcar to a storm drain (5:00)

Source Identification

DEQ Notification to Virginia Transformer

- DEQ IPDES and HW Compliance Officers notify Virginia Transformer about release (5:15)
  - VTC employees inform DEQ no one is there to help at that time and to try back tomorrow.
  - VTC employees also say it was probably a semi-truck that drove through the fence (separating the complex from a major roadway) and spilled its fuel into the storm drain. There was no evidence of this, the fence had no damage.
  - **Because the release was stable DEQ decides to reconvene the next morning**

November 3, 2022

- DEQ discusses options and decides it would be best to call and report the release (8:00 am)
  - VTC had not notified or responded to DEQ
- Doug (Remediation Manager and EL) calls the release into the state communication center (9:10 am)
  - Identifies VTC as the most likely responsible party of the release
  - Requests bridge call with EPA and other applicable agencies (10:00 am)
  - EPA's Idaho OSC on plane from Seattle to Boise
  - Beth Sheldrake commits they will call Doug Tanner

DEQ and City of Pocatello Coordination

- Meeting to discuss what was known so far and determine path forward (11:30 am)
  - DEQ and City of Pocatello to notify VTC again
  - Meet with VTC management at 1:15 pm
- EPA Idaho OSCs contact Doug Tanner from Boise airport ~ 12:30 pm
  - Agree to meet at DEQ at 4:00 pm, with City
  - Contact Titan Center Management ~4:30 pm
  - Leave to walk the site

DEQ and City of Pocatello Notification to Virginia Transformer

- DEQ and City of Pocatello discuss release with VTC management staff
  - Physically walked with VTC staff to the suspected release area by the railcars
  - Updated VTC on how DEQ and the City of Pocatello discovered the release area
  - Recommended if VTC thought they were the responsible party to report the release
  - VTC makes report to State Comm of possible release
  - Asked if VTC had emergency procedures they could activate to start cleaning up the release

EPA and DEQ Joint Incident Command

Pocatello Creek Oil Release

OSCs Stephen Ball and Eric Vanderboom

June 6th, 2023

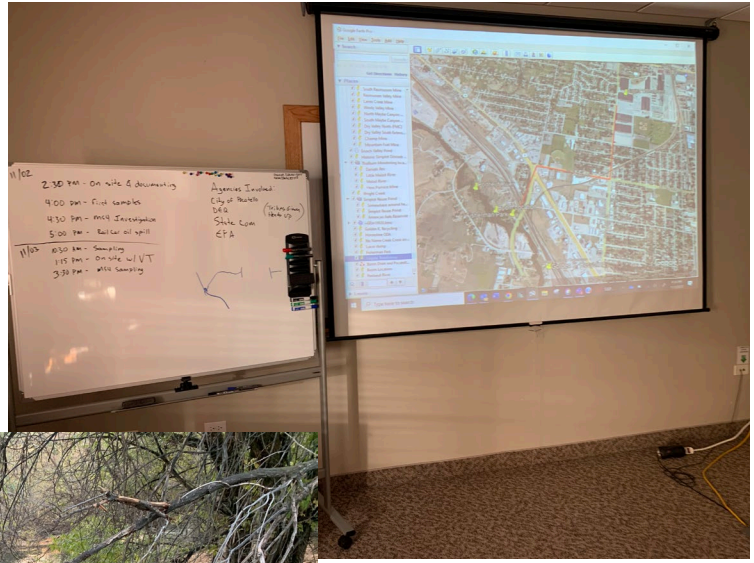
EPA Initial Actions

- OSCs Ball and Vanderboom arrive on-scene around 4:30pm on November 3

- IDEQ, City of Pocatello and RRT6 hold a briefing to integrate EPA into response followed by site tour of Pocatello Creek.

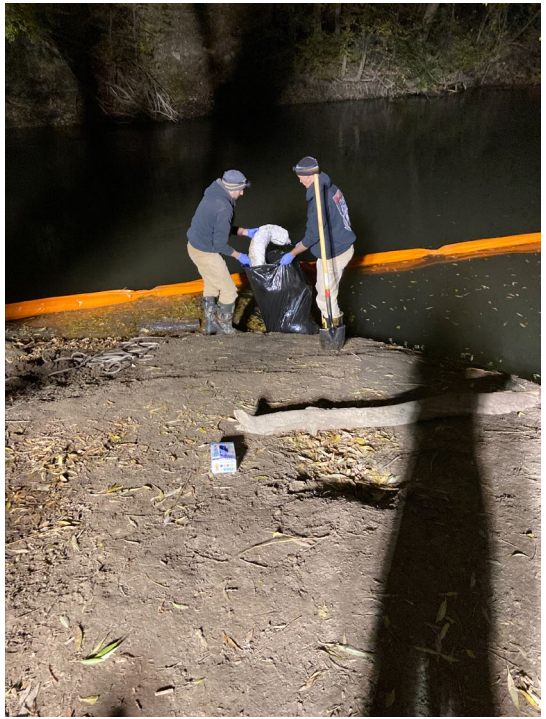
- Spill traced to a suspected mineral oil release from a 30,000-gallon rail car tanker located at the VTCU facility

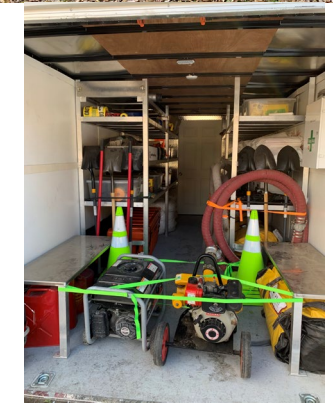
- Substantial product observed backed up on all of visible Pocatello Creek – held by 1 containment boom set



EPA Initial Actions

- OSCs initiate EPA response and leverage Marathon Spill Trailer
- OSCs, DEQ and Pocatello Public Works deploy additional boom through the night under City light plant.
- Clean Harbors (EPA contractor) arrives around 3am to continue set-up for oil recovery.





Spill Path

- ¾ mile storm sewer + ¾ mile open creek
- Pocatello creek drains half the city
- 1 or more fuel spills suspected to have occurred during/after mineral oil response

PRP - Virginia Transformer

- Issued NOFI on Nov. 4th
- Initial spill estimate at 13,000 gallons
- Took a week to take responsibility
- Did not take the incident seriously because the oil would biodegrade according to SDS
- Did not understand CWA/OPA

PRP - Virginia Transformer

- Did not understand disposal – Lead issue
- Did not understand that other spills did not resolve them of their liability
- Non-responsive personnel
- Personnel coming and going

Operations continue

- Operations fully scale up on November 4-5
- 2 vac trucks & 2 skimmers
- 4 containment boom sets
- Hearding & Flushing operations
- Debris clearing/removal
- 20,000 gal frac tank
- START SCAT 4.5 miles downstream – no visible impacts

PRP takes over

- 11/9/2022 VTC assumed financial and operational responsibility for the spill – UC set objectives for VTC
- VTC reduces spill estimate to 4000 – 6000 gallons based on inventories

Objectives

Administrative Objectives:

- Coordinate all activities with government agencies so there is an opportunity for oversight/observation of clean-up activities. Provide a schedule, as appropriate, for clean-up activities that are not going to be immediately executed.
- Provide daily updates to involved government agencies including a daily coordination call and a daily written update conveyed via email. Adjust updates as required by EPA and IDEQ.
- Investigate the private stormwater conveyance system on the Titan property in coordination with the Titan property owner. Provide maps to involved government agencies of the conveyance flow paths in support of ensuring extent of the spill is confirmed.

Operational Objectives:

- Decontaminate responder oil spill equipment.
- Address remediation of soils, ballast and other impacted areas at the facility where the spill occurred in coordination with the Titan property owner.
- Flush the impacted conveyance lines and collect any dislodged oil resulting from flushing activities.
    - Consider installing containment boom in the upper creek division to catch any oil flushed from the buried conveyance line. Coordinate/notify the school of these activities as necessary.
- Contain and remove any oil including sheen and emulsified oil on Pocatello Creek. Maintain 2 sets of containment boom at the mouth of Pocatello Creek until approval to remove is given by EPA and IDEQ.
- Dispose of all waste generated in compliance with federal and state regulations and provide documentation of disposal of all waste to EPA and IDEQ.
- Meet cleanup endpoints as required by EPA and IDEQ.
- Provide restoration activities as identified by City of Pocatello for the impacted city park as well as any other restoration needs resulting from the spill.
    - Remove caution tape from the upper and middle division of Pocatello Creek.

EPA End Points:

Emergency Response Phase:

- All free product removed, only sheen remains on Pocatello Creek.

Remediation Phase:

- No sheen observed on Pocatello Creek.
- Spill area remediated to IDEQ standards.
    - Excavation workplan recommended by IDEQ.

*Note: IDEQ may have additional regulatory requirements and end points for VTC.

Transition to remediation

- Emergency Phase ends on Nov. 14th
- Skimming no longer effective
- Cold weather
- Health and Safety concerns

Transition to remediation

- Storm sewer hydrojetting 11/16-17/22
- 6400 total gallons oily water recovered via skimming
- Estimated 4200 pounds of oily solids/absorbent
- Winter OPS plan developed and implemented
- Rainbow sheen vs grey/silver sheen

Winter OPS Plan

- Developed by VTC at Agencies' direction
- Describes the details of how clean-up will continue over the winter while everything is mostly frozen
- Passive management of Pocatello Creek Containment site
- Absorbent boom +containment installed with weekly monitoring and maintenance
- Weekly Reporting

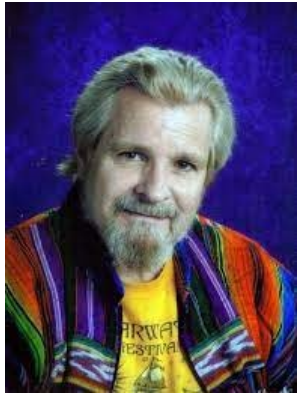
Containment Closure Plan

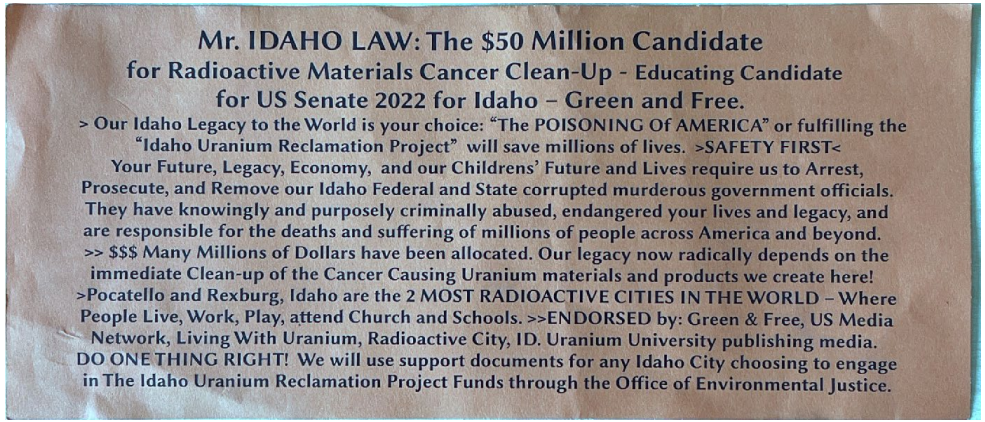
- Developed by EPA, IDEQ, City, Shoshone-Bannock Tribe
- 2 weeks of creek monitoring and inspection
- Weekly reporting
- No visible mineral oil

- Final site visit to agree on closure
  - EPA, IDEQ, City, Shoshone-Bannock Tribe, VTC

Other Experiences of Note

- IDEQ Emergency exemption for diverting water
- JIC with IDEQ and City
- VIP Visits
  - Acting Mayor
  - Shoshone Bannock Tribe
- Activist interest
  - The Lorax
- Local Media Interest
  - Paper
  - TV Interview





Mr. IDAHO LAW: The $50 Million Candidate
for Radioactive Materials Cancer Clean-Up - Educating Candidate
for US Senate 2022 for Idaho – Green and Free.

> Our Idaho Legacy to the World is your choice: "The POISONING Of AMERICA" or fulfilling the "Idaho Uranium Reclamation Project" will save millions of lives. >SAFETY FIRST< Your Future, Legacy, Economy, and our Childrens' Future and Lives require us to Arrest, Prosecute, and Remove our Idaho Federal and State corrupted murderous government officials. They have knowingly and purposely criminally abused, endangered your lives and legacy, and are responsible for the deaths and suffering of millions of people across America and beyond. >> $$$ Many Millions of Dollars have been allocated. Our legacy now radically depends on the immediate Clean-up of the Cancer Causing Uranium materials and products we create here! >Pocatello and Rexburg, Idaho are the 2 MOST RADIOACTIVE CITIES IN THE WORLD – Where People Live, Work, Play, attend Church and Schools. >>ENDORSED by: Green & Free, US Media Network, Living With Uranium, Radioactive City, ID. Uranium University publishing media. DO ONE THING RIGHT! We will use support documents for any Idaho City choosing to engage in The Idaho Uranium Reclamation Project Funds through the Office of Environmental Justice.

Questions?

Idaho State EMS Communications Center

Idaho State EMS Communications Center

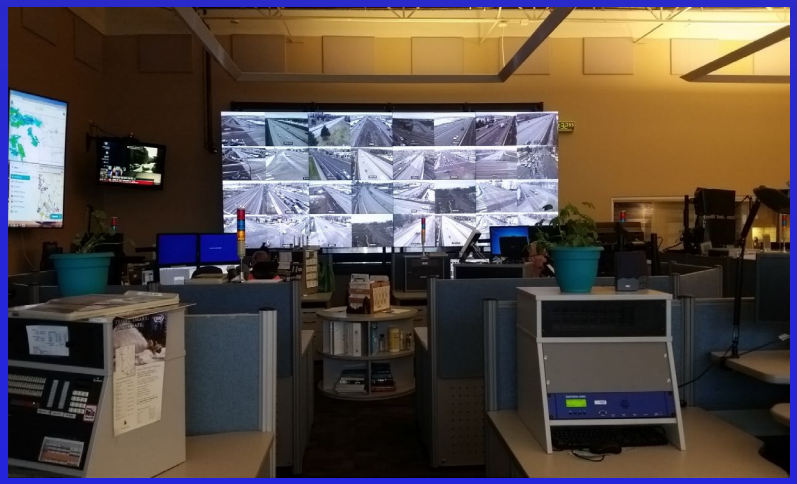
Department of Health and Welfare

Division of Health

Bureau of EMS and Preparedness

- System of Care
- StateComm
- Public Heath Preparedness and Response
- System, Quality and Improvement

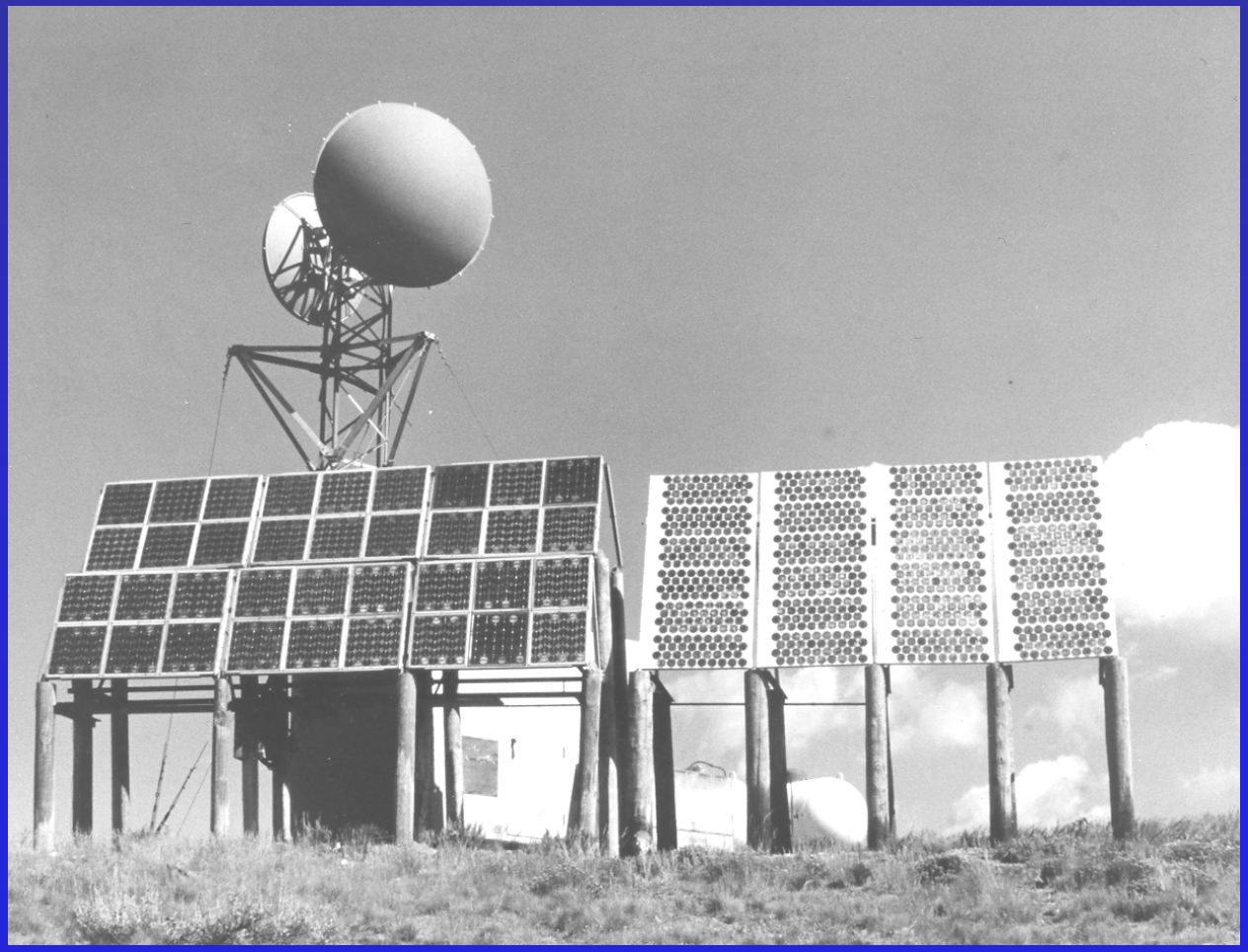
What is StateComm?



- Not a 9-1-1 center
- Resource center for state, local and federal resources
- Emergency notification center
- Dispatch center for multiple agencies statewide

1974 Robert Wood Johnson Foundation EMS Communications

1974 Robert Wood Johnson Foundation EMS Communications



1974 Robert Wood Johnson Foundation EMS Communications

1974 Robert Wood Johnson Foundation EMS Communications

Highway Camera Monitoring

- 41 EMS Mountain Top Radio Base Stations
- Statewide monitoring 700 MHz
- Statewide monitoring of EMS, hospital and ITD radios
- Emergency Medical Dispatchers
- ICS 100, 200 and 700 compliant
- Primary EMS dispatch in 16 rural communities

Agency Dispatch/Notifications

- State Public Health
- State Laboratories
- District Public Health
- Department of Agriculture
- Explosive Ordnance Teams
- Idaho Transportation Department (ITD)
- State Aeronautics
- Idaho Office of Emergency Management (IOEM)
- Civil Air Patrol
- Fish and Game

Agency Dispatch/Notifications

- Department of Environmental Quality (DEQ)
- Regional Response Teams (HazMat)
- INL Oversight Protection (DEQ Radiation Control)
- 101st Civil Support
- Environmental Protection Agency (EPA)
- Air Medical Tracking
- Search and Rescue Teams
- Critical Incident Stress Management Teams (CISM)
- Tissue Recovery Referral

Emergency and Public Notifications

- Primary state warning point for National Alert Warning System (NAWAS)
  - FEMA and Dept. of Homeland Security
  - Local, Regional and Statewide events

- Emergency Alert System (EAS) activation point
  - Civil Emergencies (*disasters, evacuations, travel advisories, etc*)
  - AMBER Alert

Response Coordination

- Mass Casualty incident coordination
  - EMS mutual aid
  - Hospital bed count monitoring
- Railroad incident response coordination
- Logging incident response coordination
- Dam incident response coordination

Resource Center

- Ability to contact state and federal agencies 24 hours a day
- TDD-TTY capabilities
- Language Line
- Teleconference Bridge Coordination
- Exercise Participation

Communications with:

- 44 County Sheriff Offices
- Idaho State Police (ISP) statewide

Thank you!

Michele Carreras, Manager
Idaho State EMS Communications Center

NOAA

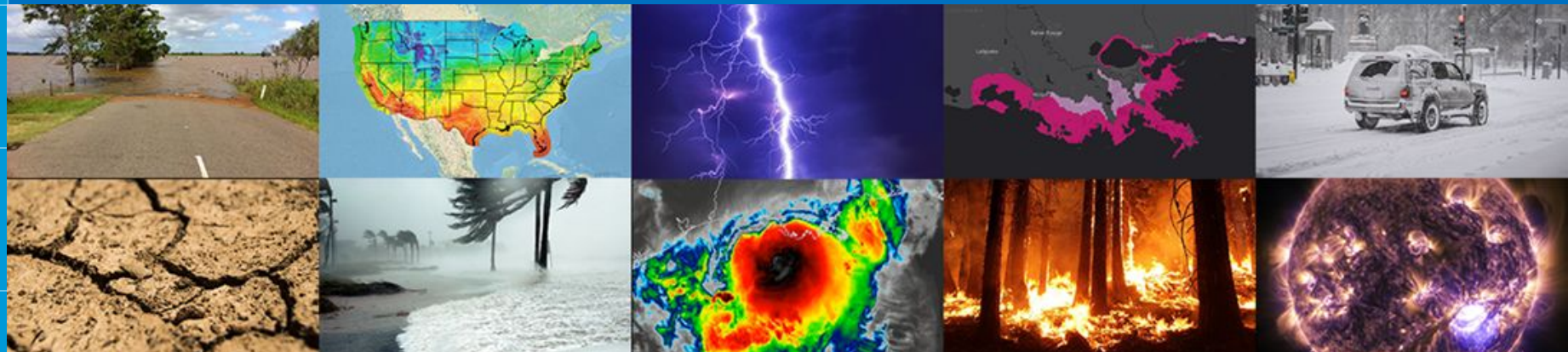
NW Area Committee Meeting

June 6, 2023

NOAA's National Weather Service:

Evolving to Build a Weather Ready Nation

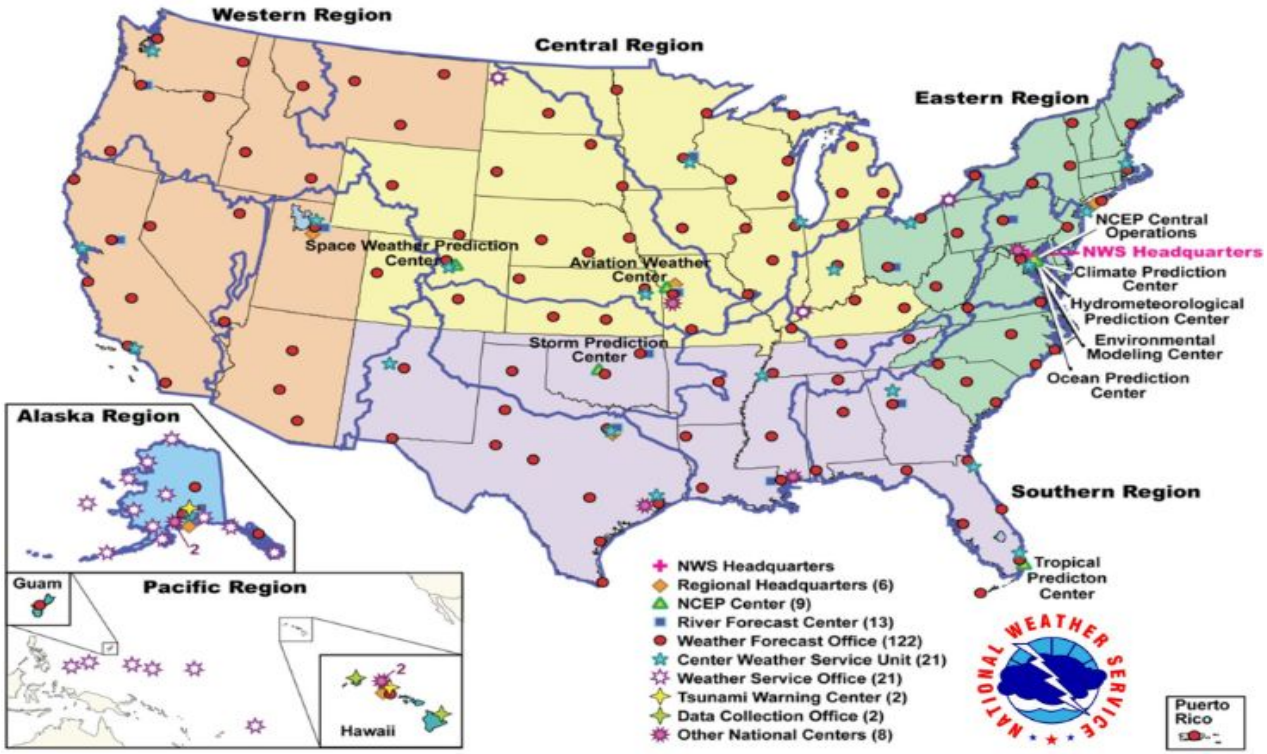
Matt Solum, NWS Regional Response and Preparedness Specialist
Jay Breidenbach, NWS Boise Warning Coordination Meteorologist
Stefanie Henry, NWS Boise Meteorologist



Outline

- What is NOAA's National Weather Service?
- How Impactful is Weather and Climate to the U.S.?
- How does the NWS provide Decision Support Services to Partners to build a Weather Ready Nation?
- HAZMAT Support

NOAA's National Weather Service



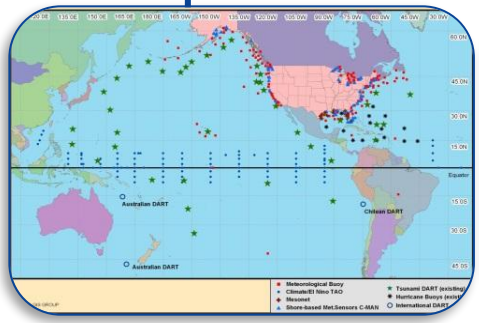
- 122 Forecast Offices to reduce impacts of weather, climate, and water events
- ~4700 Employees, 168 Units, 86% in the Field, 50K warnings and 1.5M forecasts per year
- Provide Decision Support Services for multitude of Partners, Agencies, and Sectors
- Communicate/message hazards by harnessing latest science and technology

Examples of NWS Partnerships

Other: Space Weather, Tsunami Programs, Broadcast Media, Law Enforcement and Highway Patrol, Fire Departments, Avalanche Programs, HAZMAT, EOCs

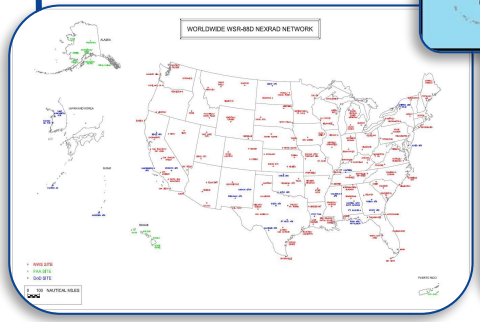
Multiple Sources of Observation

Buoy Networks

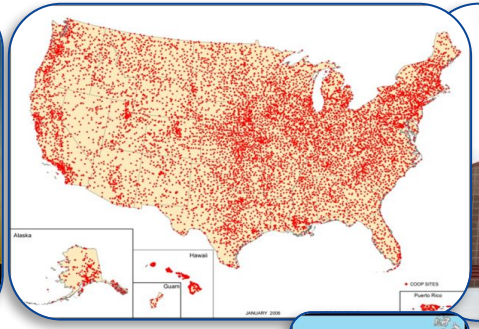


Automated Surface Observation System

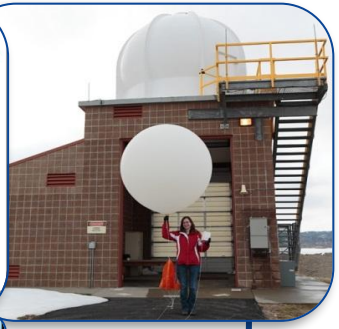
NEXRAD



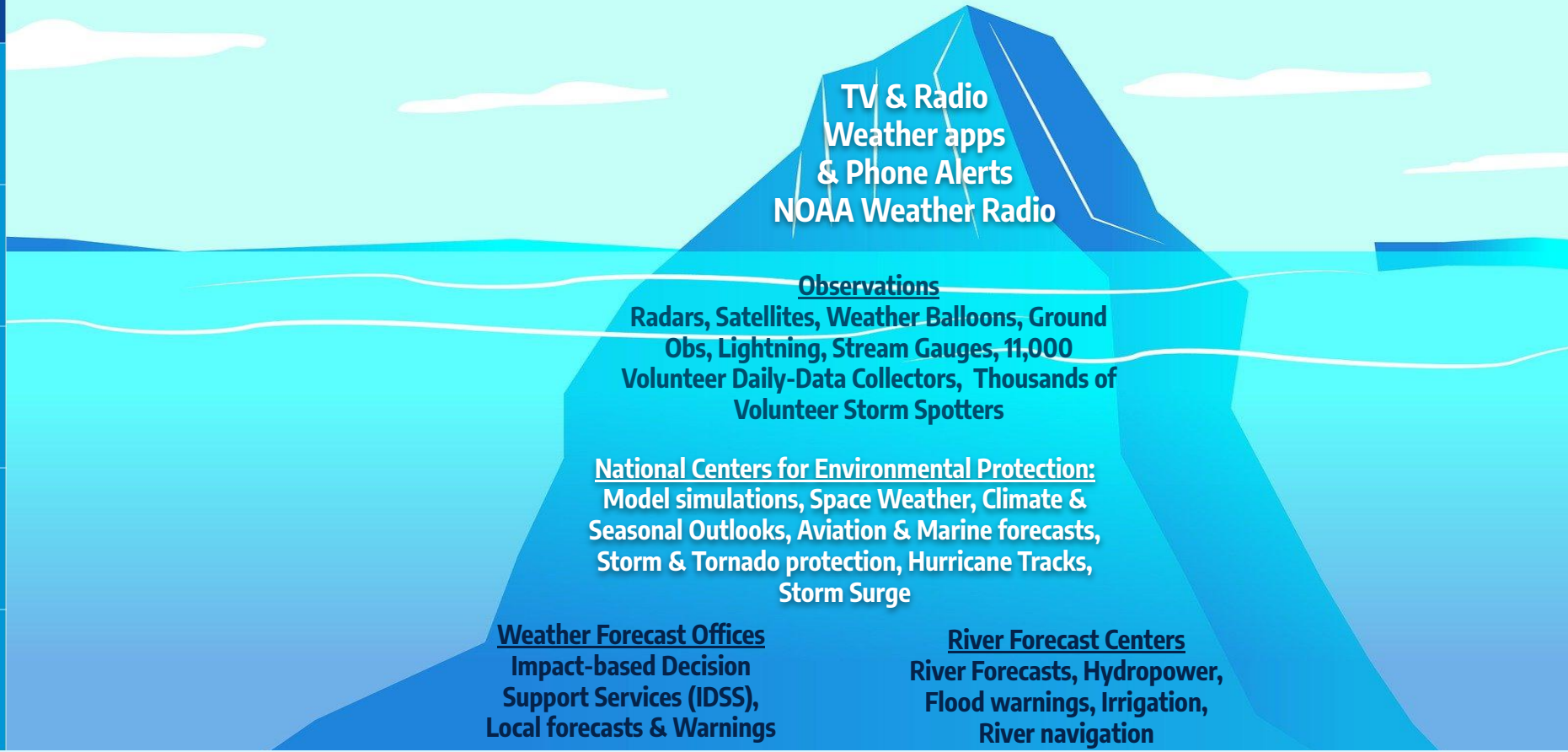
Cooperative Observers



Upper Air Network

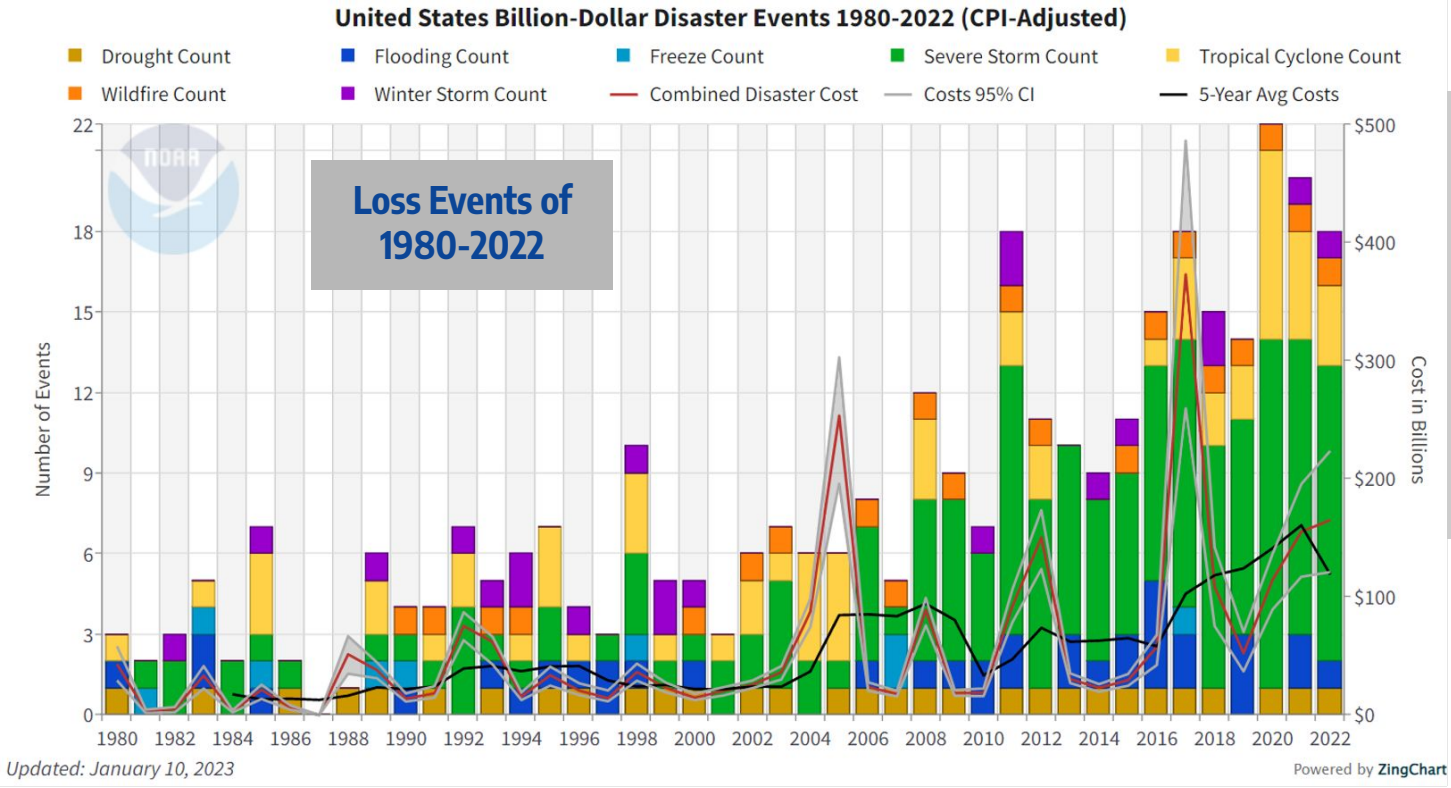


Most People Only See the Tip of the Iceberg



Major Weather and Climate Disaster Events 1980-2022

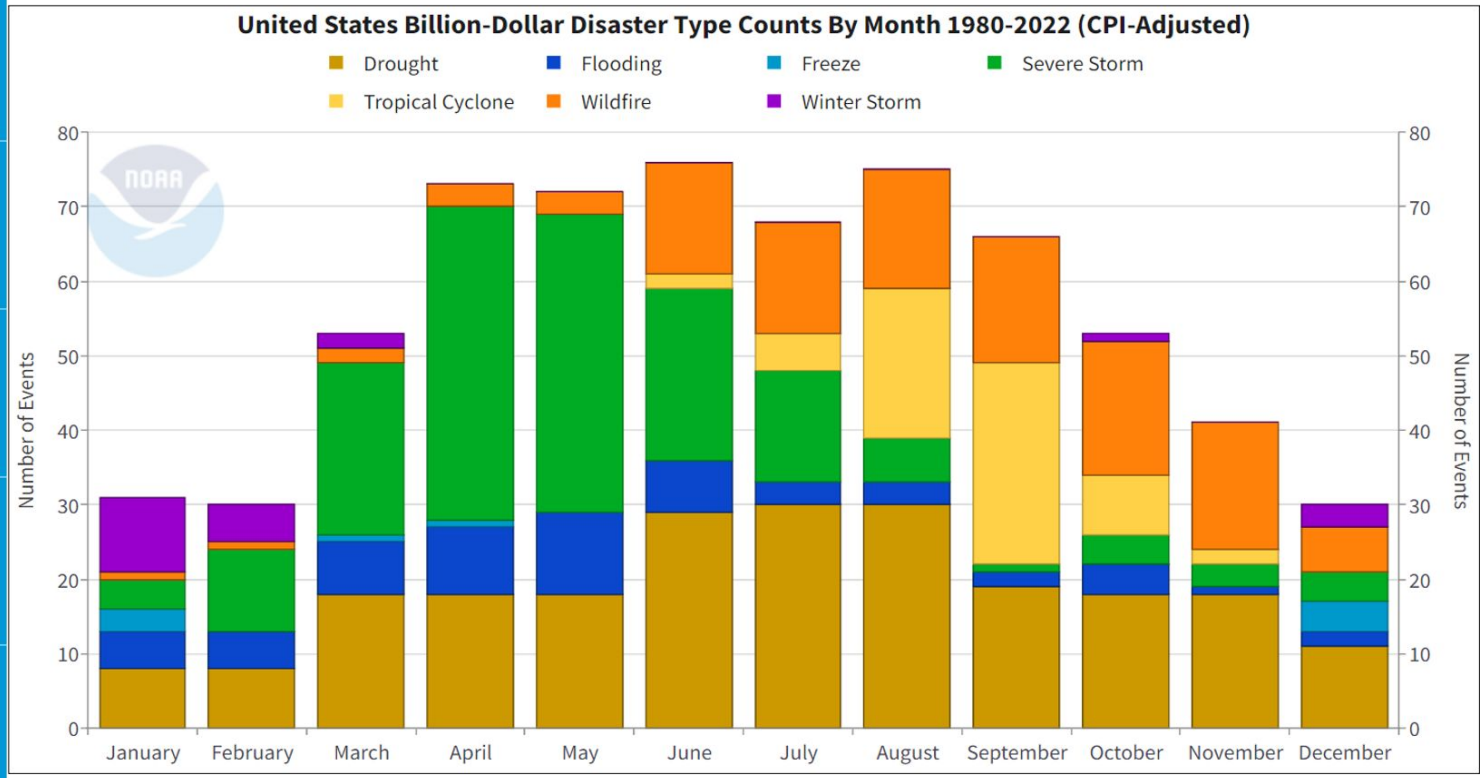
We Are Increasingly Vulnerable to Environmental Hazards



The number and cost of weather and climate disasters is rising due to a combination of population growth and development along with the influence of human-caused climate change on some type of extreme events that lead to billion-dollar disasters. NOAA NCEI Image.

When do these Disasters Occur?

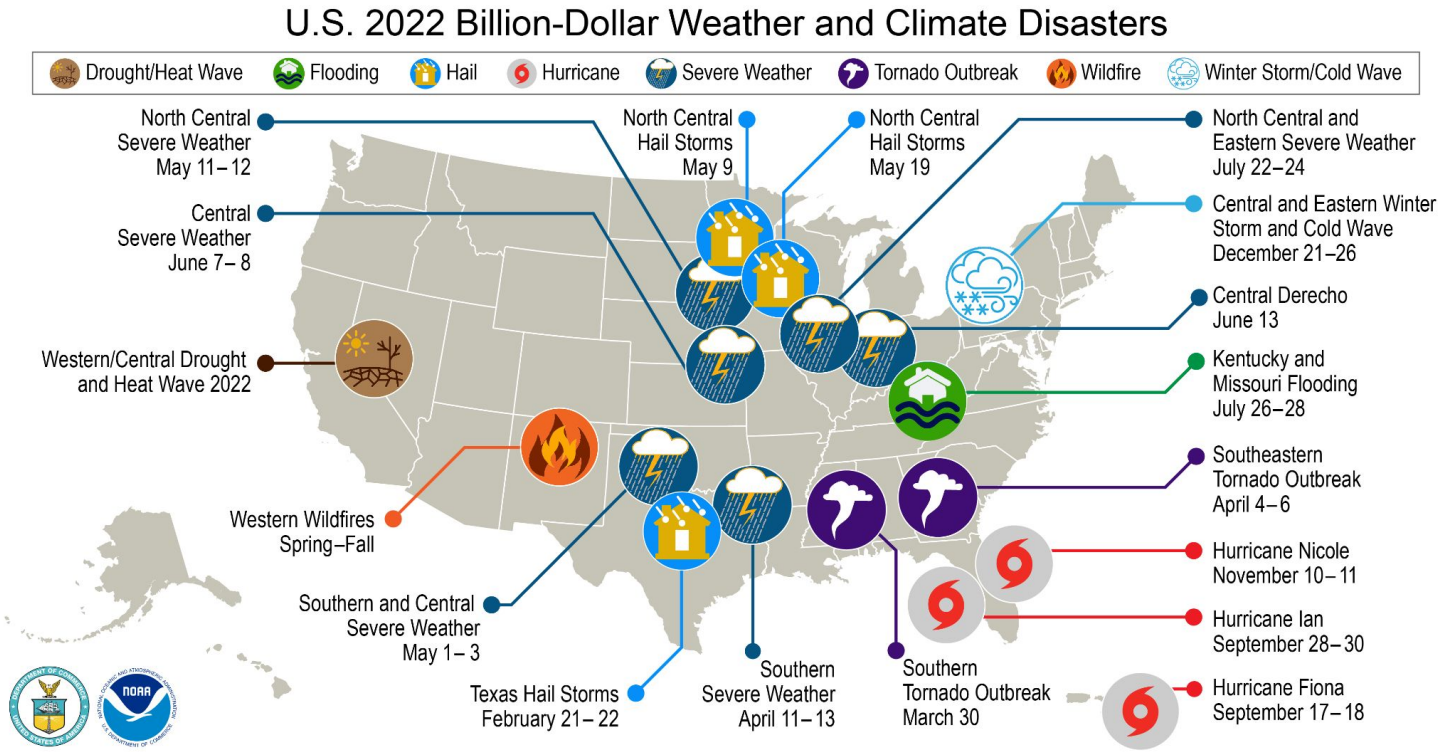
Disaster Type Counts by Month 1980-2022



The monthly climatology of U.S. billion-dollar weather and climate disasters from 1980 to 2022, showing which months have the greater frequency of disasters. NOAA NCEI Image.

2022 Billion-Dollar Weather and Climate Disasters

18 Events, $165 Billion in Damages, 424 Fatalities

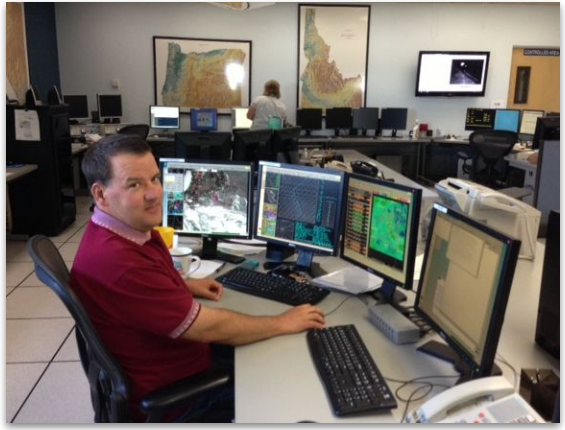


*This map denotes the approximate location for each of the **18 separate billion-dollar weather and climate disasters that impacted the United States in 2022.***

In 2022, the United States experienced 18 separate weather or climate disasters that each resulted in at least $1 billion in damages. NOAA map by NCEI.

NWS Services to Build a Weather Ready Nation

- Forecasts, watches, warnings, advisories, hydrological support
- Terminal Aerodrome Forecasts for airports and general aviation, transportation support for hazardous weather and avalanche
- Fire weather decision support for wildfires & prescribed burns; IMETs
- Marine and Ocean weather predictions; Space weather predictions
- Support large outdoor events: festivals, Super Bowl and other sports, concerts
- Hazardous incidents including HAZMAT, aviation/railway accidents, major disaster events (hurricanes, tsunamis, wildfires, severe weather, dam break)



Common Weather Hazards Each Season in PacNW

Winter	Spring	Summer and Fall
Valley Air Quality	Severe Weather (Wind, Hail, Tornadoes, Lightning)	Heat Waves
Avalanche	Flash Flooding	Wildfires (Air Quality, Evacuations, Burn Scar Debris Flows)
Snow & Ice Storms	River Flooding	Wind & Dust Storms
Marine Threats	Landslides	Drought
Cold Outbreaks		

What is the Difference between Outlooks, Watches, Advisories, and Warnings?

Impact-Based Decision Support Services

Our forecasts & warnings: confidence, context, social science

+

Trusted connections with decision-making partners: tabletops, feedback, engagement

=

Actionable Environmental Intelligence.

Impact-Based Decision Support Services

HAZMAT Support - What can we do?

The Wireless Information System for Emergency Responders (WISER) app was discontinued in February 2023. This was a tool used by first responders (FD) for HAZMAT releases. We may see a growing need for HAZMAT plume modeling and the NWS may be called upon more often.

Hysplit Dispersion Modeling

Cameo/Aloha/Marplot

IMAAC Coordination

Spot Forecasts

Virtual Support

Onsite Support

Exercises

Partner Relationships

HAZMAT Response Tools & Partners

HYSPLIT models simulate the dispersion and trajectory of substances transported and dispersed through our atmosphere, over local to global scales.

- Developed by NOAA Air Resources Laboratory (ARL)
- Available to the WFO via web or request to the SDM
- Designed for scales of 1 to 1000's of km from the source

Interagency Modeling and Atmospheric Assessment Center

The IMAAC Technical Operations Hub is staffed by federal, military and contractor/watch-stander specialists

Available for larger-scale events or events and support that surpass a WFO's capabilities and/or capacity

HYSPLIT Limitations

The HYSPLIT implementation does not incorporate the effects of:

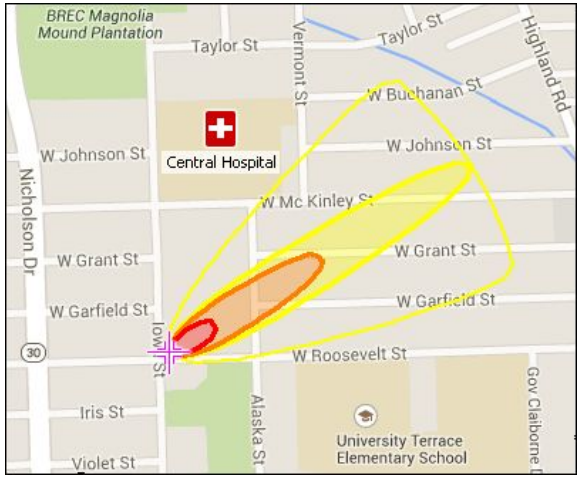
- Chemical reactions
- Dense gases
- Byproducts from fires, explosions, or chemical reactions
- Materials released that are not neutrally-buoyant
- Deposition - unless the user enters appropriate wet and dry deposition parameters
- Particulate transport- unless the user enters information about the particle
- Complex terrain- other than what is resolved by the meteorological model's terrain
- Varying emission rate, except for the chemical simulations which uses the ALOHA model to calculate a time-varying emission rate

It is important to be aware of model limitations. Since these limitations are not incorporated the forecaster must be able to identify them and assess if they are impactful enough to result in significant errors in plume depiction.

Cameo/Aloha/Marplot

CAMEO is actually a suite of four core programs that can be used together or separately:

- CAMEO Data Manager
- CAMEO Chemicals
- MARPLOT - Mapping application
- ALOHA - Atmospheric dispersion model



IMAAC is a Partnership

Interagency Modeling and
Atmospheric Assessment Center

Provide a single point for the coordination and dissemination of federal dispersion modeling and hazard prediction products that represent the Federal position during actual or potential incidents involving hazardous atmospheric releases.

IMAAC Activation Sequence

1	2	3	4	5
IMAAC Activated	**Initial IMAAC Products Developed**	**Initial IMAAC Products Distributed**	**IMAAC Coordination Teleconference**	**IMAAC Deactivated**
Activation by any partner! Notification through **CBRN Responder** if activated by a partner	Initial Plume Modeling	Email notification via CBRN Responder sent to office email from the account. Cease HYSPLIT products as to not provide conflicting information	Notification through CBRN Responder, with information about the incident. This can include a weather briefing and additional event response concerns.	Event has ended or HAZMAT situation under control while additional recovery efforts continue

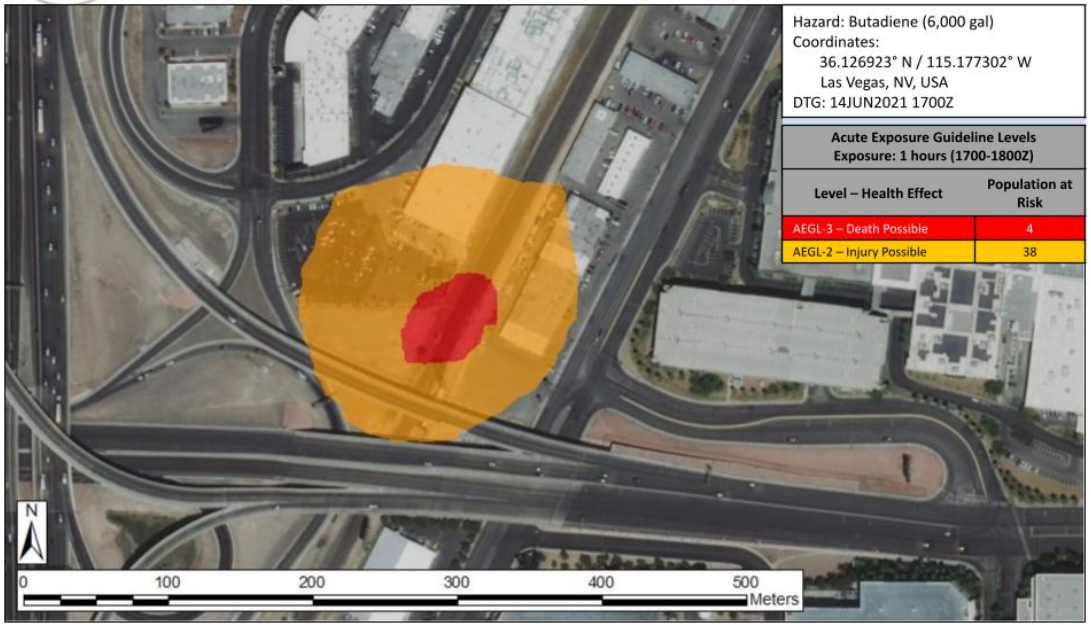
24/7 IMAAC Phone #: 1-877-240-1187

IMAAC Products

CUI
EXERCISE EXERCISE EXERCISE

RFI 20-9999

Butadiene – AEGL – 1800Z



Hazard: Butadiene (6,000 gal)
Coordinates:
36.126923° N / 115.177302° W
Las Vegas, NV, USA
DTG: 14JUN2021 1700Z

Acute Exposure Guideline Levels Exposure: 1 hours (1700-1800Z)	
Level – Health Effect	Population at Risk
AEGL-3 – Death Possible	4
AEGL-2 – Injury Possible	38

EXERCISE EXERCISE EXERCISE
CUI

4

CUI
EXERCISE EXERCISE EXERCISE

Date:	14JUN2021 1730Z
Version:	Initial Product

IMAAC

Interagency Modeling and

CUI
EXERCISE EXERCISE EXERCISE

RFI 20-9999

Request Summary

Requestor	Kate Guillet, NOAA
Contact information	813-956-7624 kate.guillet@noaa.gov

CUI
EXERCISE EXERCISE EXERCISE

RFI 20-9999

Acute Exposure Guideline Levels (AEGL)

Value	Description
AEGL-3	**Death Possible** - the airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience life-threatening health effects or death.
AEGL-2	**Injury Possible** - the airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.
AEGL-1 (May not be displayed or defined)	**Threshold** - the airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure.

FINAL AEGLs – may be used on a permanent basis by all federal, state and local agencies, and private organizations.

INTERIM AEGLs – represents the best efforts of the AEGL Committee to establish exposure limits, and the values are available for use as deemed appropriate on an interim basis by federal and state regulatory agencies and the private sector.

CUI
EXERCISE EXERCISE EXERCISE

RFI 20-9999

Population Data

- Population figures are based on LandScan™, a database produced by Oak Ridge National Laboratory.
- LandScan™ is based on the 2010 census for the U.S. (other nations vary), overhead imagery, geo-economic, and other observable data. It was updated in

CUI
EXERCISE EXERCISE EXERCISE

RFI 20-9999

Assumptions / Comments

- The model assumes a chemical storage container leaking butadiene from a 6” hole.
- Because there was no description of agent pooling around the release location, the hole was set to near the top of the car. A hole farther down would result in a larger release.
- Relatively still weather conditions keep the downwind hazard near to the release location.

EXERCISE EXERCISE EXERCISE
CUI

3

Spot Forecasts

https://www.weather.gov/spot/request/

Rumford Power Hazardous Chemical Transfer Part II (Take II)

HAZMAT Land

Forecast Start Time:2023-06-01 7:00 AM EDT
Request Time: 2023-05-31 12:22 PM EDT
Deliver Time: 2023-05-31 4:00 PM EDT
Forecast Complete At: 2023-05-31 3:46 PM EDT

Requested By: Oxford County EMA
Contact:
Phone:
Fax:

Location Legal:
Lat/Lon: 44.5305 / -70.5224
Quad:
Calculated: 44.5305 / -70.5224

Elevation:
Drainage:
Aspect:
Size:
Fuel Type:

Observations

Site	Date	Elev	Wind	Temp	WB	RH	Td	Sky	Wx	Vsby	Rmks

No observations available

Submit New Observation

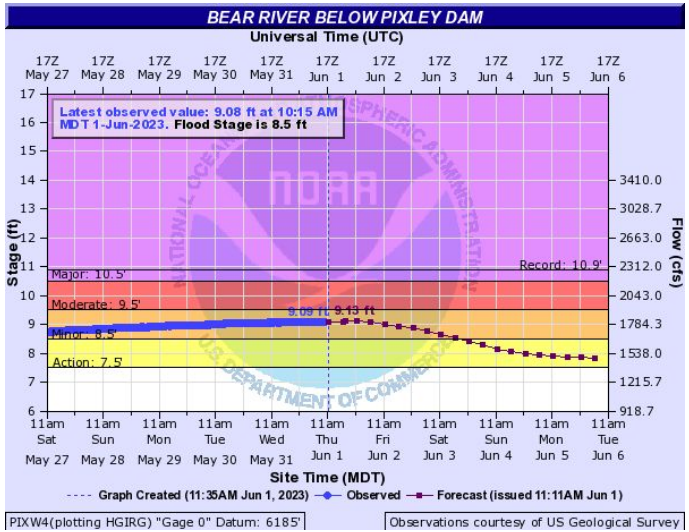
Requested Parameters	Remarks
X X . Sky/Weather	
X X . Chance of Precipitation	
X X . Surface Wind	
X X . Temperature	
X X . Humidity	
X X . Rainfall Amount	
X X . Snowfall Amount	
X X . Lightning Activity Level	
X X . Mixing Height	
X X . Transport Winds	
X X . Stability Class	
X X . Apparent Temperature	
X X . Nighttime Inversion Depth	
X X . Inversion Setup/Burnoff	

Forecast:

```
Spot Forecast for Rumford Power Hazardous Chemical Transfer Part...Oxford County EMA
National Weather Service Gray ME
346 PM EDT Wed May 31 2023

Forecast is based on forecast start time of 0700 EDT on June 01.
If conditions become unrepresentative...contact the National Weather
Service.

Please contact our office at (207) 688-3224, if you have questions
or concerns with this forecast.

.DISCUSSION...
Good afternoon. High pressure will bring mostly sunny and light winds
during the day on Thursday with a very low chance of a shower after
1 PM. It will also be very warm with high temperatures quickly
climbing into the 80s by late morning and approaching 90 degrees
in the afternoon.

.THURSDAY...

Sky/weather........Mostly sunny (10-20 percent). Isolated showers in
                   the afternoon.
Chance of pcpn......20 percent.
LAL................1.
Max temperature.....Around 90.
Min humidity........30 percent.
Max apparent temp...86.
Surface winds (mph).Northwest winds around 5 mph in the morning and
                   early afternoon becoming light.
Mixing height.......7900 ft AGL.
Transport winds.....Northwest 6 to 10 mph.
Rainfall amount.....0.00 inches.
Snowfall amount.....0.0 inches.

TIME (EDT)      7AM 8AM 9AM 10A 11A 12P 1PM 2PM 3PM 4PM 5PM
Sky (%).........5   5   5   5   5   26  26  26  26  26  26
Weather cov.....                        ISO ISO ISO ISO ISO
Weather type....                        RW  RW  RW  RW  RW
Tstm cov........NO  NO  NO  NO  NO  NO  NO  NO  NO  NO  NO
Chc of pcpn (%).0   0   0   0   5   10  15  20  20  20  20
LAL.............1   1   1   1   1   1   1   1   1   1   1
Temp............62  71  76  80  84  85  87  88  87  86  85
RH..............75  59  50  44  40  36  32  30  32  34  36
Aparnt tmp (F)..62  71  76  80  83  84  85  86  85  84  84
Surface wnd dir.NW  W   NW  NW  NW  NW  NW  NW  NW  N   N
Surface wnd spd.5   5   5   5   5   5   5   3   2   2
Surface wnd gst.8   9   9   9   9   9   9   8   7   6
Mix hgt (kft)...0.5 0.9 1.6 2.4 4.6 7.8 7.9 5.9 7.6 6.7 3.4
Transp wind dir.NW  NW  NW  N   N   N   N   N   N   N   N
Transp wind spd.9   9   9   9   9   10  8   8   8   8   6

.THURSDAY NIGHT...
```

Hydrology Support

River level and streamflow observations and forecasts



Exercises/Onsite Support

Thank You - Any Questions?

Matt Solum, NWS Regional Response and Preparedness Specialist

matt.solum@noaa.gov

Jay Breidenbach, NWS Boise Warning Coordination Meteorologist

jay.breidenbach@noaa.gov

Stefanie Henry, NWS Boise Meteorologist

stefanie.henry@noaa.gov

OVERVIEW OF THE KOOTENAI RIVER GRP

Cody Harris, President, Whitewater Rescue Institute

INTRODUCTION

Whitewater Rescue Institute, Inc. is a USCG approved OSRO based in Missoula, MT. We specialize in spills to fast water and provide Spill Management Team support in Safety, Planning, Logistics and Operations. In addition to response, we host numerous training events in technical rescue/safety and spill response.

AGENDA

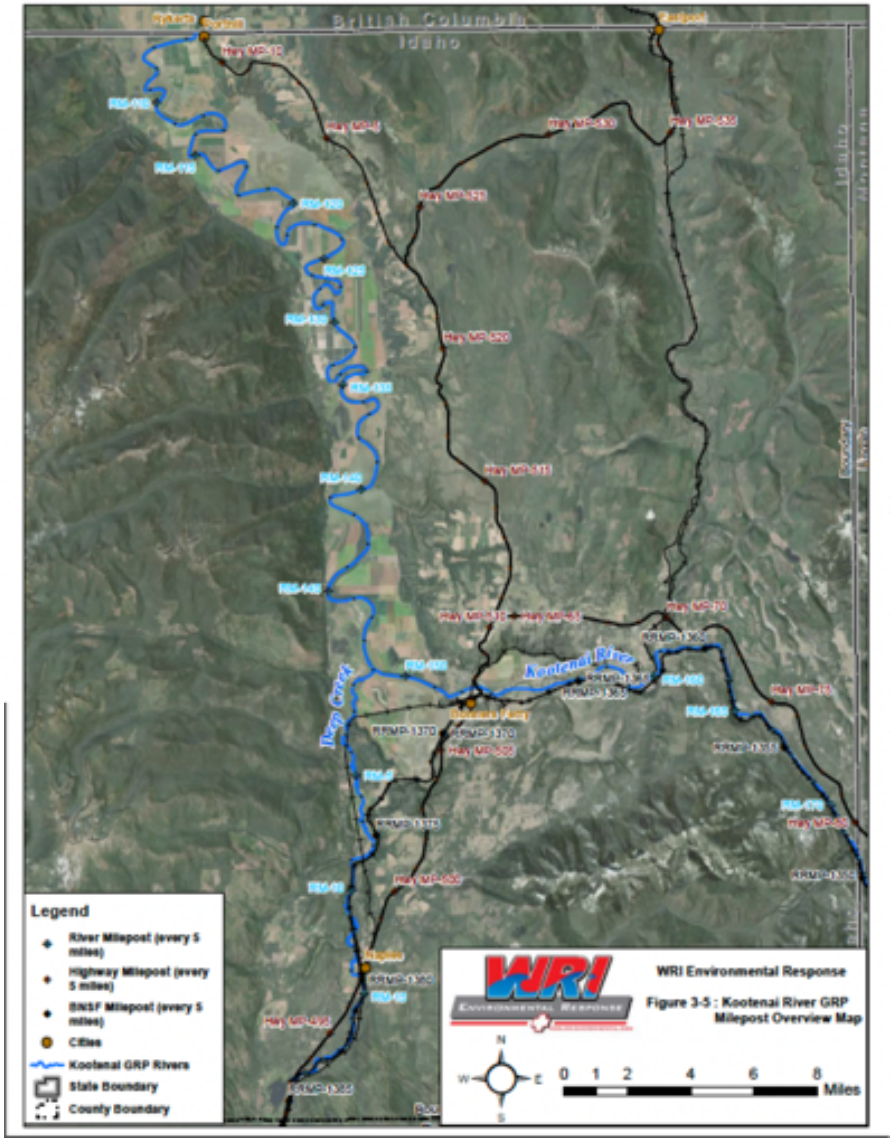
Kootenai River/Wildlife

Restoration Projects

Pre-GRP Trainings and Plans

2020 Derailment

Kootenai River GRP Summary



KOOTENAI RIVER, BOUNDARY COUNTY, IDAHO

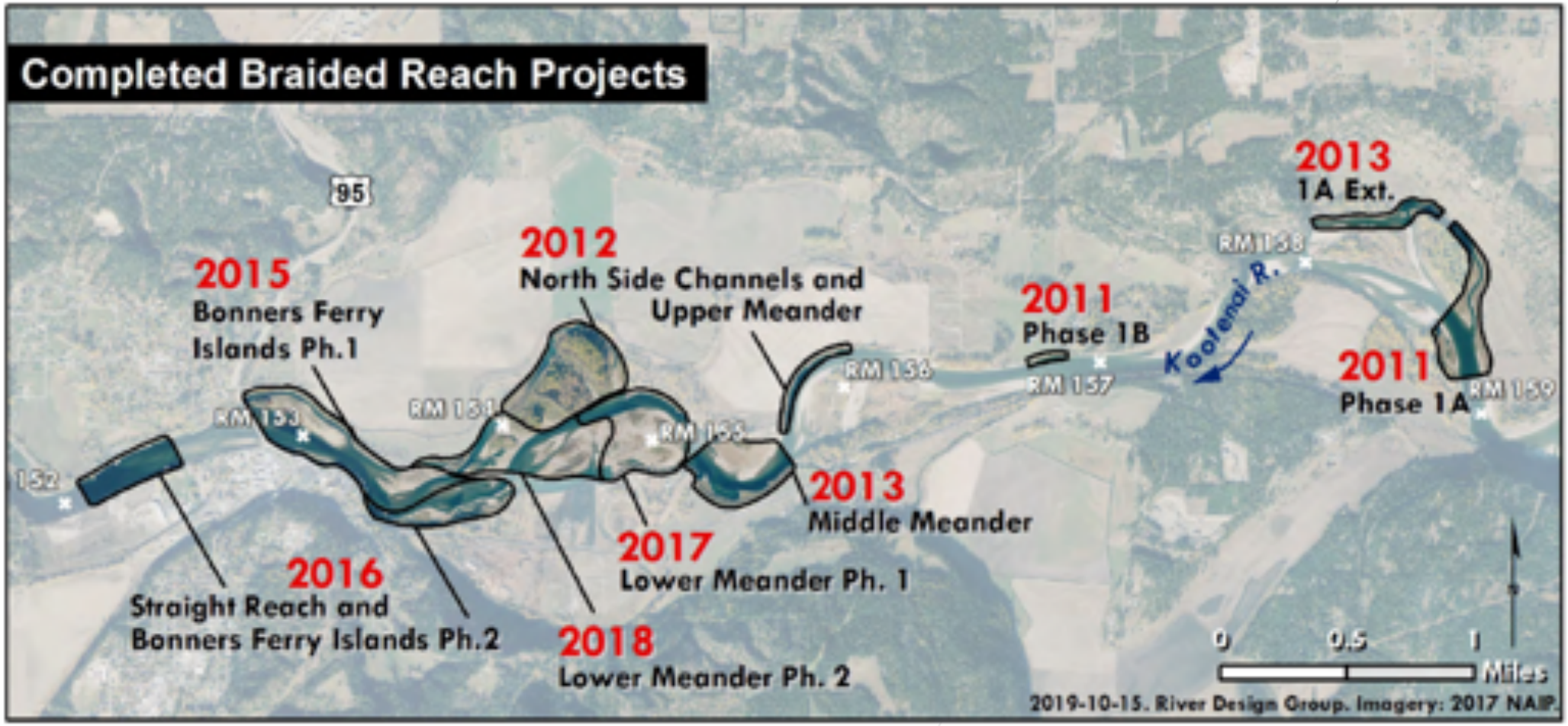
- Kootenai is 3rd largest tributary to Columbia, 20% of Lower Columbia Flow.
- GRP: ~60 river miles from MT border to CAN Border
- Average Flows Range from 9,000 cfs – 19,000 cfs
- Libby Dam (USACE) is located 45 miles upstream from MT border
- 3 distinct sections in GRP:
  - Canyon
  - Braided
  - Meander

WILDLIFE

- Kootenai River White Sturgeon: Endangered Species
  - Genetically distinct and unique population of white sturgeon
  - Significant cultural importance for KTOI
  - Hatchery at Bonners Ferry
- Burbot: Petitioned
  - Significant cultural importance for KTOI
  - Hatchery at Moyie Springs

KOOTENAI TRIBE OF IDAHO: KOOTENAI RIVER HABITAT RESTORATION PROJECT MASTER PLAN

- Project in 14th year
- Restore river to improve habitat for native wildlife
  - Braided Reach: pool ladders, vegetated floodplain, rocky substrate, variety of habitat
  - Meander Reach: Nutrient inputs, Reconnect Floodplain, variety of habitat
- Accomplishments:
  - 6 mega-pools constructed
  - 24,000 linear feet of bank structures
  - 90 acres of new floodplain surfaces
  - 6 side channels
  - 27,000 plantings
  - 93,000 pieces of wood added
  - 762,000 cubic yards of earthwork


Completed Braided Reach Projects
95
2015
Bonners Ferry
Islands Ph.1
2012
North Side Channels and
Upper Meander
2011
Phase 1B
2013
1A Ext.
2011
Phase 1A
2013
Middle Meander
2017
Lower Meander Ph. 1
2016
Straight Reach and
Bonners Ferry Islands Ph.2
2018
Lower Meander Ph. 2
Kootenai R.
RM 152
RM 153
RM 154
RM 155
RM 156
RM 157
RM 158
RM 159
0
0.5
1
Miles
2019-10-15. River Design Group. Imagery: 2017 NAIP.

POTENTIAL SPILL SOURCES TO KOOTENAI RIVER

1. Two Class I Railroads operate along the river
2. Hwy 2 follows and crosses river
3. Libby Dam

RAILROAD SPONSORED TRAININGS AND PLANS

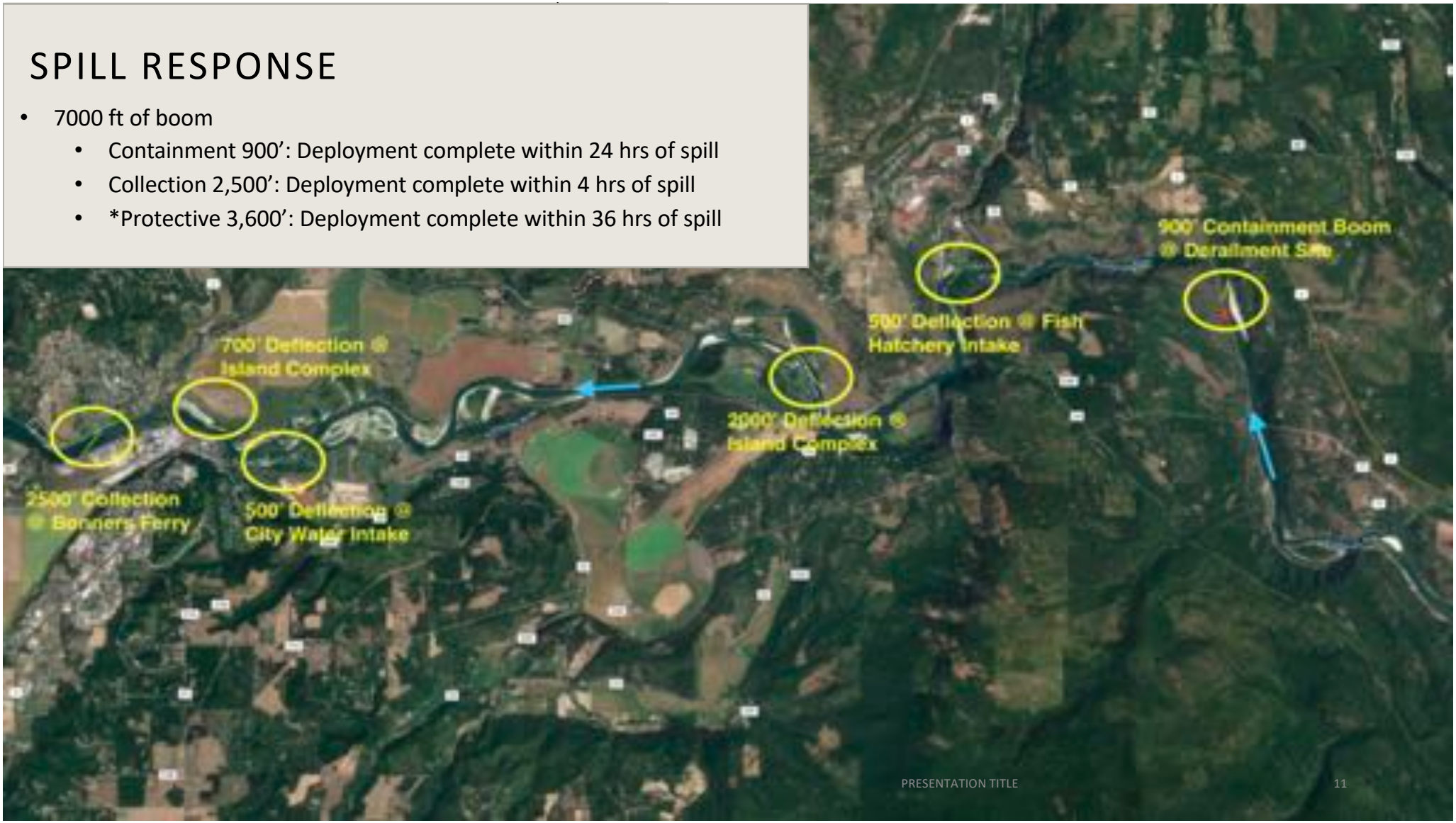
- Industry Developed GRP
- At least 5 Industry Sponsored Trainings have occurred since 2016
- 13,000’ of boom and spill response equipment is staged in area

2020 KOOTENAI DERAILMENT

- December 31, 2019
- Three Locomotives Derailed at the MT/WY Border. One entered the water completely.
- ~ 6,000 Gal of diesel was released
- 6 miles downstream is intake for Moyie Fish Hatchery
- 15 miles downstream is KTOI Restoration project
- 30 miles downstream is Bonners Ferry Water Intake
- 60 miles downstream River crosses US/CAN border

SPILL RESPONSE

- 7000 ft of boom
  - Containment 900’: Deployment complete within 24 hrs of spill
  - Collection 2,500’: Deployment complete within 4 hrs of spill
  - *Protective 3,600’: Deployment complete within 36 hrs of spill



LESSONS LEARNED FROM SPILL

Industry sponsored GRP focused on collection points. Culturally and environmentally sensitive resources, unless obvious, were limited. This caused a delay in the deployment of some strategies as UC discussed priorities.

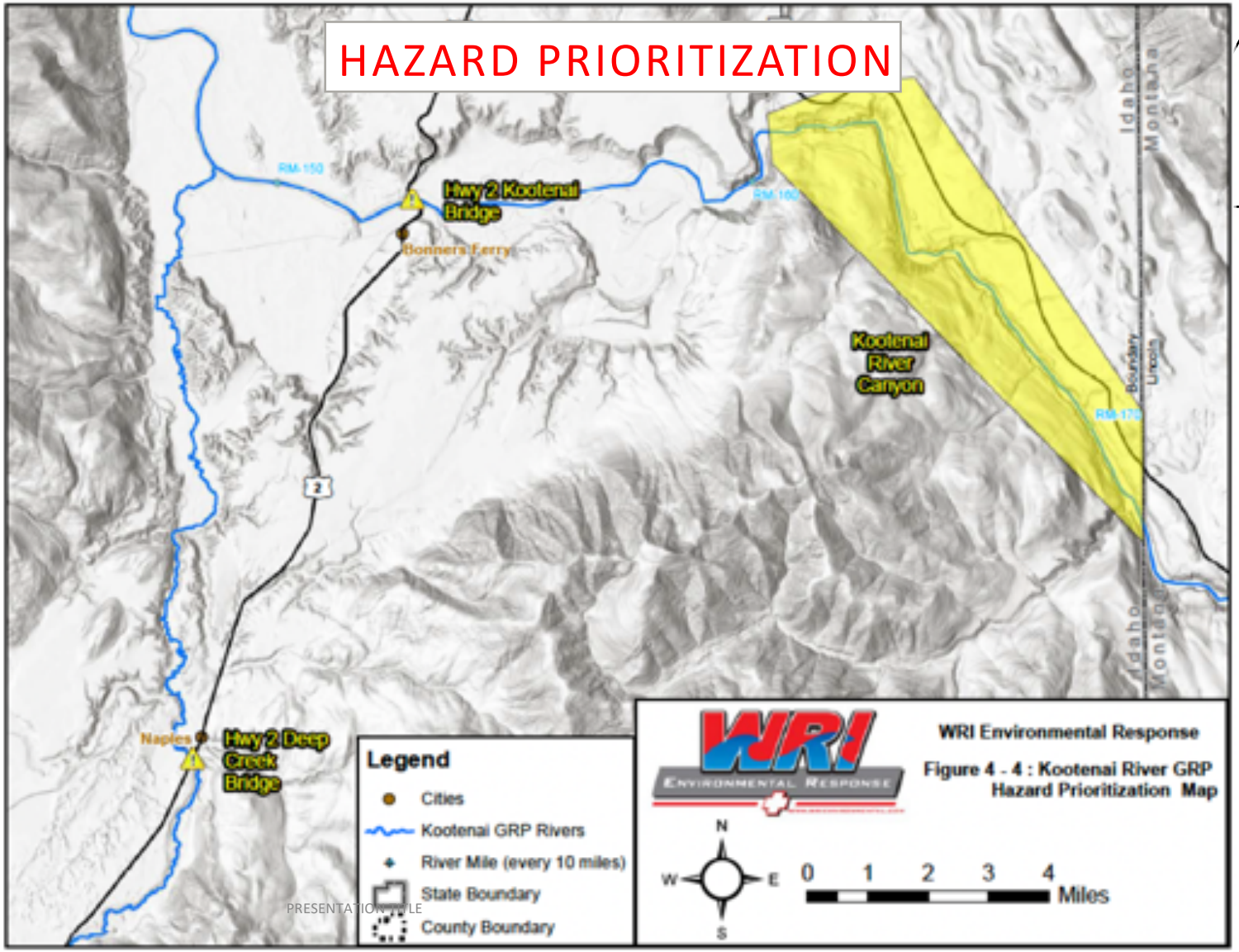
Collection strategies are limited to non-existent in the canyon and braided sections.

Trainings with local first responders prior to spill paid dividends in ability to deploy boom quickly/effectively.

Staged equipment was critical to robust response.

The Kootenai River needed a NWAC GRP.

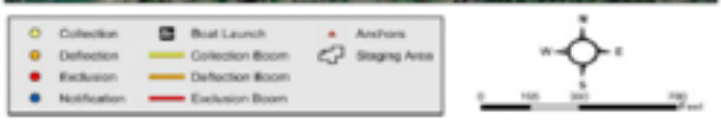
HAZARD PRIORITIZATION



High Risk Points Upper Canyon Area	RM 172.0 – RM 159.0						
						Sector Map	1
General Strategy Description	Product Collection and Recovery and Resource Protection						
Staging Area	**Site ID**						
Twin Rivers	161.0						
Bonners Ferry SAR	151.5						
Suggested Boat Launches	**Site ID**						
Twin Rivers	161.0						
Bonners Ferry SAR	151.5						
		Equipment Needs					
Suggested Strategies	**Site ID**	**Curtain Boom**	**Recovery Device**	**Rope**	**On shore Anchors**	**In-water Anchors**	**Boat?**
Twin River Hatchery	161.0	300 ft	N/A	375 ft	1	1	No
Restored Habitat 158.6	158.6	1200 ft	N/A	2400 ft	4	4	Yes
Restored Habitat 157.0	157.0	750 ft	N/A	1000 ft	2	0	Yes
Restored Habitat 154.5	154.5	1800 ft	N/A	2400 ft	2	0	Yes
Restored Habitat 153.3	153.3	200 ft	N/A	250 ft	1	1	Yes
Restored Habitat 152.9	152.9	600 ft	N/A	850 ft	2	0	Yes
Bonners Ferry Intake	153.0	50 ft	N/A	75 ft	2	0	Yes
Bonners Ferry SAR	151.5	1700 ft	Skimmer, Vac Truck	2000 ft	2	0	Yes

Twin Rivers Hatchery Intake and Boat Launch — RM 161.0

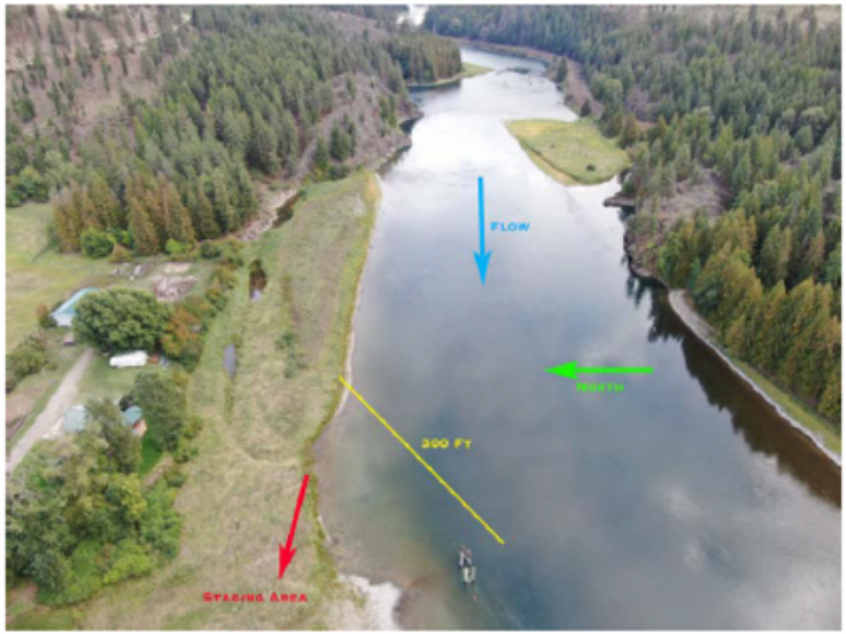
Site Lat Long:	48.71536 -116.18607 https://goo.gl/maps/LDh8xjHioLVZFDX2A
Strategy Objective:	Notification and deployment of deflection/exclusion boom: Deflection/exclusion of spilled material flowing down the waterway from upstream source. Deploy boom to exclude spilled materials from entering the intake.
Implementation:	Kootenai River flow direction at strategy is north to south. Contact Hatchery to shut off Kootenai River water intake. Secure upstream end of boom to on shore anchor, river right. Secure downstream end of boom to in water anchor. Shoreline: Mixed sand and gravel bars and gently sloping banks (Type 5).
Site Safety Note:	Slip, trip, fall hazards; traffic/roadway hazards, congestion, water hazards, hazards from spilled material. Expect extreme winter conditions from November to March.
Staging Area:	YES
Field Notes:	4WD Access: NO Locked Gate: NO Response equipment stored in "Conex box". Twin Rivers Road is steep, narrow and with multiple switch backs - may be challenging during inclement weather. Road is maintained when Hatchery is operational.
Resources Targeted:	Fish Hatchery water intake, Recreational Use, Wildlife Habitat, and T & E species.
Watercourse:	Kootenai River: low gradient, discontinuous sand to cobble river bed, width 300-700 feet (variable), depth 5-35 feet (variable)



Suggested Equipment	
Quantity	Description
300 ft.	Curtain Boom / Tow Bridles
As Appropriate	Vacuum Truck; Portable Skimmer; Absorbent Boom
375ft.	Rope
1	On-shore Anchors
As Appropriate	Post pounder, shovels, knife, wood saw
1	In Water Anchors
As Appropriate	PFD work vests/rubber boots
As Appropriate	Throw bags, first aid kit
Jet boat/raft needed for strategy implementation? No	

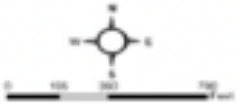
Suggested Personnel	
Quantity	Description
1	Hazmat Supervisor
1	Safety Supervisor
2 / 0	Hazmat Field Techs / Traffic Flagger
0 / 0	Boat Operator / Swiftwater Tech

Visited on 09/17/2021 River discharge in CFS 9,000


FLOW
NORTH
300 FT
STAGING AREA

158.6 Habitat Restoration 1 — RM 158.6

Site Lat Long:	48.70255 -116.20739 https://goo.gl/maps/iLf7eLgi2LeM8xKS8
Strategy Objective:	Deployment of deflection/exclusion boom: Deflection/exclusion of spilled material flowing down the waterway from upstream source. Deploy boom to exclude spilled materials from entering the sensitive habitat.
Implementation:	Kootenai River flow direction at strategy is south to northwest. Secure upstream end of boom to on-shore anchors on river right. Secure downstream end of boom to in-water anchor. Shoreline: Mixed Rip-rap/log and gravel bars (type 6).
Site Safety Note:	Slip, trip, fall hazards; water hazards, hazards from spilled material. Expect extreme winter conditions from November to March.
Staging Area:	NO: Nearest: Twin Rivers Boat Launch
Field Notes:	4WD Access: NO Locked Gate: NO Response is by water ONLY.
Resources Targeted:	Sensitive Habitat, Wildlife Habitat, and T & E species.
Watercourse:	Kootenai River: low gradient, discontinuous sand to cobble river bed, width 300-700 feet (variable), depth 5-35 feet (variable)



Suggested Equipment	
Quantity	Description
1200 ft total.	Curtain Boom / Tow Bridles
As Appropriate	Boom Vane, Absorbent Boom
2400 ft.	Rope
4	On-Shore Anchors
As Appropriate	Post pounder, shovels, knife, wood saw
4	In-Water Anchors
As Appropriate	PFD work vests/rubber boots
As Appropriate	Throw bags, first aid kit
Jet boat/raft needed for strategy implementation? Y	

Suggested Personnel	
Quantity	Description
1	Hazmat Supervisor
1	Safety Supervisor
6 / 0	Hazmat Field Techs / Traffic Flagger
2 / 2	Boat Operator / Swiftwater Tech

Visited on 09/17/2021 River Discharge in CFS: 9,000

Bonners Ferry SAR Boat Ramp — RM 151.5

Site Lat Long:	48.69409 -116.32875 https://goo.gl/maps/UwcGConm4u6xpV/hd7
Strategy Objective:	Collection/Recovery: Collection and Recovery of spilled material flowing down the waterway from upstream source. Deploy boom to collect/recovery spilled materials.
Implementation:	Kootenai River flow direction at strategy is east to west. Secure upstream end of boom to existing anchor installed in rock on river right. Secure downstream end of boom to on-shore anchors on river left. Shoreline: Varied/mixed shore line of man-made structure and rip-rap (type 8B) and vegetated, steeply sloping bank (type 8F).
Site Safety Note:	Slip, trips, fall hazards; traffic roadway hazards, water hazards, hazards from spilled material. Expect extreme winter conditions from November through March.
Staging Area:	YES Large staging area across street
Field Notes:	4WD Access: NO Locked Gate: NO Developed deep water boat ramp
Resources Targeted:	Wildlife Habitat, and T & E species; Downstream Hatchery and irrigation water supplies; recreational use
Watercourse:	Kootenai River: low gradient, discontinuous sand to cobble river bed, width 300-700 feet (variable), depth 5-35 feet (variable)

Suggested Equipment	
Quantity	Description
1700 ft.	Curtain Boom / Tow Bridles
As Appropriate	Absorbent Boom, skimmer, vacuum truck, etc
2000 ft.	Rope
1	On-shore Anchors
As Appropriate	Post pounder, shovels, knife, wood saw
0	In Water Anchors
As Appropriate	PFD work vests/rubber boots
As Appropriate	Throw bags, first aid kit
Jet boat/raft needed for strategy implementation? Y	

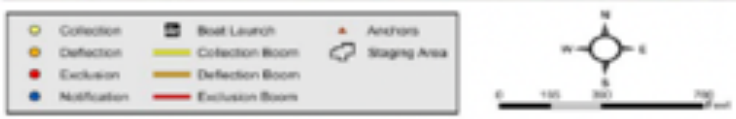
Suggested Personnel	
Quantity	Description
1	Hazmat Supervisor
1	Safety Supervisor
4 / 0	Hazmat Field Techs / Traffic Flagger
2 / 2	Boat Operator / Swiftwater Tech

Visited on 09/17/2021 River Discharge in CFS: 9,000

High Risk Point Bonners Ferry	**RM 153.0 – 152.0**						
						Sector Map	1
General Strategy Description	Product Collection and Recovery and Resource Protection						
Staging Area	**Site ID**						
Bonners Ferry SAR	151.7						
Suggested Boat Launches	**Site ID**						
Bonners Ferry SAR	151.7						
Deep Creek Confluence	149.0						
		Equipment Needs					
Suggested Strategies	**Site ID**	**Curtain Boom**	**Recovery Device**	**Rope**	**On-shore Anchors**	**In-water Anchors**	**Boat?**
Bonners Ferry SAR	151.7	1700 ft	Skimmer, Vac Truck	2000 ft	2	0	Yes
KTOI Hatchery Intake	149.6	300 ft	N/A (Exclusion)	375 ft	2	0	Yes
Deep Creek Confluence	149.0	2000 ft	Skimmer, Vac Truck	2500 ft	2	0	Yes

Kootenai Tribal Fish Hatchery — RM 149.6

Site Lat Long:	48.705023, -116.369786 https://goo.gl/maps/QFLFFdQ5JzFhNoEm7
Strategy Objective:	Notification and deflection/exclusion of spilled material flowing down the waterway from upstream source. Deploy boom to deflect/exclude spilled materials from entering hatchery water intake.
Implementation:	Kootenai River flow direction at strategy is east to west. Notify KTOI Fish Hatchery to shut off water intake. Secure upstream end of boom to on-shore anchor on river right. Secure downstream end of boom to on-shore anchors on river right bellow intake. Shoreline: Varied/mixed shore line of man made structure and rip-rap (type 8B) and vegetated, steeply sloping bank (type 8F).
Site Safety Note:	Slip, trips, fall hazards; traffic roadway hazards, water hazards, hazards from spilled material. Expect extreme winter conditions from November through March.
Staging Area:	NO Nearest: Deep Creek Boat Launch
Field Notes:	4WD Access: NO Locked Gate: NO Response is by water ONLY
Resources Targeted:	Wildlife Habitat, and T & E species; Downstream irrigation water supplies; Recreational use
Watercourse:	Kootenai River: low gradient, discontinuous sand to cobble river bed, width 300-700 feet (variable), depth 5-35 feet (variable)



Suggested Equipment	
Quantity	Description
300 ft.	Curtain Boom / Tow Bridles
As Appropriate	Absorbent Boom, skimmer, vacuum truck, etc
375 ft.	Rope
2	On-shore Anchors
As Appropriate	Post pounder, shovels, knife, wood saw
0	In Water Anchors
As Appropriate	PFD work vests/rubber boots
As Appropriate	Throw bags, first aid kit
Jet boat/raft needed for strategy implementation? Y	

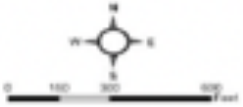
Suggested Personnel	
Quantity	Description
1	Hazmat Supervisor
1	Safety Supervisor
2 / 0	Hazmat Field Techs / Traffic Flagger
1 / 1	Boat Operator / Swiftwater Tech

Visited on 09/17/2021 River Discharge in CFS: 9,000

High Risk Point Deep Creek	**RM 15-14**						
						Sector Map	3
General Strategy Description	Product Collection and Recovery and Resource Protection						
Staging Area	**Site ID**						
McArthur Lake WMA	20.0						
Deep Creek Confluence	0.0						
Suggested Boat Launches	**Site ID**						
Deep Creek Confluence	0.0						
		Equipment Needs					
Suggested Strategies	**Site ID**	**Curtain Boom**	**Recovery Device**	**Rope**	**On-shore Anchors**	**In-water Anchors**	**Boat?**
Highand Flats Bridge	12.6	100 ft	Skimmer, Vac Truck	125 ft	2	0	No
Campground Bridge	12.4	100 ft	Skimmer, Vac Truck	125 ft	2	0	No
Deep Creek Confluence	0.0	100 ft	Skimmer, Vac Truck	125 ft	2	0	Yes

Deep Creek - Highland Flats Bridge — RM 12.6

Site Lat Long:	48.582120 -116.402933 https://goo.gl/maps/TyFuFvjL5AE7oX5z8
Strategy Objective:	Collection/Recovery: Collect and recover spilled material flowing down the waterway from upstream source.
Implementation:	Deep Creek flow direction at strategy is south to north. Deploy containment boom and initiate spilled material recovery on river right at road bridge. Secure upstream end of boom to on-shore anchor on river left. Secure downstream end of boom to on-shore anchor on river right. Shoreline: Vegetated low bank (type 9B).
Site Safety Note:	Slip, trip, fall hazards; traffic/roadway hazards, congestion, water hazards, hazards from spilled material. Expect extreme winter conditions from November to March.
Staging Area:	LIMITED Equipment and vehicle parking areas along Highland Flats Road.
Field Notes:	4WD Access: NO Locked Gate: NO
Resources Targeted:	Bull Trout critical habitat. Downstream municipal & irrigation water supplies, recreational use and wildlife habitat.
Watercourse:	Deep Creek: Medium gradient, sandy river bed. Width 20-50 ft (variable). Depth 0.5-4 ft (variable).



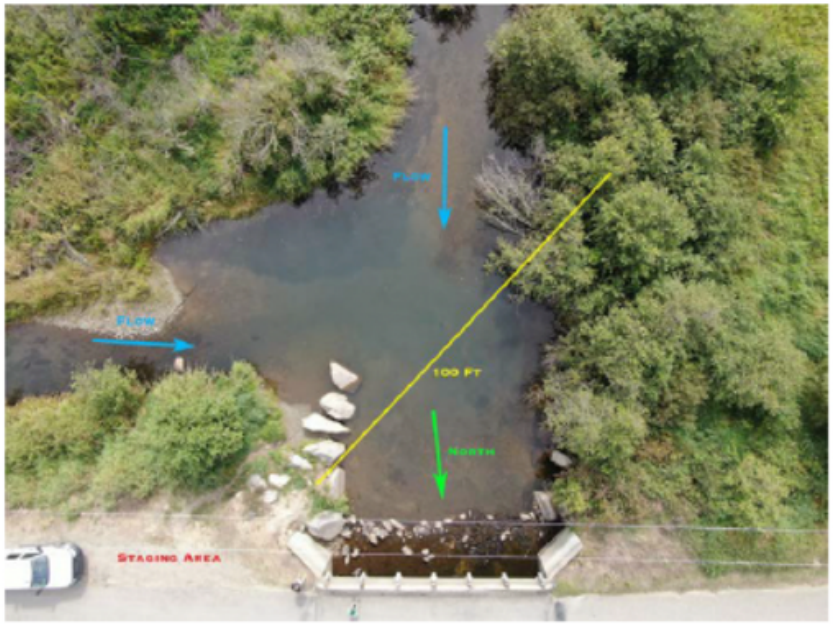
Suggested Equipment

Quantity	Description
100 ft.	Curtain Boom / Tow Bridles
As Appropriate	Vacoum Truck; Portable Skimmer; Absorbent Boom
125 ft.	Rope
2	On-shore Anchor
As Appropriate	Post pounder, shovels, knife, wood saw
0	In Water Anchors
As Appropriate	PFD work vests/rubber boots
As Appropriate	Throw bags, first aid kit
Watercraft needed for strategy implementation?	No

Suggested Personnel

Quantity	Description
1	Hazmat Supervisor
1	Safety Supervisor
2 / 2	Hazmat Field Techs/ Traffic Flagger
0 / 0	Boat Operator / Swiftwater Tech

Visited on: 09/17/2021


FLOW
FLOW
100 FT
NORTH
STAGING AREA

SUMMARY

- Most of the critical strategies have been tested, refined and drilled multiple times.
- The Kootenai's greatest strength is also its greatest weakness: isolation.
- The Kootenai dodged a bullet in 2020 and the lessons learned will certainly help protect it in the future.


Questions?

Environmental Justice in Emergency Response

Executive Orders Related To Environmental Justice

- The Biden Administration has issued several EOs related to EJ
- Provide general direction about how each department and agency should integrate EJ into their programs
- Focus on targeting efforts, which is not how emergency responses are managed. However, there are activities during the ER that can integrate EJ practices
- Highlight 4 EOs today: 13895, 14008, 14091, and 14096

EOs In Detail

- **EO 13985 - Executive Order On Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (January 20, 2021)**
  - *Sec. 8. : "Engagement with Members of Underserved Communities. In carrying out this order, agencies shall consult with members of communities that have been historically underrepresented in the Federal Government and underserved by, or subject to discrimination in, Federal policies and programs. The head of each agency shall evaluate opportunities, consistent with applicable law, to increase coordination, communication, and engagement with community-based organizations and civil rights organizations."*
  - **What this means for Emergency Response:**
    - Public engagement is the avenue for integrating EJ into the response
    - Need to make a concerted effort to work with community based organizations

EOs In Detail

- **EO 14008, Executive Order on Tackling the Climate Crisis at Home and Abroad (January 27, 2021)**
  - *Sec. 222(a) : "The Chair of the Council on Environmental Quality shall, within 6 months of the date of this order, create a geospatial Climate and Economic Justice Screening Tool and shall annually publish interactive maps highlighting disadvantaged communities."*
  - *Sec. 223 : "Justice40 Initiative. (a) Within 120 days of the date of this order, the Chair of the Council on Environmental Quality, the Director of the Office of Management and Budget, and the National Climate Advisor, in consultation with the Advisory Council, shall jointly publish recommendations on how certain Federal investments might be made toward a goal that 40 percent of the overall benefits flow to disadvantaged communities."*

- **What this means for Emergency Response**
  - Use of CEJST for identifying/ reporting on if work we are doing is in a disadvantaged community
  - Since emergency response work cannot be targeted, an actual response program would not be measured on J40, but other related work might be used as an ancillary measure

EOs In Detail

- **EO 14091, Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (February 16, 2023, update to EO 13985)**
  - *Sec. 2 : Establishes Agency Equity Teams that have a goal to deliver equitable outcomes to all communities*
  - *Sec. 5(a) : Directs departments and agencies to "conduct proactive engagement, as appropriate, with members of underserved communities — for example, through culturally and linguistically appropriate listening sessions, outreach events, or requests for information — during development and implementation of agencies' respective annual Equity Action Plans, annual budget submissions, grants and funding opportunities, and **other actions**."*

  - **What this means for Emergency Response**
  - Provides more detailed direction for how to fulfill goals from EO 13895

EOs In Detail

- **EO 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All (April 21, 2023, update to EO 12898 from 1994)**
  - *Sec. 3(vii) – detailed points about community engagement practices*
  - *Sec. 3(xii) : "improve collaboration and communication with State, Tribal, territorial, and local governments on programs and activities to advance environmental justice"*
  - *Sec. 6 : "Community Notification on Toxic Chemical Releases. To ensure that the public, including members of communities with environmental justice concerns, receives timely information about releases of toxic chemicals that may affect them and health and safety measures available to address such releases [under EPCRA]."*

  - **What this means for emergency response:**
    - Emphasizes practices that we should have in place based upon other EOs

Emergency Response and Environmental Justice at EPA

- EPA's primary emergency response role is responding to the potential and actual threats and impacts from the release of hazardous substances, contaminants, or pollutants and discharges of oil.
- EPA may also address the impacts of community water and wastewater systems during an Emergency Support Function (ESF) #3 mission for Stafford Act responses
- These incidents are often in areas populated by underserved and overburdened communities.
- We respond to incidents where they occur – we do not prioritize responses based on incident location

Large Disasters That Impacted Overburdened and Under-resourced Communities Highlighted Gaps in Response Practices

- After Hurricane Katrina (2005), the National Environmental Justice Advisory Council (NEJAC) recommended changes to EPA's emergency response procedures
  - Recommended incorporating EJ into the Incident Command System (ICS) structure
  - Recommended development of public participation guidelines for disaster response situations and to promote their adoption by relevant response organizations
- After Deep Water Horizon (2010) and Hurricane Sandy (2011), EPA observed that EJ practices during responses needed more proactive considerations of communities impacted by the incidents

Efforts to Increase Community Outreach in Emergency Response

- EPA's Incident Management Handbook (IMH) was revised in 2007 to address the need for more proactive consideration of EJ in response
  - Included EJ related responsibilities for three Key Leadership Positions (KLPs)
    - Incident Commander (IC)
    - Public Information Officer (PIO)
    - Liaison Officer (LNO)
  - IMH includes ICS training requirements for each EJ Response Facilitator in compliance with the National Incident Management System (NIMS)
- *EPA Order 2010, Crisis Communications Plan* was issued in 2016
  - Identified considerations for Public Information Officer (PIO) during an incident
    - Community engagement
    - Language access
    - Environmental Justice

Integrating Environmental Justice into Emergency Response Preparedness and Management

- Issued November 2022
- The guidelines document was developed collaboratively by the Office of Environmental Justice and External Civil Rights (OEJECR) and OLEM's Office of Emergency Management (OEM)
- The goal it to enhance the inclusivity, equitability, and responsiveness of EPA's emergency response functions.
- Reviewed by EPA's National Incident Management System (NIMS) Integration Team (NIT), the Removal Managers, and the regional Environmental Justice (EJ) Coordinators.

Five Recommendations and Clarifications

- Integrate Environmental Justice priorities into EPA's National Approach to Response (NAR) structure and develop Management Objectives/Incident Objectives, as needed
- Engage Environmental Justice expertise in early assessments, as needed
- Incorporate an environmental justice function and staffing support within the IMT and EOC structures, where appropriate.
- Implement training and other related requirements [in order to develop a cadre of EJ Facilitators]
- Develop and promote the adoption and use of public participation guidelines for disaster response situations by relevant emergency response organizations in both the public and private sectors.

Questions?

Executive Orders That Address Environmental Justice

- **EO 13985 - Executive Order On Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (January 20, 2021)**
- https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/20/executive-order-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/

- **EO 14008, Executive Order on Tackling the Climate Crisis at Home and Abroad (January 27, 2021)**
- https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/executive-order-on-tackling-the-climate-crisis-at-home-and-abroad/

- **EO 14091, Further Advancing Racial Equity and Support for Underserved Communities Through the Federal Government (February 16, 2023, update to EO 13985)**
- https://www.whitehouse.gov/briefing-room/presidential-actions/2023/02/16/executive-order-on-further-advancing-racial-equity-and-support-for-underserved-communities-through-the-federal-government/

- **EO 14096, Revitalizing Our Nation's Commitment to Environmental Justice for All (April 21, 2023, update to EO 12898 from 1994)**
- https://www.whitehouse.gov/briefing-room/presidential-actions/2023/04/21/executive-order-on-revitalizing-our-nations-commitment-to-environmental-justice-for-all/

Environmental Justice-Related Responsibilities for Specific Key Leadership Positions (KLPs)

- **Incident Commander (IC)** : Ensure adequate resources are devoted to Liaison staff to assure that environmental justice issues receive appropriate attention.

- **Public Information Officer (PIO)** : Ensure that community relations activities are effectively coordinated with other Command and General Staff functions, including outreach, in coordination with the Command Staff Liaison Officer, to vulnerable populations during the course of the response in collaboration with regional environmental justice and tribal offices. Ensure the community feedback and issues are effectively coordinated with the LNO.

- **Liaison Officer (LNO)** : Ensure Environmental Justice issues are addressed in a timely manner and briefed to the IC/UC as necessary; and coordinate frequently regarding EJ issues and outreach to vulnerable populations with the Command Staff PIO.

Attendance for NW Area Committees Meeting DEQ STATE OFFICE June 6th, 2023

Name (Please Print)	Signature	Location/Program/Office
Dean Ehlert		Idaho DEQ
Jamie Waterman		USCG D13
Kara Pinetti		USCG D13
Carlos R Clemons		Washington Dept. of Ecology
Mark Dietrich		IDEQ
Erica Bates		WA Dept of Ecology
Wes Risher		OR Dept. of Envir Quality
Cody Harris		WRI
Matt Bissell		WA ECY
Lori Muller		EPA
Tiffanny Bowman		Idaho DEQ
Sarah Cerda		IOEM
Rob Feeley		IOEM
Hilary Gafford Beavis		Weston Solutions
Matt Solum		NOAA/NWS
Amanda Hardy		Idaho DEQ
Doug Tanner		IDEQ
Karen Dannny		WA Dept of Ecology
Eric Vanderboom		EPA
Beth Sheldrake		EPA
Stefanie Henry		NOAA NWS
Natalie Lowell		Makah Tribe
Jase Brooks		WA Ecology

David Reuter	WA Ecology	

NWAC Meeting Virtual Attendees - 6/6/2023
Allie Taylor
Allison O Hall# DOI
Armando Martinez (CTCLUSI)
Beth Sheldrake - EPA R10 Seattle
Brandon Sulfridge (USCG SCR)
Chad Bowechop
Christopher Burns (Jamestown S'Klallam Tribe)
Christopher Caprio# WA EMD
Cindy Murphy (Cynthia Murphy)
Darcy Bird (ECY) she/her
David Byers (ECY)
David Troutt - Nisqually Indian Tribe
Dean Johnston (USCG)
Don Pettit (OR-DEQ Emergency Response)
Faith Knighton# NOAA
Heather Parker# US Navy NOSC Navy Region NW
Illeana Alexander | CTCLUSI | They/Them (Illeana Alexander | CTCLUSI)
Jase Brooks
Jenna Driscoll (CA OSPR) (Jenna Driscoll)
Jody Brown (Stillaguamish Tribe)
John FitzGibbon# GSA R10 REC
Katy Bergholm
Kyrion Gray
LCDR Brian Dykens# USCG
LCDR Chelsey Olson (USCG - D13 DRAT)
LT Matt Naylor# USCG
LTJG Kyle Vincent (NOAA)
Meg Harris (OSTF)
Natalie Lowell# Makah Tribe
Pete Hartmann# WA EMD
Pete Purchase
Rainer Luhrs (Stillaguamish Tribe) (rluhrs)
Sara Benovic
Sarah Behrman (ODEQ) (she/her)
Sonja Larson (ECY)
Stephen Ball (SBALL03)
Stephen Brink - USCG SCR (891 9138 7946)
Susan Forsythe / WA State EMD
Tiffany Royal (NWIFC)
Vika Sirova# DOI OEPC (VSirova)
Wendy Buffett# WA ECY Spills