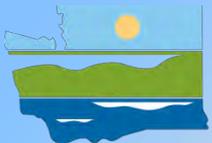


Marine & Rail Oil Transportation Study

Scott J. Ferguson

Prevention Section Manager, Spills Program
Transportation Commission Meeting
January 22, 2015



DEPARTMENT OF
ECOLOGY
State of Washington

Proviso

\$300,000 to conduct a study of oil shipment through the state.

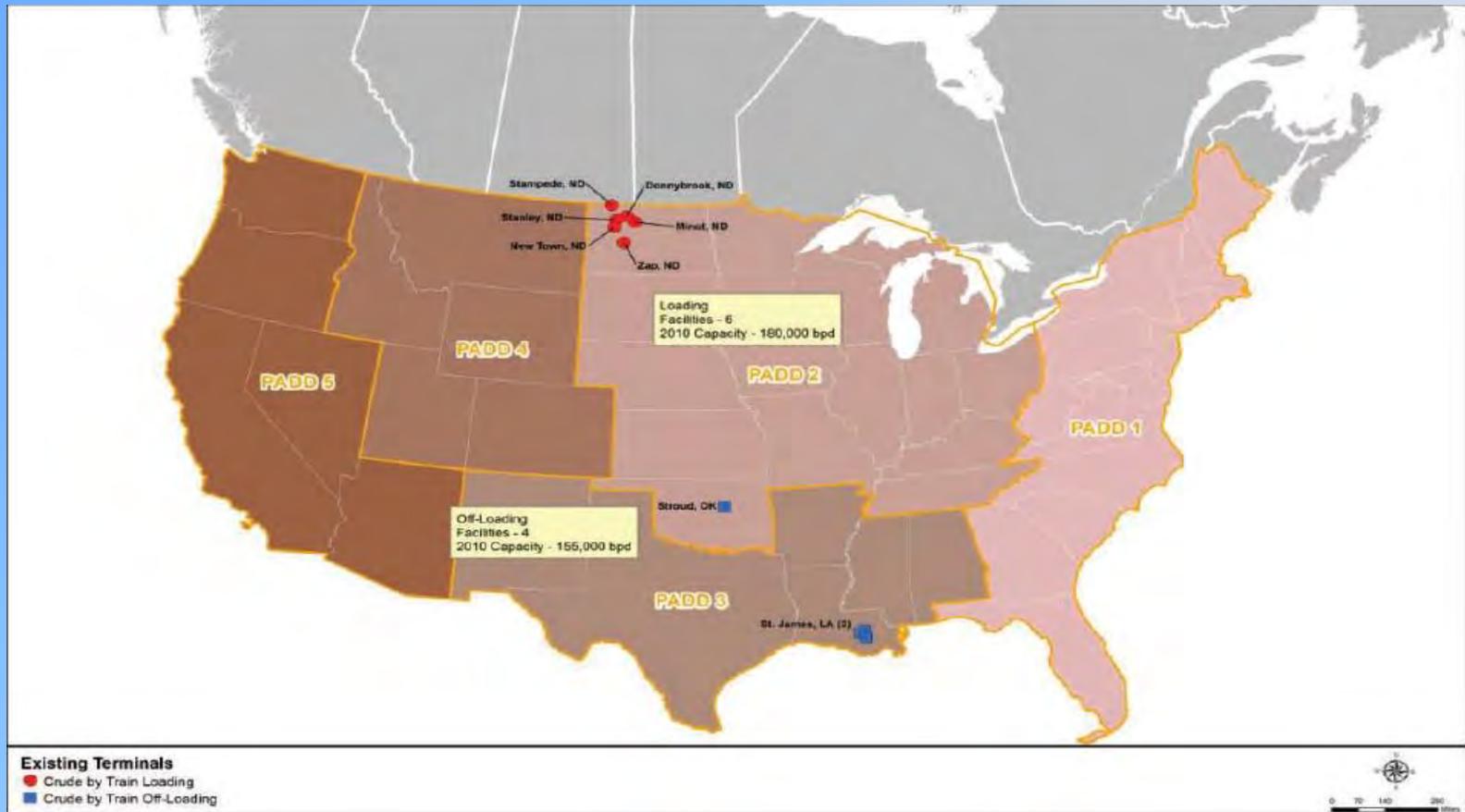
Study purpose is **assess public health and safety , and environmental impacts.**

Study must provide data and analysis of statewide risks, gaps, and options for **increasing public safety and improving spill prevention and response readiness.**

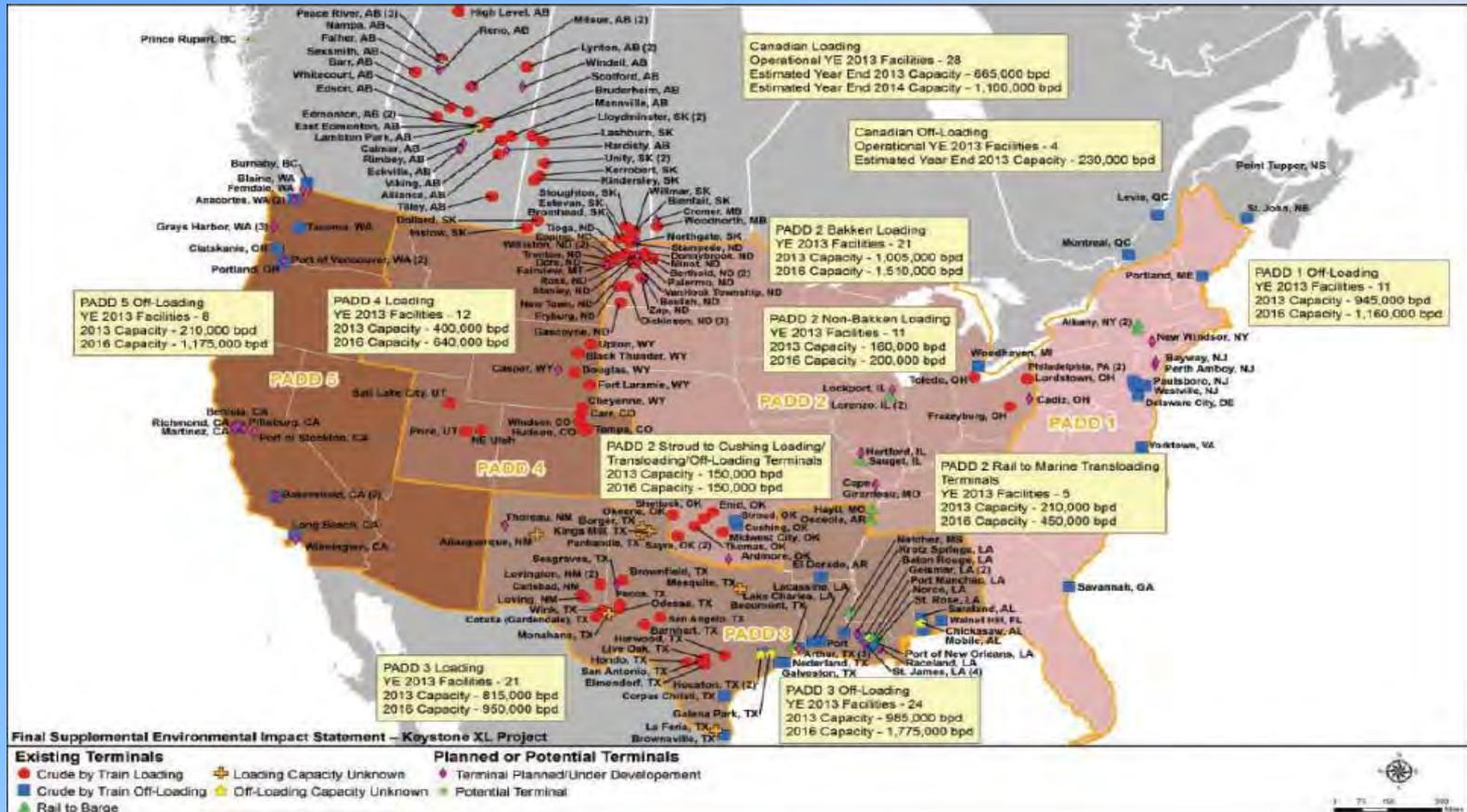
Changing energy picture



United States existing terminals 2010

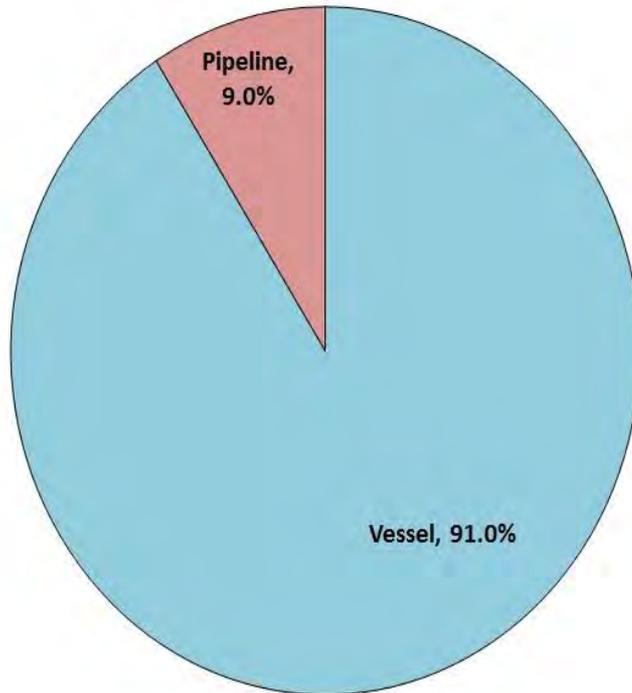


US existing and proposed terminals - 2013

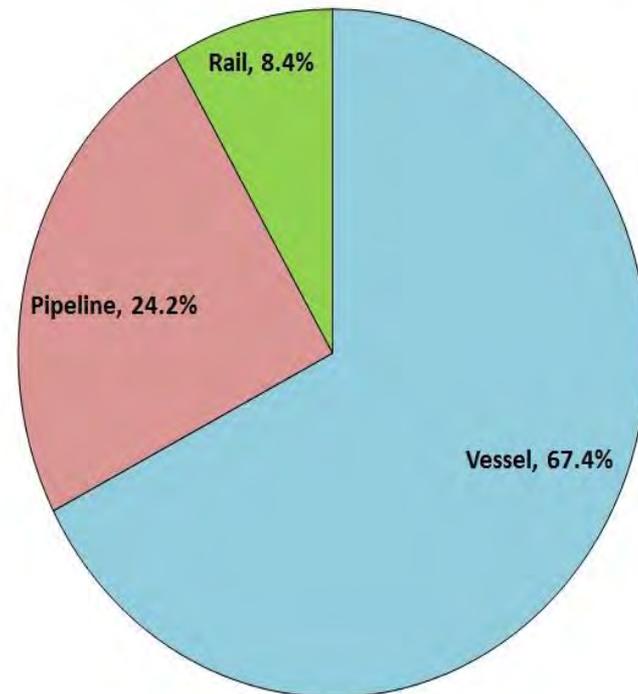


First Oil Train in WA 2012

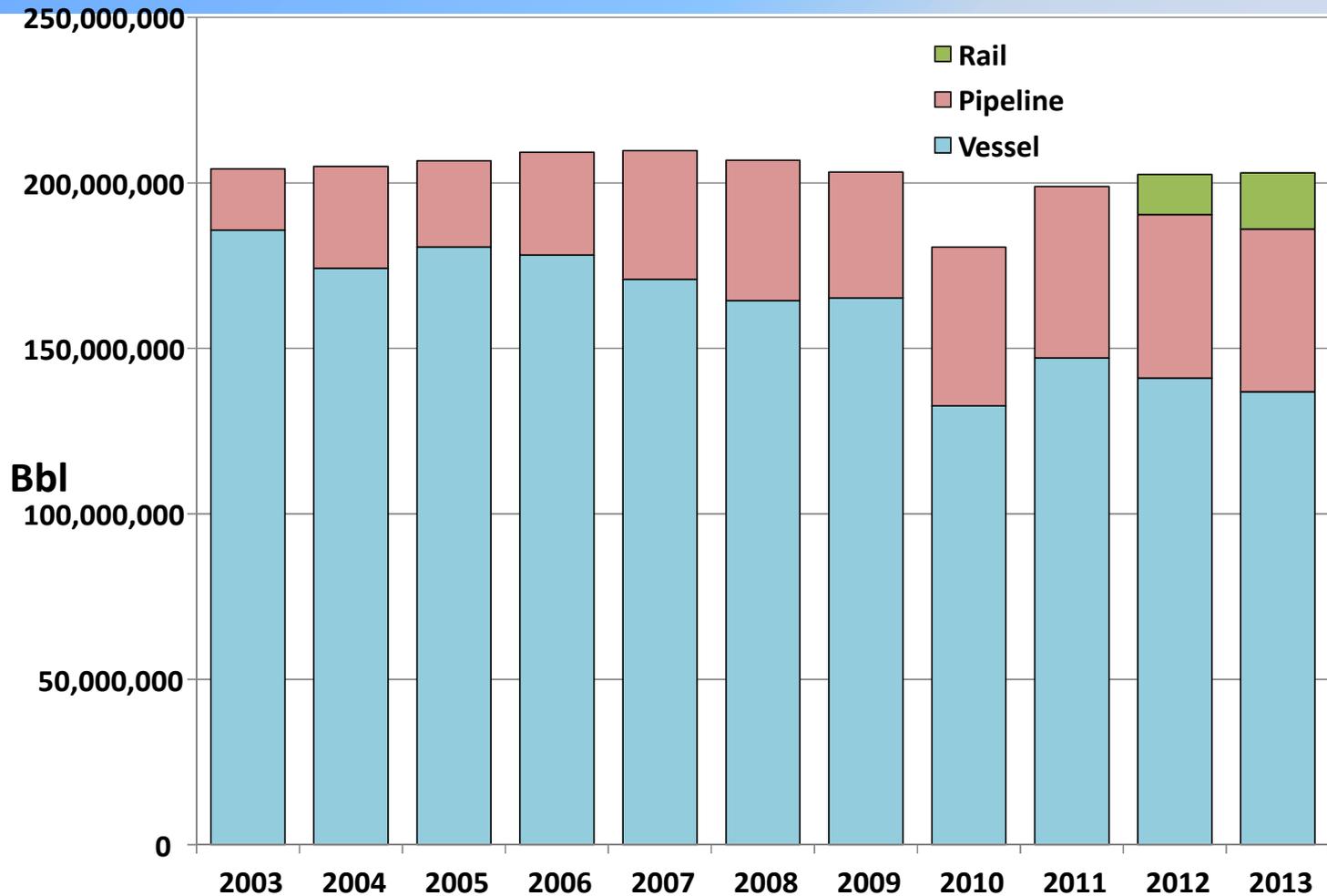
Percent Oil Transport to Washington State by Mode - 2003



Percent Oil Transport to Washington State by Mode - 2013



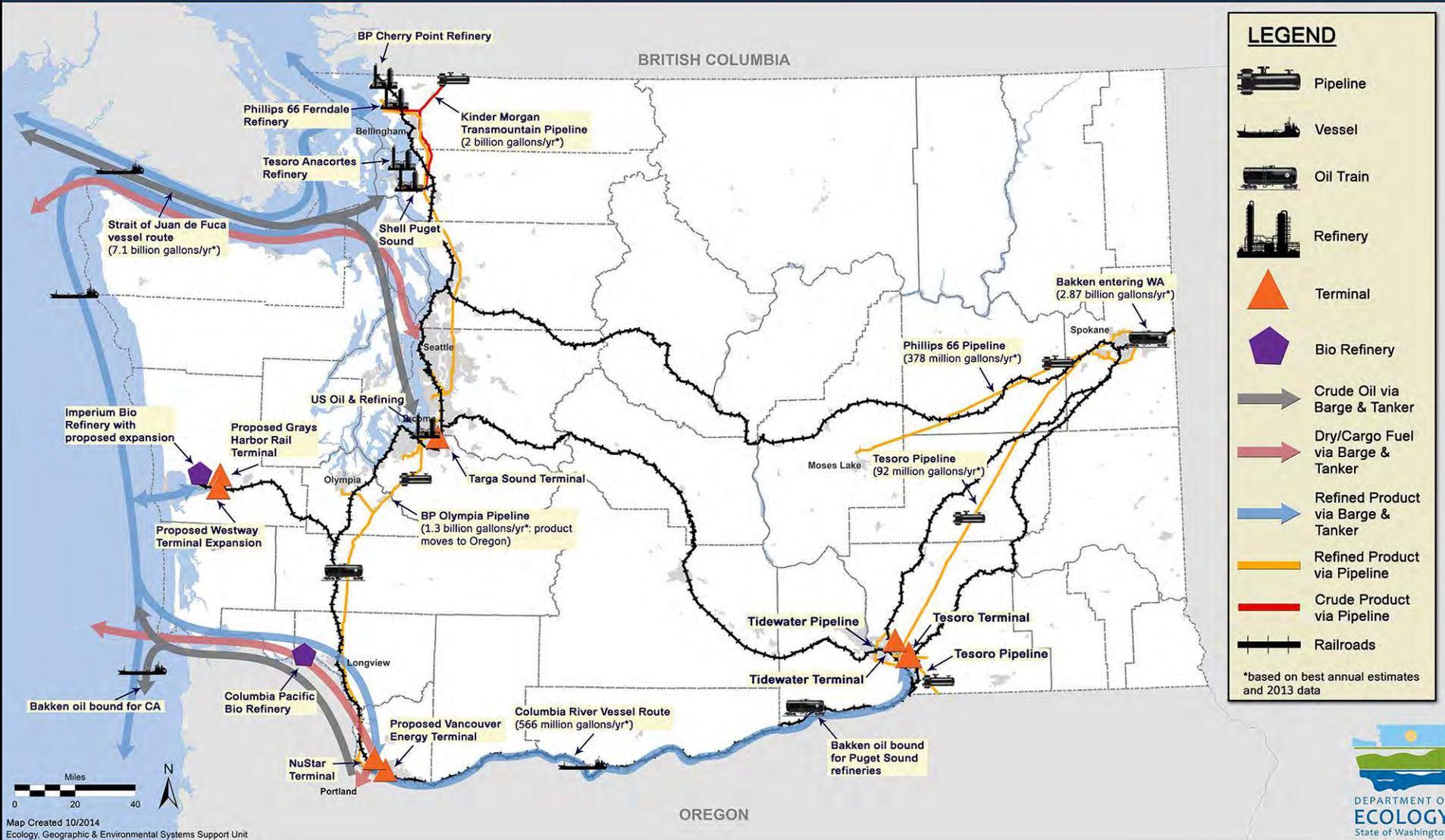
Oil imports to WA by mode '03-'13



Refineries & facilities (existing & proposed) for crude oil by rail – June 2014



Oil Movement In & Out of Washington State



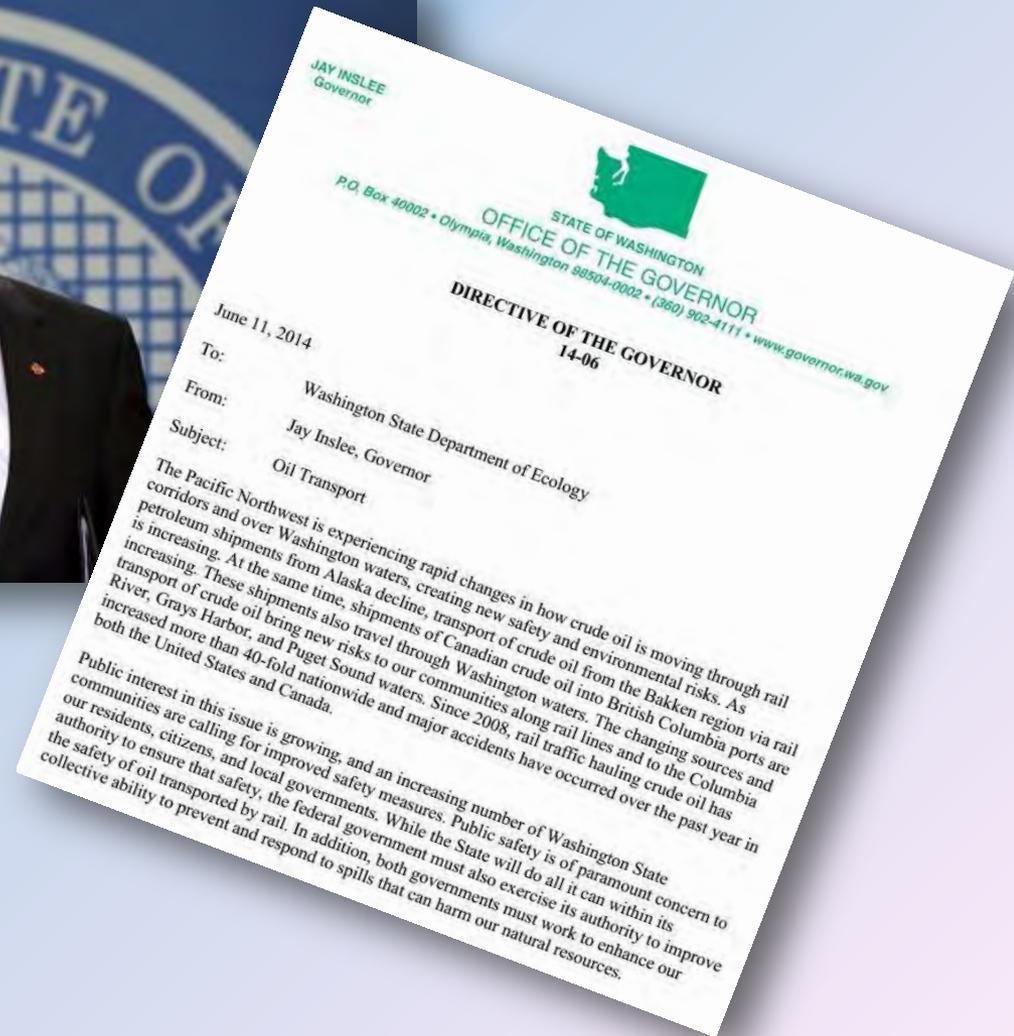
Public concerns over oil train safety



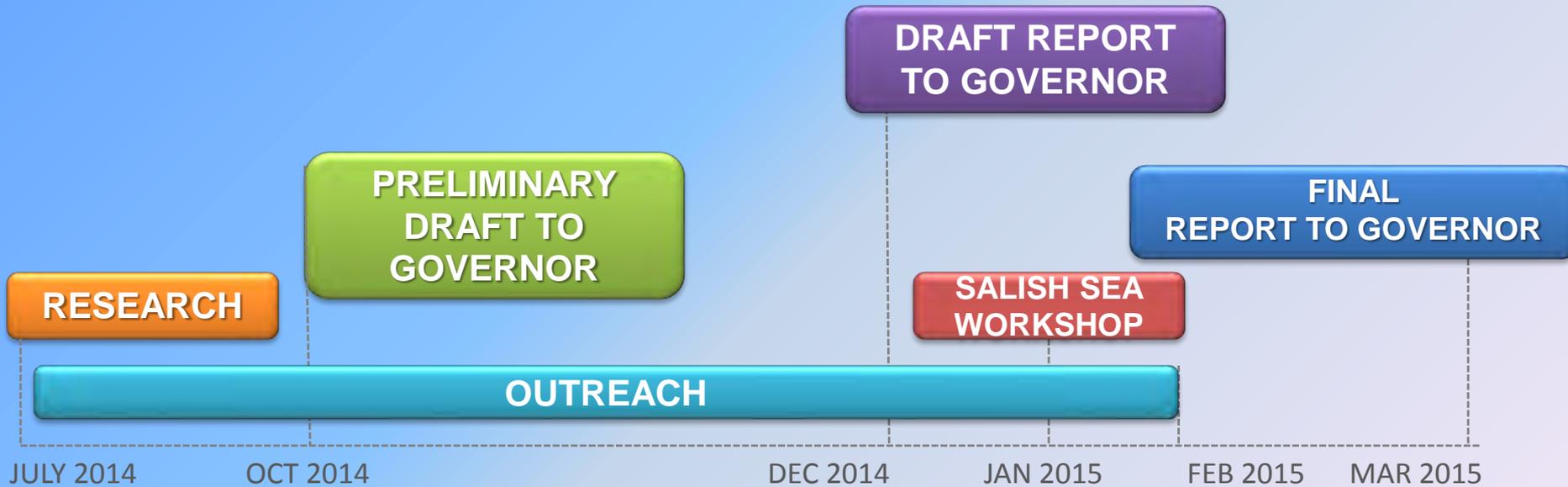
BNSF Bakken Crude Oil Derailment



WA Governor's Directive



Oil Transportation Study



Salish Sea Workshop

- Connects the recent Salish Sea traffic studies, including this Oil Transportation Study
- Report from the Workshop will become appendix in the Study
- Focus here is marine only: Only marine aspects from oil transported by rail

Supporting recommendations from the study

Focus on New Oil Spill Risks

Spills Program



DEPARTMENT OF
ECOLOGY
State of Washington

September 2014

Marine & Rail Oil Transport Study: Reporting Oil Transport by Rail

The problem

Over the last decade significant changes have occurred in the way crude oil is transported in Washington State. In the past, 90% of the crude oil for Washington's refineries transited thru the Puget Sound by tanker, and the majority of this oil was Alaska North Slope Crude. Today an increasing amount of crude used by west coast refineries is being sourced from the Bakken formation and is moving thru Washington via pipeline and rail. The potential volatility and public hazards that Bakken crude possesses has come to light nationally with tragic rail

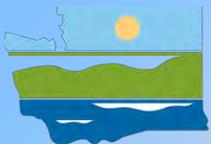
WHY IT MATTERS

Today Washington is faced with the challenges associated with moving crude oil by rail – a new dynamic.

Not only is the mode of transport new – the volume and type of product are too, and Washington isn't accustomed to dealing with crude oil on the inland side of our state.

And there's more to consider:

- We're facing the potential of a new methanol facility in our state.



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Rail Prevention

- Prevent derailment through track inspection
- Reduce speed
- Safer tank car standards
- Crew/manning standards
- Crossing safety
- Better identification of CBR and hazmat cargo on trains
- Rail safety committee

Marine Prevention

- Prevent vessel casualties and spills by building on previous systems (e.g., VTS and ANT systems, harbor safety committees, rescue/escort tugs)
- Reduce human error/Improve Situational Awareness
- Protective fuel tanks, bunkering, speed
- Enhance VTS, piloting, Facility/Rail/Marine
- Voluntary Best Achievable Practices
- Continue and expand VTRA studies to follow CBR and future changes

Rail Response

- Comprehensive response plans for rail
- Increase emergency response capabilities (for example, equipment, local emergency plans)
- Increase training of responders
- Update geographic response plans

Marine Response

- Enhance response capabilities in target areas where oil will/may be transported by rail
 - Salish Sea (Puget Sound), Grays Harbor, Columbia River, WA Coast
- Response capability for new crude types based on geography/waterway
- Response capability for potential future changes in vessel traffic

Rail Preparedness

- State authority to regulate rails limited, but state can have input to federal rulemaking process and consider potential for higher standards within state.
- Contingency planning related to facility definition.
- Ensure limits of liability are adequate.

Marine Preparedness

- Preparing and update marine geographic response plans to reflect changes in facilities and marine/rail traffic characteristics.
- Ensuring response equipment is appropriate for that operating environment.
- Spill response equipment caches.
- Contingency planning related to facility definition.
- Ensure limits of liability are adequate.

Moving forward, next steps



Thank you.

Scott Ferguson, Prevention Section
Manager

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[www.ecy.wa.gov/programs/spills/Oil
Movement/index.html](http://www.ecy.wa.gov/programs/spills/OilMovement/index.html)