



Gasoline & Diesel In Oregon Quantity, Sources & Distribution

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Oregon Motor Fuel Consumption

- 1.507 Billion Gallons of Motor Fuel 2008 (ODOT)
 - Fuel tracked primarily for tax purposes
 - Taxed fuel data collected by ODOT
 - EIA collects data by a annual mandatory industry survey form
 - Some discrepancies between data
 - ODOT 2007 Motor Fuel Taxable Distribution – 1,563,847,970 gal
 - EIA 2007 Oregon Motor Fuel Total Consumption – 1,587,600,000 gal
 - Almost a 24 Million gallon difference or 1.5%
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Oregon Distillate Consumption

- 773 Million Gallons Distillate Total 2007 (EIA)

Residential – 22,453,000 gallons

Commercial – 18,965,000 gallons

Industrial – 18,191,000 gallons

Farm – 26,846,000

Electric Power – 1,400,000 gallons

Railroad – 80,362,000 gallons

Vessel Bunkering – 20,003,000 gallons

On-Highway – 560,598,000 gallons

Military – 1,977,000 gallons

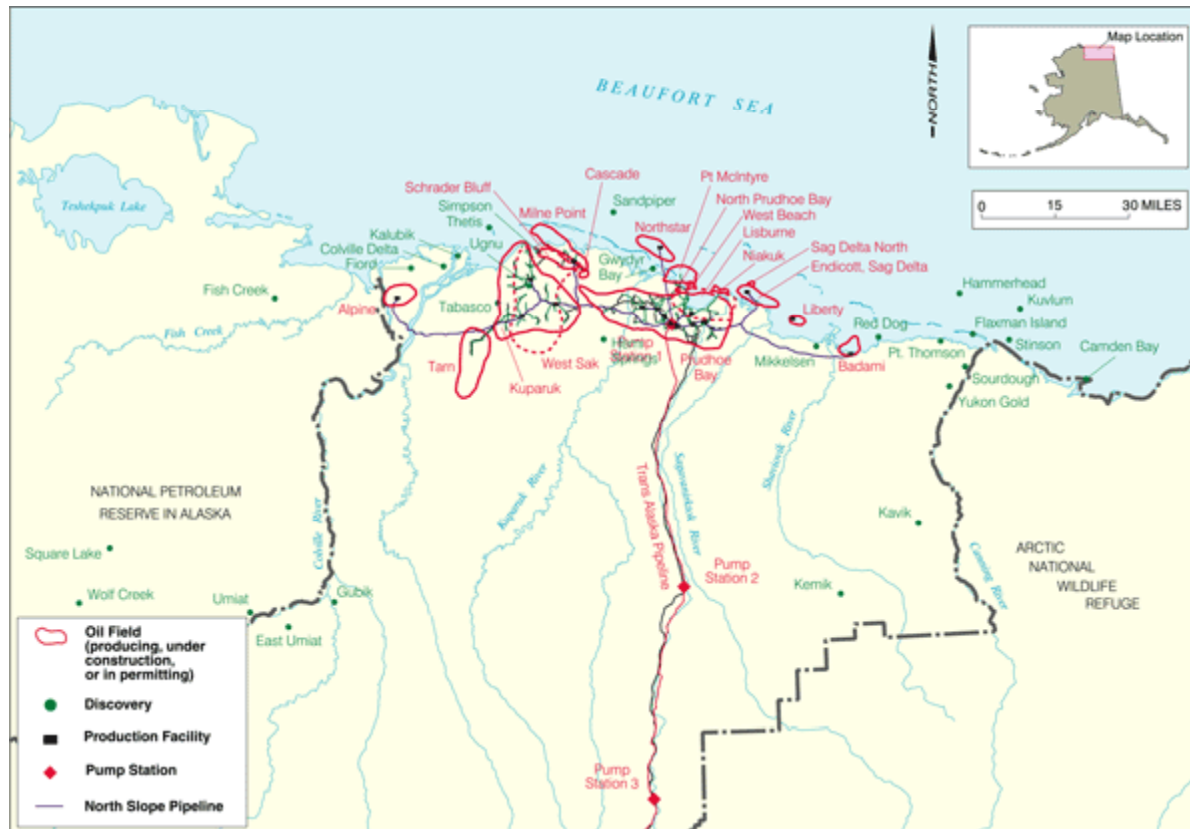
Off-Highway – 22,367,000 gallons

About 90% of Oregon's Petroleum is Processed at Four Washington Refineries

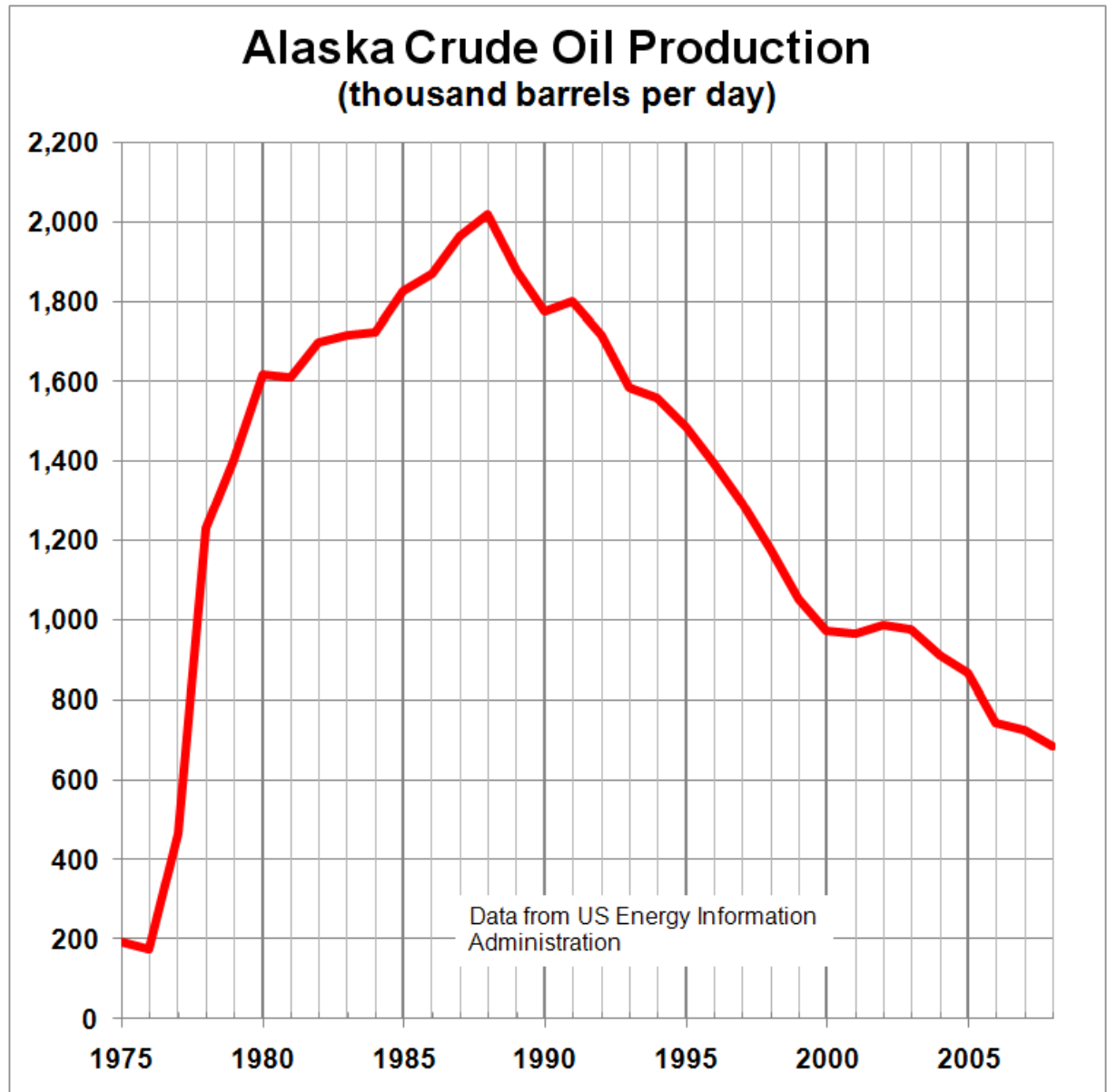
- BP Cherry Point (Ferndale) 234 TBD
- ConocoPhillips (Ferndale) 105.5 TBD
- Shell (Anacortes) 147.5 TBD
- Tesoro (Anacortes) 120 TBD
- All of Oregon's petroleum demand must be satisfied with imports



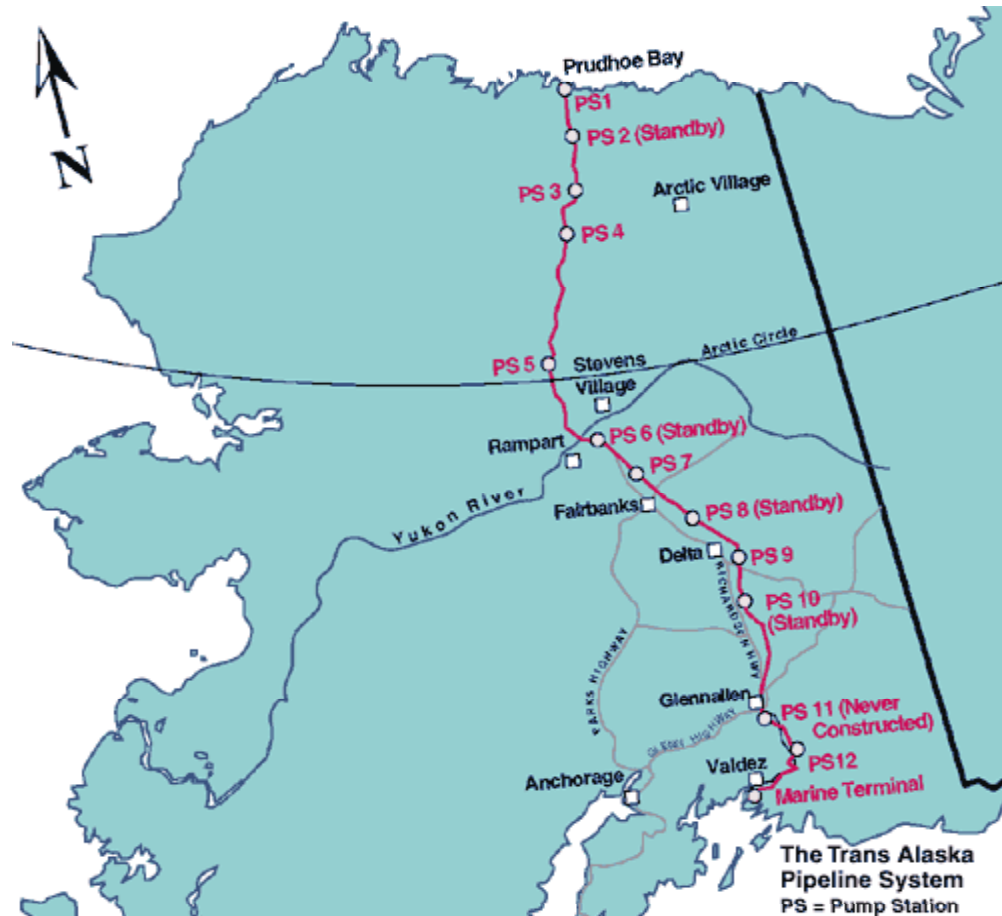
Historically the largest percentage (80 to 90%) of petroleum product has come from the Alaskan North Slope



Production of North Slope oil peaked in 1988 and since has been in a steady state of decline



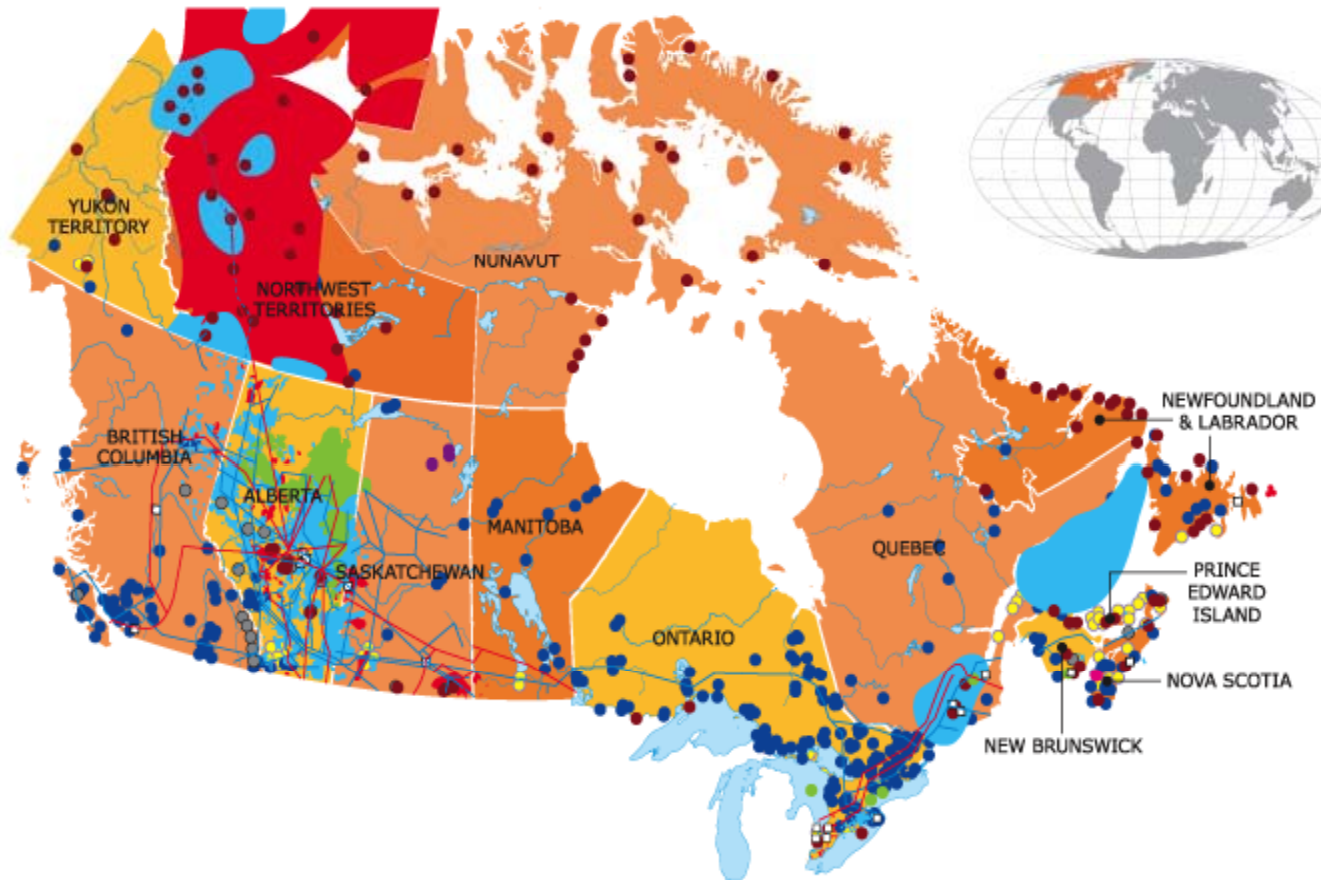
Oil from the North Slope is transferred South by the Trans Alaskan Pipeline System



Tankers transport the biggest share of the ANS crude to refineries on the West Coast



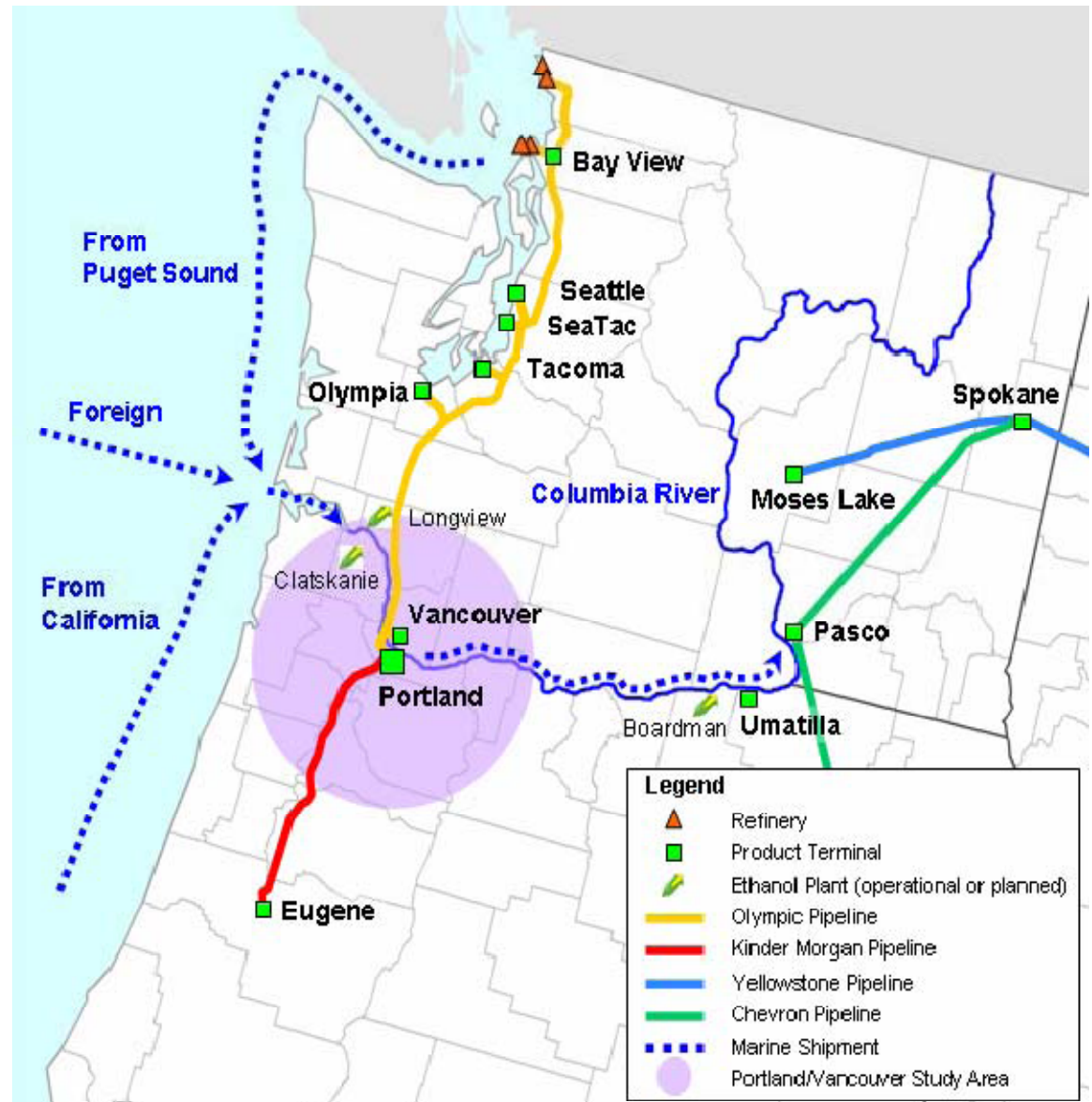
Canadian Oil Sources



The Trans Mountain Pipeline delivers crude directly to the four WA refineries



**Olympic Pipeline - 300
TBD Capacity**
130 to 132 TBD is
shipped into Portland
Portland /Vancouver
region has a demand of
about 200-210 TBD
70 to 80 TBD come by
barge
The demands on the
Portland/Vancouver
terminal include about
45 TBD shipped to the
Tri-Cities area as well as
45 TBD that moves to
Eugene via the Kinder
Morgan Pipeline



TBD = Thousand Barrels a Day

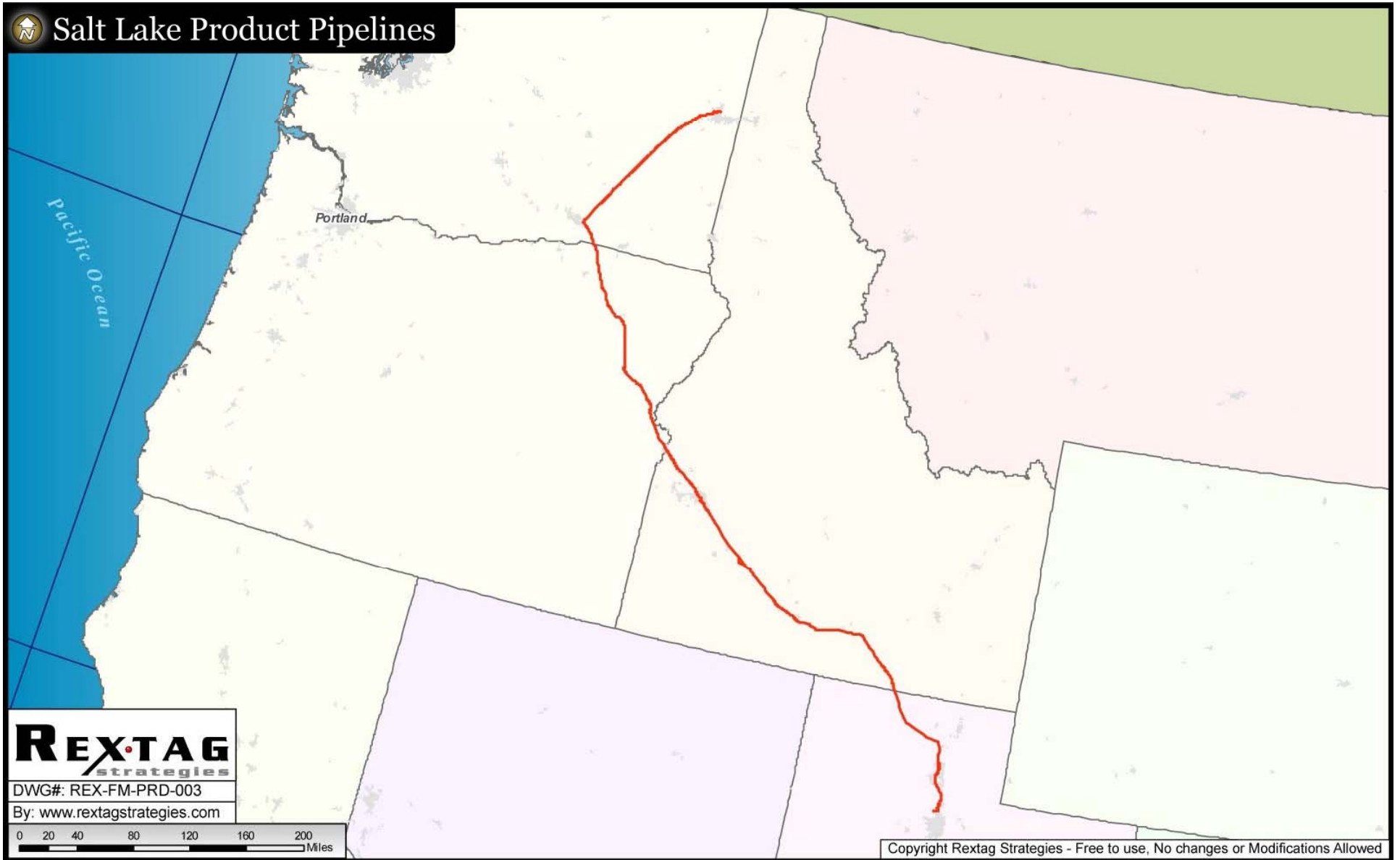
Terminals and Distribution

- Oregon Dept. of Agriculture categorizes petroleum businesses by the size of their measurement meters
 - Terminal (type 33 or H) 91 businesses
 - Jobber (type 32 or G) 428 businesses
 - Retail (type) over 1,600 businesses
 - 110 to 120 TBD are distributed primarily by truck daily from Portland terminals.
 - 45 TBD are distributed primarily by truck from Eugene terminals.
 - 45 TBD are distributed primarily by truck from Pasco
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Some product is trucked up into S. Oregon from pipeline terminals in Nevada that originate from the CA Bay area



Some product is trucked into Eastern Oregon from pipeline terminals in Idaho that originate from a refinery in Utah



Ethanol Consumption in Oregon

- The state RFS requires 10 percent ethanol in all regular and mid-grade product. Retailers now have the option of offering clear premium. Most will not opt in.
- Estimated use is 151 MG/yr.
- Sales of higher blends of ethanol (E85) are not tracked, most likely rolled into the Motor Fuels number.



Ethanol Production and Distribution for Oregon

- Ethanol production capacity in Oregon is 151.5 Million Gal/yr, 150 MG/yr is corn
- Currently ethanol production is at 41.5 MG/yr
 - 40 MG/yr from Boardman OR. (Corn)
 - Ethanol is barged from Boardman to West Coast marine terminals
 - Est. 1.5 MG/y from Cornelius OR. (Ag. Waste)
- The remainder is railed from the Midwest
- Ethanol is not transported in any of the regions pipelines
- Retail blender pumps for ethanol are not legal in Oregon



Biodiesel Consumption in Oregon

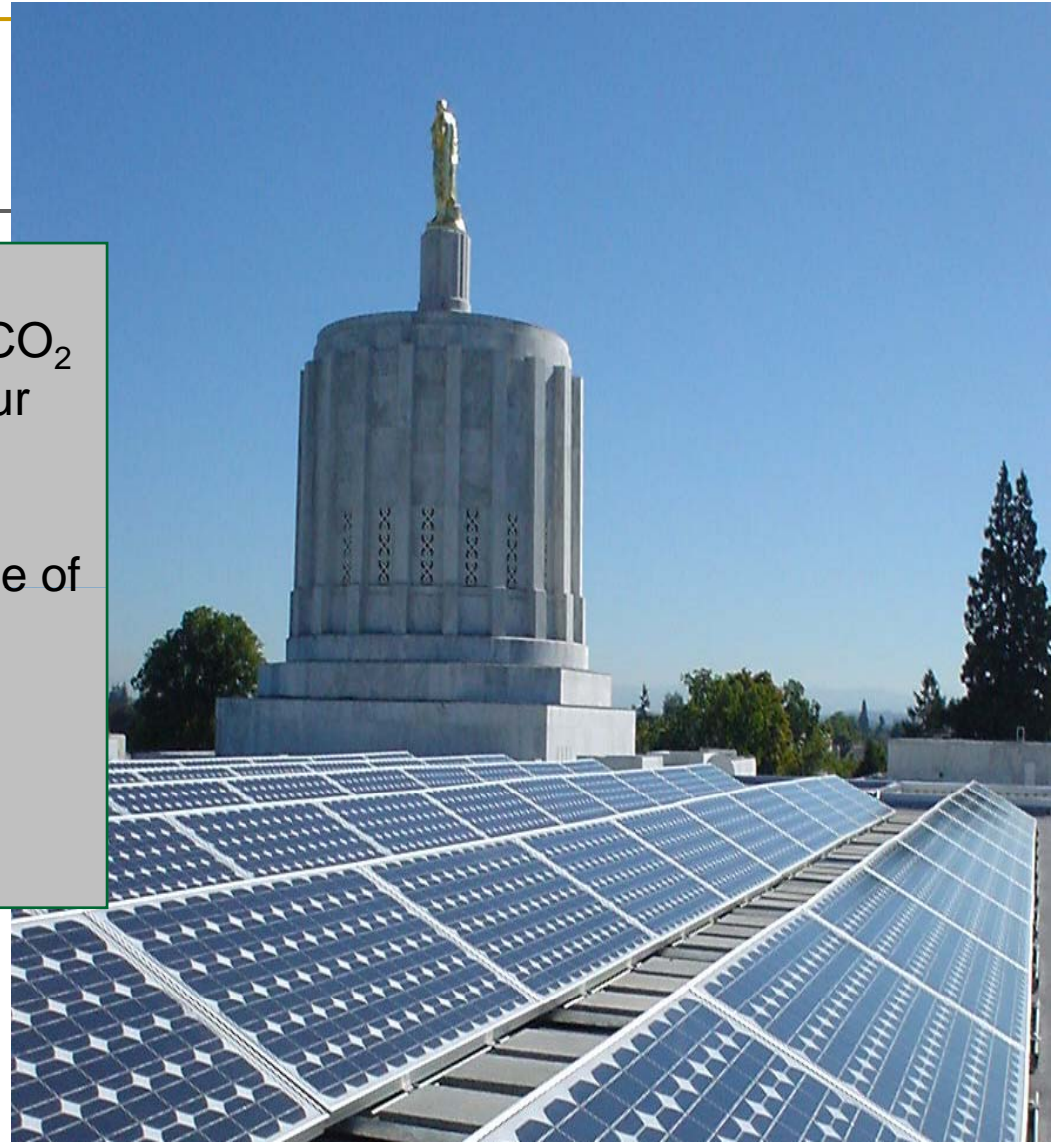
- The state RFS requires 2 percent biodiesel in all diesel on-road product.
 - Estimated use is 10.6 MG/yr
 - Sales of higher blends is not tracked, most likely rolled into the on-road distillate numbers.
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Biodiesel Production and Distribution for Oregon

- Oregon has about 6.5 MG/yr of biodiesel production
- Most demand is met by Midwest soy based biodiesel brought in by rail
- B2 is now transported down the Kinder Morgan Pipeline to Eugene
- Retail blender pumps for biodiesel are not legal in Oregon



- ◆ Based on Oregon's experience, we can limit CO₂ emissions and improve our economy.
- ◆ Education and efficient use of resources is essential.
- ◆ Renewable resources are Oregon's most beneficial resources.



www.oregon.gov/ENERGY

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