2018 Forest Health Report

Oregon Board of Forestry – Public Meeting

September 4th, 2019

ODF's Forest Health Unit

- Consists of:
  - Manager
  - Pathologist
  - Entomologist
  - Invasive Species Specialist
  - Survey Specialist

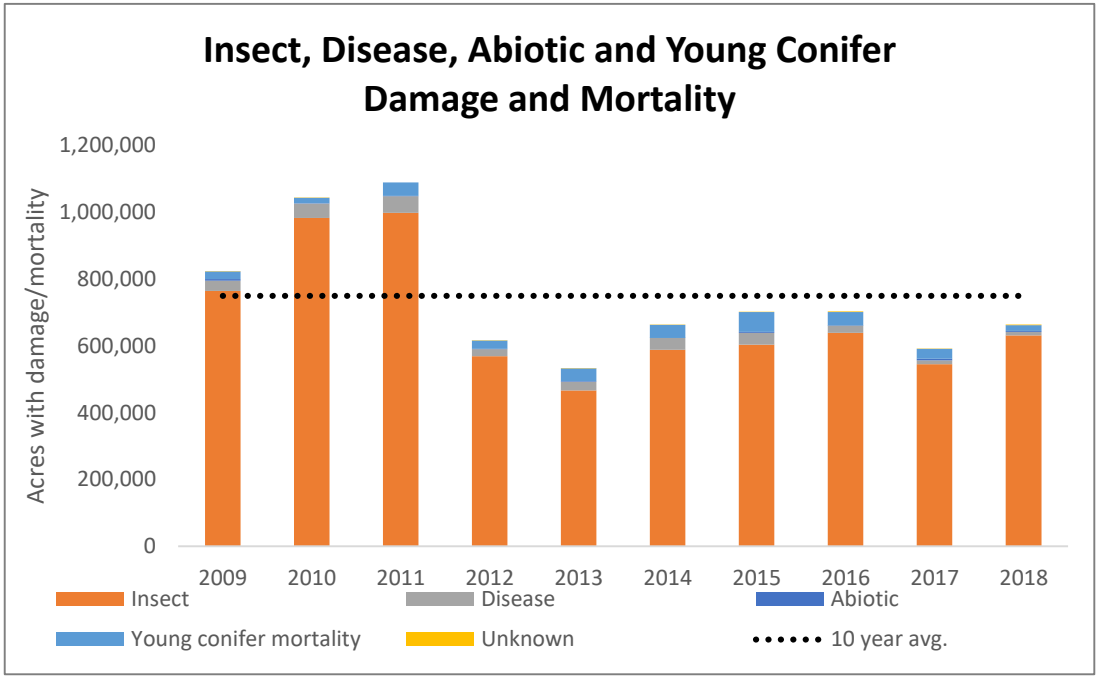
- Provides services statewide:
  - Technical assistance
  - Monitoring and detection
  - Research projects
  - Cost-share funding
  - Eradication and mitigation

Aerial Detection Surveys

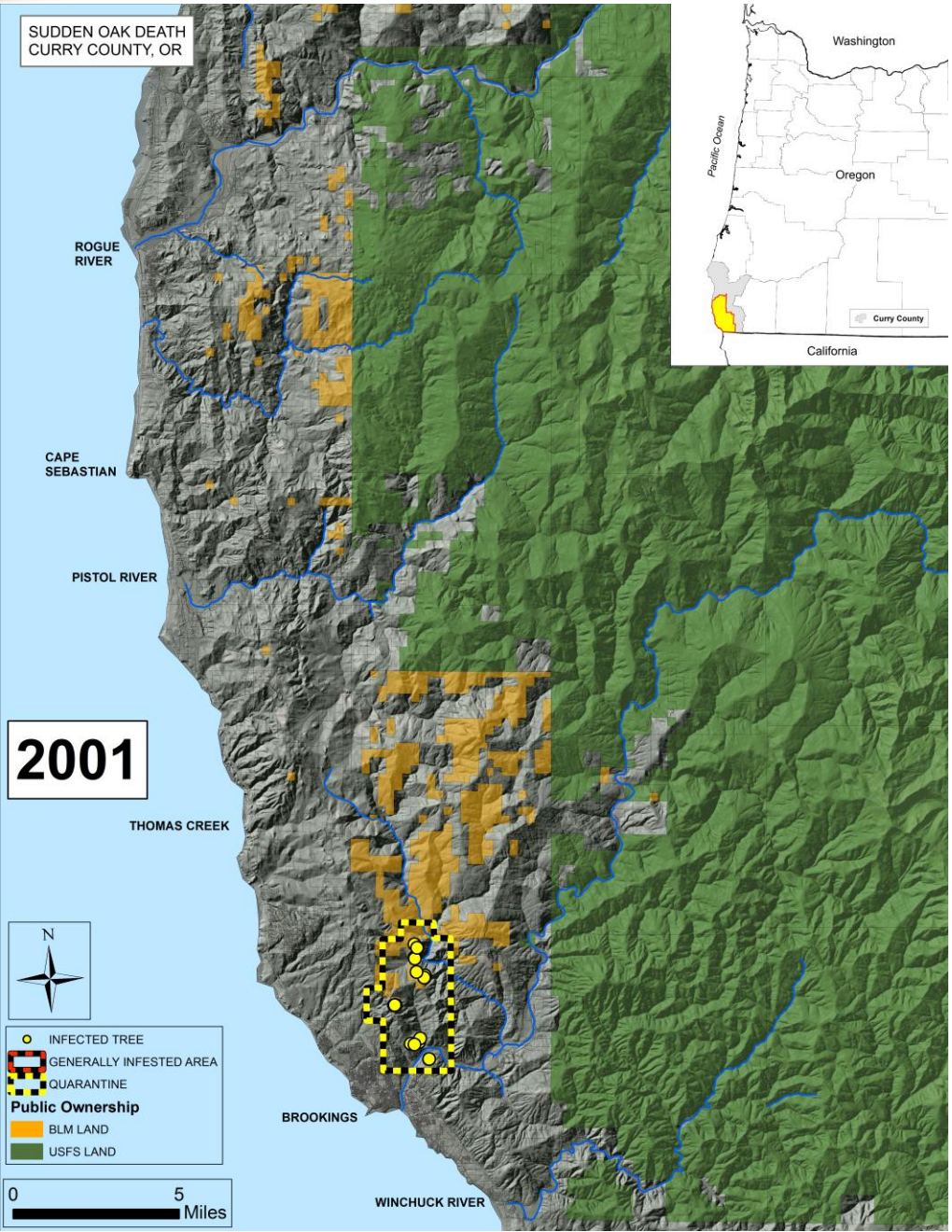
- Broad scale issue detection and trend monitoring
- Cooperative with the USDA Forest Service
- Annual since 1947
- Over 35 million acres surveyed in 2018
- Provide data input into:
  - Risk models
  - Planning efforts
  - Prioritization (e.g. Forest Action Plan)
  - Direction of Federal funds nationwide

Aerial Detection Surveys

- 2018 Results:
  - Approximately 28 million acres of general survey
  - Over 675,000 acres <u>with</u> damage (10-year average ~750,000)



  - Primarily driven by insect damage
  - Does not include acreage for Swiss needle cast or sudden oak death



Sudden Oak Death in Oregon

Updates

- Slow-the-Spread continues
- SOD Task Force formed 2016
- Economic analysis completed in 2018
- ODF/OSU Citizen Science Project
- High Resolution Imagery
- Participatory Disease Modeling

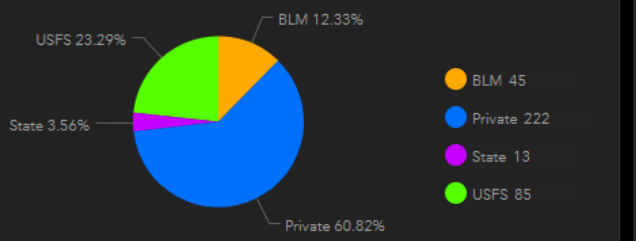
OR Sudden Oak Death Dashboard

2019 SOD Samples Taken

365

Last update: an hour ago

2019 SOD Samples by Ownership



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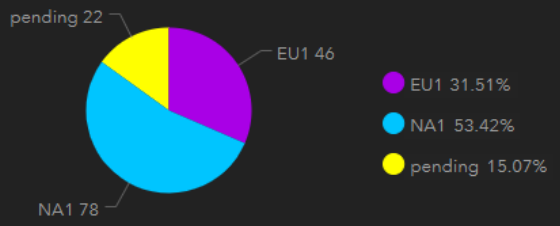
2019 SOD Positive Trees

146

Last update: an hour ago

Lineage Results for 2019 SOD Positive Trees



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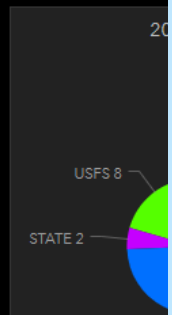
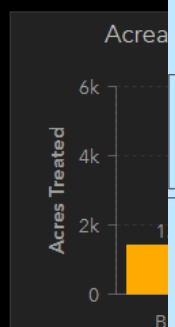
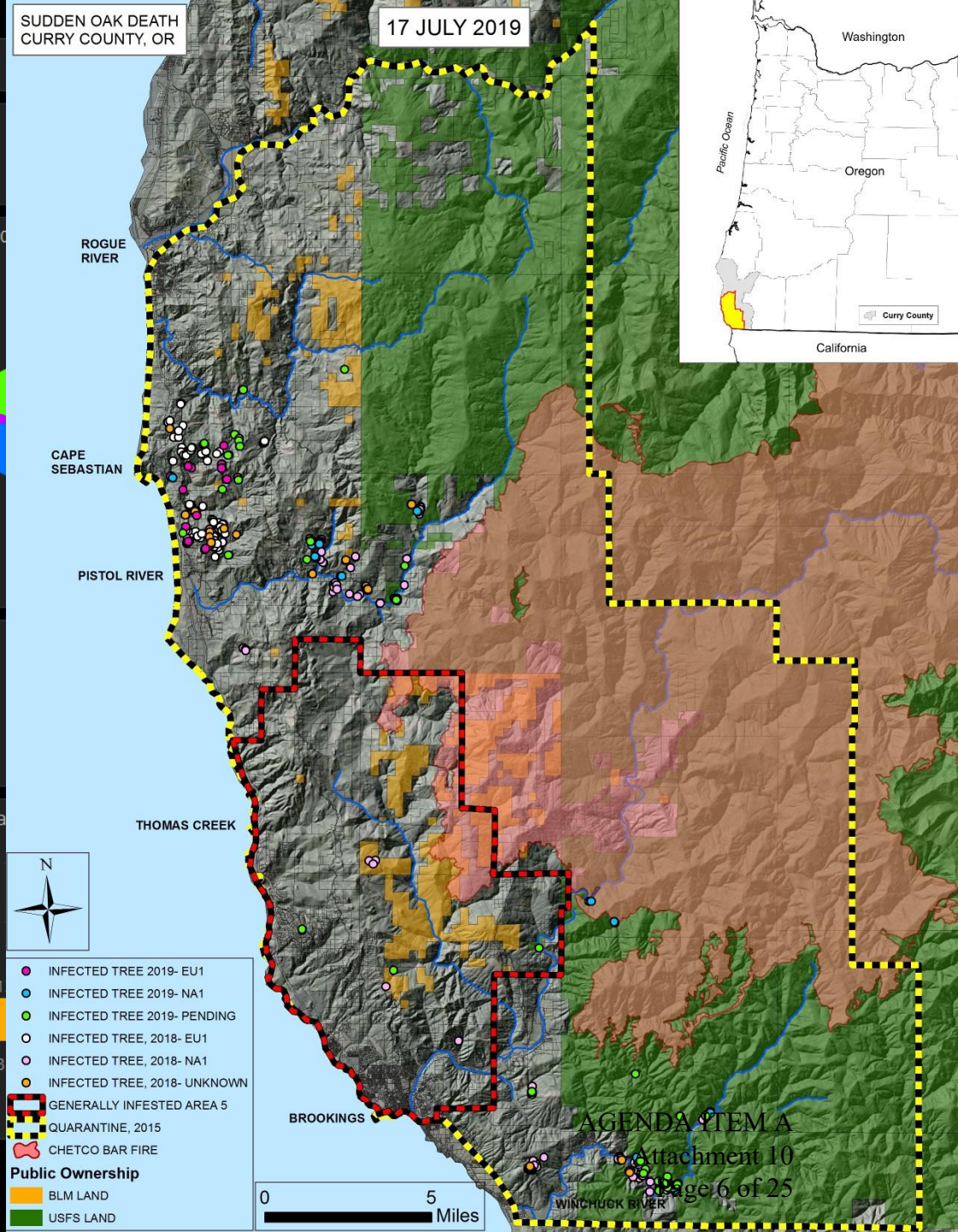






SOD Economic Impact Assessment

- Examined timber-based economic impacts:
  - From discovery of SOD in 2001 to 2018
  - Future economic impacts: 2019 through 2038.
    - Coos, Curry, Douglas, and Josephine County
    - Three scenarios
- Examined non-timber impacts:
  - Property values
  - Ecosystem Services
  - Cultural values
  - Wildfire risk

SOD Economic Impact Assessment

Timber Impacts

- Current

Funding SOD at $30 million over the next 20 years could offset:

- **1,200 job losses by 2028**
- **$580 million in wages from 2028 to 2038**

  - Decline property value

Sudden Oak Death Economic Impact Assessment

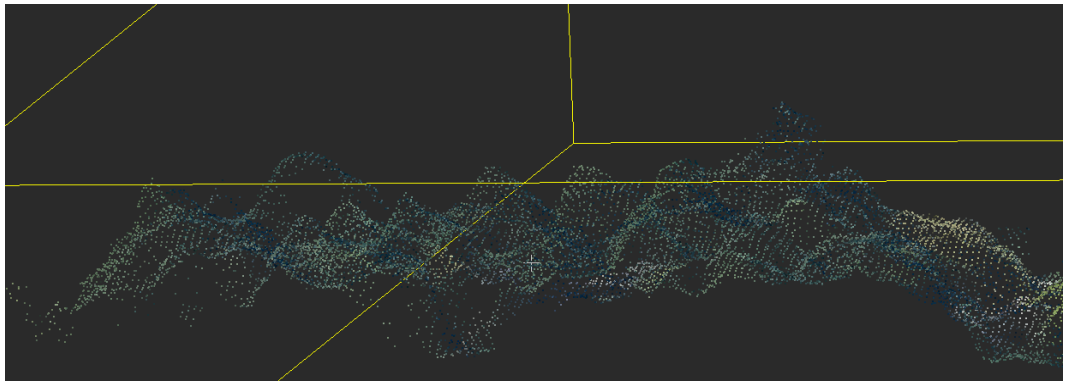
Non-timber Impacts

- Impacts to cultural practices
- Reduced rural residential property value
- Loss of real estate transaction revenues
- Decline in recreation and tourism
- Potential increased wildfire risk

GTAC Project- Mapping Sudden Oak Death

Objectives

- Utilize existing aerial imagery to:
  - Create 3D models
  - Detect dead tanoak
  - Refine tanoak distribution maps



Tangible Landscape- Modeling spread of SOD in Oregon

- PhD Project of Devon Gaydos, NCSU
- ODF hosted a participatory workshop of the Tangible Landscape Model
- Workshop goals were to:
  - Assess how participants interact with the model
  - Collect stakeholder input to refine model

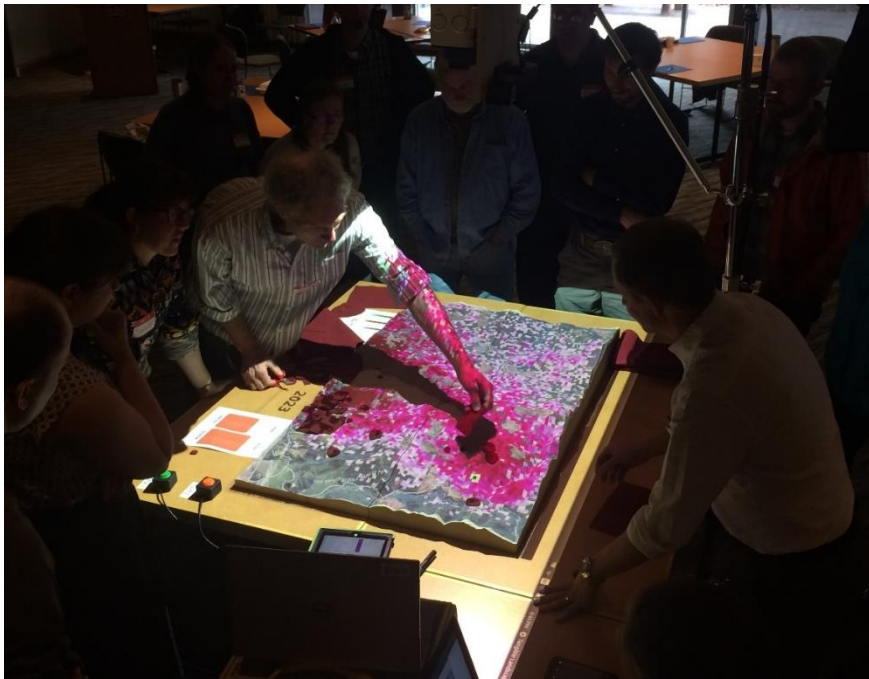
EurekAlert! | AAAS

HOME NEWS RELEASES MULTIMEDIA MEETINGS PORTALS ABOUT

NEWS RELEASE 19-MAY-2019

Can a hands-on model help forest stakeholders fight tree disease?

NORTH CAROLINA STATE UNIVERSITY



Tangible Landscapes

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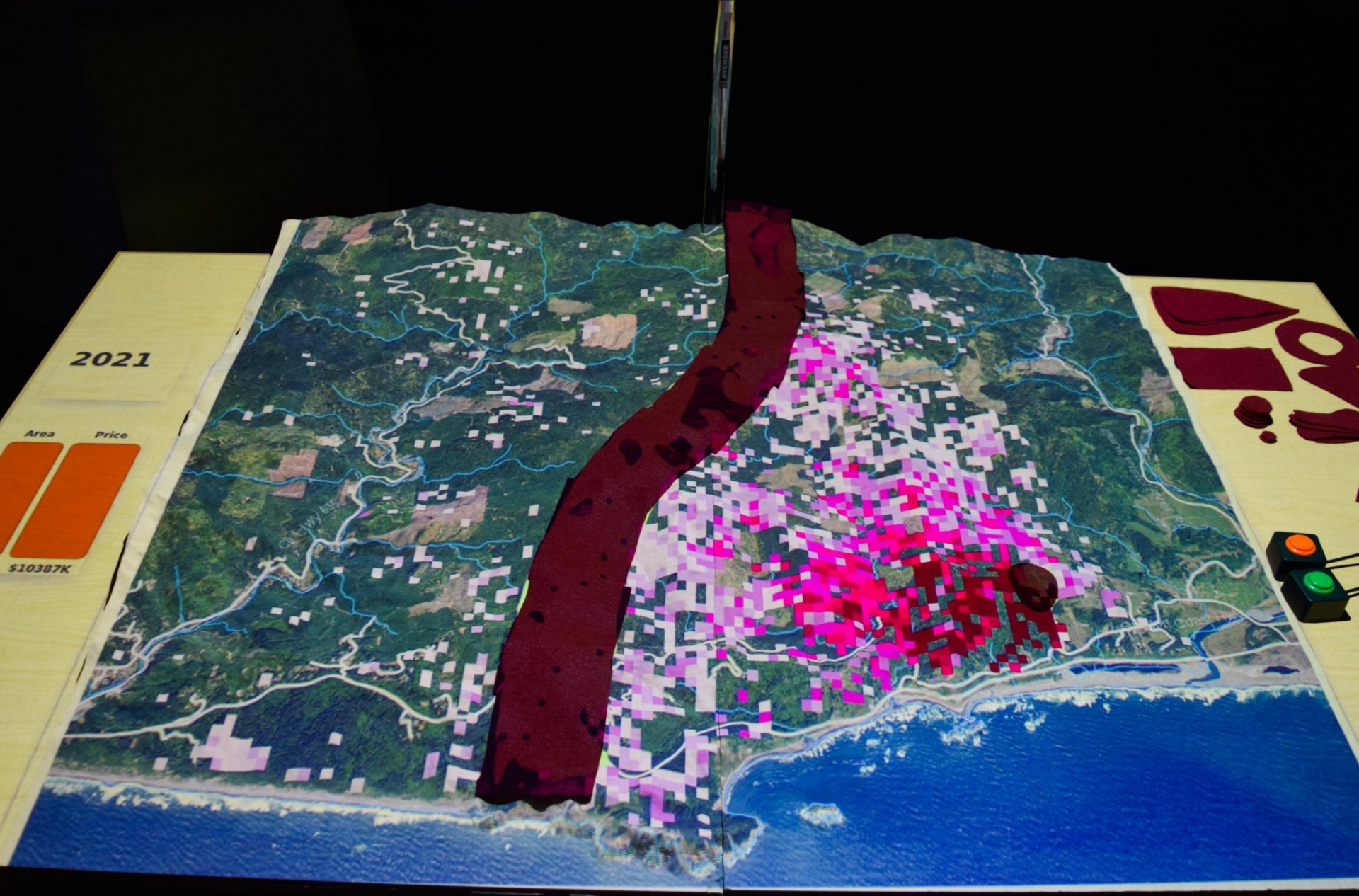
RASS GIS


2021
Area
Price
$10387K

Tangible Landscape- Modeling spread of SOD in Oregon

- 12 participants from ODF, USFS, and OSU
- Participants were surveyed before and after interacting with TL model
- Since then:
  - Refinement of disease spread model
  - Follow up workshop planned for 9/11

Bark Beetle Mitigation

- 50/50 cost-share program
- Stretching the $
  - Spend within 2 years
  - Combine with other grants
  - Multiple landowners = ‘beetle block’
  - Sustainability planning (e.g., drought)
- 212 acres in 218 to 15 ownerships

2019 Gypsy Moth Eradication - Corvallis

- 500+ host species, including DF
- Tools for detection, eradication

- **ODA-IPPM is lead agency**
- 4 GM detected in 2017
- 27 GM detected in 2018
- 46-acre ground treatment
- Treatments May 6th and 20th

- ODF provided technical and local support to the project

Invasive woodborer survey

USFS funded project:

"Improving Early Detection of Exotic Invasive Wood Boring Insects at High Risk Areas in Oregon and Washington"

Field work:

2016-2018

165 mile transect along

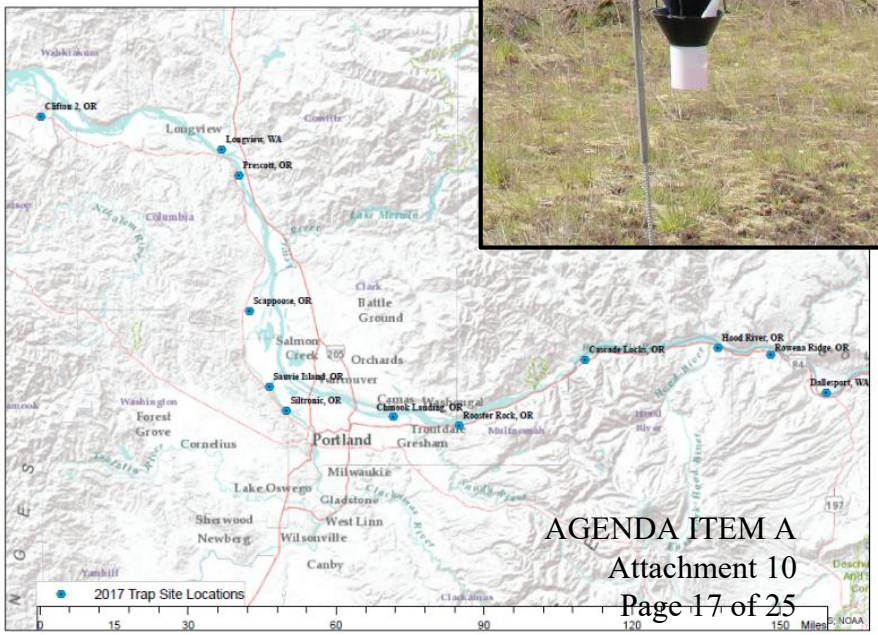
Columbia River

Collaborators:

ODA

USFS

WADNR



Invasive woodborer survey

Cyclorhipidion pelliculosum

First record in W. North America

Xyleborus monographus

First record in North America

Chrysobothris rugosiceps

First record on West Coast

Trypodendron domesticum

Native to Europe

Oregon Forest Pest Detectors and the Oregon Invasive Species Council Hotline:

OFPD = new exotic species detection!

- Two OFPD graduates noticed signs/symptoms
- New exotic species- *Agrilus cyanescens*
- ODA conducting risk analysis
- Other agencies cooperating:
  - OSU
  - City of Portland
  - Tualatin SWCD

Exotic Invasive Plants- Orange Hawkweed

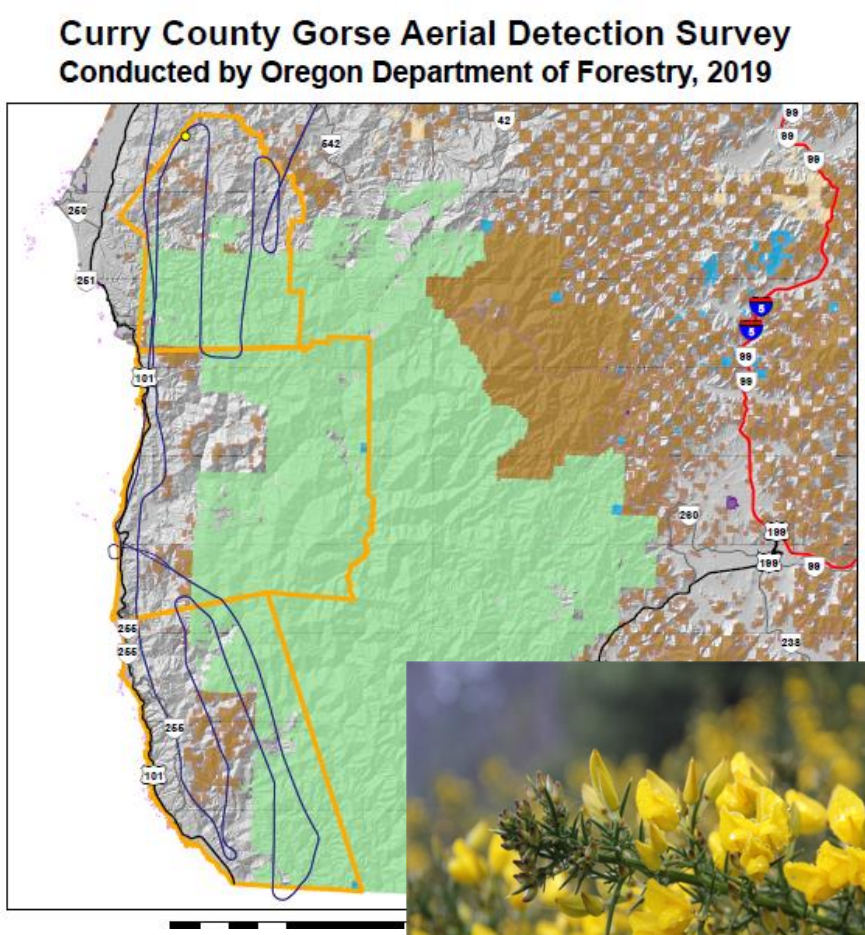
Class A noxious weed

- Landowner alerted ODF
- ODF conducted surveys and treatments
- ODF continuing to monitor
  - No detection post treatment

Charley Moyer, former ODF Reforestation forester

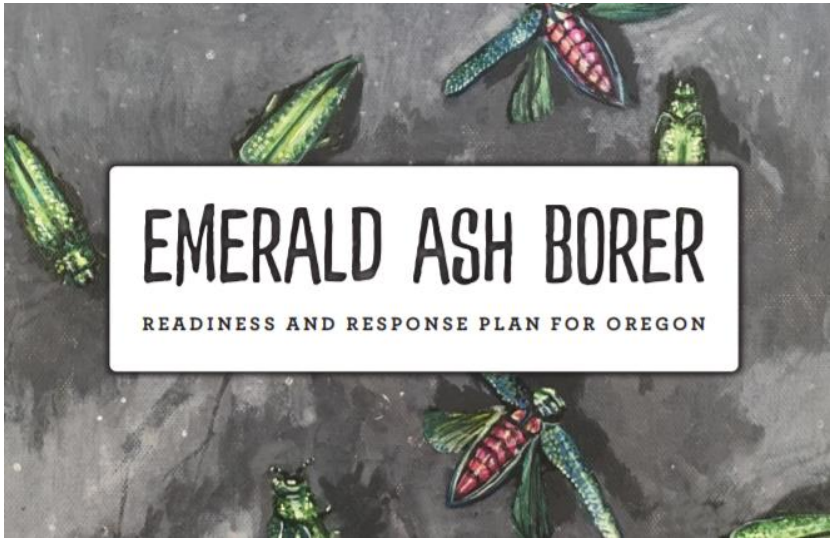
Exotic Invasive Plants- Gorse (*Ulex europaeus*)

- Class B noxious weed
- Curry County requested ODF assistance for aerial detection surveys
- ODF surveyed approx. 300,000 acres in spring of 2019
- <$5,000 cost to county



EAB Plan for Oregon

- Introduction and background
- Define roles of stakeholders
- Readiness
  - Risk Assessment, Detection
- Response
  - Communication plan, quarantine, restoration
- Funding
- Appendices
  - Sample press release, IPM fact sheet



Final plan was released late Spring 2018

http://www.OregonEAB.info/

Oregon Ash

- In response to the EAB threat, ODF is working to collect and preserve Oregon ash seeds :
  - Preserve the species once EAB arrives
  - Support resistance development
  - “getting a step ahead”

Oregon Ash – a widespread and common tree in Oregon, California, and Washington.

Questions?

More information and data provided by ODF Forest Health:

http://tinyurl.com/odf-foresthealth