Oilseeds and Biofuels in Washington State, 2017

Bioenergy Goals

- Reduce dependence on foreign oil
- Improve environment / public health
- Support WA agriculture and rural economy
State Action Strategies

Grow
oilseed/biofuel
crops

Process
at in-state
crushers /
refineries

Incentivize investment
in processing facilities

Use
in state

Require biodiesel use;
Ensure quality

Invest in cropping
systems research
Research investment made at WSU

Washington Biofuels Cropping Systems

• Initiated in August 2007.
• Initial state funding was $500,000 annually, now $300,000/yr.
• Rebranded in 2013:
  WA Oilseed Cropping Systems
• 15-20 projects each year; interdisciplinary research & extension team.
• **Goal:** *Increase oilseed acreage from <1% to 10% of crop acreage by 2020.*
WA canola production is significantly higher than it was prior to 2012

Source: USDA, National Agricultural Statistics Service
Washington Canola Acreage, 2007

Planted Acres reported to USDA-FSA by County

Source: Acreage Reported to USDA's Farm Service Agency
Prepared by Washington State Dept. of Agriculture
Washington Canola Acreage, 2016
Showing planted acres by County for 2016 and 2015

Source: Acreage Reported to USDA's Farm Service Agency, as of 1/4/17
Prepared by Washington State Dept. of Agriculture
January 2017
WA now producing 25% of PNW canola

PNW Canola Production, 2012-16

Source: USDA, National Agricultural Statistics Service
WA has oilseed/biodiesel processing facilities to handle 300,000+ acres of production

- Crush capacity: 350,000 T/yr = 350,000 acres
- Refining capacity: 105 MGY = 1.5 mil acres
  If yield is 1 T/ac
WA Oilseed/Biodiesel Processors

- **REG Grays Harbor**
  - 100 MGY capacity. Feedstock: canola oil, primarily from Canada. Receives some oil from Pacific Coast Canola.

- **Pacific Coast Canola**
  - Crush Capacity: 1,000 MT per day. Crushes GMO, non-GMO and High Oleic canola.
  - Operated by Viterra since 2015. Produces food grade oil that's available for biofuel production.

- **Odessa**
  - 8 MGY capacity. Integrated oilseed crusher/biodiesel production facility. Idle since 2014.

- **General Biodiesel, Seattle**
  - 5 MGY capacity; restarted production in fall 2016. Feedstock: used cooking oil. Primarily selling into Oregon.

- **Sequential Pacific, Salem, OR**
  - 17 MGY capacity. Collects substantial amount of used cooking oil in Washington.
Market for biodiesel is especially strong along the West Coast

- Renewable Fuel Standards (RFS)
  - Federal RFS2
    - Requires 36 billion gallons of renewable transportation fuel by 2022
  - Our neighbors
    - Oregon: 5% biodiesel in all diesel since 2011
    - British Columbia: 4% biodiesel
    - California: Low Carbon Fuel Standard (LCFS)
  - Washington’s 2% biodiesel requirement is not functional

- Industry Renewable Fuel Initiatives
  - Military
  - Commercial Aviation

- Government Use Requirements
U.S. biodiesel production primarily driven by federal mandate and regional markets

Source: U.S. Energy Information Administration
State agencies lead biodiesel use in WA

- **State agency** biodiesel purchases topped 1 million gallons for 4th time in 2016.
  - State Ferries (*top user*) fuels with B5.
  - State fleets average 14% biodiesel
    - B20 in western WA
    - B20 (summer) / B5-B10 (winter) in eastern WA
  - Per contract, biodiesel must be at least 51% in-state produced or feedstock-sourced.
- Testing and use show no biodiesel-related fuel quality issues.

![State Agency Biodiesel Purchases](chart.png)
What’s ahead in the near term?

• Market demand for **WA oilseeds** strong
  – WA crushing and biodiesel facilities very interested in WA feedstocks

• Market demand for **renewable fuels** strong
  – RFS Renewable Volume Obligation (RVO) increases already in place
  – CA, OR and Canadian market demands continuing
  – Alternative Jet Fuel demand strong
  – WA consumption increase driven by state and local govt demand

**WOCS** to continue and evolve in response to market and grower needs