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UC Cooperative Extension
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Sudden Oak Death Hot Spot Management in the North Coast of California

Funding courtesy of the USDA Forest Service and CAL FIRE

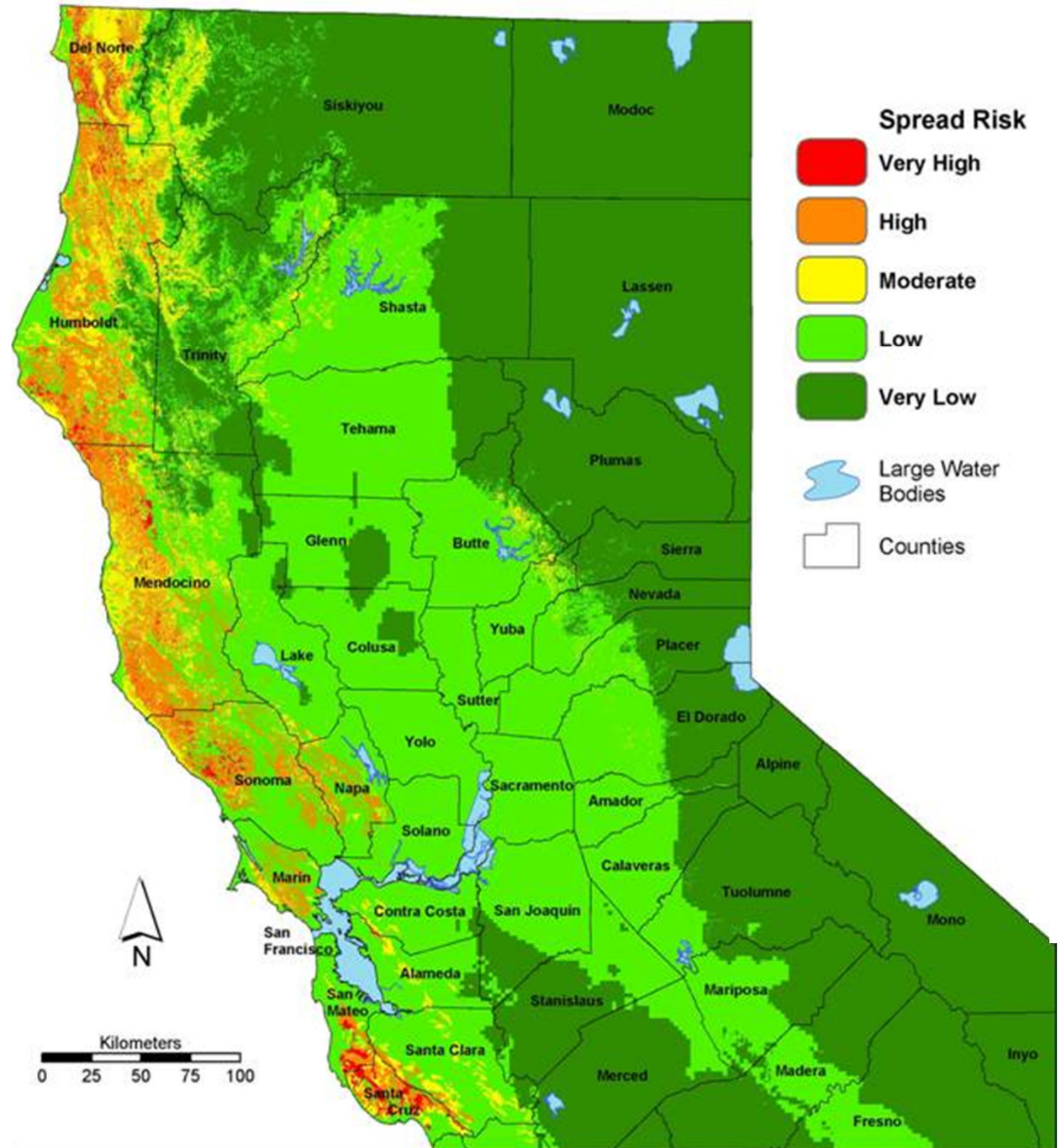
SOD Distribution:

14 California counties; 1 Oregon County

Expanding infestations in previously known areas, minimal spread last few years

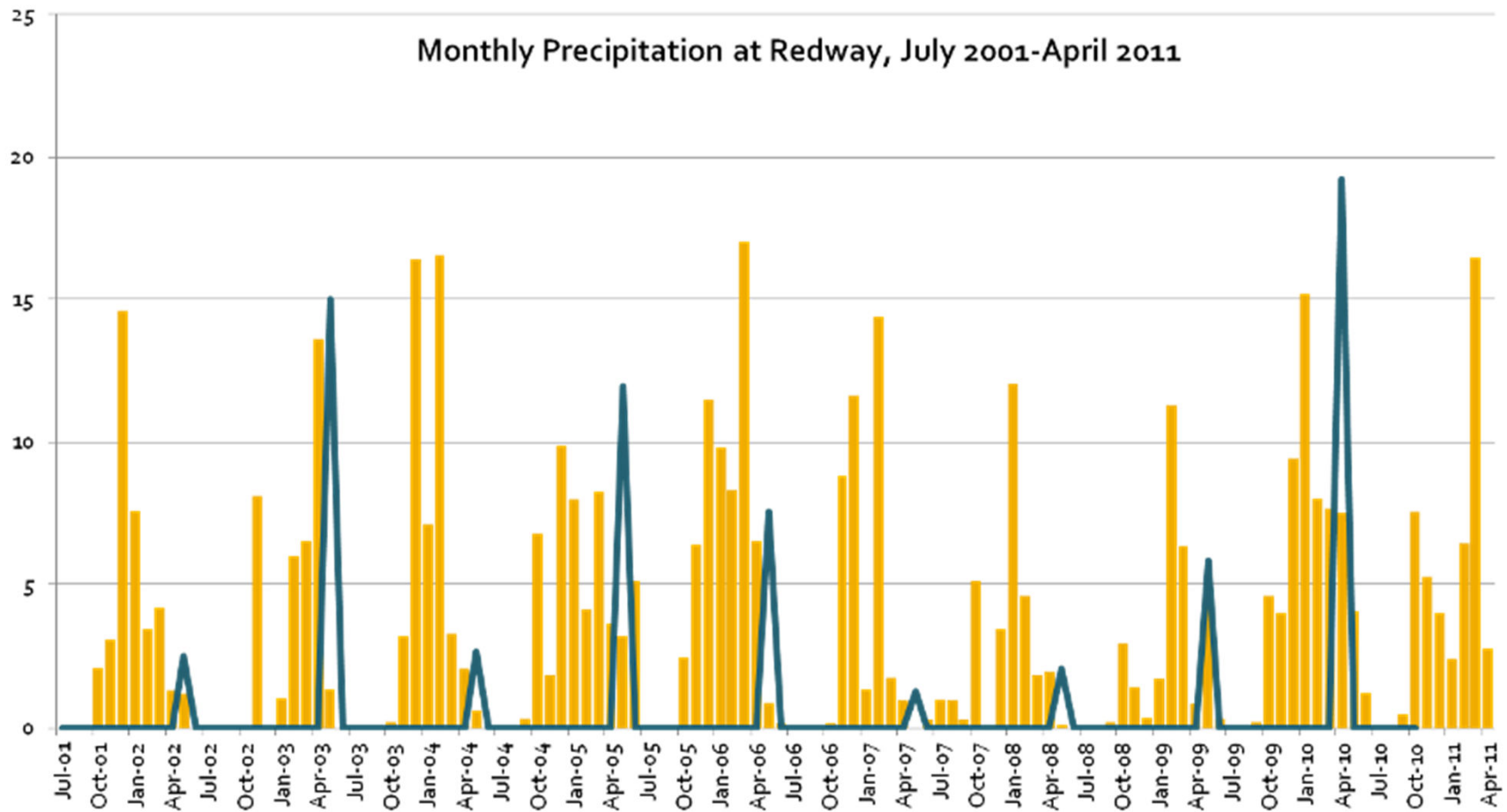


Risk models

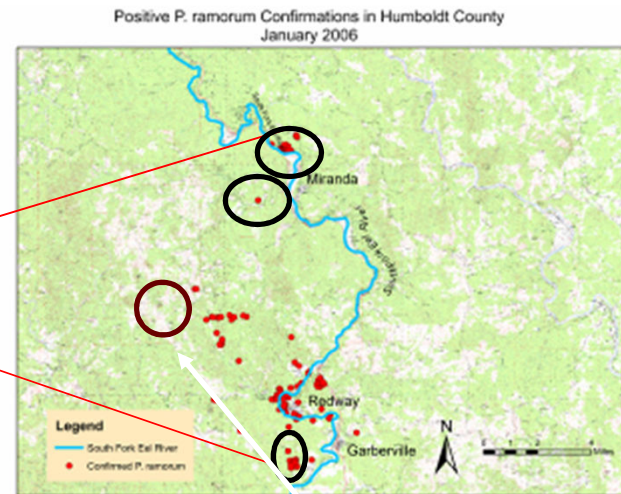
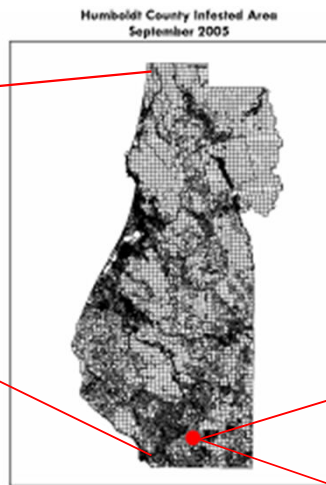


Meentemeyer et al., 2004

Humboldt County: 2003, 2005, 2006, 2010 were highly supportive for pathogen spread



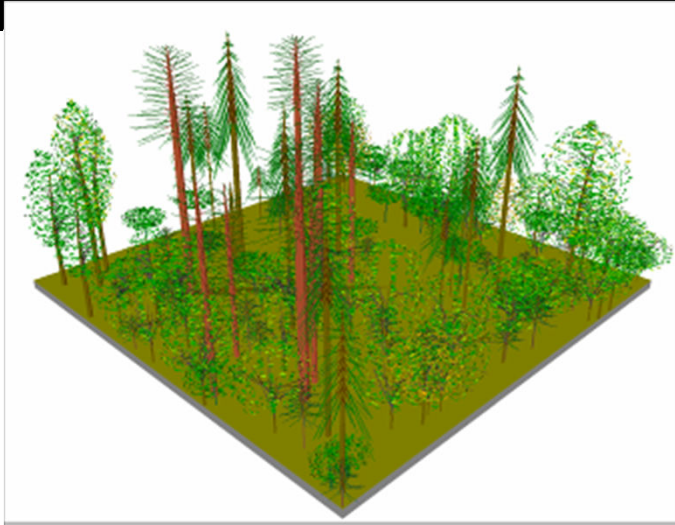
2006 Hot Spot Management Approach



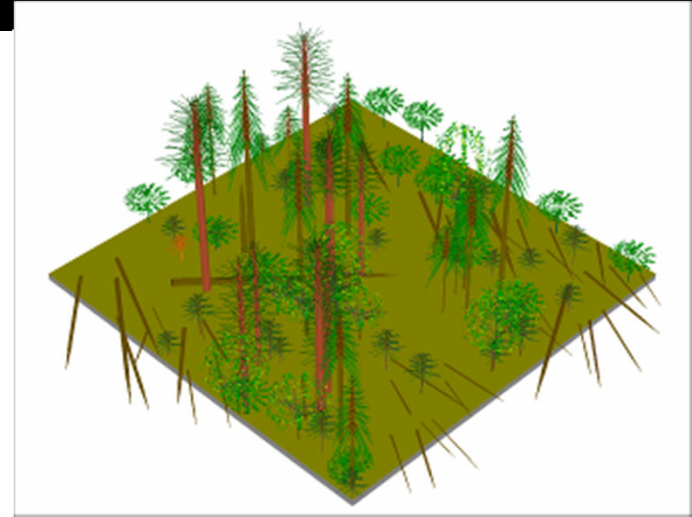
7 mi

Forth project tied to a community fire protection project

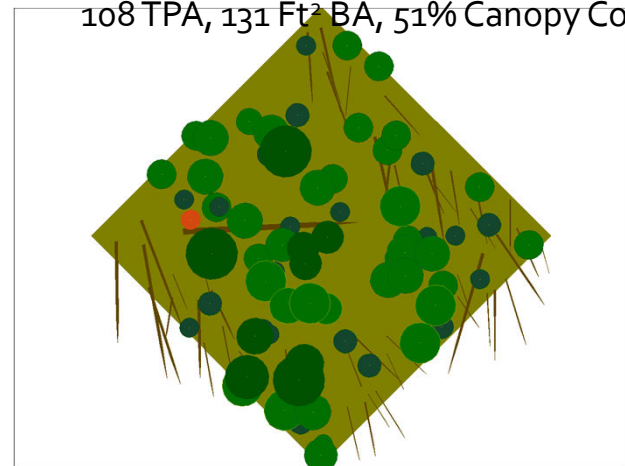
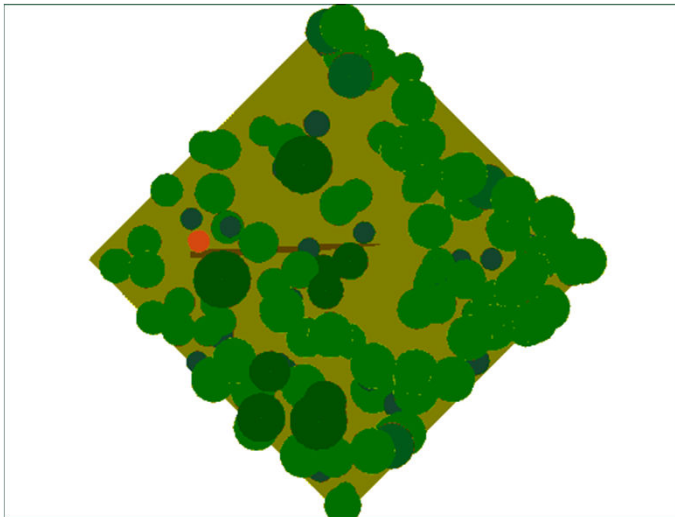
Pre- and post-treatment stand structure- from an average condition at one 50 acre management unit in Humboldt



156 TPA, 187 Ft² BA, 61% Canopy Cover



108 TPA, 131 Ft² BA, 51% Canopy Cover



Jay Smith Road Treated 2006,
pre- and one year post- treatment photos



Plot 4-1, HRSP



Plot 4-2, HRSP



Plot 4-2, HRSP

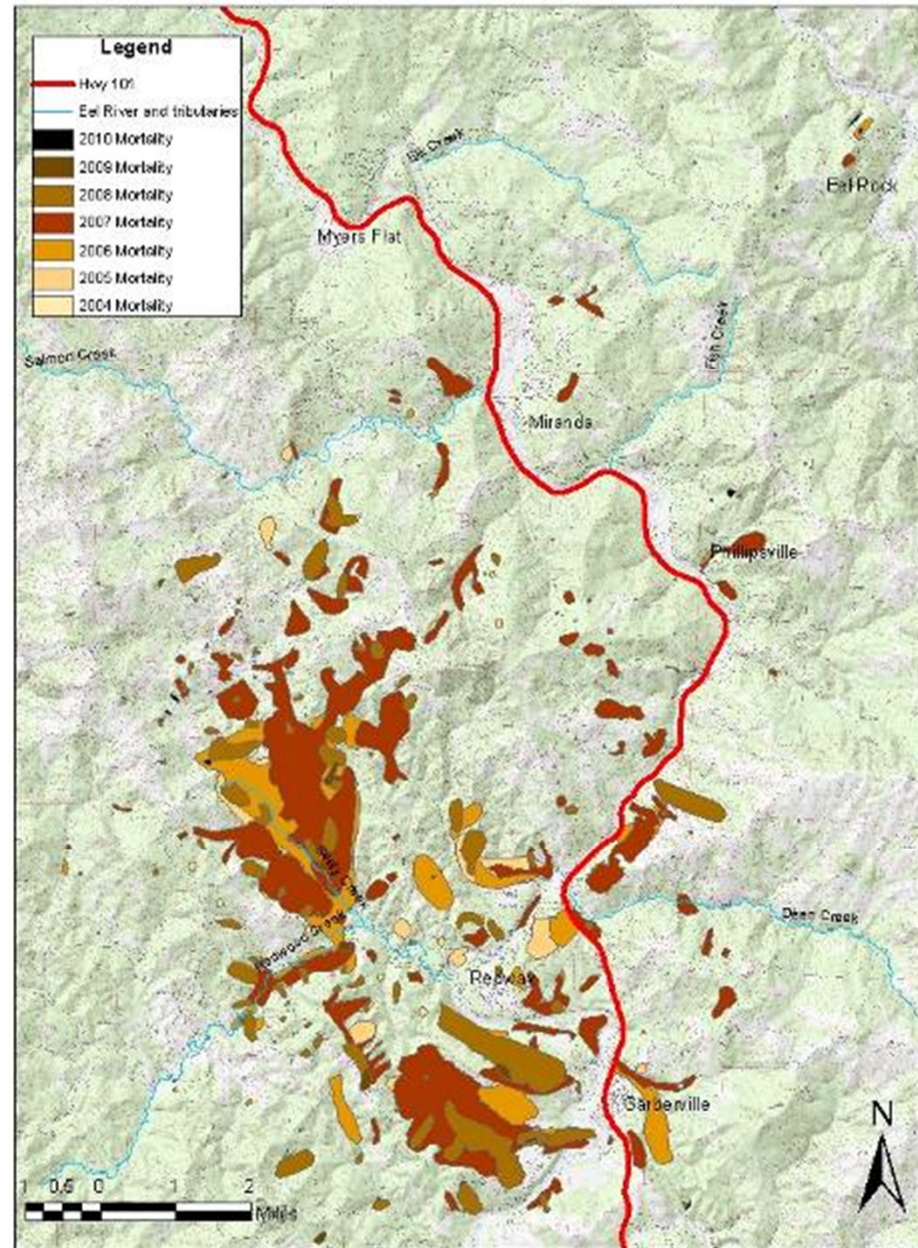
General views on the same treatment area in 2010



In this case sprouting was not controlled as a part of the treatment program. Sprouts 5 years post treatment are disease-free.

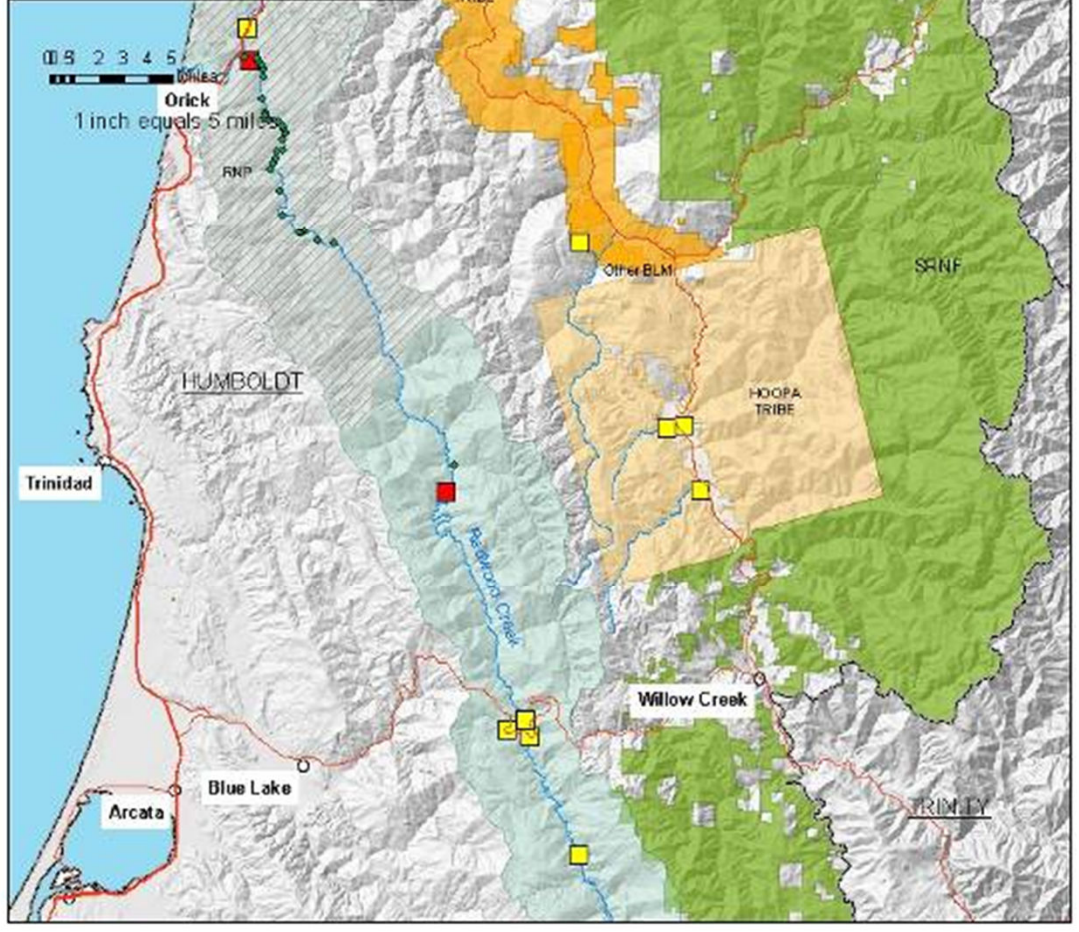


Southern Humboldt Tanoak Mortality 2004-2010



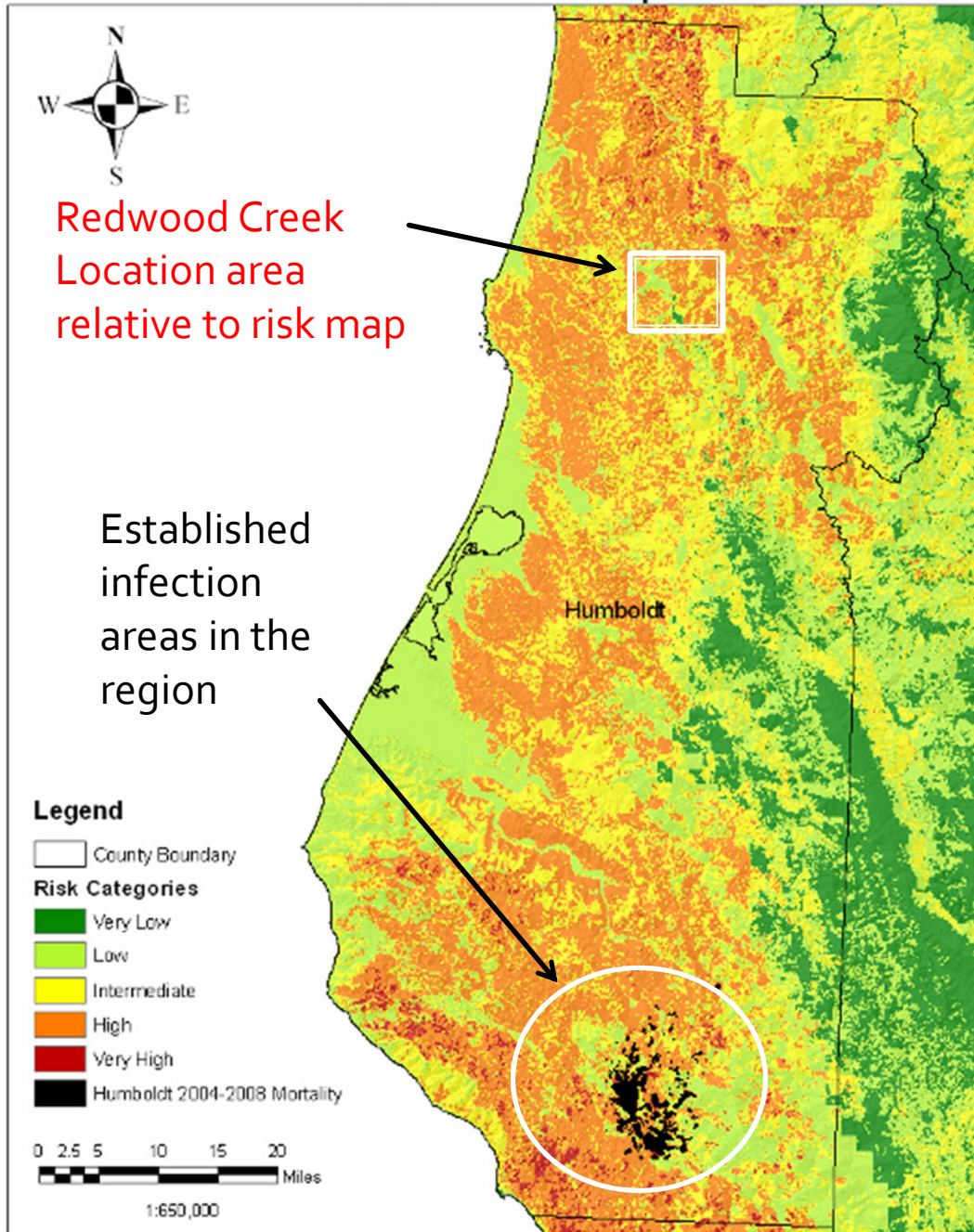
Rate of expansion is ~1500 acres per year for the last 7 years

- Redwood Creek Watershed**
- Stream Positive
 - Stream Negative
 - Highway
 - ▭ Watershed Boundary
 - ▭ County Line
 - ▭ BLM
 - ▭ Hoopa Tribe
 - ▭ Yurok Tribe
 - ▨ Redwood National and State Parks
 - ▭ Six Rivers National Forest
 - RedwoodCreekTribs.csv Events

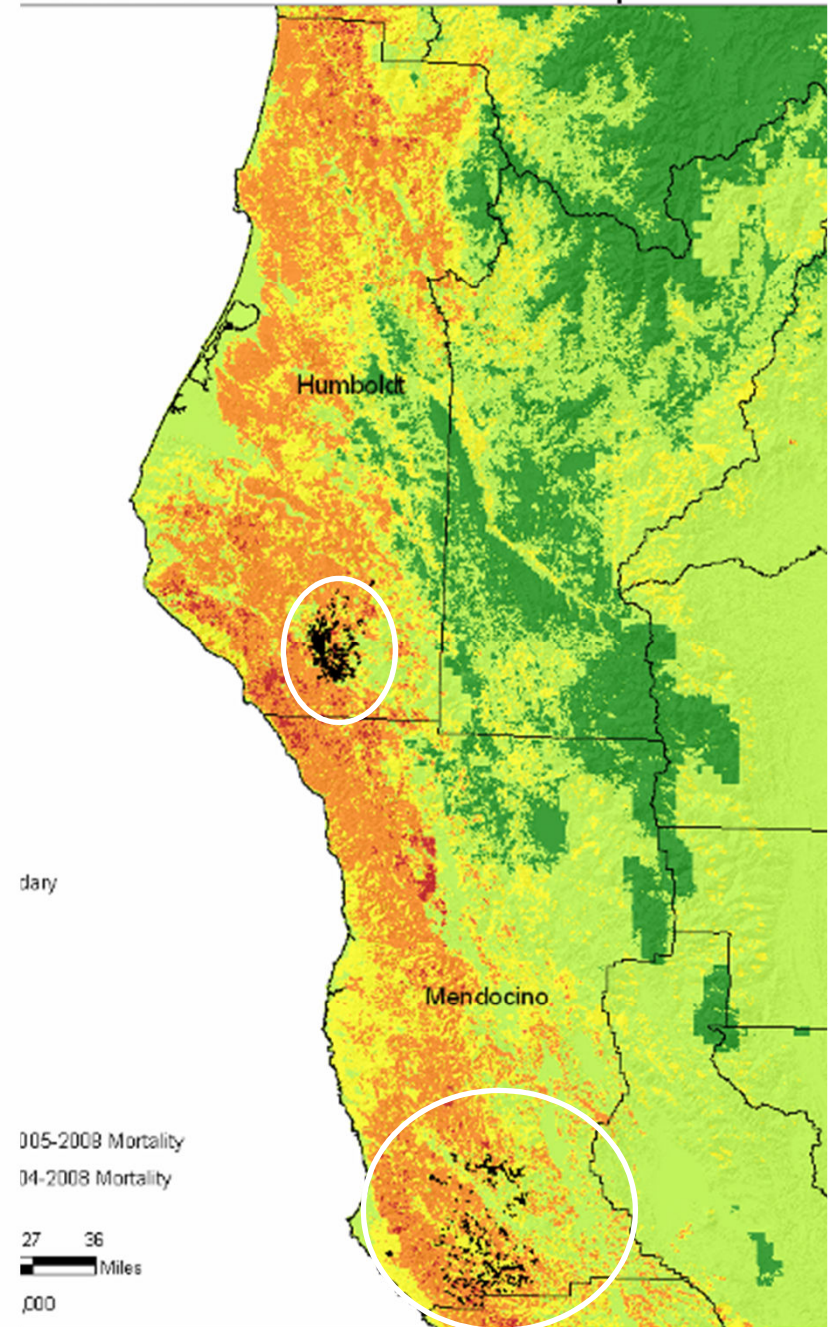


What's new?

Humboldt Risk Map



Humboldt - Mendocino Risk Map



Redwood Creek



Infection just beginning to show

Vistas of Redwood creek, most of the stream is dominated by conifers or alder (to right)





Redwood Creek
General area photos and
disease conditions on
Douglas-fir and tanoak



Why is Redwood Creek Important?

- Del Norte County is disease free
- Proximity to Hoopa and Yurok Reservations
- Proximity to Redwood National Park
- End of the accessible road
- Heart of Humboldt County
- It is still a small infestation
- Only 10% of the at risk habitat in CA is infested, <1% of Humboldt County

Conclusions

- Funding is coming together
- Landowners are cooperating
- Urban forestry is very challenging and takes a delicate hand

