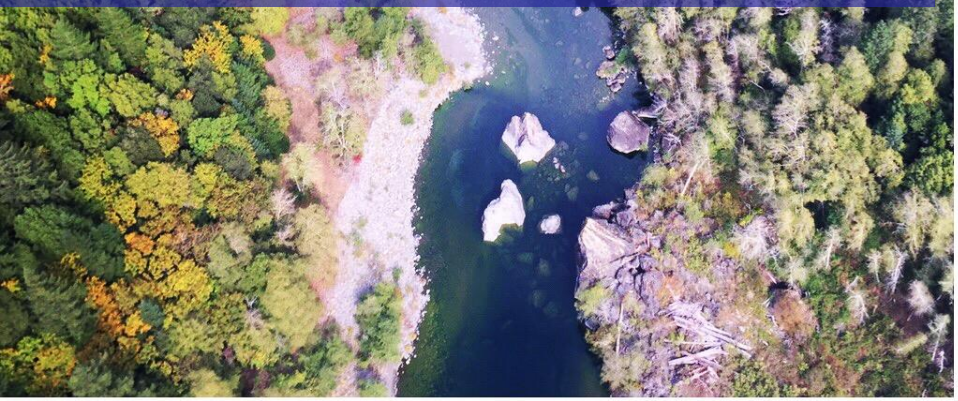
Sudden Oak Death in Oregon Forests



Oregon Department of Forestry
Oregon Department of Agriculture
Oregon State University
USDA - Forest Service
USDI - Bureau of Land Management
Association of Oregon Counties

SOD in Oregon

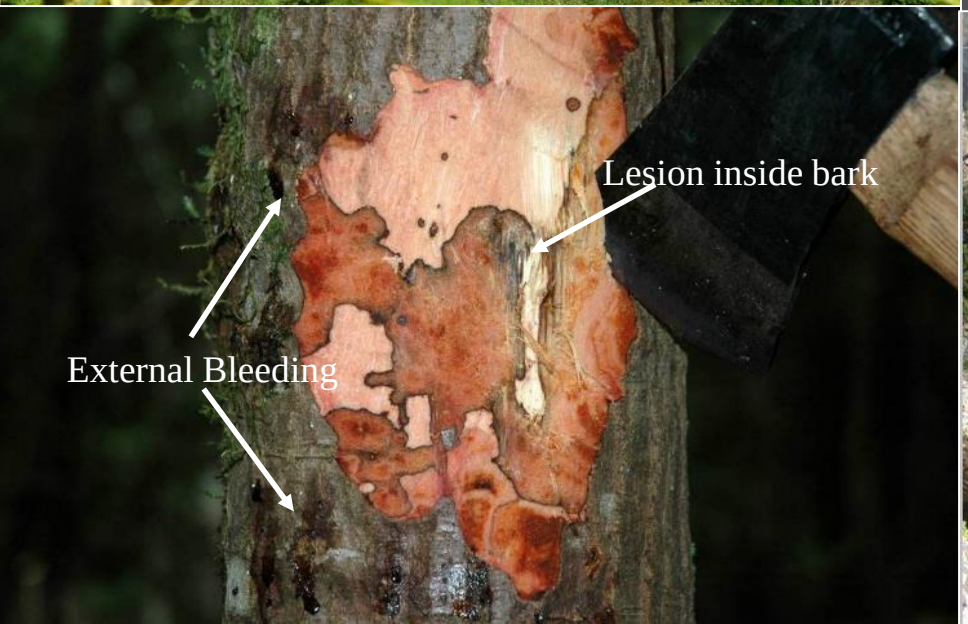

Curry County, 2014. Tanoak mortality

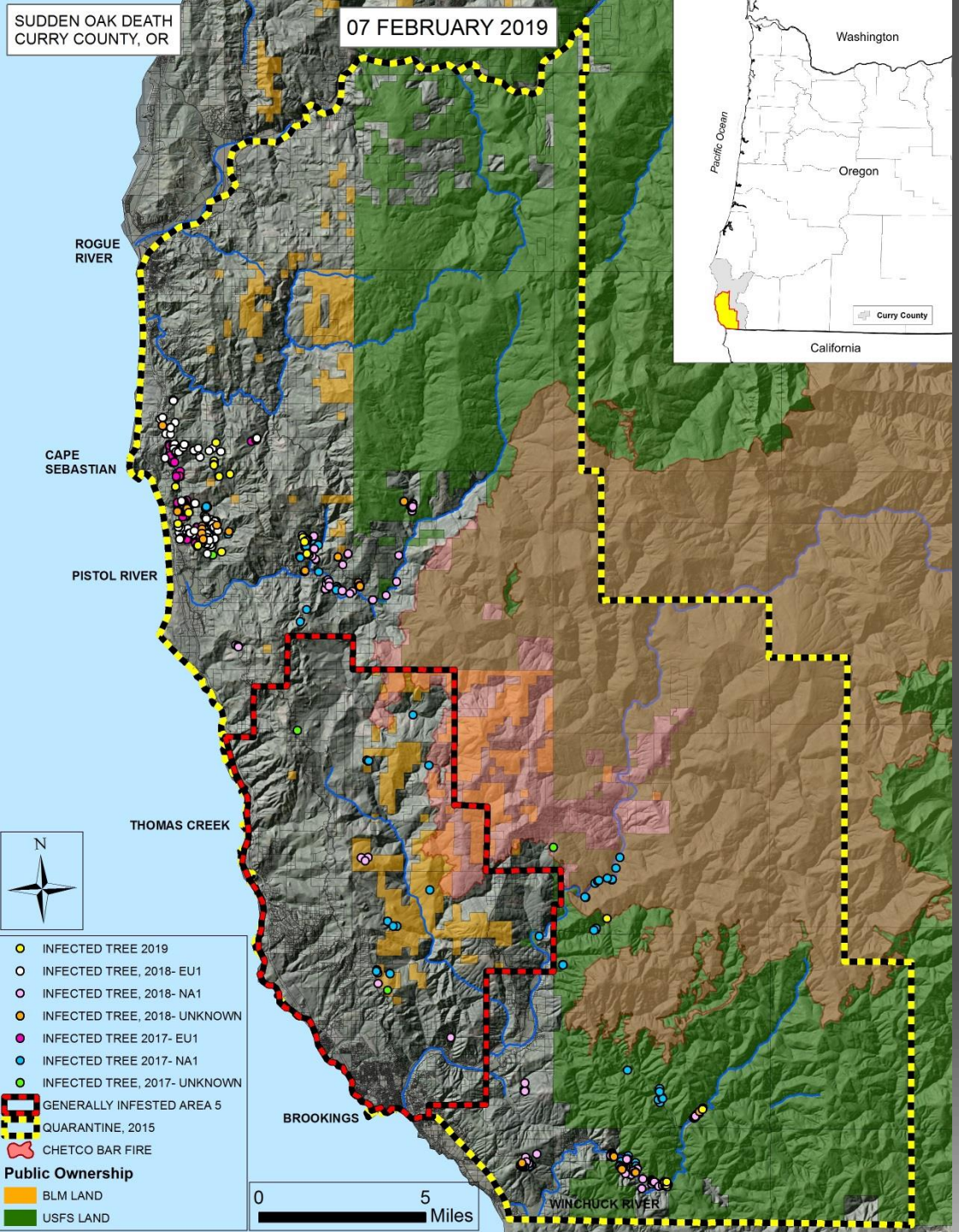
Disease Biology

- *Phytophthora ramorum* (non-native)
- Tanoak is the key host species
- Many hosts infected (and regulated)
- Requires mild/moist environments for spore production and many pathways for dispersal

Disease Management

- Treatment area buffers; 50 to 300+ ft, recently as small as 20 ft.
- Cut and burn tanoak, and other host species
- Costs : $3,000-$5,000 / acre





SUDDEN OAK DEATH 2017-2018

2017: 39 new sites outside the GIA; none more distant than previous sites, and none near the new quarantine boundary.

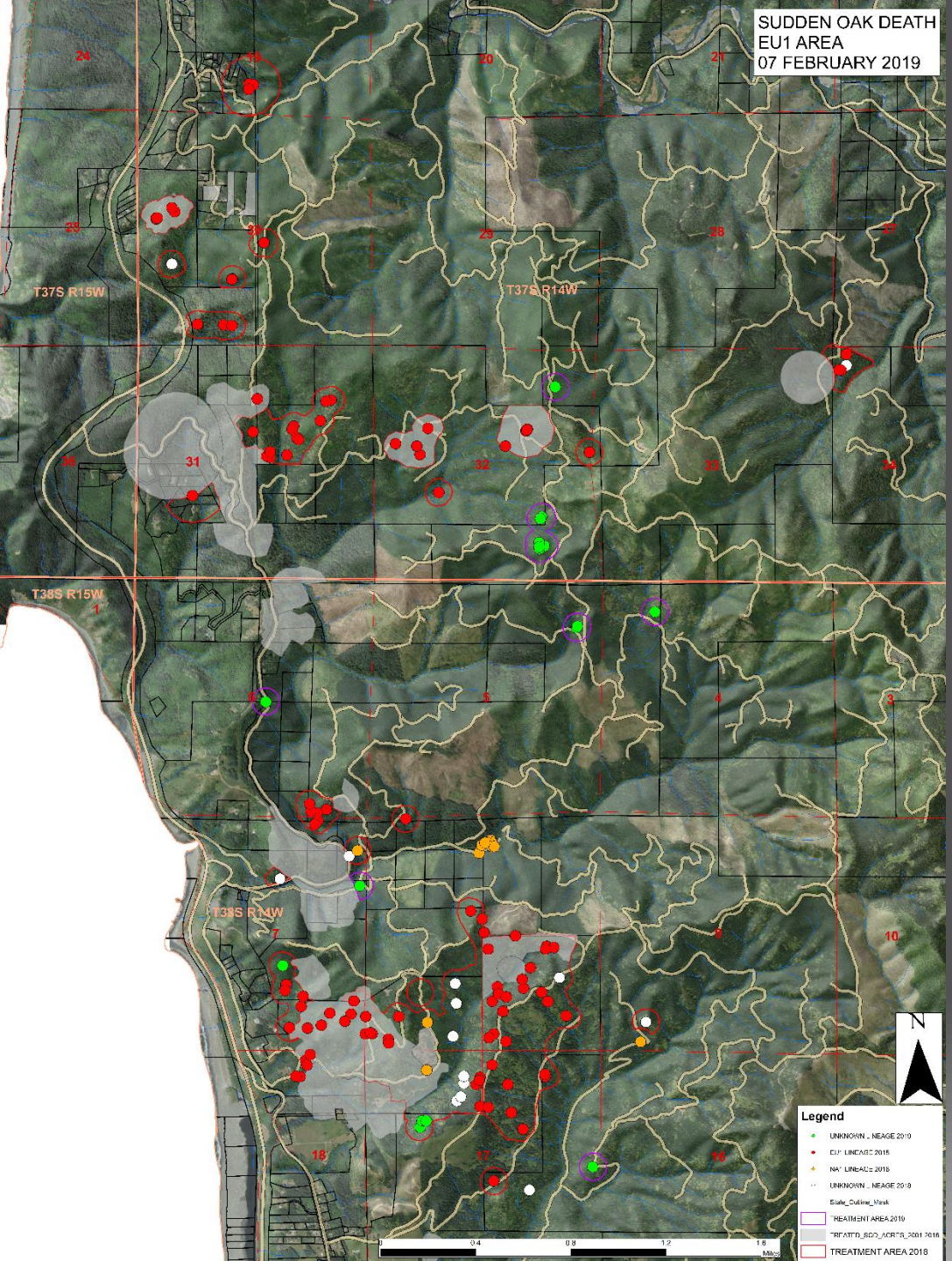
GIA expanded for 5th time to 89 sq mi.

EU1 infestations increased into Cape Sebastian area. 270 acres treated

2018: 43 new sites outside the GIA.

EU1 infestations all within the same geographic area, intensification of treatment areas. 203 acres treated

ODF has prioritized all EU1 infestations within the SOD quarantine for treatment



EU1 Infestation- 2019

455 acres left to treat from 2018 and 80 acres detected so far in 2019

$1 million allocated for SOD treatments for the remainder of the biennium

Challenges

Landowner consent has been an issue with multiple EU1 infestations

Gaps in funding- E-Board Funds

Splitting staff time between contract administration and survey/detection

Current SOD Research

•**Devon Gaydos-** Tangible Landscapes and new disease spread model for Oregon

•**Nik Grünwald-** Population genetic analysis of *Phytophthora ramorum*: Evaluating the threat of forest to nursery spread

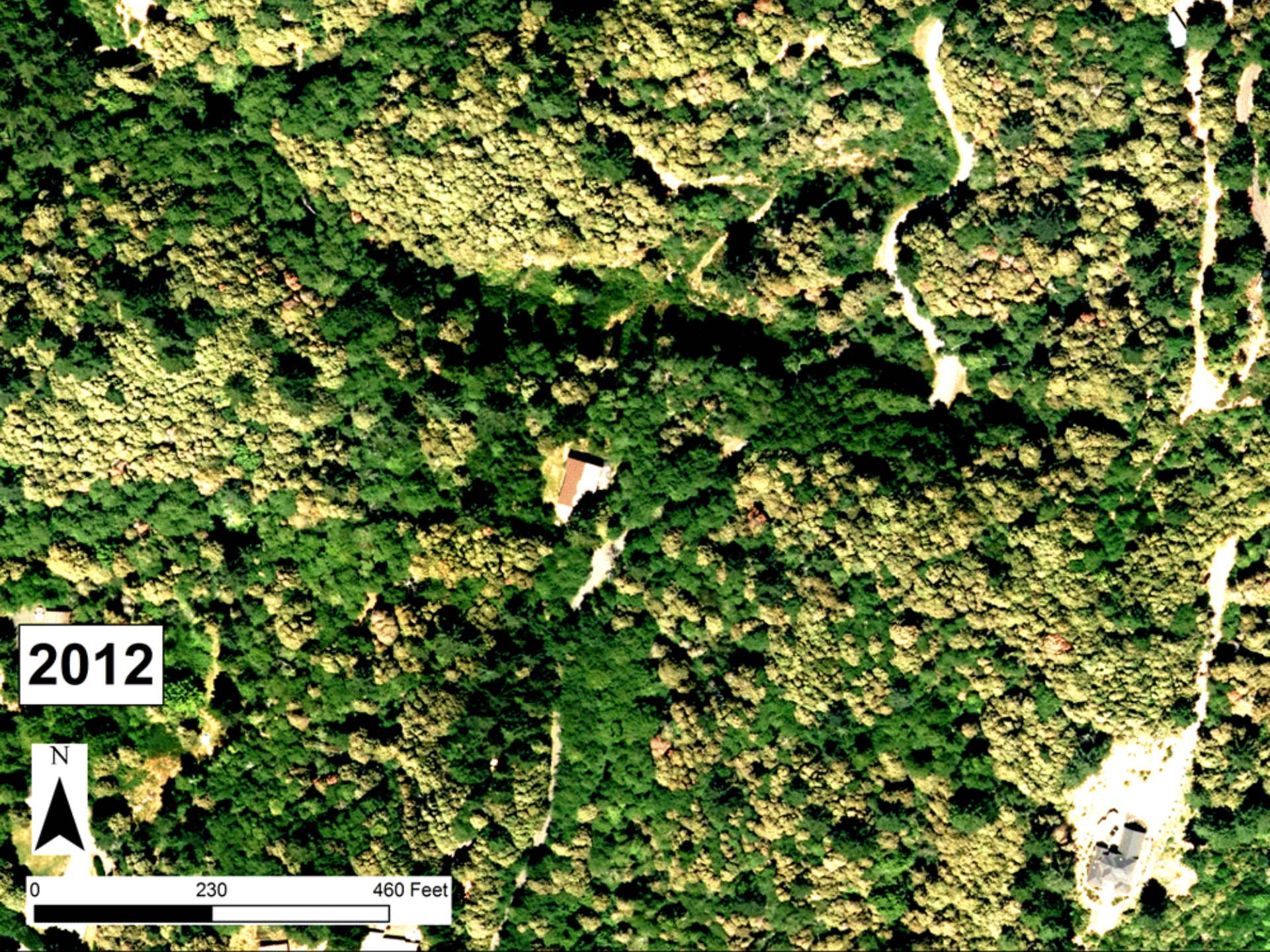
•**Jared Leboldus-** Resistance trials on tanoak seedlings

•**Kelsey Søndreli-** Rapid Field Based Detection of the Sudden Oak Death (*P. ramorum*) Lineages

•**Hazel Daniels**- *Phytophthora ramorum* lineage x eradication treatment x wildfire interactions: Implications for management.

•**Norma Kline**- Using citizen science and outreach education to reduce the risk of Phytophthora ramorum spread in Oregon forests &

•**Ebba Peterson**- Enhancing mitigation responses to the new threat of an emerging EU1 *Phytophthora ramorum* population in Oregon


2012
N
0
230
460 Feet