

# Improving Forest Health Through Bioenergy And Other Market Development



# Journey to Bioenergy & Other Market Development

- 2003 FPFO identifies opportunities for fuels management; mentions cogeneration power plants; and makes the connection to carbon level reductions.
- 2005 FBWG formed in October and OFRI let out a RFP seeking to understand Oregon's Biomass resources and opportunities
- OFRI report produced in July 2006 and FBWG report in December 2006
- 2007 Legislature passes significant energy legislation aimed at meeting renewable energy goals.
- 2008 the Landscape is beginning to change

# USFS Strategic Assessment

## **All Ownerships - Oregon**

- ❖ **16.9 million acres of Treatable Timberland\***
- ❖ **5.6 million acres of Condition Class 3**
- ❖ **6.6 million acres of Condition Class 2**
- ❖ **12.2 million acres of Condition Class 2 and 3**

**\*Treatable land is not high elevation or reserved and within 1.5 miles of roads.**

**USDA Forest Service 2005. *A Strategic Assessment of Forest Biomass and Fuel Reduction Treatments in Western States.***

# Fire Condition Class in Oregon



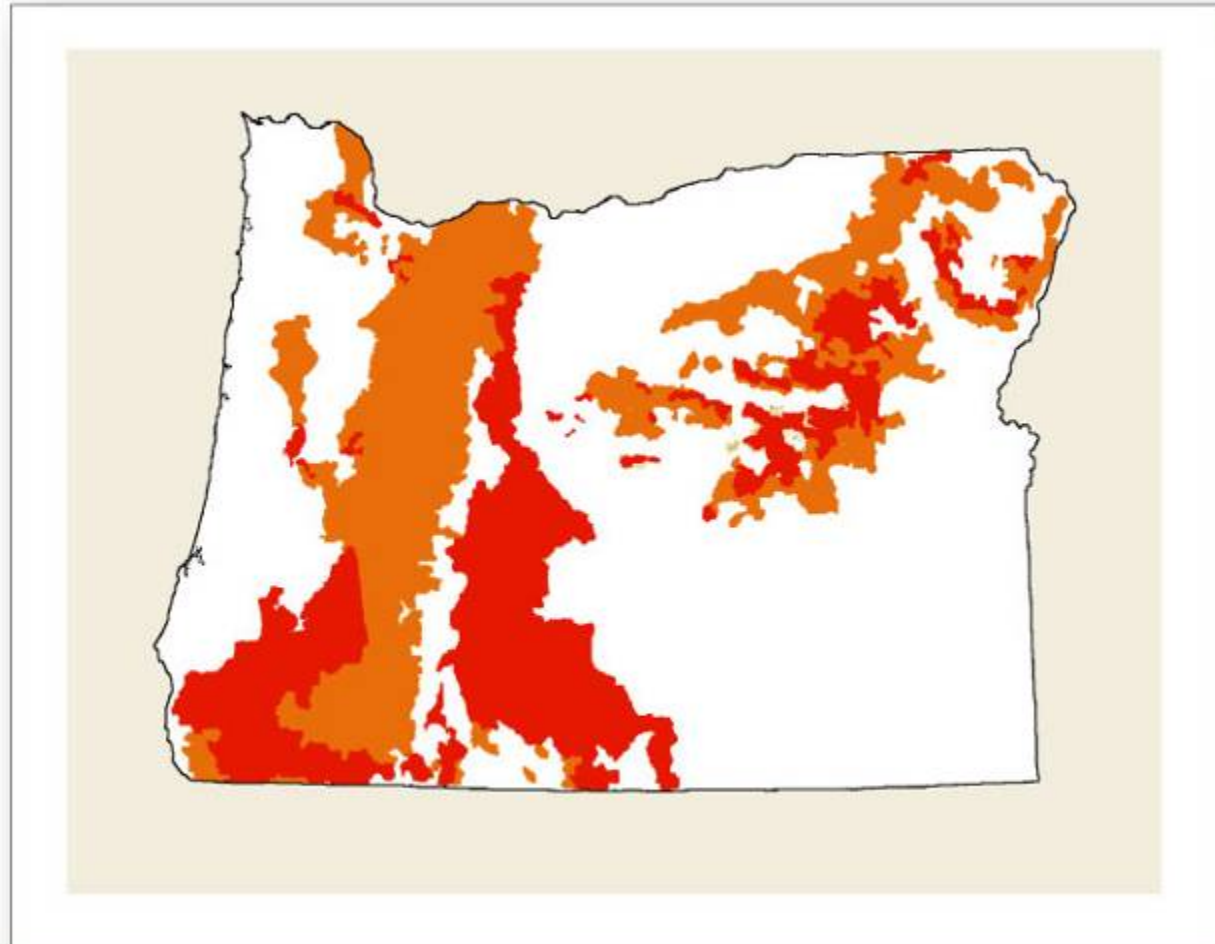
## Forestland in Condition Class 3

- At high risk of uncharacteristically intense fire



## Forestland in Condition Class 2

- At moderate risk of uncharacteristically intense fire



# OFRI Study: Biomass Energy and Biofuels from Oregon Forests

## Study Premise:

- ❖ **Woody Biomass could be harvested from overstocked, fire-prone forests and be used to make electricity, biofuels and other products**
- ❖ **Addresses three challenging Oregon needs:**
  - restoring forest health, fire resiliency and wildlife habitat,
  - finding renewable energy alternatives, and
  - revitalizing rural economies

# Key Study Findings

- ❖ **Study analyzed potential biomass supply from fuel reduction treatments across 20 eastern and southern Oregon counties**
- ❖ **An estimated 4.25 million acres (about 15% of Oregon's forestland) have the potential to provide forest biomass by thinning of forest stands to reduce risk of uncharacteristic fire**
- ❖ **Opportunities exist in Klamath/Lake, Jackson/Josephine/Douglas, Grant/Union/Wallowa/Baker & Crook/Deschutes/Jefferson/Wasco Counties**
- ❖ **Eligible area includes public and private timberland with moderate to high fire risk which is outside of designated roadless areas, wilderness areas, parks and other forestlands where harvesting is excluded. Federal lands make up 71% of potential acres**
- ❖ **Thinning these acres over 20 years could produce 1.0 million bone dry tons (BDT) per year of woody biomass not including merchantable sawtimber**

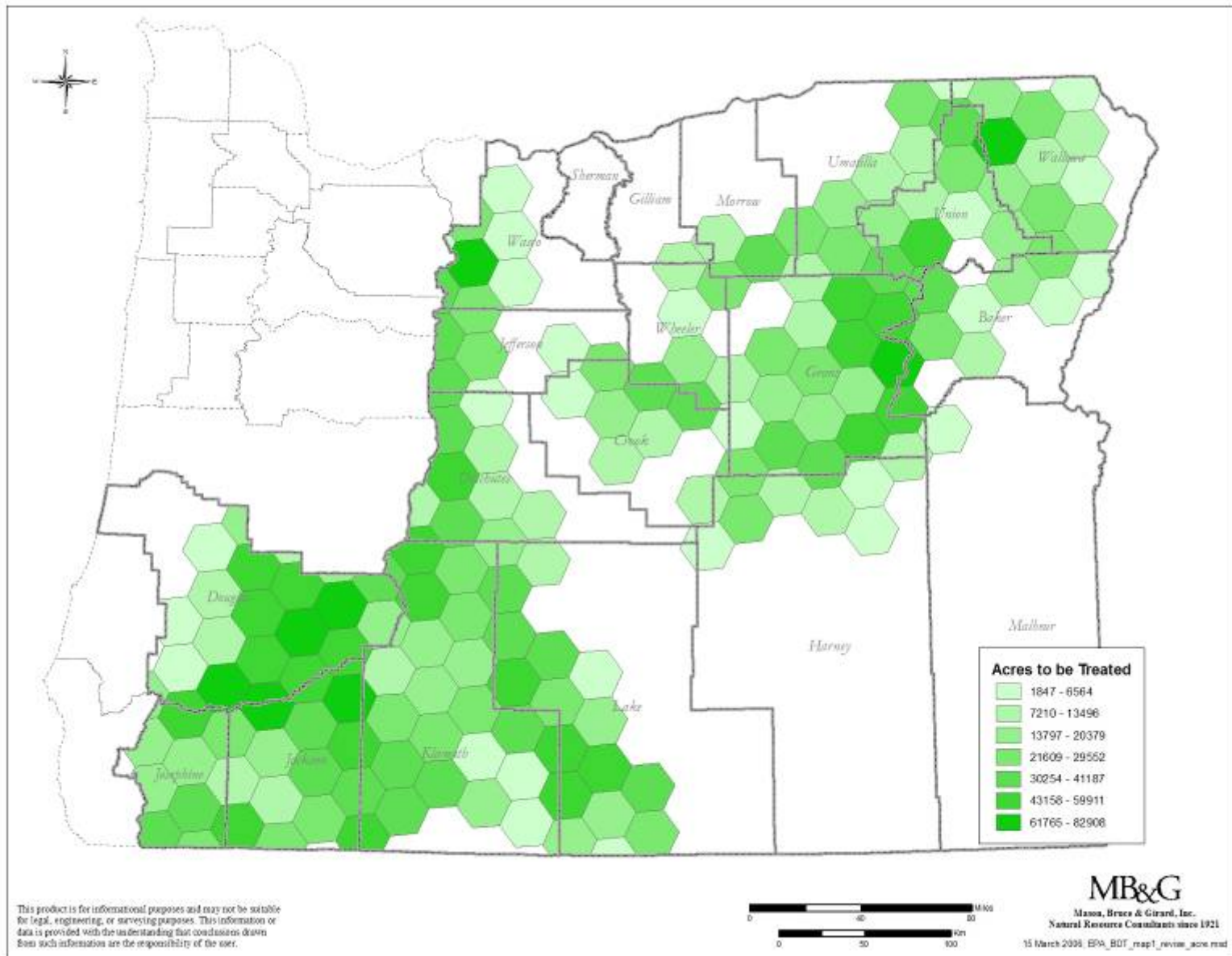


Figure 2-2 – Acres eligible for fuel reduction thinning treatment by 160,000 acre EMAP hexagon.

# Forest Biomass Work Group

## **Membership includes:**

- ❖ **Forest Industry**
- ❖ **Energy Industry**
- ❖ **Warm Springs Tribe**
- ❖ **Legislators, Congressional staff**
- ❖ **NGOs**
- ❖ **State and federal agencies**
- ❖ **Entrepreneurs**

## Key Federal Actions – recommended in Forest Biomass Work Group Report

- 1) Congress should fully fund USFS and BLM Biomass Strategic Plans**
- 2) Fund research focusing on conversion of biomass to cellulosic ethanol**
- 3) Fund a cellulosic ethanol commercial demonstration facility in Oregon**
- 4) Expedite Forest Stewardship contracting on Federal lands**
- 5) Fund the existing federal transportation credit for biomass that was authorized by congress**
- 6) Increase federal production tax credit for biomass to that for other renewables and extend length of time for renewal of FPTC.**

## Key State Actions – recommended in Forest Biomass Work Group Report

- **Fund a coordinator to facilitate community forums to increase understanding of benefits and consequences of biomass utilization.**
- **Build on harvesting and research projects that have already been completed and fund new studies to fill in the information gaps.**
- **Support action that will help coordinate R&D advances in forest biomass utilization with commercial technology development.**
- **Continue administrative collaboration (under Enrolled Senate Bill 1072 - 2005 session).**
- **Consider developing/ expanding Oregon incentives to off-set capital cost of biomass energy facilities.**

# Forest Biomass Work Group

- Just revised charter for the group
- Emphasis on assistance to the field to encourage forest health project work, and encourage biomass utilization.
  - Funding for federal forest management /stewardship contracting federal lands
  - Supply- federal, state, and private grounds (statewide CROP?)
  - Education and outreach tools

# Summary Thoughts

- Funding shift for federal forest management is critical
- FBWG can be an outreach connection to communicate benefits/consequences of biomass utilization and net carbon effects.
- Forest Health is one of the best renewable objectives to focus on for CO<sub>2</sub> benefits,.
  - Healthier forest take up more CO<sub>2</sub>
  - Biomass utilization stops creation of CO<sub>2</sub> from burning slash
  - Offsets natural gas to extent it is used for fuel

# Vision for the Future

- Policy goal of having CO<sub>2</sub> mitigation/sequestration, through wise Oregon forest management, yielding as much or greater value to forest landowners than their saw logs do, within a decade (Mark Kendall ODOE).