COBALT Presentation on Oregon DEQ Emergency Response Program

Don Pettit

Oregon Dept. of Environmental Quality

Emergency Response Program

October 25, 2023 10:30 to 10:45

State of Oregon
DEQ Department of Environmental Quality

DEQ Emergency Response Program

- Incident Response (Duty Officer through SOSC and UC Responses)
- Response Planning (general RCP/ACP)
  - Facility Contingency Plan Review/Approval
  - Vessel Contingency Plan Review/Approval
  - Geographic Response Plan Preparation
  - Railroad Contingency Plan Review/Approval
  - Railroad Geographic Response Plan Preparation
- Drills and Exercises
  - Vessel and Facility C-Plan Drills and Exercises
  - Railroad C-Plan Drills and Exercises
- Derelict Vessels
- Disaster Response Planning/Exercises
- Ballast Water Management

- **Wes Risher** – Emergency Response Manager
  - **Vacant** – Administrative Assistant
  - **Kimberlee VanPatten** – LEAD Worker, Emergency Response Unit Leader
    - **James Heintz** – Daytime Duty Officer
      - **Cassandra Carlson** – Duty Officer, Ballast Water Inspector
    - **Don Pettit** – Senior ER Planner, NWACP/GRP/GIS Planner
      - **Scott Smith** – Drills & Exercise, Vessel/Facility Plan Review, Derelict Vessels & CEI Hub
    - **Sarah Behrman** – GIS Specialist
      - **Kyrion Gray & Brandon Bertilson** – Oil By Rail Planners

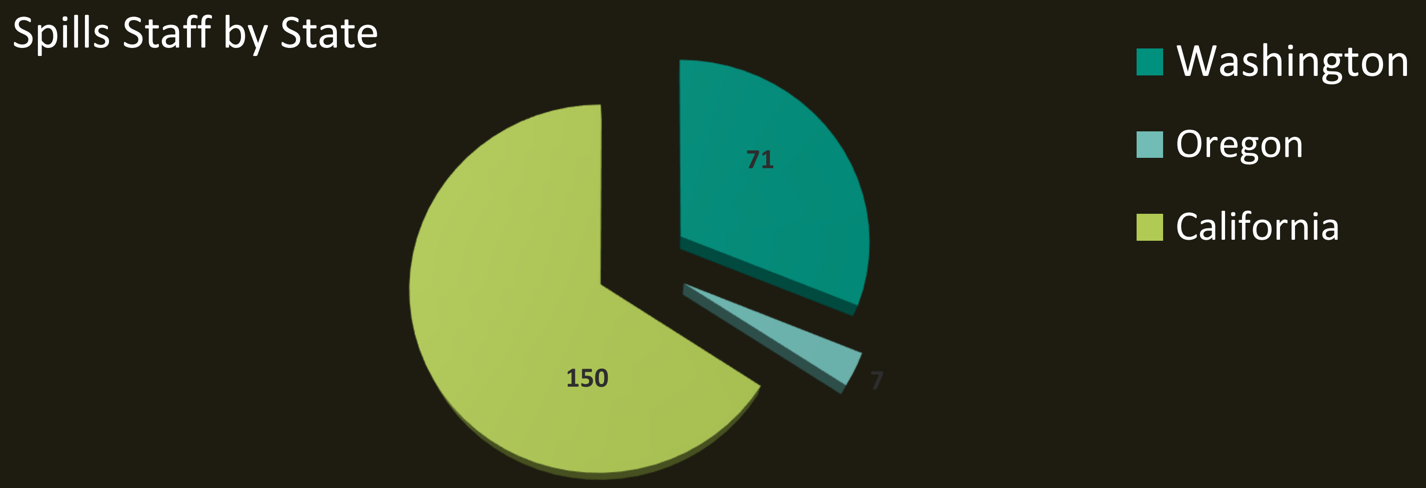
- **REGIONAL EMERGENCY RESPONSE MANAGERS**
  - **Brad Schultz** - Western Region
  - **Paul Seidel** - Northwest Region
  - **Anne Farris** - Eastern Region
    - **Geoff Brown** – Western Region SOSC
    - **Kevin Chan** – Northwest Region SOSC
    - **Charles Kennedy** – Eastern Region SOSC

*Staff in RED are new to the program in 2022

State of Oregon Department of Environmental Quality

Staff Resources

- Comparatively small program in Oregon
- Able to draw staff from Cleanup Program and other agency staff



As of early 2016

Primary Response Authorities

- CERCLA
  - Release or Threat of Release
    - Hazardous Substances
    - Pollutants and Contaminants
  - “Imminent and substantial endangerment to human health or the environment”
- Oil Pollution Act-Clean Water Act
  - Oil impacts or threatens to impact waters of the United States
- NCP / ESF 10 and Others

Federal

- ORS 465 Removal/Remedial Action,
- ORS 466 Spill Response/Hazardous Materials
- ORS 468B.300-500 Oil Spill Planning/ Preparedness

- Oregon Emergency Management Plan
- Northwest Area Contingency Plan
- ESF 10 Primary, Supporting Agency

State

- Governor's Office (Regional Solutions)
- Oregon Dept. of Emergency Management
  - OERS (Oregon Emergency Response System) 1-800-452-3011
- Oregon Military Department (CSTs)
- Oregon State Police
- Oregon State Fire Marshal Office
  - HazMat Teams
- Oregon Dept. of Transportation
- Forestry
- State Parks and Recreation (State Historic Preservation Office)
- Oregon Department of Fish and Wildlife
- Oregon Health Authority
- Department of Energy
- Department of State Lands
- Oregon State Marine Board

- Federal Partnerships…
  - US EPA
  - US Coast Guard
  - NOAA
  - DOI
    - US Fish and Wildlife
    - USGS
  - FEMA
  - Army Corps of Engineers

State and Federal Partnerships

Oil and Hazardous Materials Response Planning – Relationship Among the Plans (1996 to 2019)

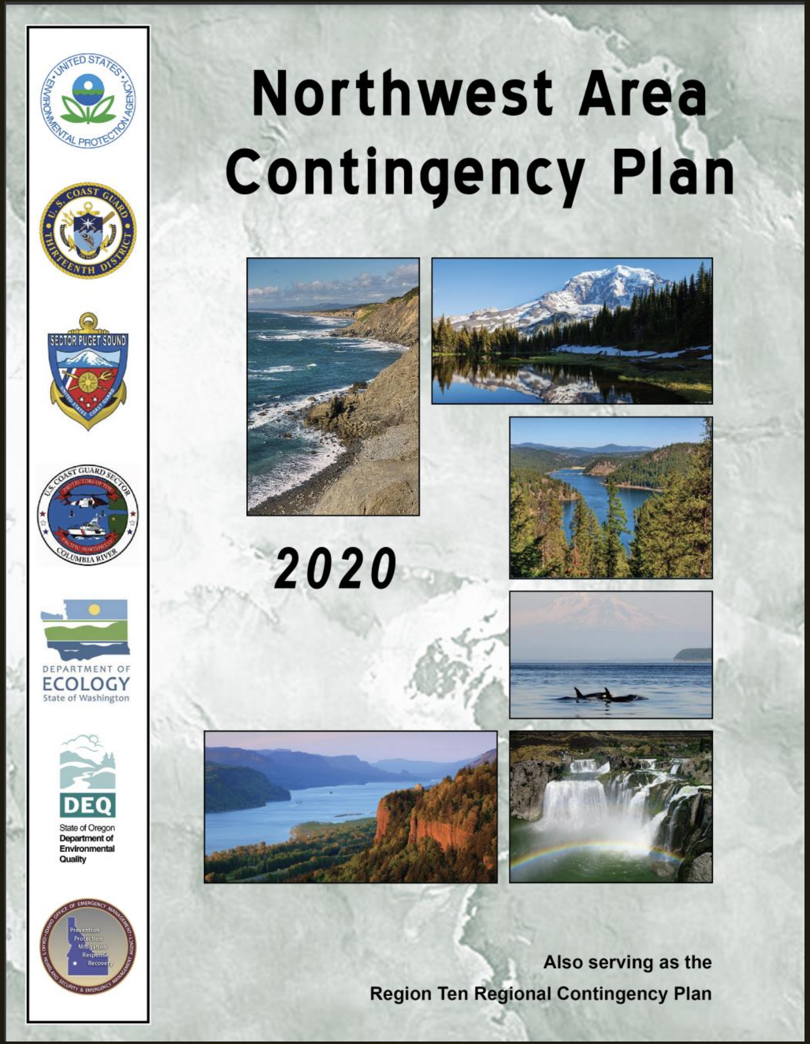
- THE PLAN unless there is a specific purpose-built plan
- Adopted as Oregon's Hazardous Materials Response Plan
- Updated annually until 2020

NW Regional and Area Contingency Plan

Inclusive Response Plan for OR, WA, ID, EPA R10 and USCG

Includes GRPs/GRSs

Local Contingency Plans (including tribal plans) & Vessel and Facility Response Plans



Source - https://rrt10nwac.com/

State of Oregon
DEQ Department of Environmental Quality

Relationship Among the Plans (Oct 2019)

NW Regional and Inland Area Contingency Plan

Inclusive Response Plan for OR, WA, ID, EPA R10 and USCG

Includes GRPs/GRS'es

Sector Puget Sound Area Contingency Plan

Coastal FOSC Plan

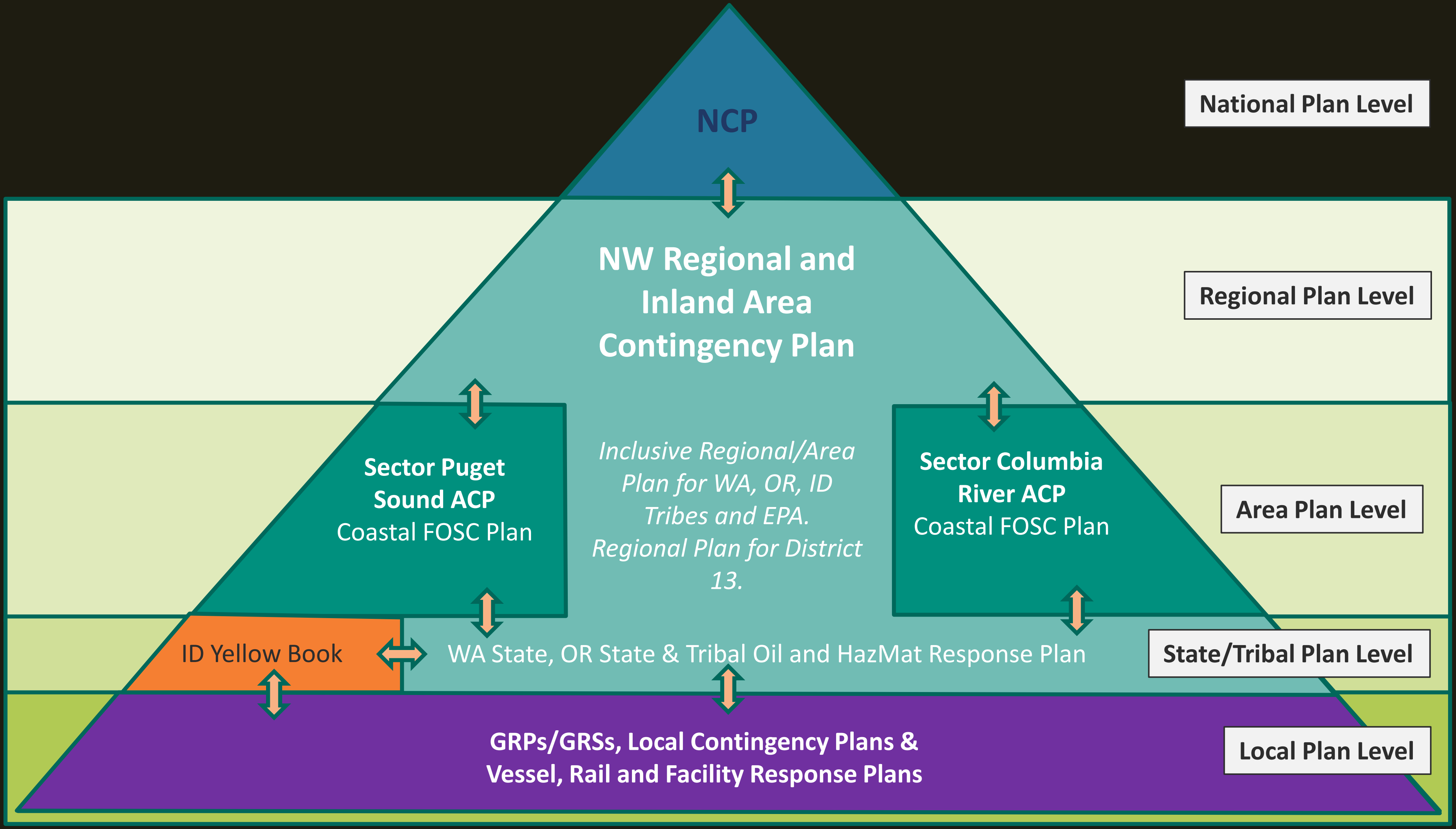
Sector Columbia River Area Contingency Plan

Coastal FOSC Plan

Local Contingency Plans (including tribal plans) & Vessel and Facility Response Plans

State of Oregon
DEQ Department of Environmental Quality

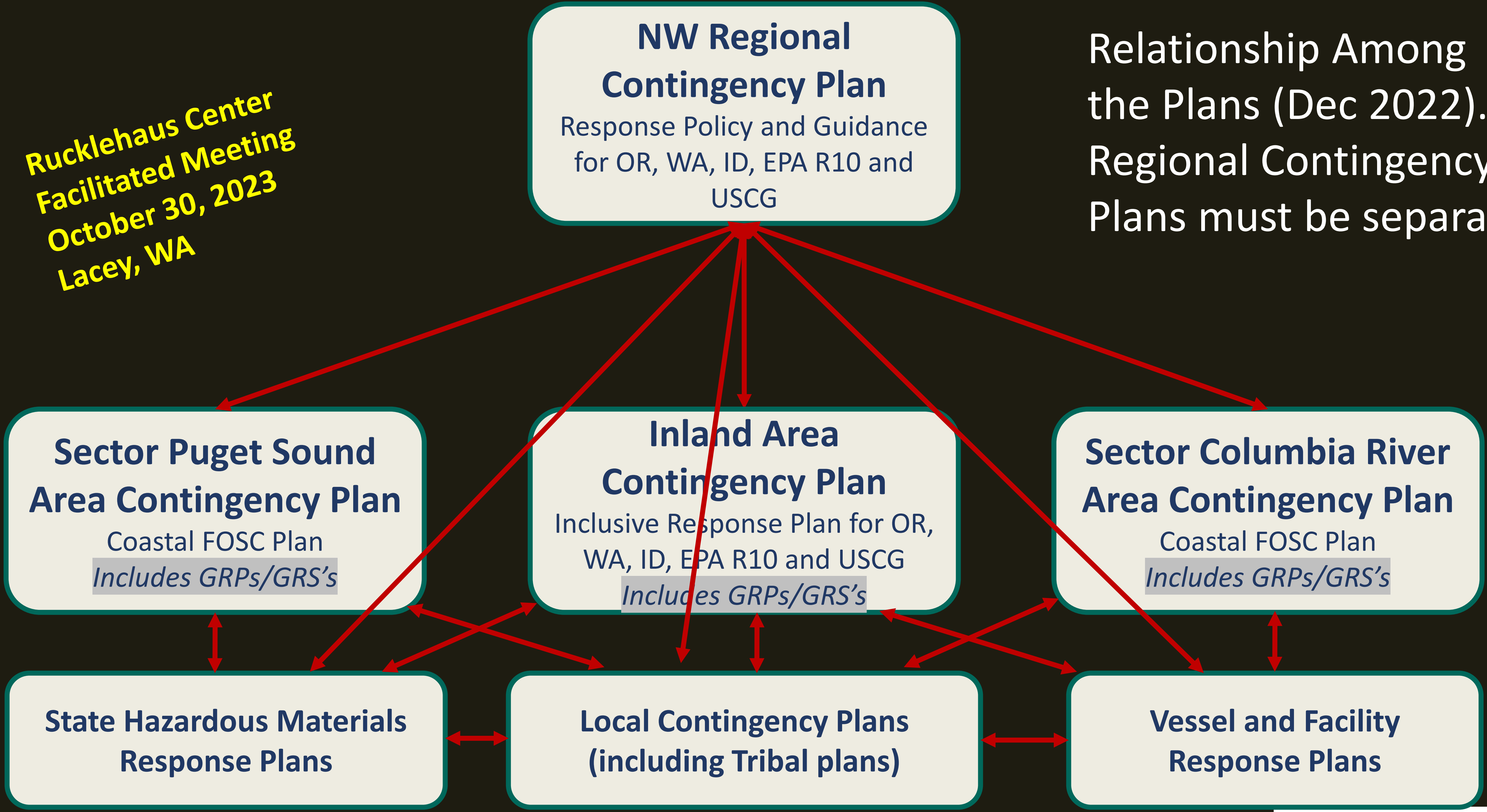
New and “Improved” NW Regional Planning Structure



State of Oregon
DEQ Department of Environmental Quality

Relationship Among the Plans (Dec 2022)… Regional Contingency Plans must be separate

Rucklehaus Center
Facilitated Meeting
October 30, 2023
Lacey, WA



State of Oregon
DEQ Department of Environmental Quality

Oregon's Place in West Coast Oil Transport

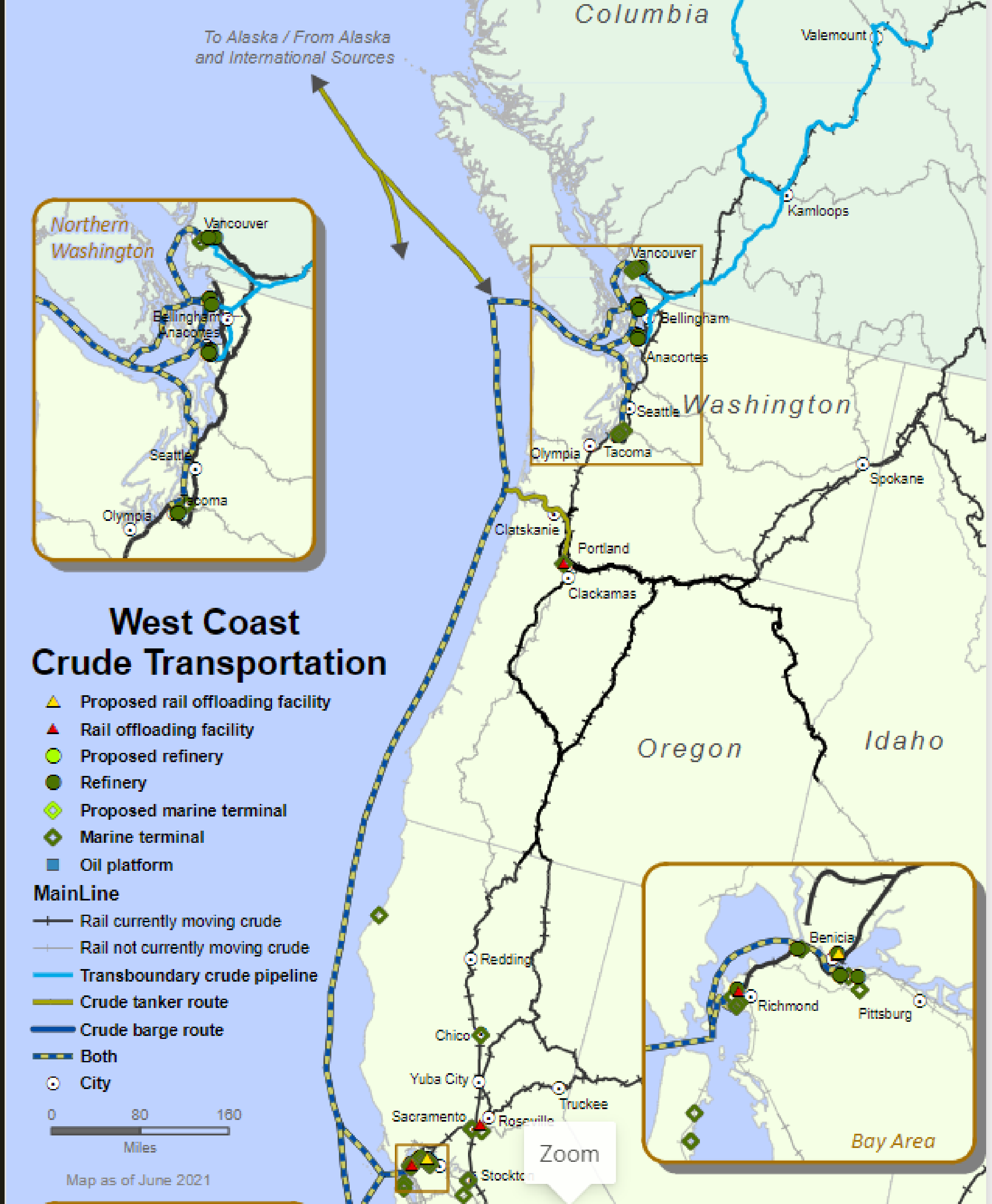
- Oregon a destination for oil products until about 10 years ago
- Refined products to Oregon via tanker, barge, pipeline and trucks; bulk of distribution from Portland and Eugene
- Limited "export" of fuels up river until Columbia Pacific began to export Bakken Crude

- All that changed with the development of the Canadian Tar Sands and Bakken Oil Fields; Oregon became a transport link between oils from east to refineries in California, Washington and Asia

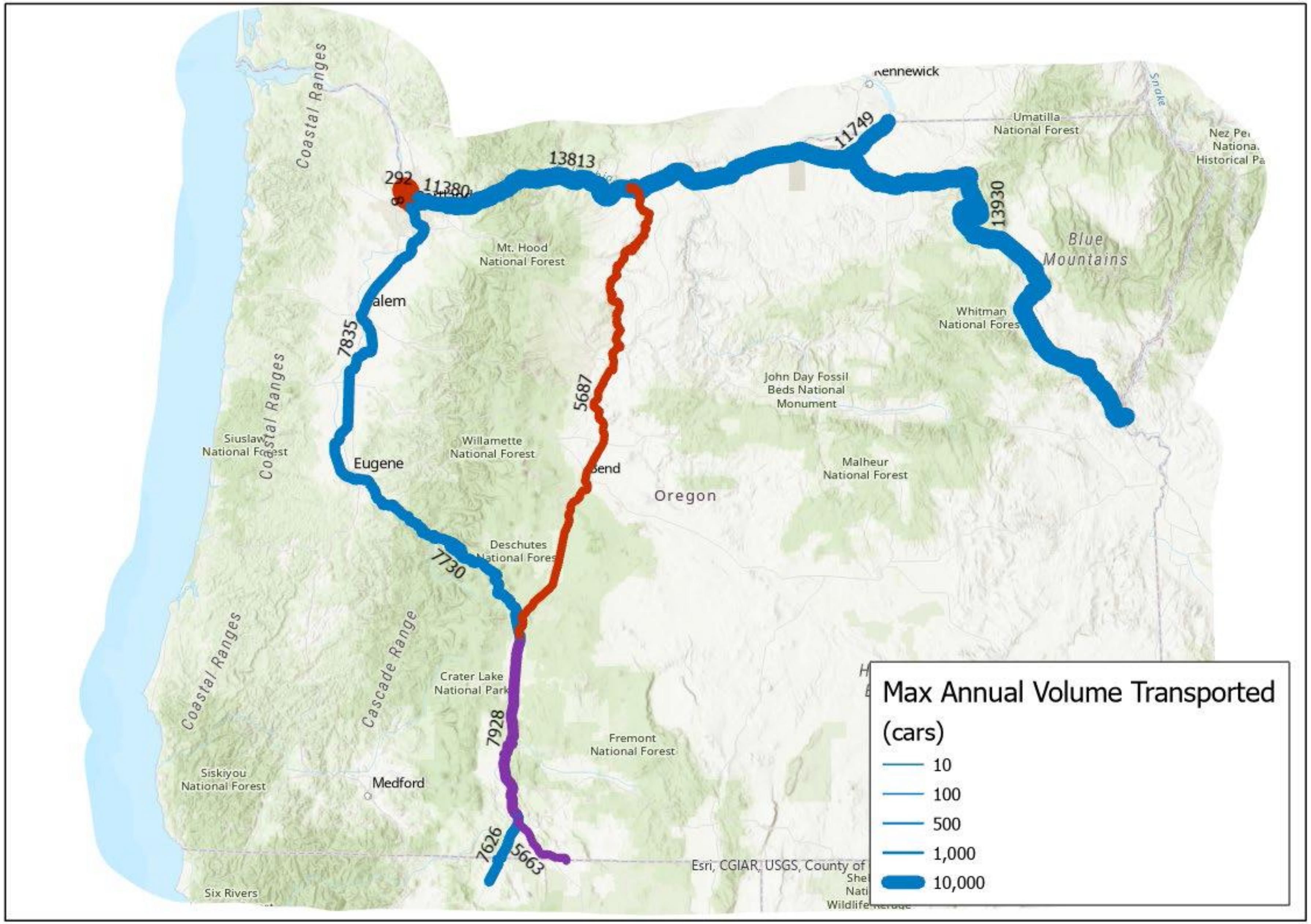
New Products Include:

- Diluted Bitumen
- Bakken
- Ethanol
- Renewable Diesel
- Biodiesel

DEQ



OR Crude Oil Rail Rail Routes by Volume (2016-2020)



8/27/2021

Primary Crude Oil Rail Routes

Columbia Gorge
Portland/Willamette Valley
NE Oregon
Deschutes River
Cascades Crossing
Klamath to California

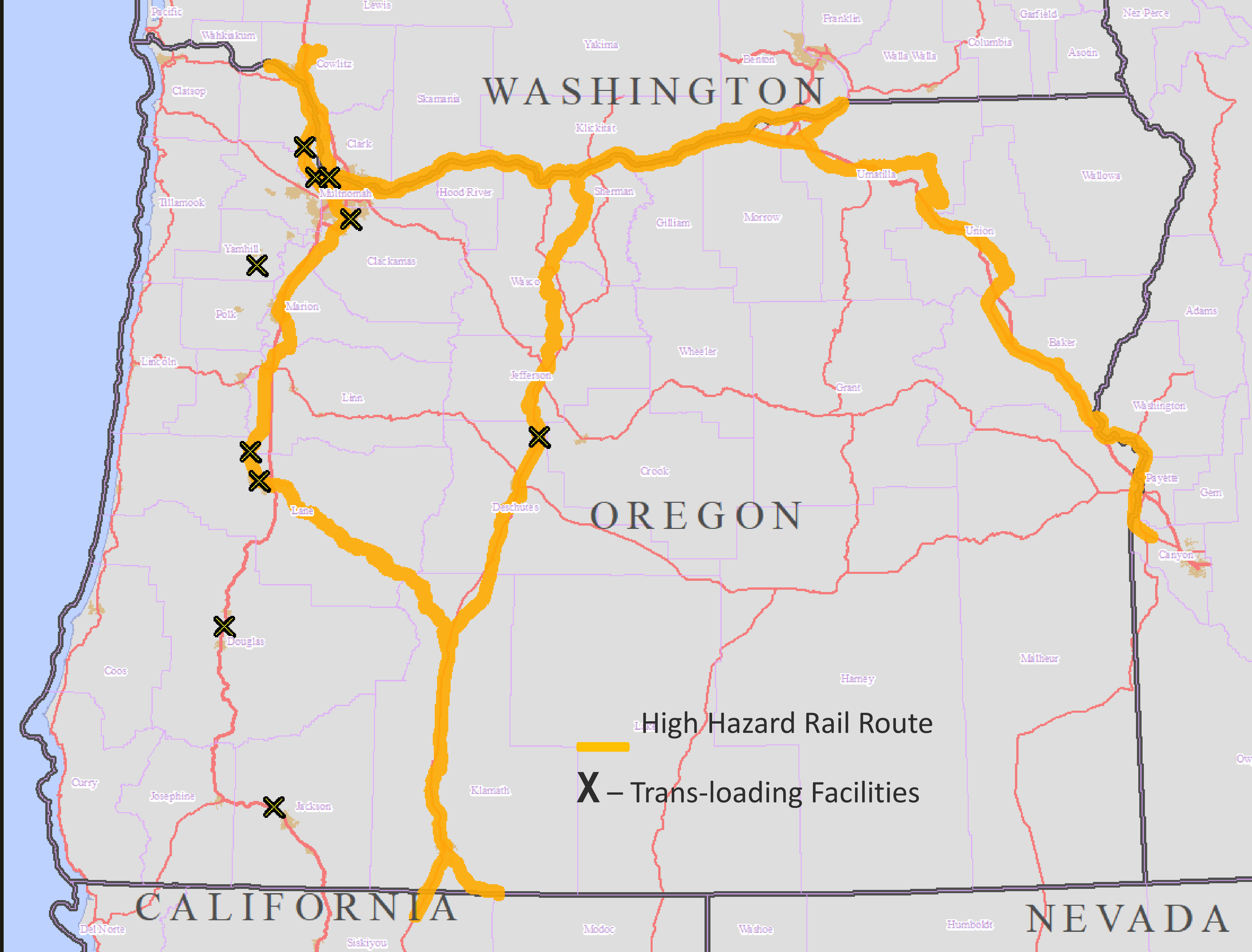
State of Oregon
DEQ Department of Environmental Quality

Major Rail Routes and Trans-loading Facilities

Major rail routes transporting crude oil

Routes, destinations and products have changed substantially over time

Also have at least 12 trans-loading “facilities”



Trends in Fuels and Crude Oil Transport

Routes, destinations and products have changed substantially over time

Trend toward supplying Renewable Diesel both within state and as pass through

We have to be ready for all fuels and product types throughout the state

Facility	Types of Products Handled	Receive By	Transfer By
Chevron Willbridge	Refined petroleum products; gasoline blendstocks	Ship/Pipeline	Ship/Local/Pipeline to Eugene
Columbia Pacific Bio-Refinery	Renewable diesel	Rail	Vessel to Marathon LA/LB
Kinder Morgan Terminal	Refined petroleum products (minor renewables)	Ship/Pipeline	Ship/Local/Pipeline to Eugene
Kinder Morgan Pipeline Eugene	Refined petroleum products; BioDiesel/Renewable Diesel	PDX Terminals	Pipeline to Eugene Terminals
Kinder Morgan Pipeline Airport	Jet Fuel (talking about renewable Jet Fuel)	KM Terminal	Pipeline to PDX
Marathon (Andeavor Log.)	Refined petroleum products (no renewables)	SLA Pipeline	Pipeline to Pasco WA/AFB
McCall Oil	Asphalt; Renewable Diesel	Rail	Local (trucks)
NuStar Portland Terminal	Refined petroleum products; BioDiesel	Ship/Rail	Local/Pipeline to Eugene
Olympic Pipeline	Refined petroleum products only	Pipeline	Portland Terminals
Pacific Terminal (PTSI)	Bunker fuels (no renewables)	Ship from PugSound	Bunker via barges
Phillips 66	Refined products/lube oils	Ship/Pipeline/Rail	Local (trucks)
Tidewater Barge Operations	Diesel and gasoline	PDX Terminals	Barge to Pasco (other small ports)
Tidewater (Umatilla Pipeline)	Petroleum diesel only, no renewables	Barge	Pipeline to feed Hinkle Railyard
TLP Management Svcs (SeaPort)	Refined petroleum products; minor BioDiesel/Renewable Diesel	Ship/Pipeline	Truck/Pipeline to Eugene
Zenith Terminals	Bakken; Dilbit; hope to do Renewable Diesel	Rail	Ship to Puget Sound/AK

State of Oregon
DEQ Department of Environmental Quality

Known Production of Biofuels…

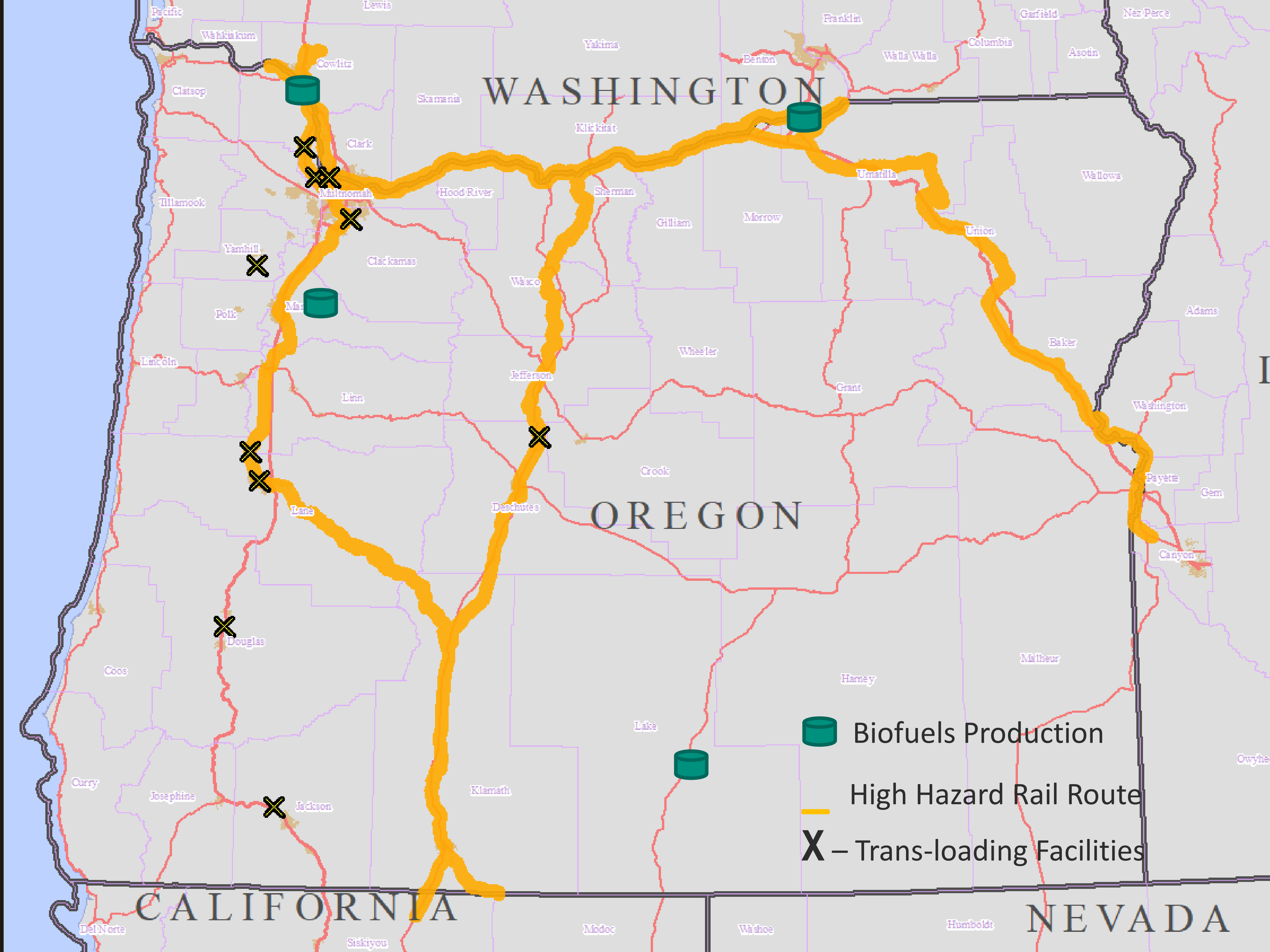
Sequential Biofuels Salem is making biodiesel from used vegetable oils

Red Rock Biofuels is under construction for Renewable AvGas from woodwaste

Pacific Ethanol in Boardman uses corn feedstock

Cascade Grain in Clatskanie uses corn to produce ethanol

Columbia Pacific Biorefinery (Global Partners) made ethanol but now exports Bakken Crude…and have applied for permit to produce ethanol *again…*

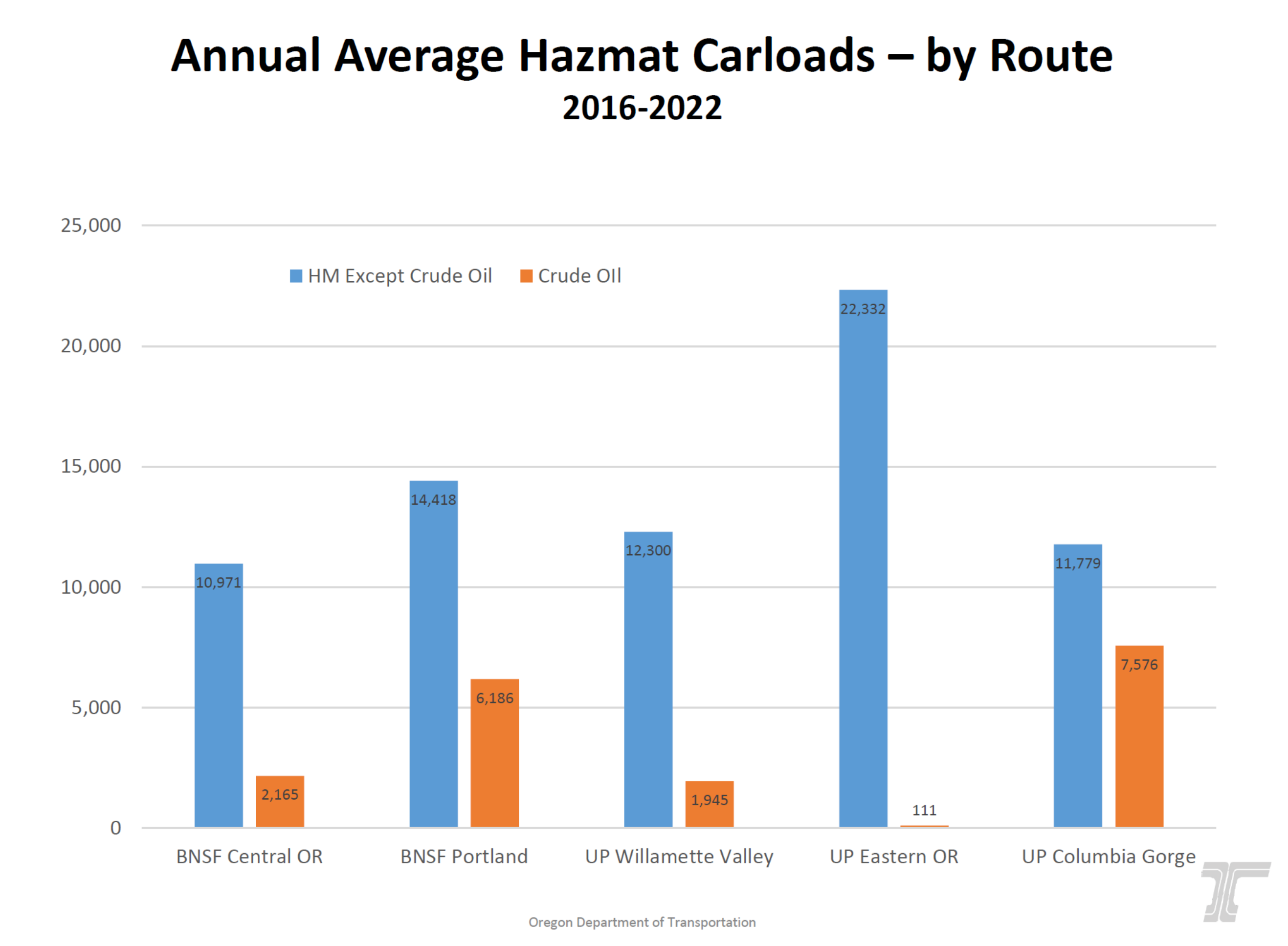


What about things besides crude oil?

We now have staff to plan for and respond to the crude oil by rail…that planning has begun

However, crude oil is a small percentage of the hazardous materials that are carried through the state

Other than ethanol, we have been very lucky so far…



State of Oregon
DEQ Department of Environmental Quality

21 Oil Spill Contingency Planholders including 12 petroleum facilities, 5 petroleum pipelines and 4 vessel plans.

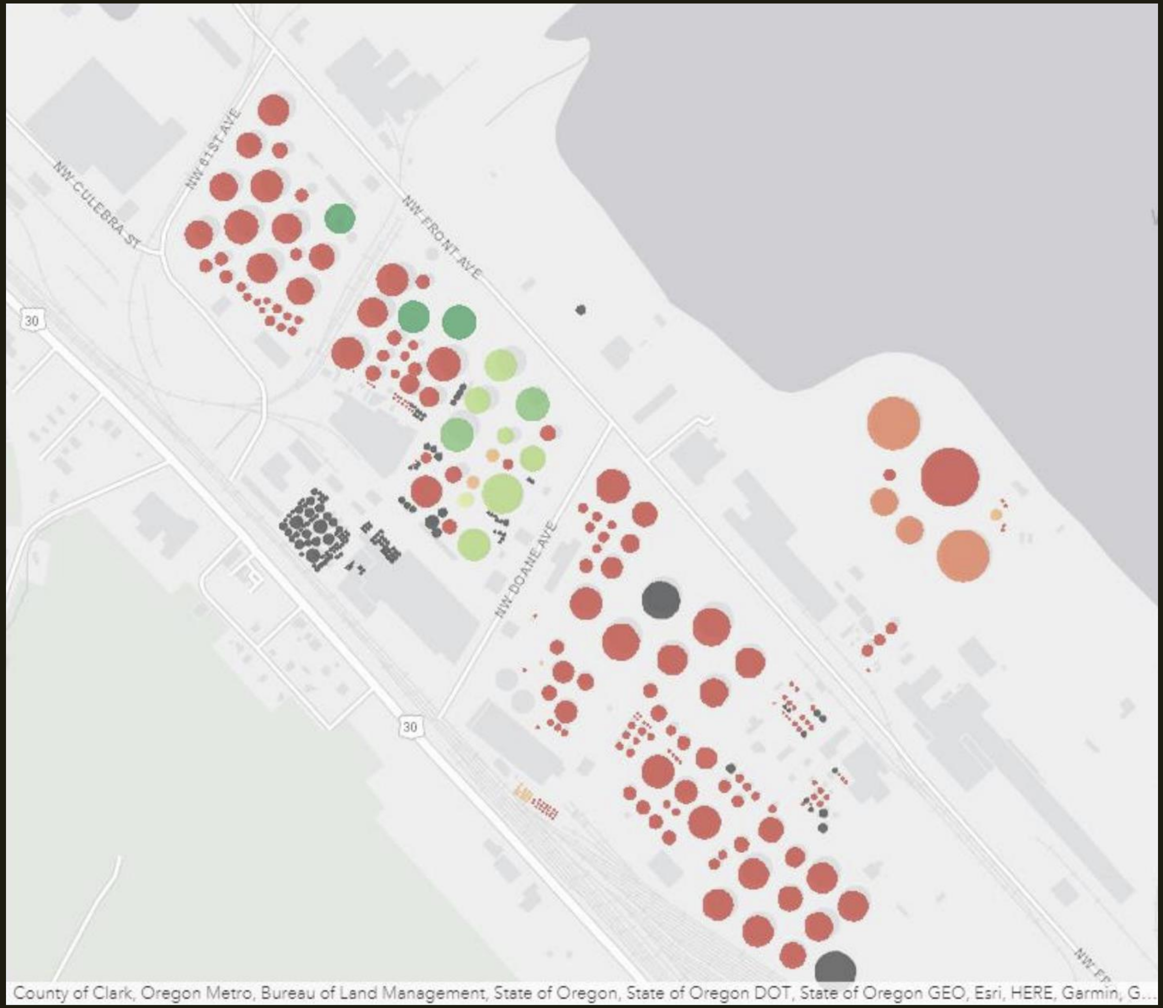
Oregon has no refineries, but there are two export terminals, one crude oil and the other exports renewable diesel.

1500 Cargo Vessels Per Year

20 to 100 Tank Vessel per year
And
1200 to 1500 Tank Barge Trips per year

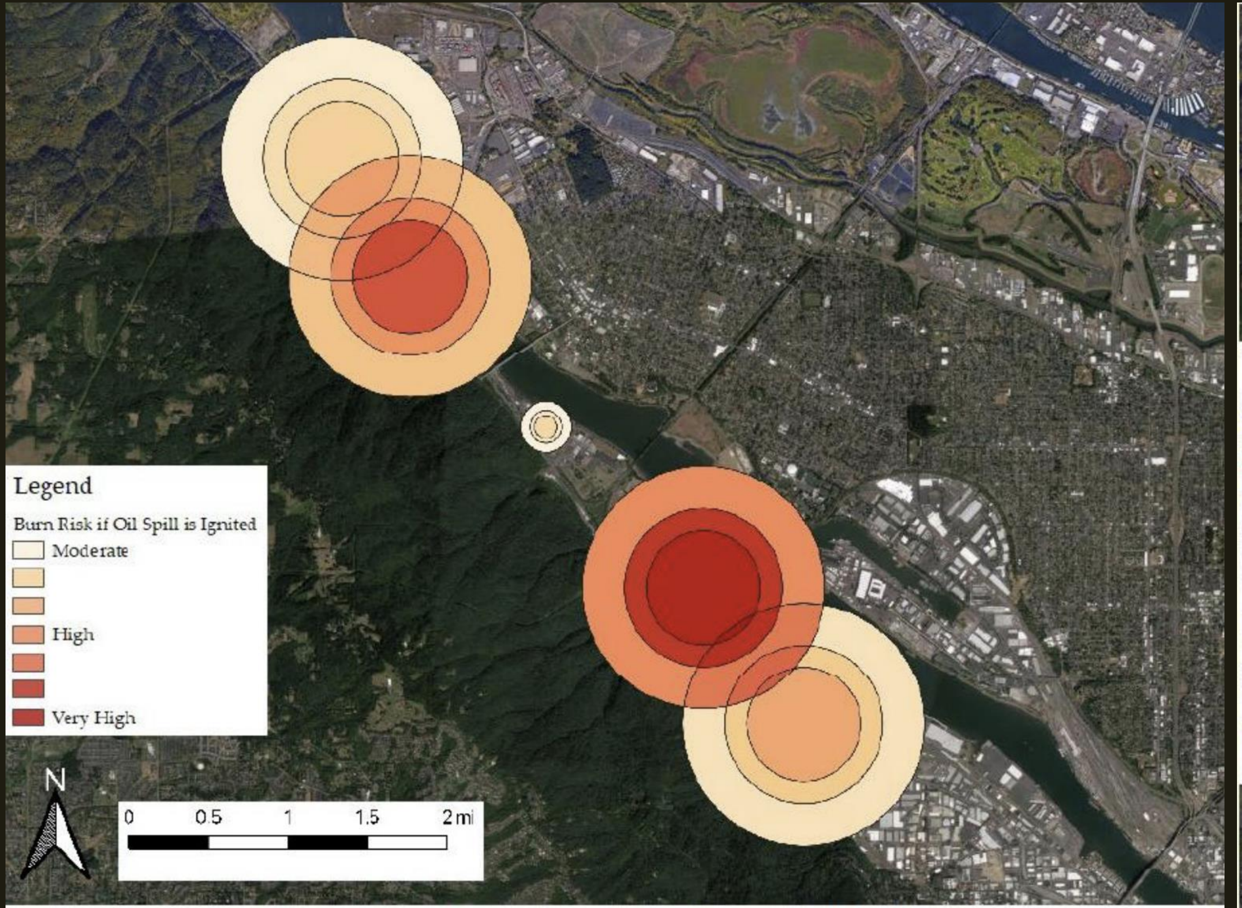
The Critical Energy Infrastructure Hub…

- 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

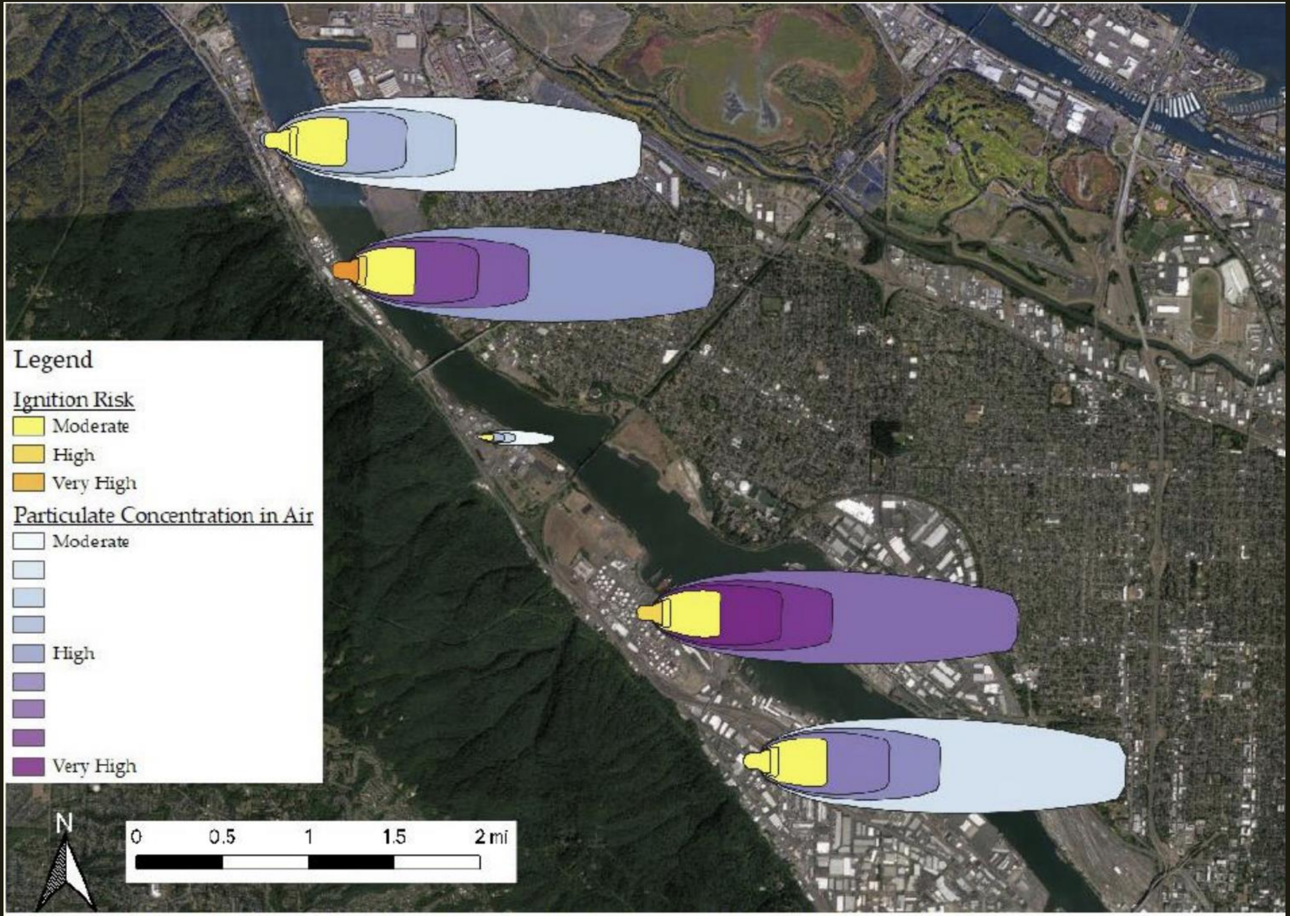


State of Oregon
DEQ Department of Environmental Quality

The CEI Hub…



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

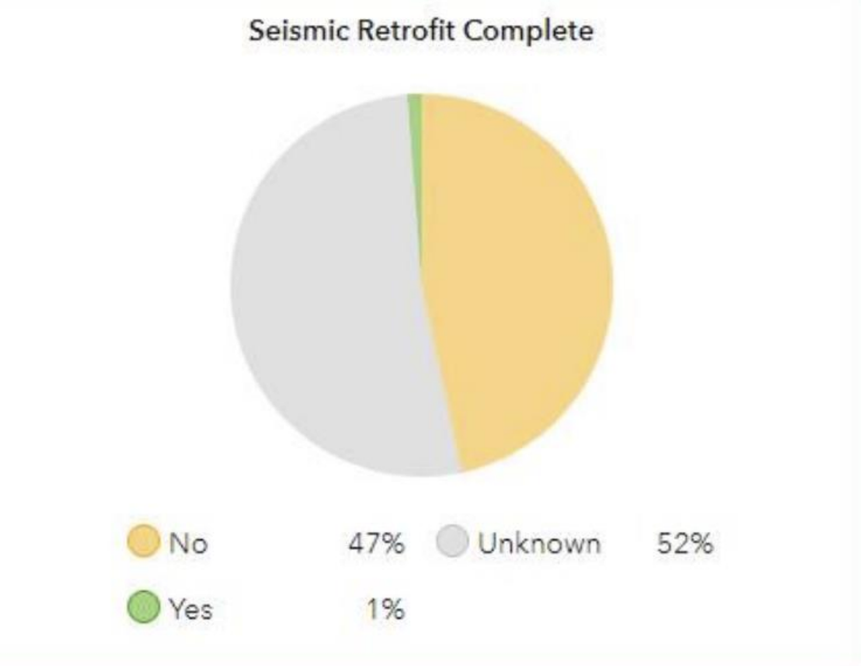


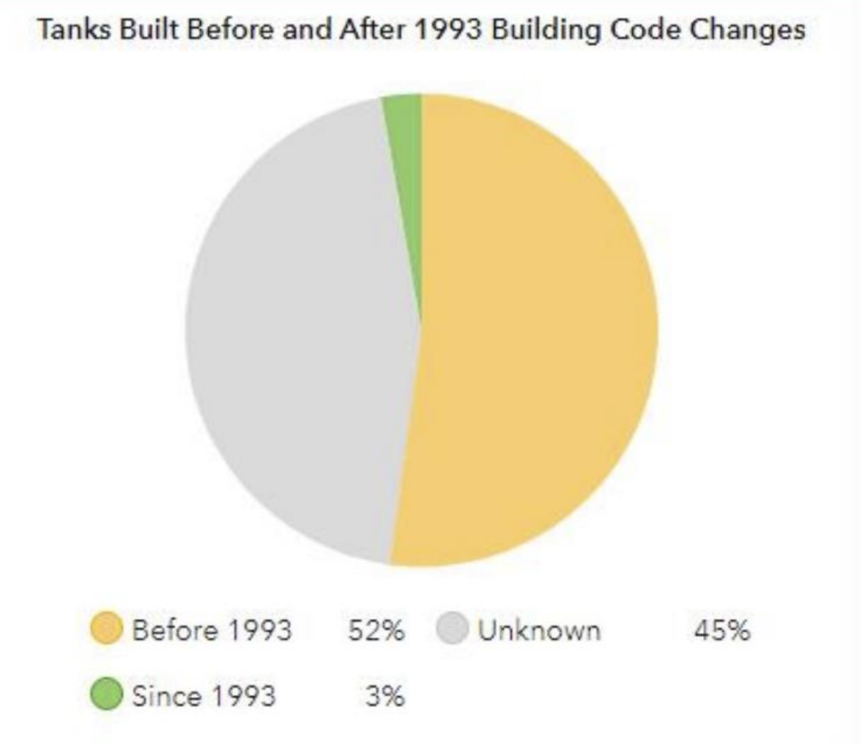
Source: NOAA and EPA ALOHA software, output created by ECONorthwest

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





USCG and DEQ oil spill drills Beyond NPREP Standards

Social Media	Community Evacuations/Reverse 911 systems
Public Drinking Water affected	Fires on Vessels
Wildlife impacted	Protesters
Archaeological Resources at risk	Tribal TOSC's and Liaisons
New Crude Oil Products	Actual VIP Tours
Sinking Oils	Press Conferences
Respiratory Protection	Multiple Simultaneous Spills

State of Oregon
DEQ Department of Environmental Quality

State and Federal Shared responsibilities

USCG/Fed Agencies Typically Staffs:	DEQ/State Typically Staffs:
FOSC	SOSC
PIO (Shared with State)	PIO (Shared with Feds)
Liaison (Shared with State)	Liaison (Shared with Feds)
Situation Unit	GIS Specialist (SIT/STAT and EU)
MTSRU	Environmental Unit (and EUL)
Operations as needed	Wildlife Branch (ODFW & USFWS)
Documentation Unit (Lead)	Documentation Unit (Support)
Planning Section as needed	Archaeological/Cultural Resources Group
Scientific Support Coordinator/SCAT	Technical Specialists

Marine AOR Spills

1978 Toyota Maru (Columbia River) 30,000 Gallons

1983 Blue Magpie (Yaquina Bay) 80,000 Gallons

1984 Mobil Oil (Columbia River) 200,000 Gallons

1991 Tenyo Maru (North Coast) 15 Miles of tar balls

1991 Tai Chung (Willamette River) 11,000 Gallons

1993 Southern Pacific (Yoncalla Creek) 5,000 Gallons

1993 MV Central (Columbia River) 3,000 Gallons

1994 An Ping 6 (Columbia River) 3,000 Gallons

1997 Handy Gunner (Willamette River) Gallons unknown

1999 MV New Carissa (South Coast) 70,000 Gallons

2010 Davy Crocket (Columbia River) 30,000 Gallons

2016 Mosier Train Derailment (Columbia River) 90,000 Gallons potential

2019 F/V Ann Kathleen (South Coast) 3,000 Gallons

Fishing Vessels

Recreational Vessels

DEQ and USCG respond to many Abandoned/Derelict Vessels in Oregon

egon
nt of Environmental Quality

Oregon Agencies with ADV Authorities

- Oregon State Marine Board ($150,000)
- Oregon Department of State Lands ($35,000)
- Oregon Department of Environmental Quality ($0*)
- Oregon State Parks (Based on Litter Removal Funds)
- County Sheriffs (Funding Varies)
- Local Authorities (Funding Varies)

*DEQ has an inter-agency agreement with OSMB to use Oil Spill Control Fund towards pollution abatement costs of ADV removals

Ongoing Cases

LST-1166: $1 Million spent by USCG 2010-2011

FV Tiffany, 2021 $300,000 + (dismantling)

Former USCGC Alert & USN Sakarissa 2020
$330,000 - $1 Million (removed)

Geographic Response Plans

Oregon GRP Zones

[Link to Oregon Coastal GRPs Update Project Website]

[Link to Oregon GRP Strategies (GRSs) Viewer]

[NOAA PNW Emergency Response Application]

CASCADIA
RISING

ality

Questions:

Don Pettit
Oregon DEQ - Emergency Response Program
971-563-7297
don.pettit@deq.oregon.gov

Title VI and alternate formats

DEQ does not discriminate on the basis of race, color, national origin, disability, age or sex in administration of its programs or activities.

Visit DEQ’s Civil Rights and Environmental Justice page.

Español | 한국어 | 繁體中文 | Русский | Tiếng Việt | العربية
Contact: 800-452-4011 | TTY: 711 | deqinfo@deq.state.or.us

For more on:

Emergency Response Program and Duty Officers/SOSCs – Wes Risher and/or Kimberlee Van Patten

NW Regional and Area Contingency Planning, Geographic Response Plans, Resources at Risk and Response Technology – Don Pettit

Drills & Exercises, Vessel & Facility C-Plans, and Derelict Vessels – Scott Smith

Ballast Water Program – Josh Emerson

State of Oregon
DEQ Department of Environmental Quality