

Oregon Fuel Action Plan

Oregon Seismic Safety
Policy Advisory
Commission

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State Declared Emergency – Management of Resources (ORS 401.188)

- ✓ Control, restrict, and regulate the use of food, feed, **fuel**, clothing, and other commodities, materials, goods, and services

Oregon Department of Energy (ODOE) Authority – (ORS 176.750-785)

- ✓ Develop and maintain a statewide contingency plan in response to petroleum shortages that impact Oregon
- ✓ Provide adequate fuel supplies to maintain emergency services, transportation, and the operation of the economy to ensure the health, safety, and welfare of the residents of the State of Oregon while an emergency exists

Fuel Executive Order

- ✓ Authorizes ODOE to implement the strategies in the Oregon Fuel Action Plan in response to a Cascadia Subduction Zone Earthquake and Tsunami

HISTORY: Energy Assurance & Resiliency



Awards Grants to 50 States – Fall 2009

To enhance state government energy assurance and resiliency

Oregon Department of Energy (ODOE)

- Partnered with the Oregon Public Utility Commission (OPUC) and the Oregon Department of Geology and Mineral Industries (DOGAMI)
- Assessed seismic vulnerabilities and earthquake impacts on critical energy infrastructure from a 9.0 Cascadia Subduction Zone (CSZ) earthquake
- Coincided with the state's development of the Oregon Resilience Plan

USDOE Definition: Resilience

“The ability of the energy critical infrastructure to absorb, adapt to, and/or rapidly recover from a potentially severe and disruptive event”

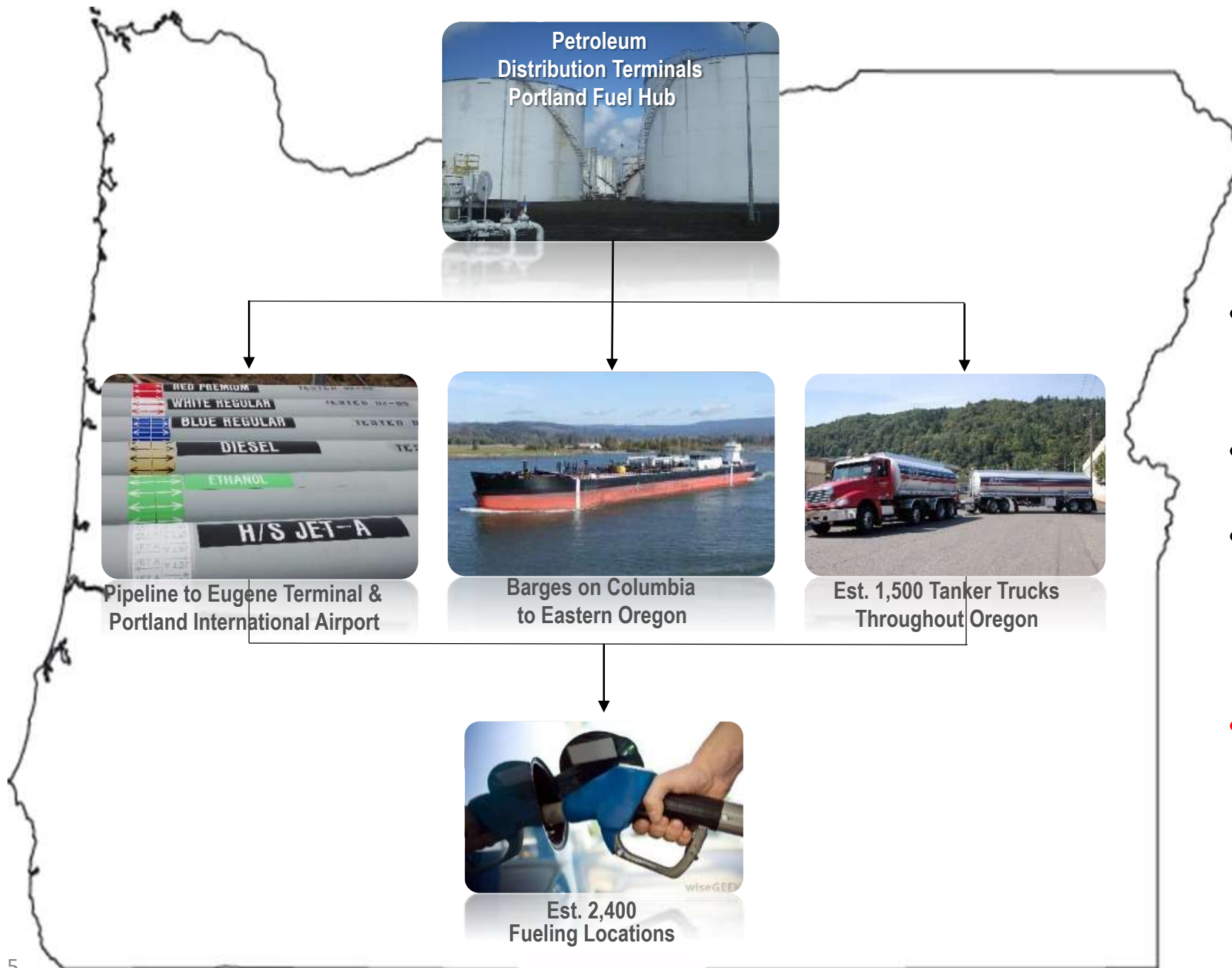


Oregon Imports 100 Percent of the State's Refined Petroleum Products

- Washington refineries supply more than 90 percent
 - ✓ About 75 percent by Olympic Pipeline to Oregon
 - ✓ Remaining product by tanker ships to Oregon
 - ✓ Portland Fuel Hub – located on liquefiable soils
anticipate significant fuel supply loss
- Utah refineries supply less than 5 percent to eastern Oregon communities
- California refineries supply less than 5 percent to southern Oregon communities



Oregon Fuel Supply & Distribution System



- Annual fuel imports estimated at three billion gallons
- Six day fuel delivery cycle
- Product delivered throughout Oregon by pipeline, barges, and tanker trucks
- Anticipate significant impacts to distribution system post Cascadia

DOGAMI Study Sites Aging Petroleum Infrastructure



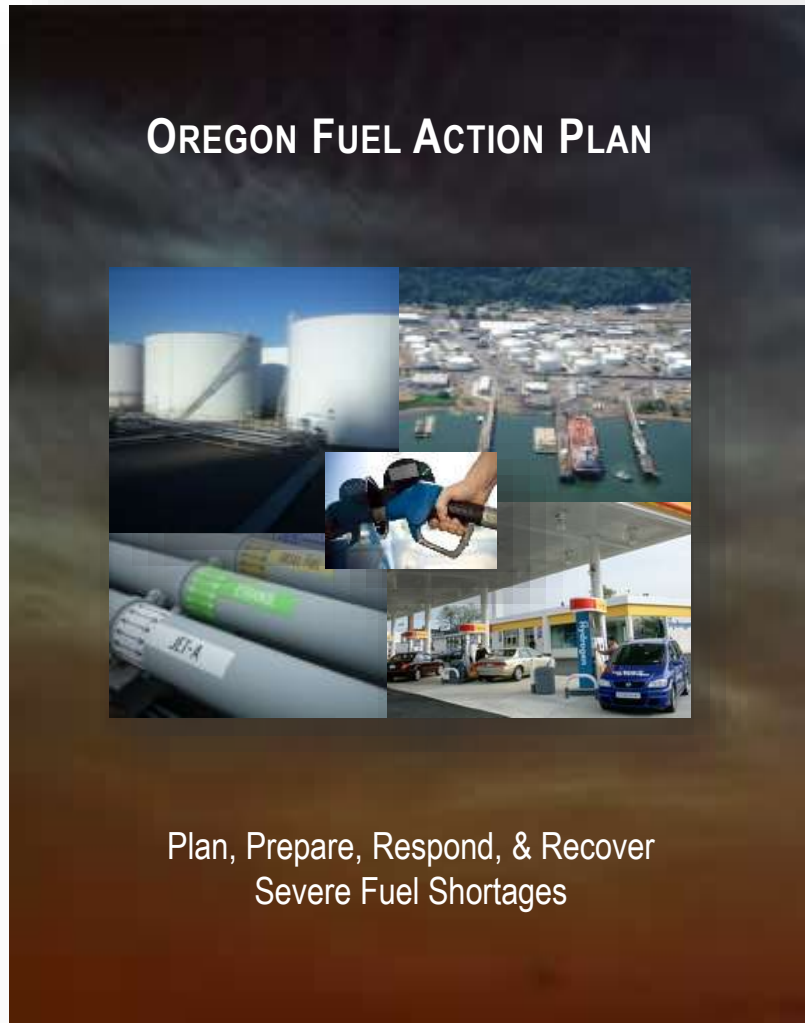
Olympic Pipeline built in the 1960s without seismic design standards



Only 3 of the hundreds of fuel tanks at the Portland fuel hub likely to survive Cascadia



Marine docks receiving fuel will be damaged with moderate earthquake



- Identifies ODOE authority and responsibilities to control and direct the state's overall response to petroleum emergencies
- Provides coordination structure for federal, state, county, tribal, and petroleum industry partners
- Provides structure for fuel allocation that identifies pre-approved priority users of fuel and user responsibilities
- Identifies state and county priority lifeline routes to support fuel deliveries
- Pre-designates Fuel Points of Distribution (FPOD) for receiving emergency fuel
- Plan on ODOE website - www./Oregon.gov/ENERGY

Oregon Fuel Action Plan: 9 Priority Actions



Action 1	Action 2	Action 3	Action 4	Action 5	Action 6	Action 7	Action 8	Actions 9
Notification Activation and Authorities	Public Information	Damage Assessment	Assess Fuel Needs & Determine Priorities	Outside Assistance: Fuel Supply	Fuel Conservation Measures	Temporary Waivers	Fuel Allocation	Recovery
<ul style="list-style-type: none"> - Initial Notifications - Activate ODOE AOC - Succession & Authorities 	<ul style="list-style-type: none"> - ODOE Fuel Emergency Outlook Web Page - Public Information Campaign – social media - News conferences - Telephone Information Center 	<ul style="list-style-type: none"> - Assess impacts to petroleum infrastructure - Estimate timeline for repairs - Provide fuel sector info & status updates 	<ul style="list-style-type: none"> - Assess fuel availability in Oregon - Assess 18 state ESFs, counties, and tribal fuel needs - Determine state & regional fuel priorities - Governor’s Disaster Cabinet 	<ul style="list-style-type: none"> - Identify & obtain fuel source - Identify viable fuel delivery options into Oregon - Identify viable options for dispensing fuel 	<ul style="list-style-type: none"> - Issue voluntary fuel conservation measures - Issue mandatory fuel conservation measures 	<ul style="list-style-type: none"> - Obtain temporary environmental operational, and safety waivers as needed to ensure the timely delivery of fuel 	<ul style="list-style-type: none"> - Review & approve/deny fuel requests <i>(ESF Primary State Agencies, counties & tribes)</i> - Allocate fuel to approved state agencies, counties & tribes - Odd/Even Fuel Allocation - Fuel Request Form Provided 	<ul style="list-style-type: none"> - Allocate fuel to support recovery activities - State Recovery Coordinating Team - Governor’s Recovery Cabinet - Terminate fuel recovery activities as appropriate

Fuel Allocation: All Hazards

Saving Lives and Restoring Critical Lifelines & Services



Challenge – Allocating fuel to emergency and essential service providers in the state involves 120 state agencies, 36 counties, 240 cities, and 9 federally-recognized tribes

Standardized Structure – Identifies three categories of priority fuel users:

- 18 ESF Primary State Agencies
- 36 Counties
- 9 Federally-Recognized Tribes



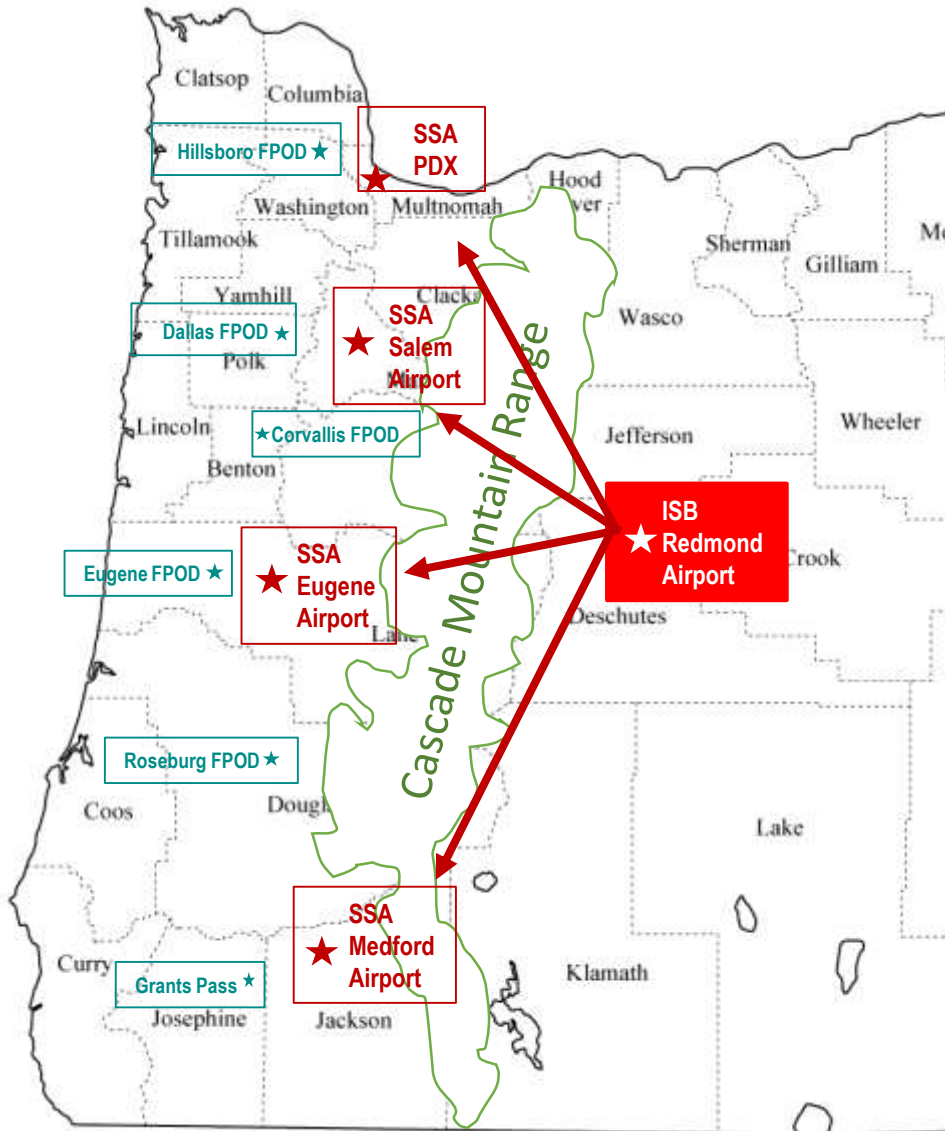
Fuel Strategy: Air Response

INITIAL AIR RESPONSE ACTIVITIES

Required Support: Federal, Military, and Industry

Bulk Fuel Source – Outside Region

- Bulk fuel “pushed” into the federal Incident Support Base - Redmond Municipal Airport
- Initial daily bulk fuel push into Oregon
 - Unleaded gasoline – est. 75,000 gallons
 - Diesel – est. 400,000 gallons
- ODOE directs fuel movement from federal ISB to State Staging Areas and to the pre-designated fuel points in the impacted communities



Fuel Strategy: State & Local Lifeline Routes



Oregon Department of Transportation (ODOT)



- **State Lifeline Routes** – Guide initial repairs on the transportation, power, and communication systems to support fuel delivery
- **County Lifeline Routes** – Counties to identify local priority routes that connect to state lifeline routes
- **Fuel Points of Distribution (FPOD)** – Counties pre-designate FPODs to receive emergency fuel supplies

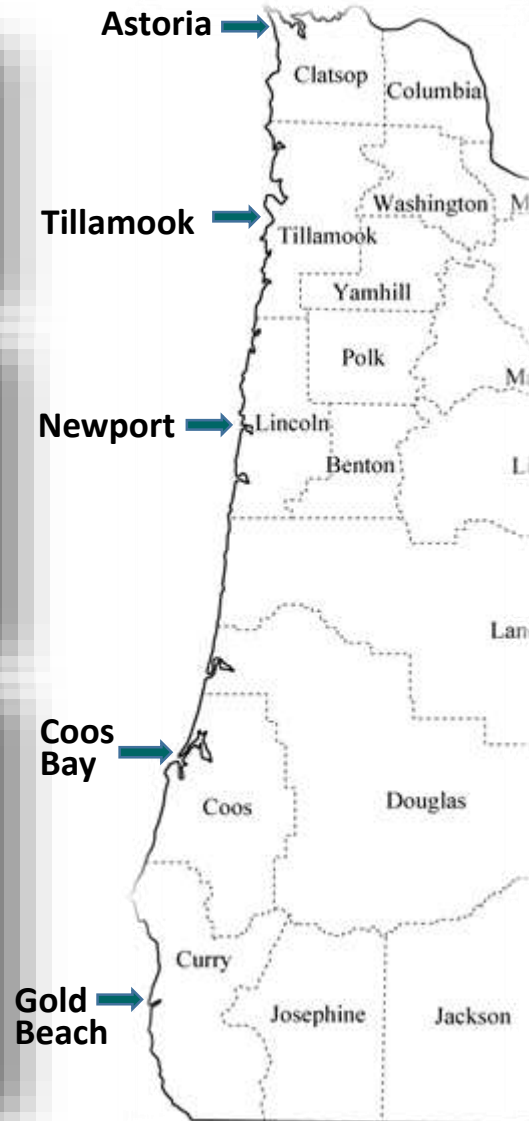
• Marion County Example:

- Identified Tier 1 priority routes connecting to state lifeline routes
- Pre-designated 9 FPODs to receive emergency bulk fuel supplies



ODOE has fuel data from 26 of 36 counties

Fuel Strategy: Oregon Coast



U.S. MARITIME ADMINISTRATION (MARAD) ASSETS

Fuel Source: Outside Region

Maritime Assets – Deliver bulk fuel and operate portable fueling points along the Oregon Coast

- Ready Reserve Force ships out 7 – 10 days of notification
- Larger MARAD vessels ship out within 30 days of notification

Foreign Vessels – Lift Jones Act to allow foreign vessels to deliver bulk fuel to Oregon ports

- Superstorm Sandy – Foreign vessels shipped 115 million gallons of fuel to ports in New York and New Jersey

Fuel Strategy: Central & Eastern Oregon

VIABLE CRITICAL INFRASTRUCTURE

Working Transportation, Power & Communications Systems

Fuel Source: Pasco Distribution Terminal-Petroleum Industry

- Reliant on petroleum industry to meet fuel demands
- Obtain temporary waivers to ensure timely fuel movement
- Implement voluntary/mandatory fuel conservation measures
- Implement Odd/Even Fuel Allocation Program if needed
- Implement public information campaign to reduce fuel consumption



JANUARY 25, 2018 FUELING ANXIETY TABLETOP: GAP IDENTIFIED

- Need for ODOE to assist counties with developing local fuel management plans
- ODOE works with the Oregon Fuels Association and member companies to identify strategies for local fuel management (*acquisition, storage, distribution*) post - Cascadia
 - Presented Oregon Fuel Action Plan at OFA Conference (*July 2018*)
 - Survey completed of OFA member companies (*November 2018*)
- ODOE to review survey results
- ODOE to facilitate meetings between counties and fuel distributors as appropriate to assist in local fuel management plan development



Partnership
With OFA
& Members



Alternate Fuel Hub: Post Cascadia



JANUARY 25, 2018 FUELING ANXIETY TABLETOP: GAP IDENTIFIED

- Need to identify an alternate location for a Fuel Hub if industry determines the existing location is unsalvageable post - Cascadia

- Industry Requirements for Alternate Fuel Hub:

- Upriver on stable soils within close proximity to current location
- Access to waterway
- Access to rail systems
- Government support



Oregon Only As Resilient as the Region's Fuel Infrastructure

- Washington Refineries Resilience
 - ✓ Anticipate moderate/significant damage – inoperable for months if not longer
- Olympic Pipeline Resilience
 - ✓ Anticipate widespread damage (*est. 250 breaks/82 leaks*) – inoperable for months if not longer
- Oregon Fuel Sector Resilience (CEI Hub)
 - ✓ No seismic assessments or risk mitigation plans have been conducted by fuel companies
 - ✓ Need to identify alternate CEI Hub post - Cascadia
 - ✓ Challenge remains getting fuel to the impacted communities with compromised roads and bridges



Oregon Fuel Action Plan



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