



USDA Forest Service

Forest Health Protection



Forest Health Protection

Emerging Regional and National Issues



Presentation Roadmap

- **FHP overview**
 - ✓ Budget
 - ✓ Acres treated
- **Emerging Regional and National Issues**
 - ✓ Sudden oak death
 - ✓ Thousand cankers disease
 - ✓ Southern pine beetle
 - ✓ Emerald ash borer
 - ✓ Polyphagous shot-hole borer
 - ✓ Coconut rhinoceros beetle
 - ✓ Insect and disease risk map



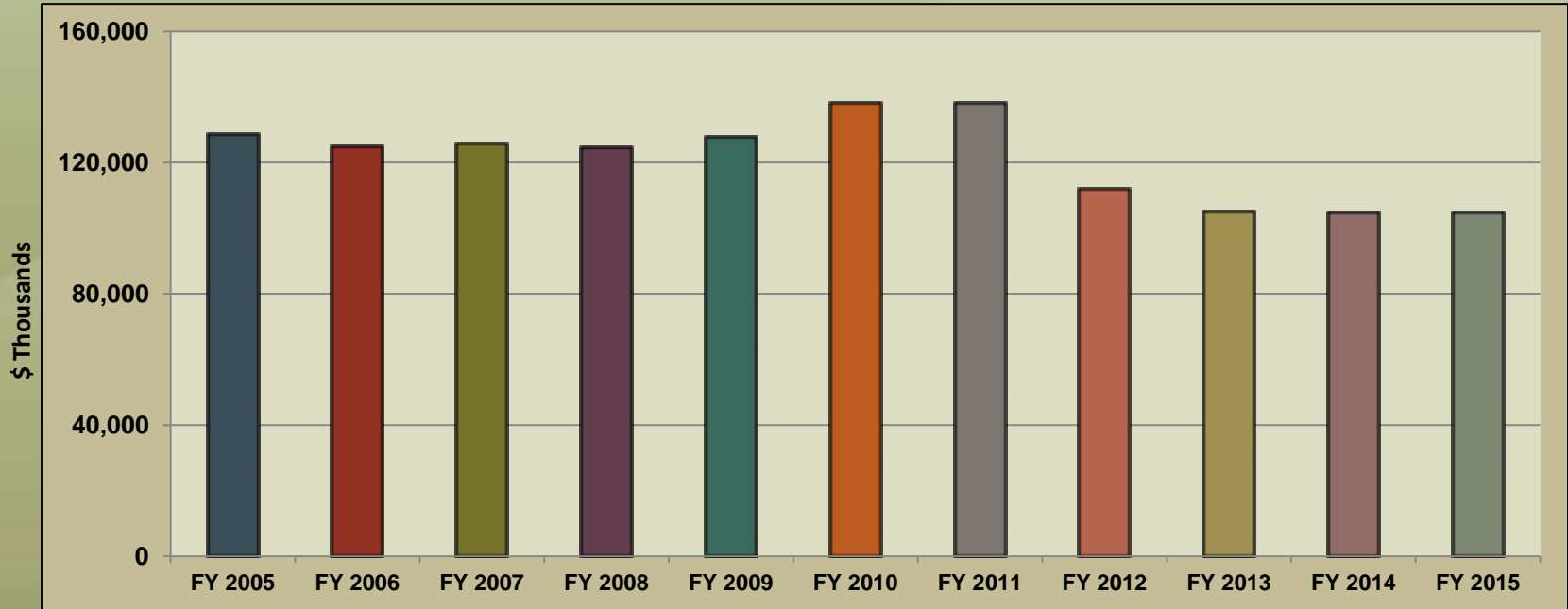
FHP Overview

- Technical Assistance
- Survey & Monitoring
- Treatments
- Methods/Tech Development



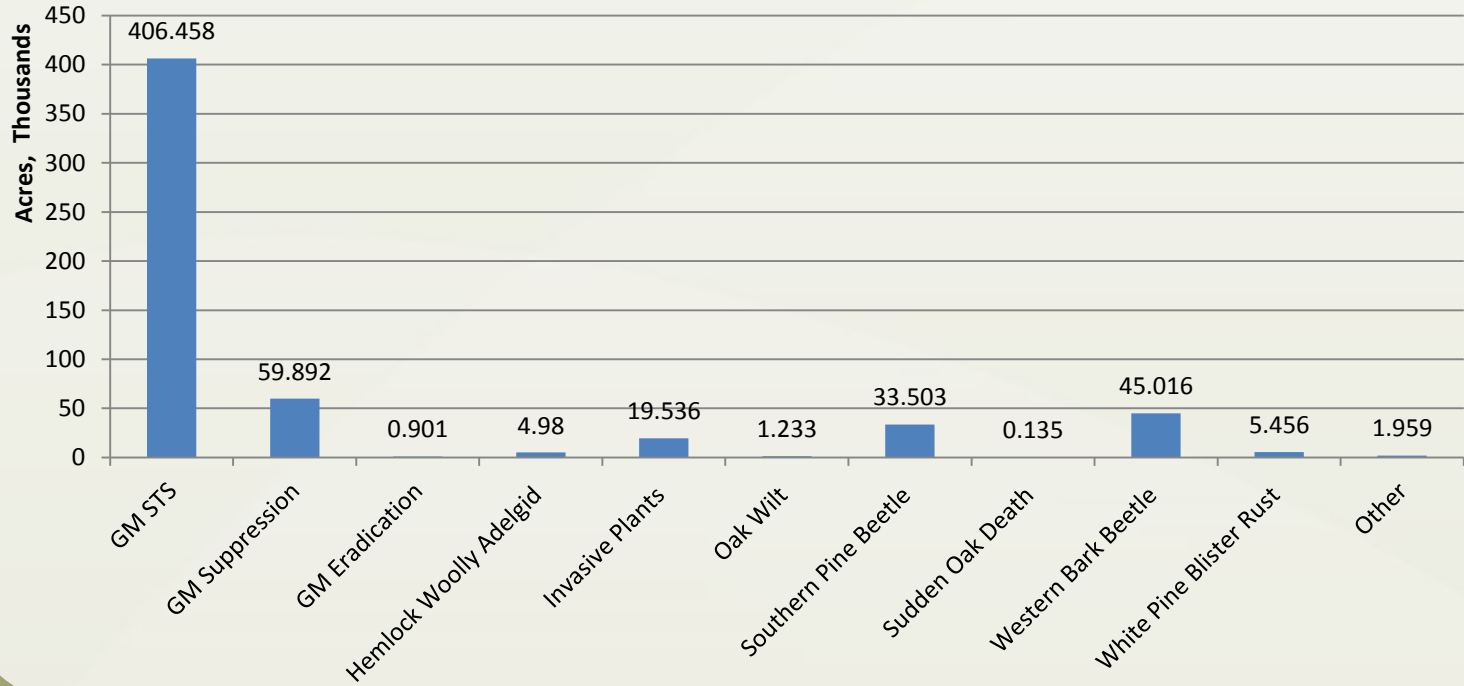
Budgets 2005-2015

Forest Health Protection Budget





Acres Treated - 2013





New and Emerging Issues

- ✓ Sudden oak death
- ✓ Thousand cankers disease
- ✓ Southern pine beetle
- ✓ Emerald ash borer
- ✓ Polyphagous shot-hole borer
- ✓ Coconut rhinoceros beetle
- ✓ Insect and disease risk map



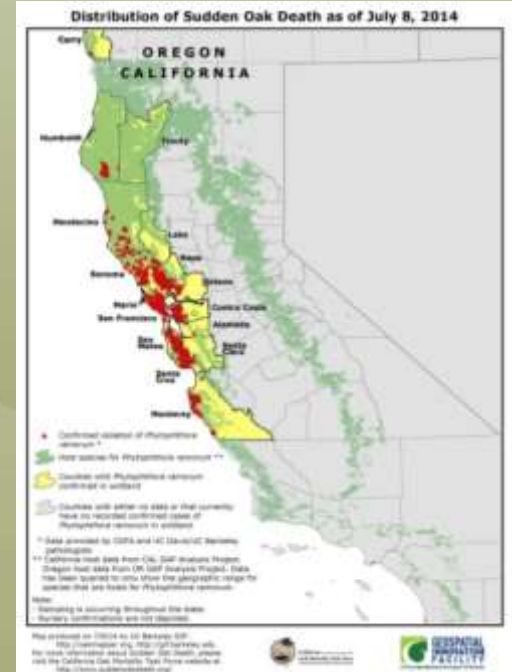
Sudden Oak Death

Confirmed in new watershed in Alabama

- Invasive pathogen found in 15 counties along the coast in CA and OR
- Recently found in new watershed in AL
- FHP national SOD stream baiting program important to detect new locations in the east and determine risk



Pete Angwin, USDA Forest Service





Thousand Cankers Disease

Confirmed in Maryland



A beetle – walnut twig beetle
Pityophthorus juglandis

+



A fungus – *Geosmithia morbida*

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Insect/Disease Complex

- Confirmation in Indiana and Maryland in 2014
- Indiana: the vector identified for the first time was a weevil transmitting *Geosmithia morbida*, the canker causing TCD fungus.
- Maryland: joint National TCD Survey effort with APHIS & FS, walnut twig beetles discovered late Nov. 2013
 - Confirmation of *Geosmithia morbida* in Oct. 2014

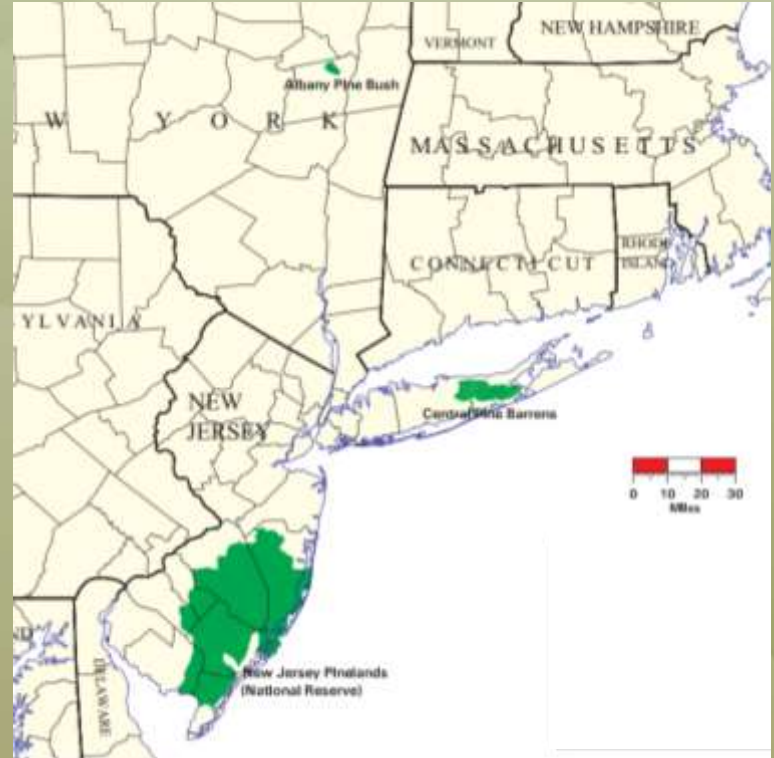




Southern Pine Beetle

Confirmed on Long Island, NY

- Oct 2014 - recently found infesting pitch pines on Long Island, NY
- This is the first record of the beetle as far north as New York
- Previously, the furthest north known infestation was central NJ





Emerald Ash Borer

Potential new host type identified

- Oct 14, 2014 - Larvae and a partial adult specimen collected from white fringetree shrubs: confirmed to be EAB
- New strategy will update current Framework (fs.fed.us/foresthealth/docs/EAB_National_Framework.pdf)
- Currently present in 24 states, DC, and Canada
- APHIS is lead agency for quarantine and surveying





Polyphagous shot-hole borer

Emerging Pest Issue



- Ambrosia beetle native to Asia
- First detected in CA in 2003, LA County
- In February 2012, found on a backyard avocado
- Large host list: box elder, castor bean, coast live oak, avocado, California sycamore, big leaf maple, English oak, silk tree, coral tree, Japanese maple, sweet gum, red willow ...
- Still unsure of taxonomic identity but beetles in CA, Israel and Vietnam are related



Coconut Rhinoceros Beetle

New detections in Hawaii

- On October 16, 2014, a single adult found at Diamond Head Lookout on Oahu
- On October 20, 2014, a single adult female found near Mililani on Oahu
- New buffer zones have been established, and surveys are being conducted to determine the extent of damage and to identify breeding sites
- The presence of CRB was first confirmed in Hawaii in January 2014
- Both new detection sites are outside of the previously known infestation area.





National Insect and Disease Risk Map

One tool for Farm Bill Forest Health designations

- 35 states requested designations to do work on insects and disease in response to the Farm Bill 2014.
- FS evaluated the requests from each state against the required criteria using a three part process.
- 81.3 million acres at risk
- “Risk” - defined as the expectation that at least 25% of the basal area will die over a 15-yr time frame





Questions?