

# **Overcoming Barriers to PES on Private Forestlands in the Pacific Northwest**

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ACES 2014

# Goal of PES Programs on Private Forestlands

- ✿ Maintain and enhance carbon sinks to mitigate climate change
- ✿ Recover endangered species
- ✿ Restore and maintain water quality and quantity for human use and aquatic species
- ✿ Restore ecological resilience
- ✿ Recreation and aesthetics

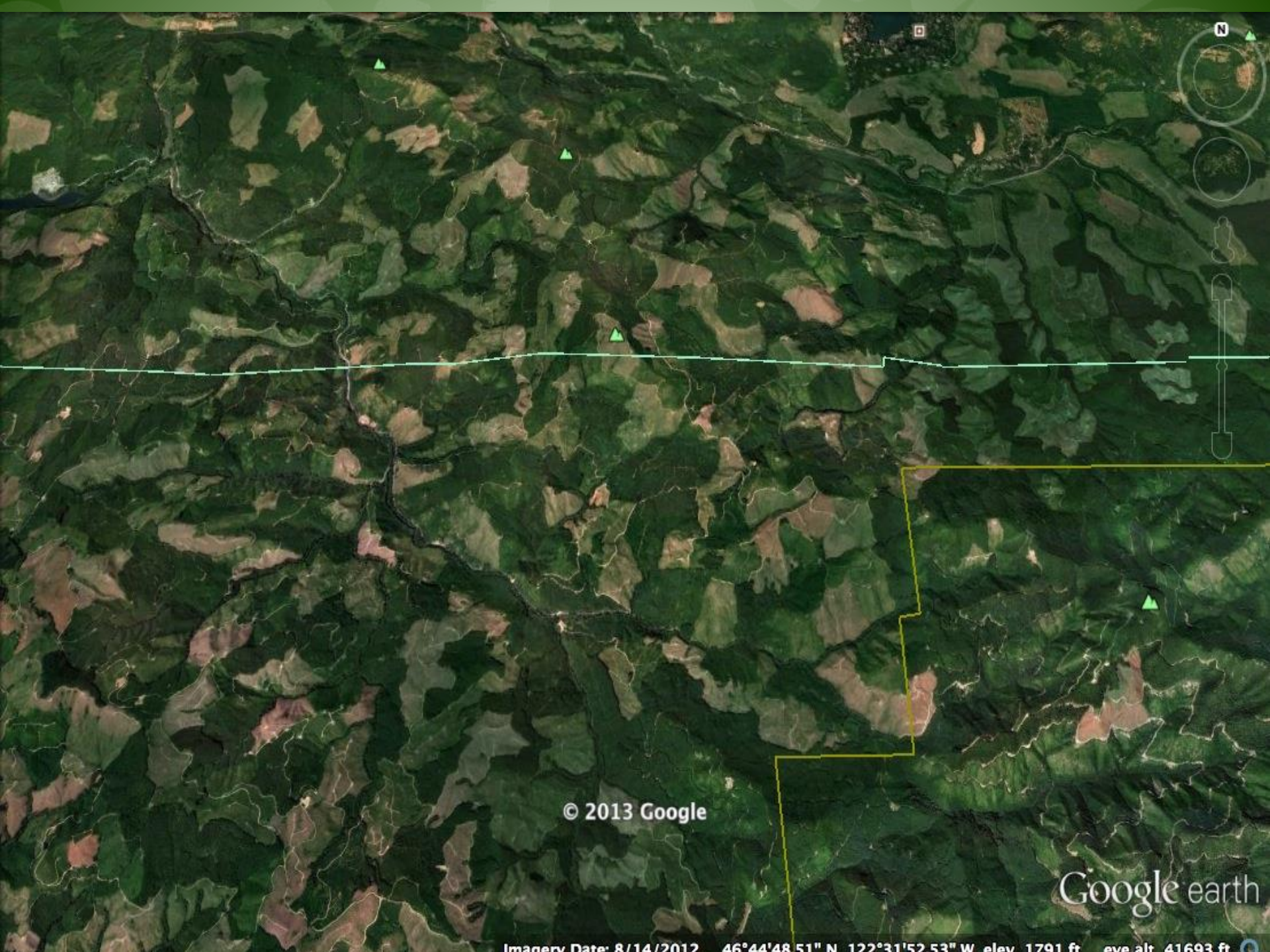










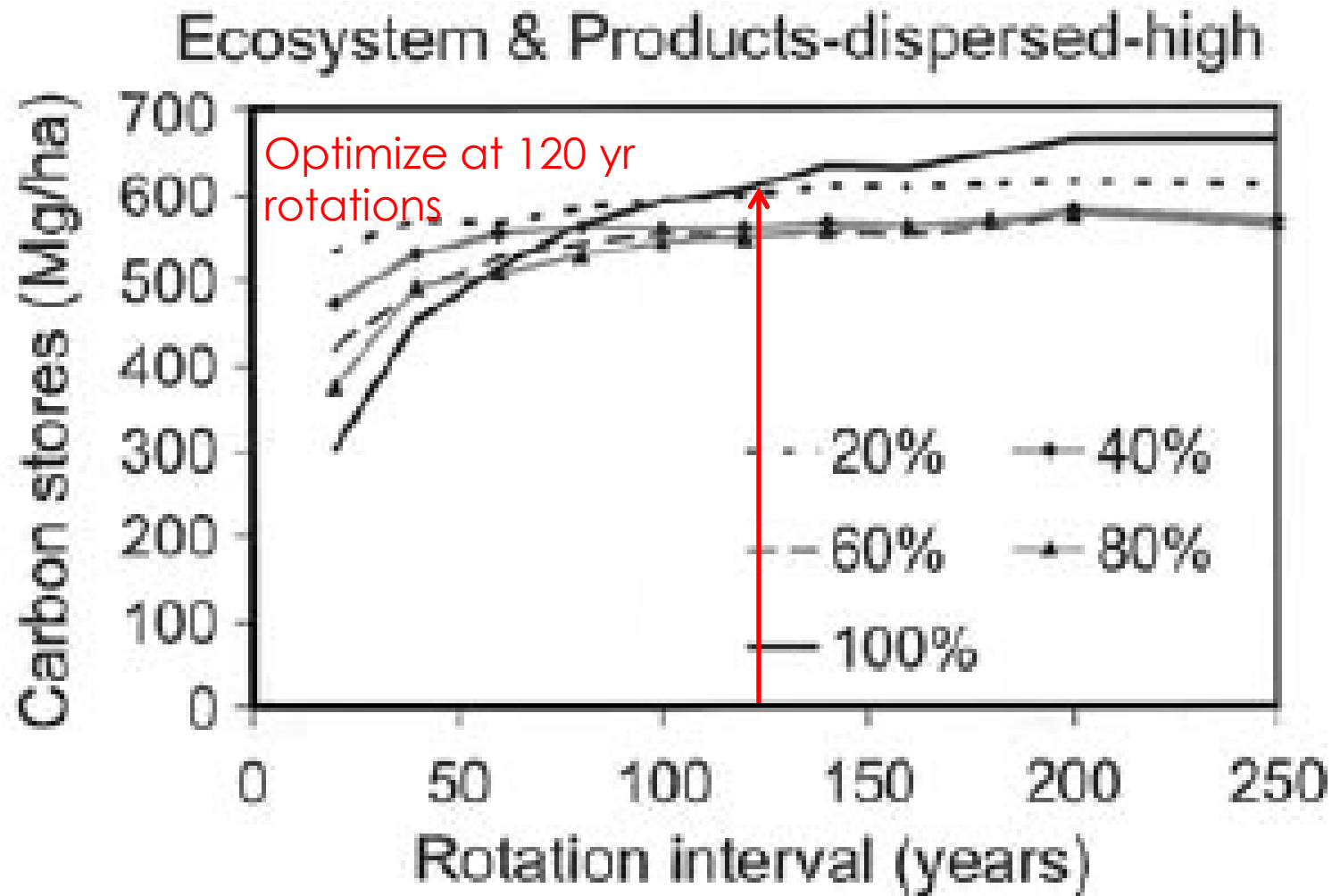


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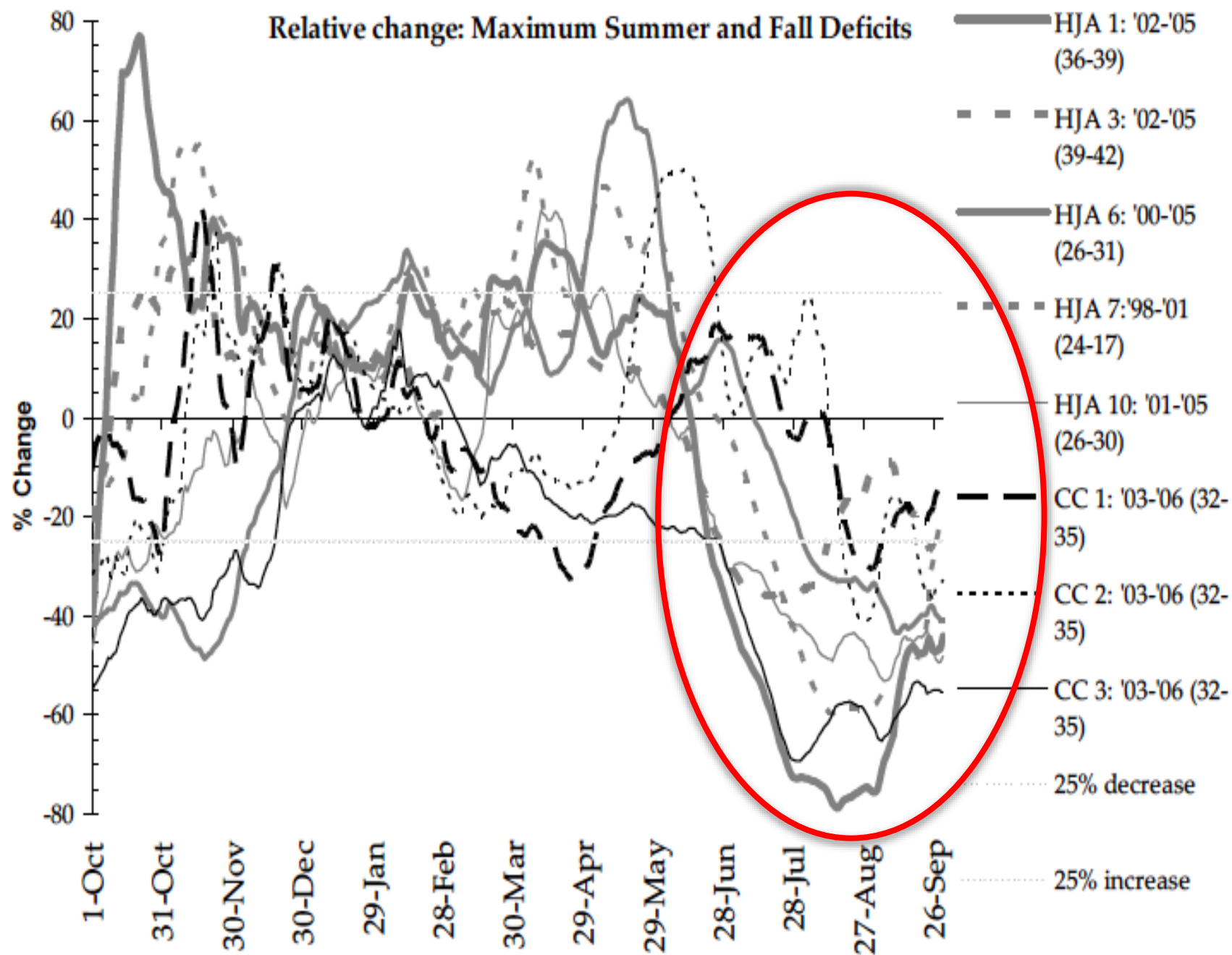
Google earth

Imagery Date: 8/14/2012 46°44'48.51" N 122°31'52.53" W elev 1791 ft eye alt 41693 ft

## Longer Rotations or Partial Harvest Increases Combined Carbon Stores in Forests and Wood Products







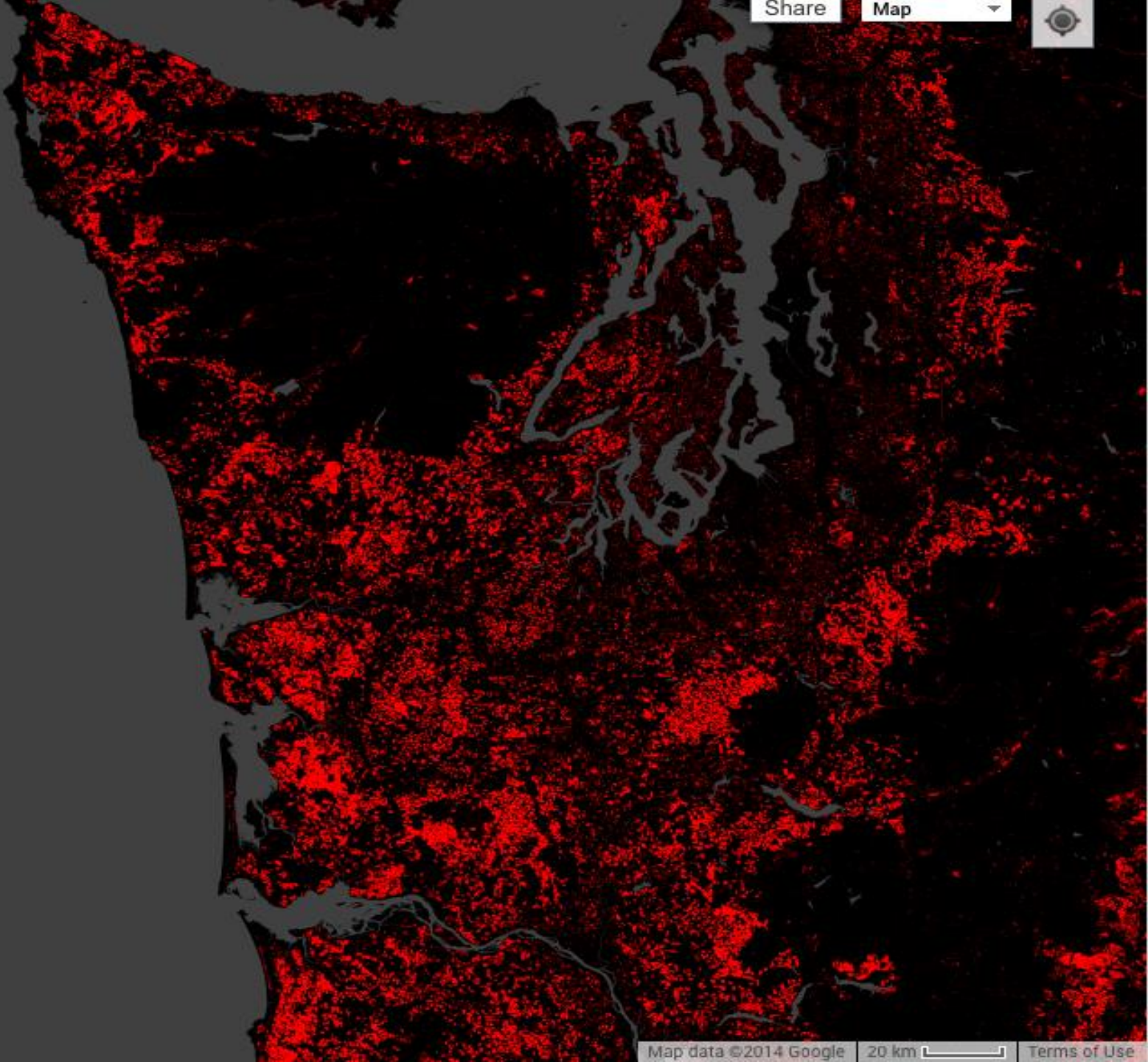
# **At Scale!**

Success is not a few pilot projects, but changing  
underlying economic drivers of forest  
management on private lands



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Map



Map data ©2014 Google

20 km



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# Efforts to Build PES Programs in Washington State


- ❁ Governor's Forest Carbon Working Groups 2007-2010
- ❁ Water Quality Trading for SFLOs 2008-2011
- ❁ ESA Habitat Banking for Spotted Owls 2011-2013
- ❁ Payment for Watershed Services 2012 – 2014
- ❁ Uptake of Forest Carbon Offset Projects under CA AB32 2011 - present



# Outcomes

- ❁ No agreement on carbon offset protocols with timber industry
- ❁ No authorizing legislation for cap and trade
- ❁ No forest-based water quality trading agreements
- ❁ No ESA Habitat Banking program
- ❁ One Payment for Watershed Services transaction (drinking water protection)
- ❁ One AB32 listed forest carbon offset project



A close-up photograph of a barred owl perched on a tree trunk. The owl has dark brown and white mottled feathers on its wings and back, and a lighter, barred pattern on its chest. It has large, dark eyes and a small, yellowish beak. It is holding a small, light-colored animal, possibly a mouse or a small bird, in its talons. A speech bubble is overlaid on the right side of the image, containing the text "What is your problem, people?!!!".

What is your problem,  
people?!!!



# Common Barriers

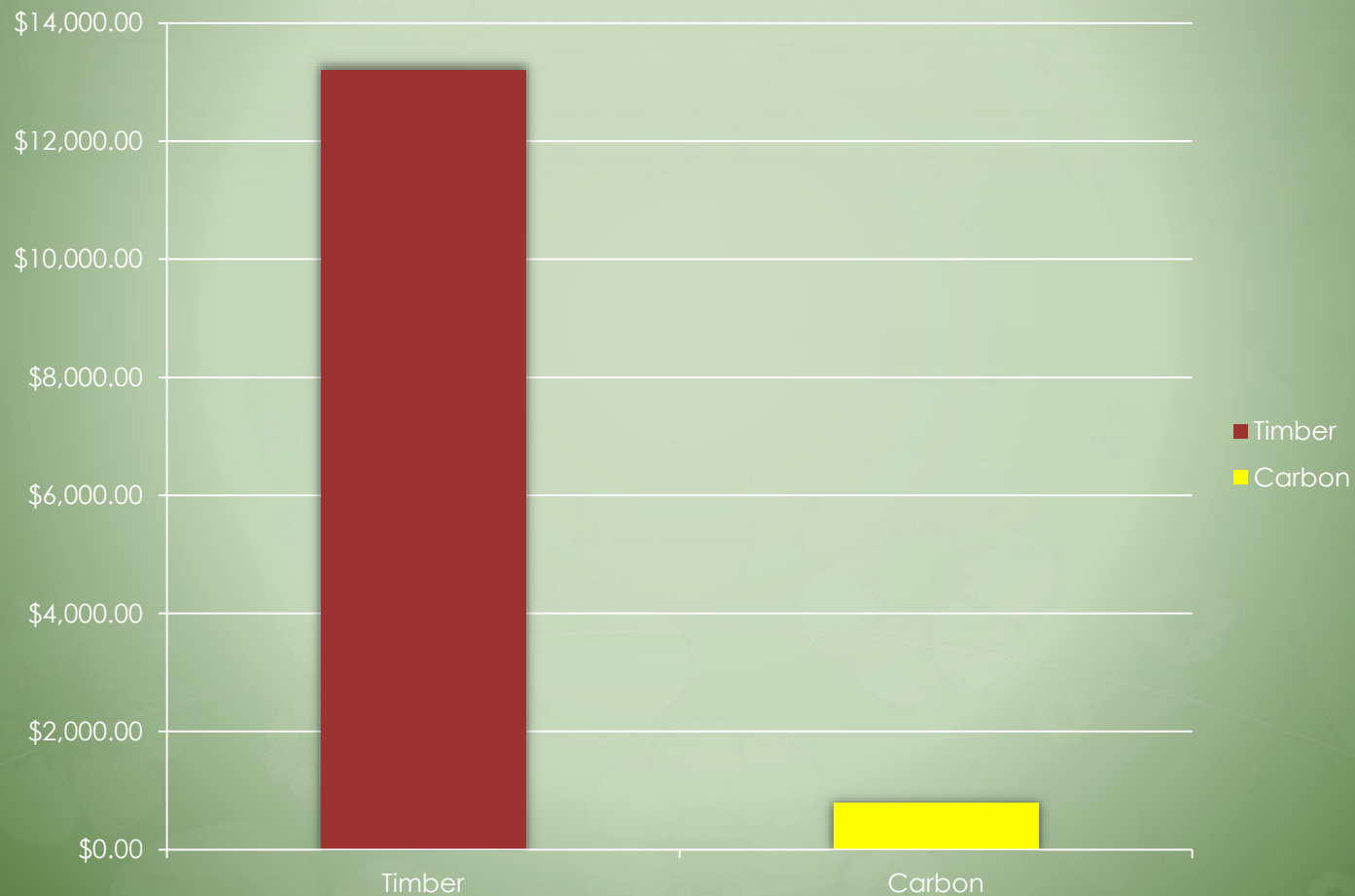
- ❁ Providing meaningful outcomes in forests requires long time commitments to provide desired services and avoid paying for Business as Usual:
  - ❁ Takes decades to restore key structures and functions
  - ❁ 100 years for offsets
  - ❁ Permanent easements for Habitat Banking; Source Water Protection
- ❁ Landowners hesitant to put encumbrances that could impact re-sale value of land



# Common Barriers

- ✿ Opportunity cost for harvesting less timber or not converting to other uses is very high
  - ✿ Timberland sales \$4,000/ac
  - ✿ Real Estate > \$20,000/ac
  - ✿ Timber > \$600 mbf
- ✿ Willingness to Pay/Mitigation mechanisms don't match these costs or scale

# Per Acre Gross Proceeds Over First 6 Years for a Western Washington Cascades Forest Carbon Offset Project





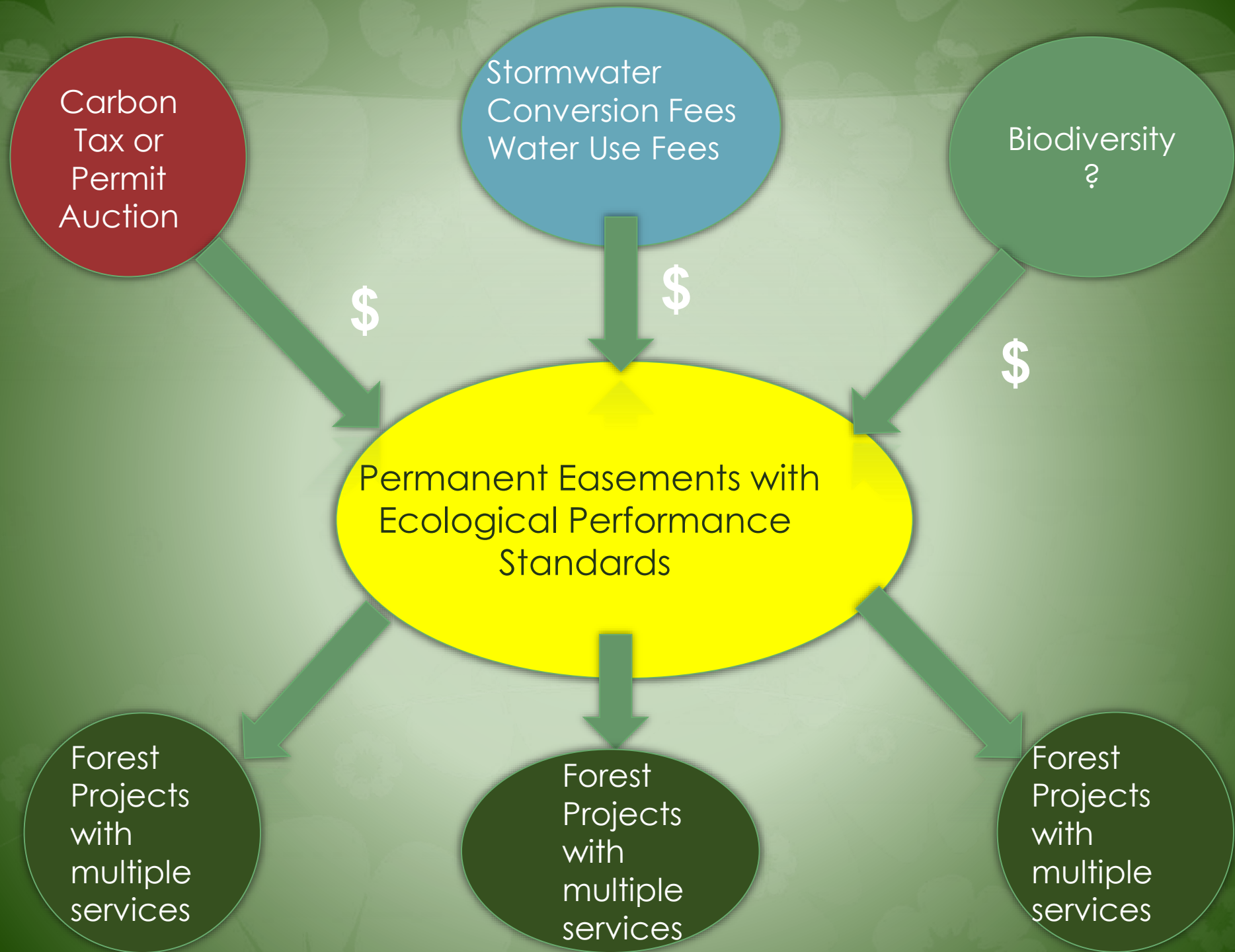
# Issues Identified by Landowners

- ❁ Too much process – for non-industrials especially
- ❁ Want compensation for existing regulatory obligations

# Overall lessons

- ✿ **Payments need to better match opportunity cost of cutting less timber or converting to real estate**
- ✿ **Don't create lots of markets or payment mechanisms: too slow , expensive, turns landowners off**
- ✿ **May need to change underlying ownership structure in some cases**
- ✿ **Need to convince policy makers this is worthwhile: we have not done this much or very well**





# Ownership Structure

- ❁ Community Forests
- ❁ Land trusts
- ❁ Small landowner co-ops





# Mashel River Protection

