



Emerald Ash Borer Action Plan and Monitoring

Plant Health and Pest Prevention
Services



CALIFORNIA DEPARTMENT OF
FOOD & AGRICULTURE

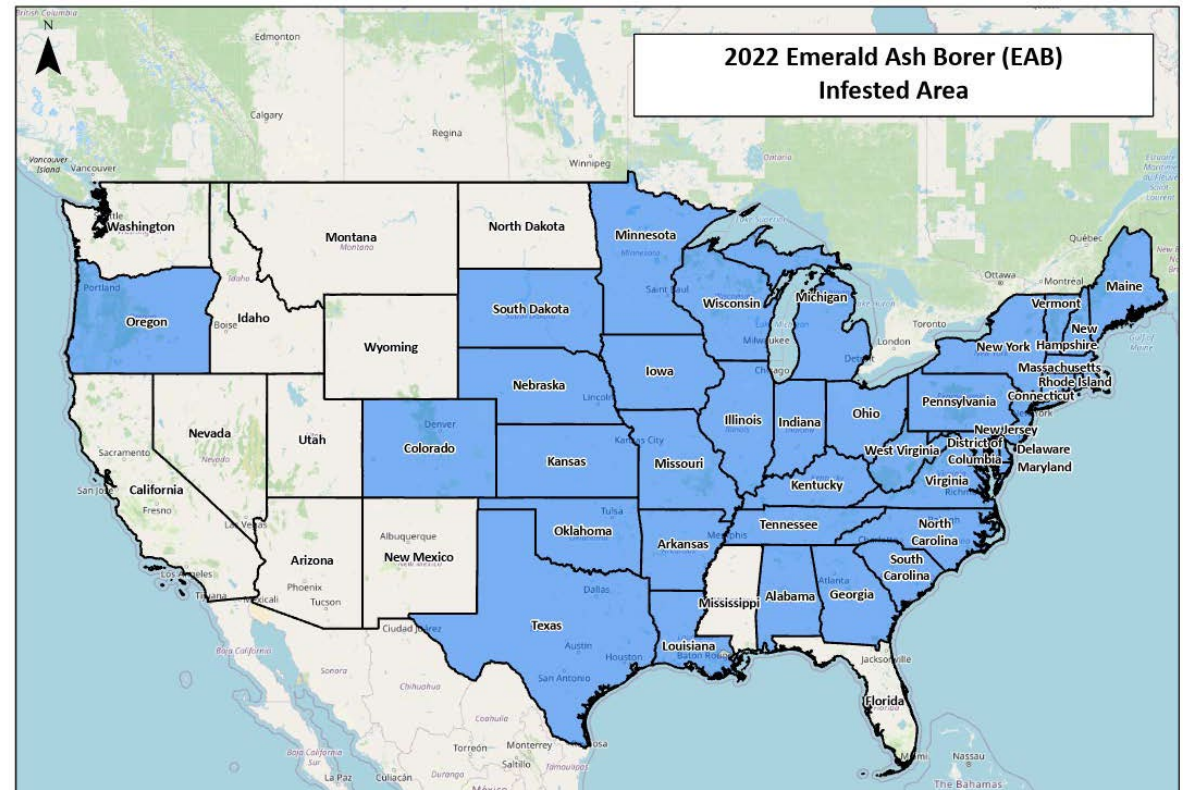
Presentation Overview

- Background on Emerald Ash Borer & Oregon Infestation
- CDFA EAB Survey Update
- CDFA Action Plan Update



Emerald Ash Borer, *Agrilus planipennis*

- Invasive beetle native to Asia
- First found in Southeastern Michigan in 2002
- Over 100 million ash trees killed in North America and Canada
- 99% mortality of ash stems greater than 2.5 cm diameter in invasion range
- Thought by some to be the most devastating forest pest to have invaded North America (cost and damage)



Hosts include:

- *Fraxinus* spp.
- white fringetree (*Chionanthus virginicus*)
- Olive (still unknown extent of damage EAB could cause)

Can attack two species of ash native to California: *Fraxinus latifolia* (Oregon Ash) and *F. velutina*.

- Other species present may be attacked as well.

Oregon ash is widespread in California.

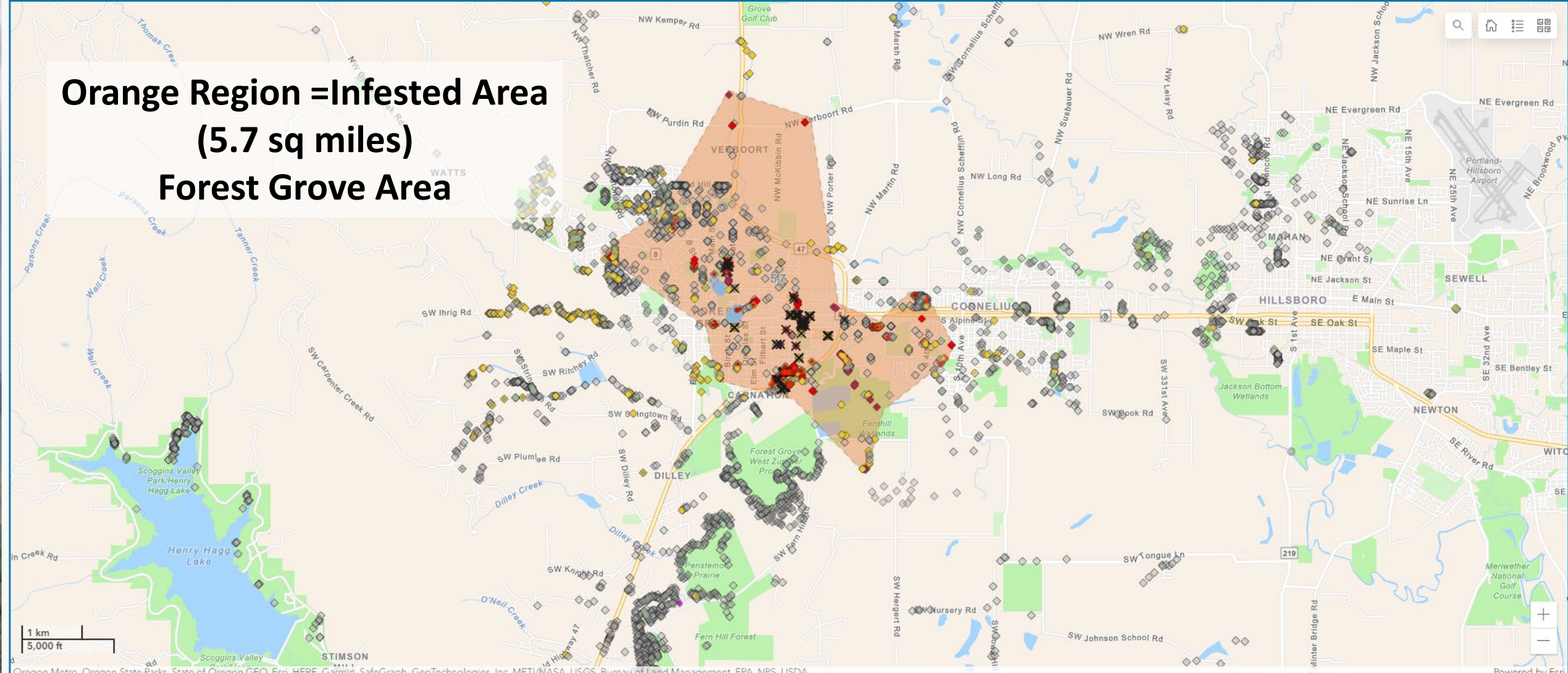
The olive industry in California is worth tens of millions of dollars annually.



Emerald Ash Borer Infestation in Oregon Detected in 2022 in Forest Grove

Preliminary Survey Results for EAB Detection. Caution: Data is live reported and preliminary. Not Intended for Management Purposes. Contact EAB@ODA.Oregon.gov for validated data.

**Orange Region = Infested Area
(5.7 sq miles)
Forest Grove Area**



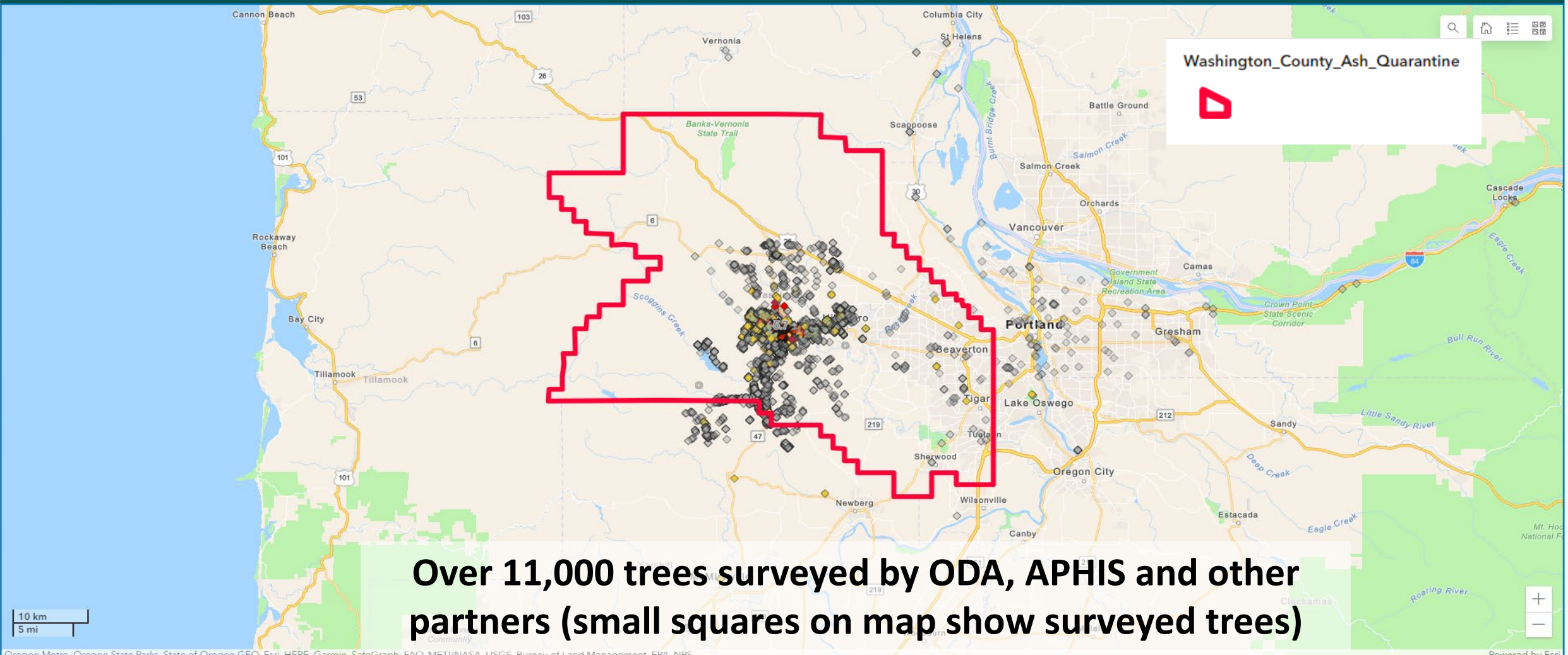
Oregon Metro, Oregon State Parks, State of Oregon GEO, Esri, HERE, Garmin, SafeGraph, GeoTechnologies, Inc, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA

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Each point represents an ash tree surveyed for EAB through visual surveys by the EAB task force and cooperating agencies and organizations.

Emerald Ash Borer Infestation in Oregon Detected in 2022 in Forest Grove Quarantine enacted for Washington County (outlined in red)

Preliminary Survey Results for EAB Detection. Caution: Data is live reported and preliminary. Not Intended for Management Purposes. Contact EAB@ODA.Oregon.gov for validated data.



Over 11,000 trees surveyed by ODA, APHIS and other partners (small squares on map show surveyed trees)

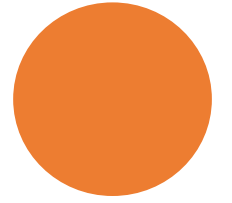
Oregon's Response to EAB

- Conducting visual and trap surveys
- Enacted quarantine for *Fraxinus spp.*, white fringe tree, and olives (included on 11/12/23)
- Have 122 trap trees in 1–2-mile buffer around infestation to help slow the spread of EAB
 - Girdled trees to attract EAB
 - bark peeling has been started
 - Treated 1-3 ash trees near girdled trees with systemic Emamectin benzoate
 - 188 *Fraxinus latifolia* treated
 - Removed 60 infested urban ash trees



Oregon's Response to EAB

- Released EAB parasitoids
 - Recovered *Spathius galinae* and *Tetrastichus planipennis* this fall
 - Will continue releases next year



CDFA's Response to EAB

- Established exterior quarantine
- Survey (Current and Planned)
- Public Outreach and Education
- Emergency Action Plan Update





Emerald Ash Borer Survey Overview

- Received funding from US Forest Service to conduct EAB survey.
- Survey will occur in 2024 (delayed to allow for longer survey period and processing of paperwork)
- Work with counties and volunteers to place traps at Oregon border and along I-5 corridor
- Counties which will be surveyed: Siskiyou, Shasta, Tehama, Glenn, Colusa, Yolo and Butte Counties

EAB Survey Overview

- Place and service traps March-October 2024 (timing will be adjusted using DD model)
 - Traps baited with *Agrilus palnippennis* lure
- Conduct visual ground surveys to look for signs of damage, EAB exit holes and woodpecker damage.

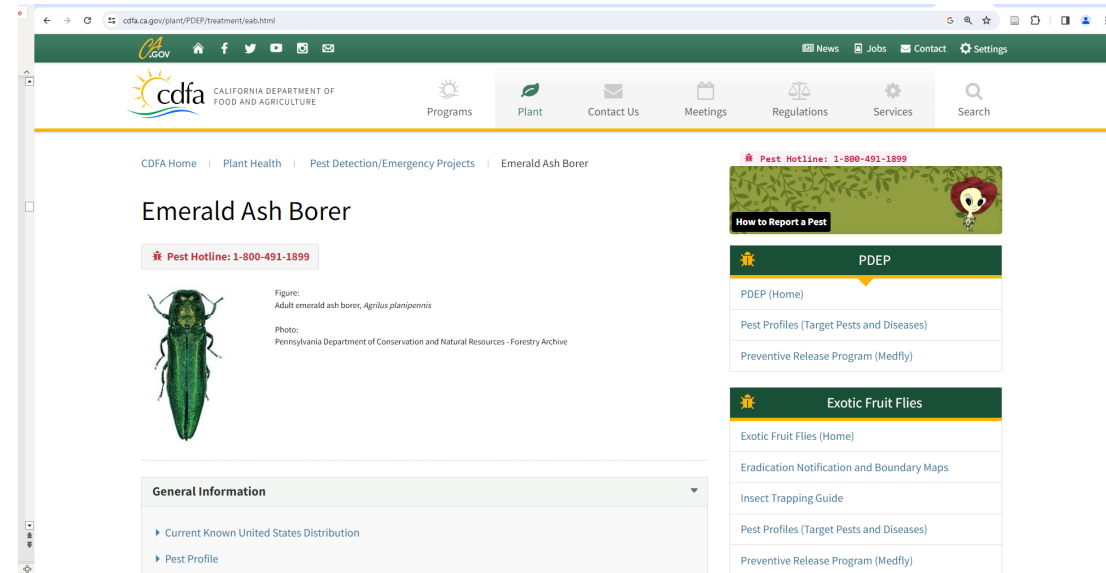
Locations along I-5 transportation corridor (Oregon border to Yolo County)

1. Stands of ash trees
2. Firewood staging locations, campgrounds, other sites w/ash or firewood movement
3. Olive orchards
4. Other locations deemed high risk by counties



EAB Outreach Efforts

- Conduct outreach and improve awareness about the risks of EAB
 - Short-term and long-term outreach efforts at:
 - Campgrounds, outdoor recreation conferences, trade shows, outdoor advertising, public service announcements etc.
- Educate the public and gain stakeholder support to monitor for EAB. Distribute outreach materials to:
 - Trappers, counties, UC ANR, CDFA, CAL FIRE, and other partners.



Exotic Woodborer Survey PD/EP

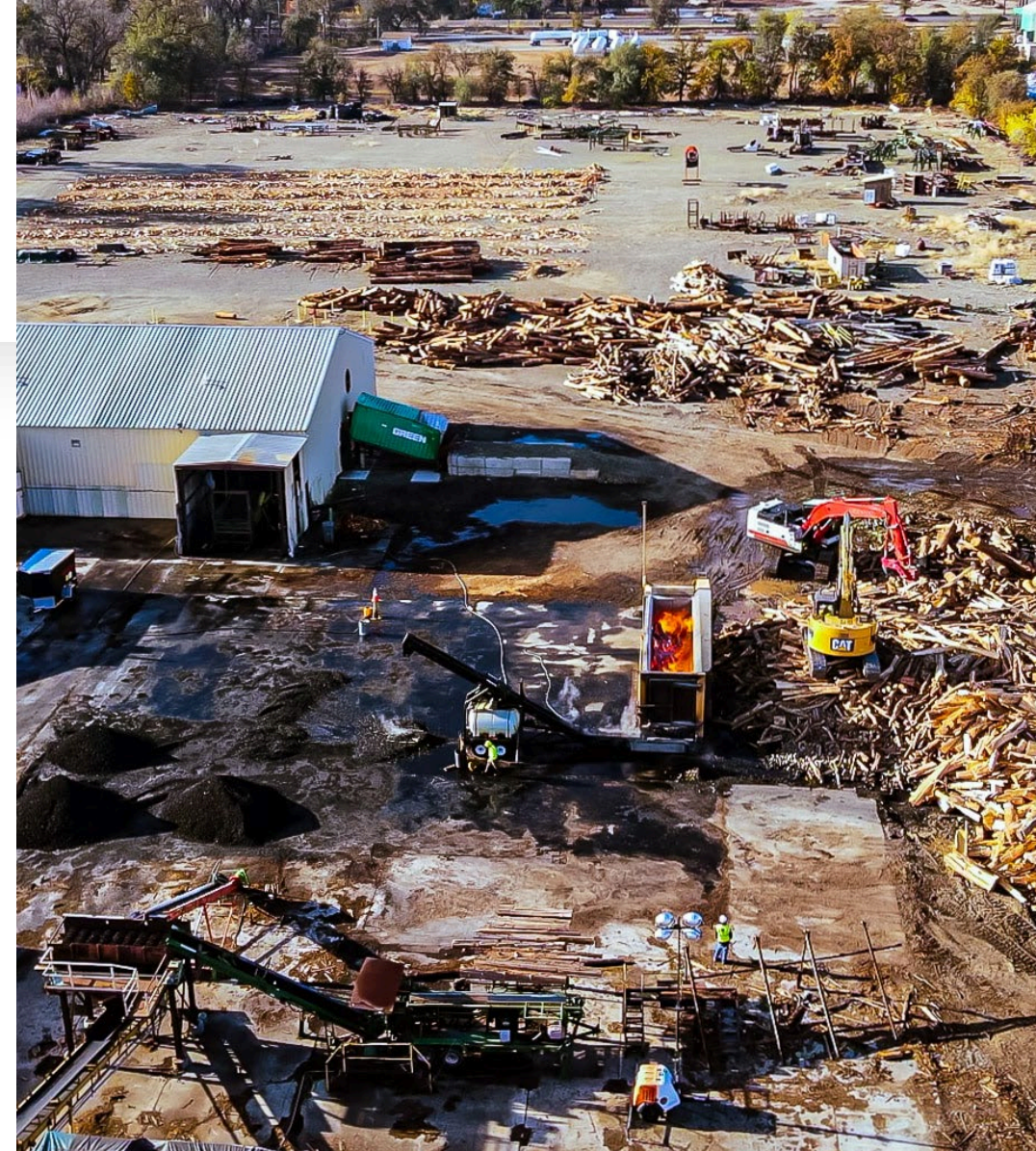
Survey Targets:

- Oak splendor beetle (*Agrilus biguttatus*)
- Asian longhorned beetle (*Anoplophora glabripennis*)
- **Emerald ash borer (*Agrilus planipennis*)**
- Redbay ambrosia beetle (*Xyleborus glabratus*)
- Black spruce beetle (*Tetropium castaneum*)
- Brown spruce longhorned beetle (*Tetropium fuscum*)
- Ambrosia beetle (*Megaplatypus mutatus*)



Exotic Woodborer Survey PD/EP

- Survey conducted this summer in 14 high-risk locations in 9 counties. Will complete spring 2024
- Counties surveyed: Monterey, Contra Costa, Tuolumne, Lake, Mendocino, Sonoma, Butte, Nevada and El Dorado
- Prioritized PG&E woodyards where large amounts of wood are transported and processed
- Other locations included:
 - RV Parks & Campground
 - Greenwaste Facilities
 - Lumber yard, sites near lumber and rock importers



EAB Action Plan

Goal: Develop a joint California Emerald Ash Borer Interagency Action Plan

Example:

https://www.cdfa.ca.gov/plant/pdep/target_pest_disease_profiles/docs/cdfa_spotted_lanternfly_action_plan.pdf

Additional funding also provided for:

- Additional EAB survey activities (2024)
- Short and long-term outreach efforts



EAB Action Plan Development

1. Identify and convene Interagency Action Plan Working Group members.
2. CDFA staff will enter into contract/grant agreement with UC IPM.
 - UC IPM will help produce, write, and oversee the development of the Action Plan in cooperation with the Action Plan Working Group
3. Produce 1st rough draft for Science Advisory Panel review. Develop list of questions for Science Advisory Panel members.
4. Convene Science Advisory Panel members.
5. Produce rough first draft for review by Action Plan Working Group members.
6. Solicit feedback on public draft.
7. Produce and publish final joint California Emerald Ash Borer Interagency Action Plan

Draft Action Plan Sections

Overview of Biology and Ecology of EAB

Known EAB Host List

Environmental and Regulatory Compliance

CDFA Permitting

Overview of Program Operational Approach

Suspect Sample Submission Procedures

Survey and Detection Methods

Draft Action Plan Sections

Protocols for Delimitating Positive Finds

Regulatory Actions

Biological Control Options

Treatment Methods

List of Outreach Partners

Internal and External Communication Plans

References



Questions & Discussion

Want to assist with the EAB survey?

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Or

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