



# Climate Action through Conservation

Capital Region Climate  
Readiness Collaborative  
June 9, 2015



# A Landscape Approach to Climate Change Solutions



Sonoma County Agricultural Preservation and Open Space  
District

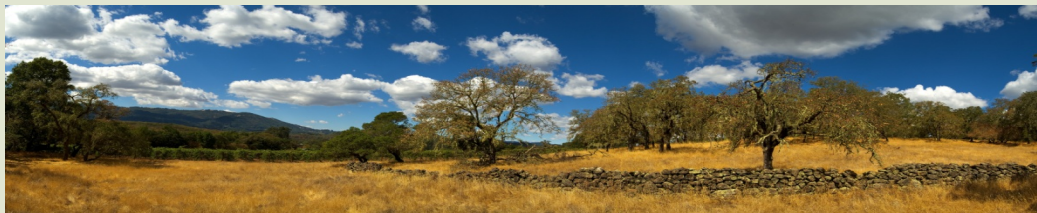
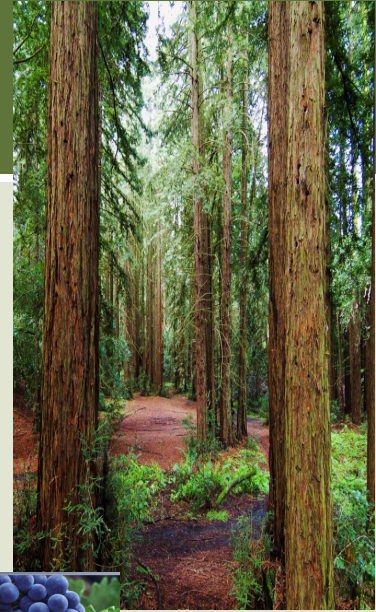
- Can reduce GHG emissions through changes in land use, management and conservation
- GHG reductions can be quantified
- Counties can make a difference

# Project Goal and Objectives

**Enable local governments to reduce GHG emissions through changes in land use, management and conservation**

- Developing GHG accounting method and tools
- Align with other public and environmental benefits
- Align county (landscape) scale GHG reductions with climate policy incentives

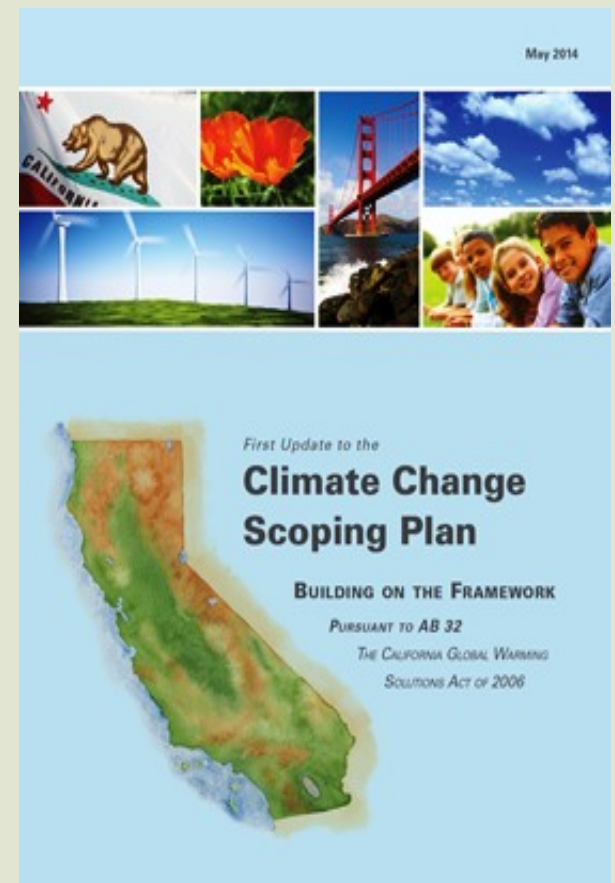
# Sonoma County Context



- Strong focus on GHG emissions reduction
  - Regional Climate Protection Authority
  - Climate Action 2020 (Multiple Sectors )
- Quarter Cent Sales Tax – leverage other investments

# Incentives for Natural Resources and Climate Benefits

- California's climate law (AB 32)
  - GHG cap & trade program:  
Greenhouse Gas Investment Fund
  - Post 2020 GHG reduction goals
- Policies emphasize need to *include natural resources, establish goals and develop GHG accounting tools*



# GHG Reductions in a Multi-benefit Context

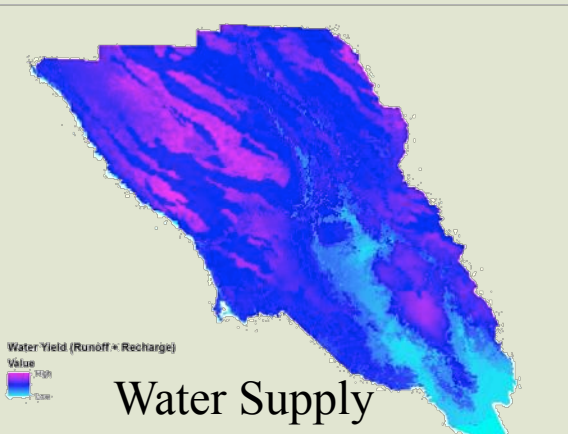
## Two integrated analysis elements

Land-based carbon inventory and accounting framework

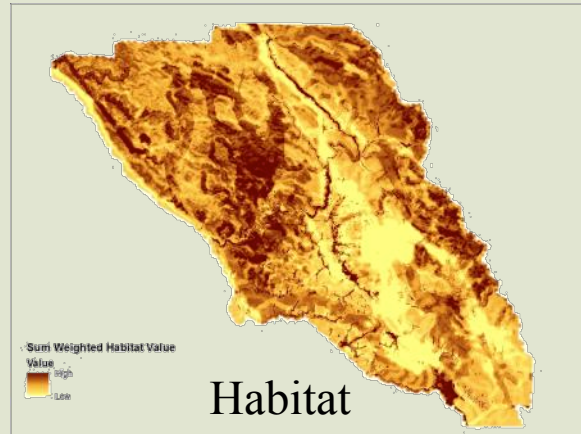


Conservation values assessment (habitat, ecosystem services)

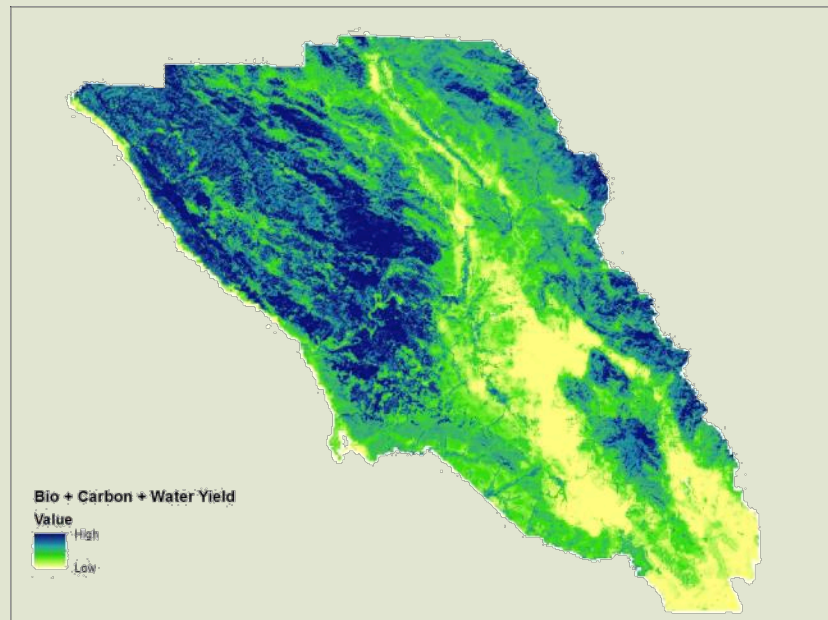
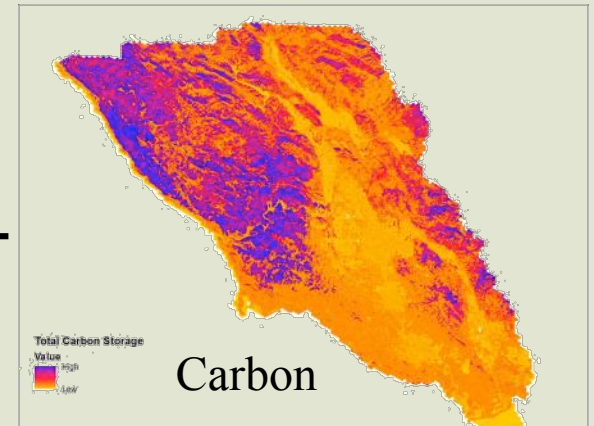
# Conservation Values Assessment: Defining Multi-Benefit Areas



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Combined Value

**Total C stock change:  
15 Tg CO<sub>2</sub>e  
750,000 Mg CO<sub>2</sub>e annually**

**Forest  
Growth**

**Fire**

**Conversion**

**Change in stock (2010 - 1990)**

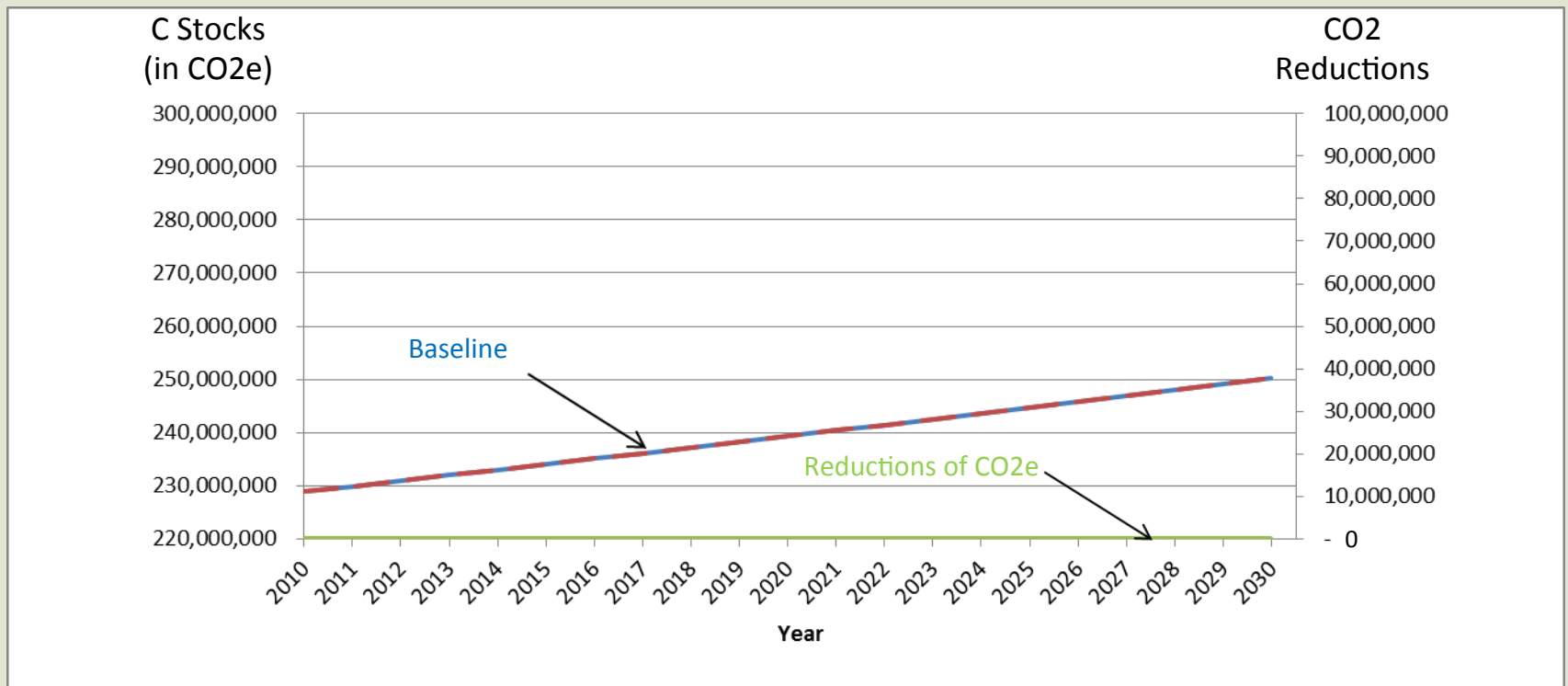
**Tonnes/ac CO<sub>2</sub>**





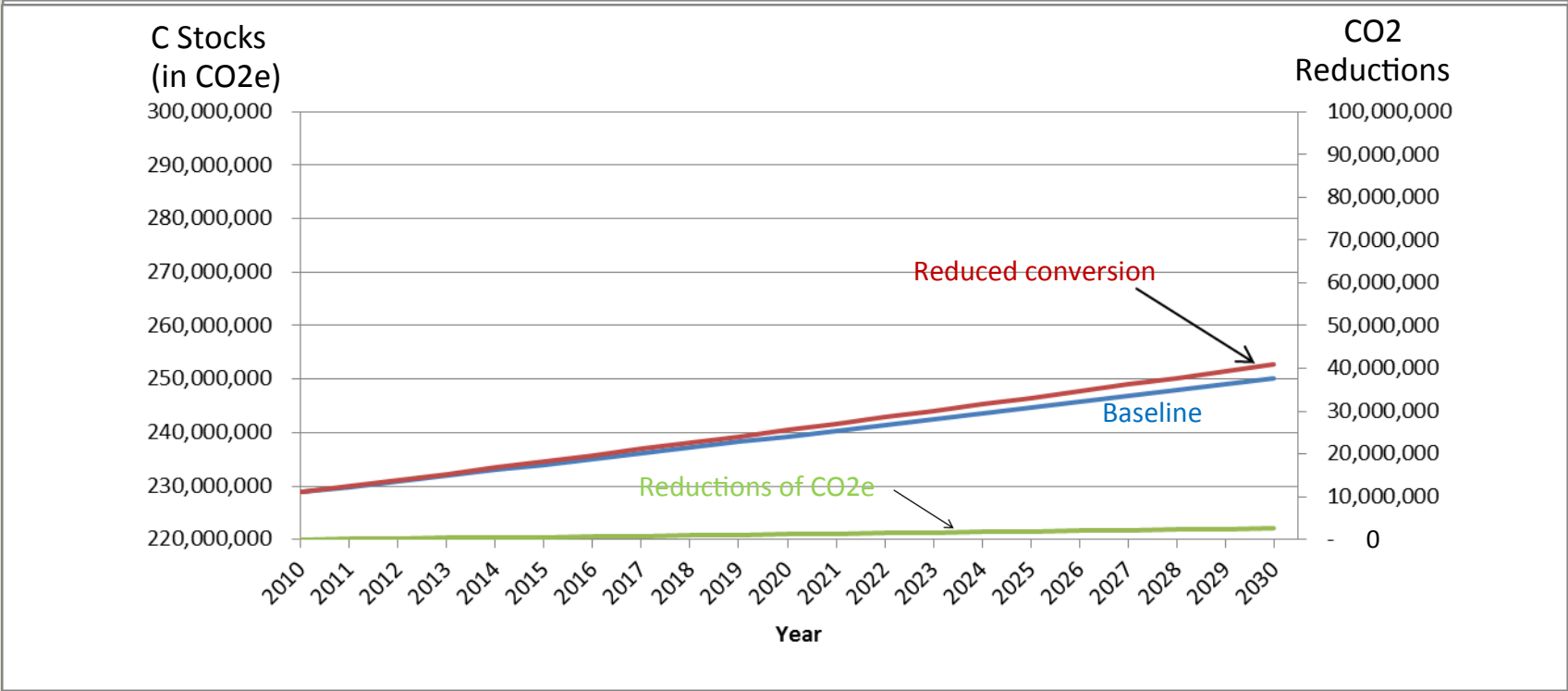
# Example of GHG Baseline

## Baseline Scenario



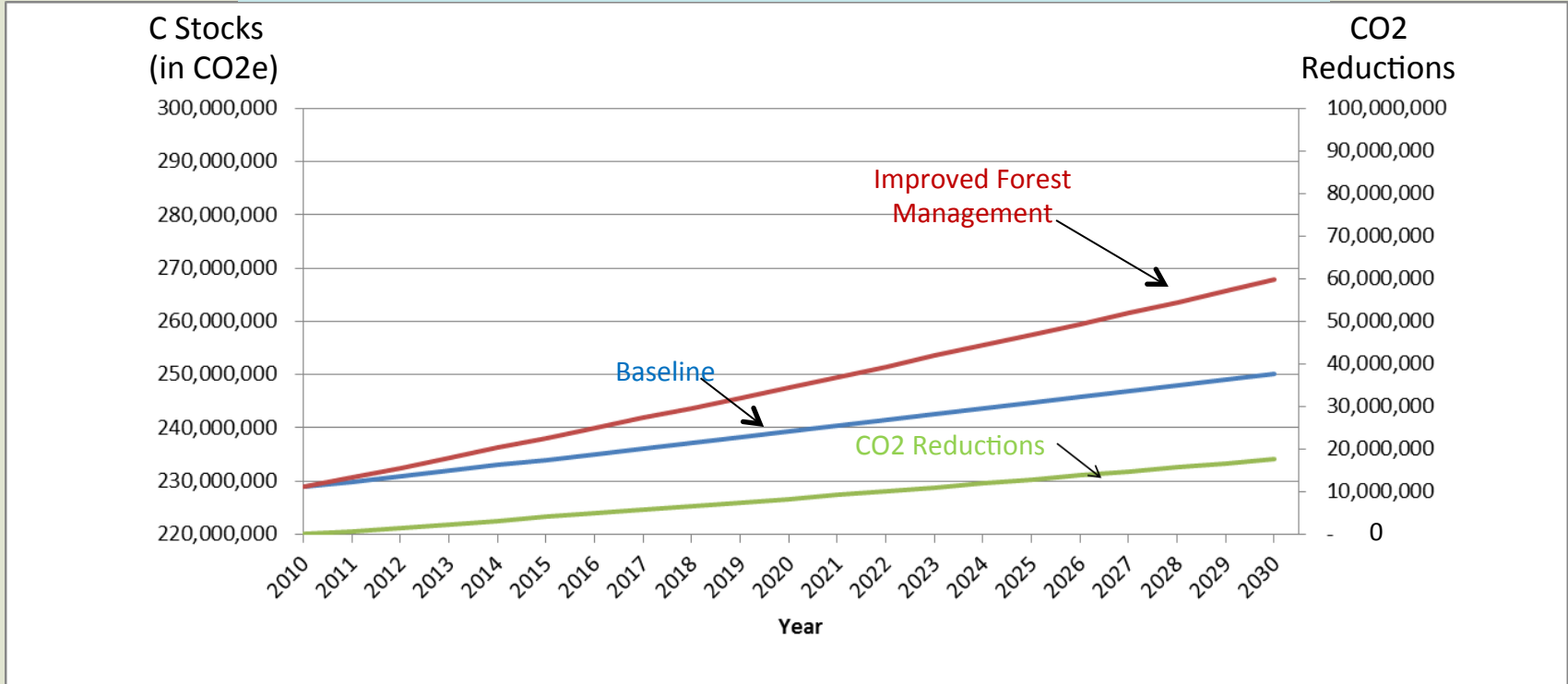
# Example of GHG Baseline and Reduction Scenarios

## Scenario: Reduced Conversion of Shrublands to Agriculture

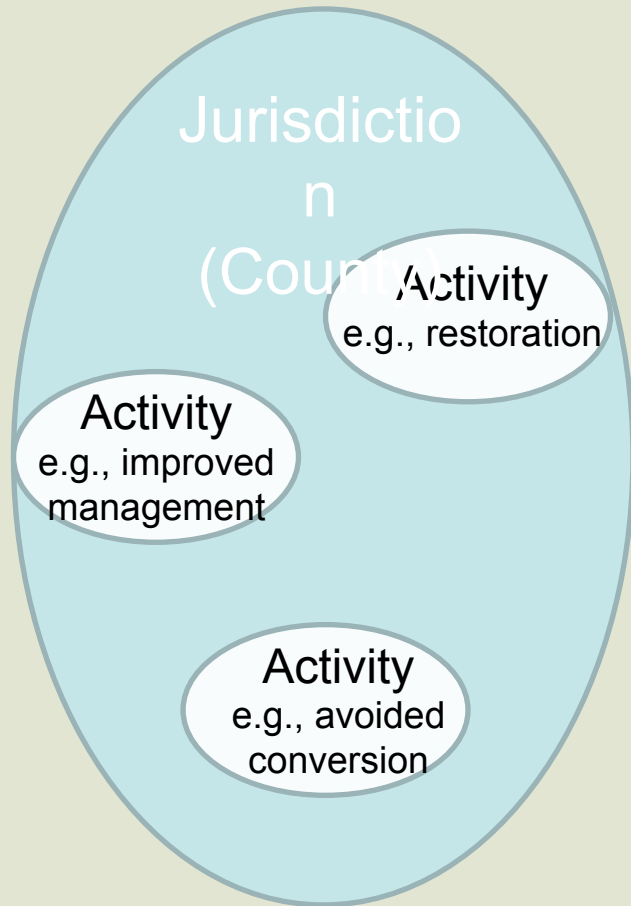


# Example of GHG Baseline and Reduction Scenarios

## Scenario: Improved Forest Management Activities



# County Jurisdiction Accounting and Activities

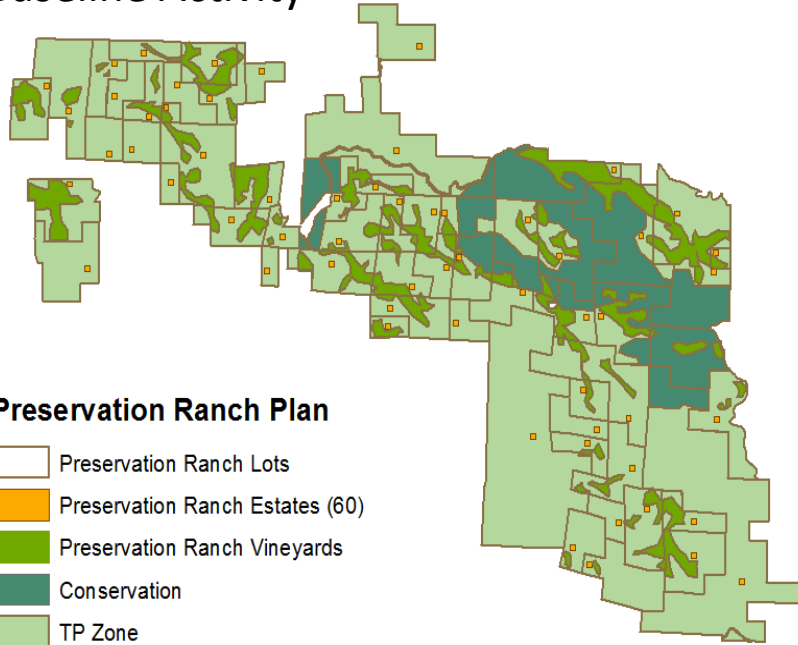


Quantifies GHG effects of activities across jurisdiction

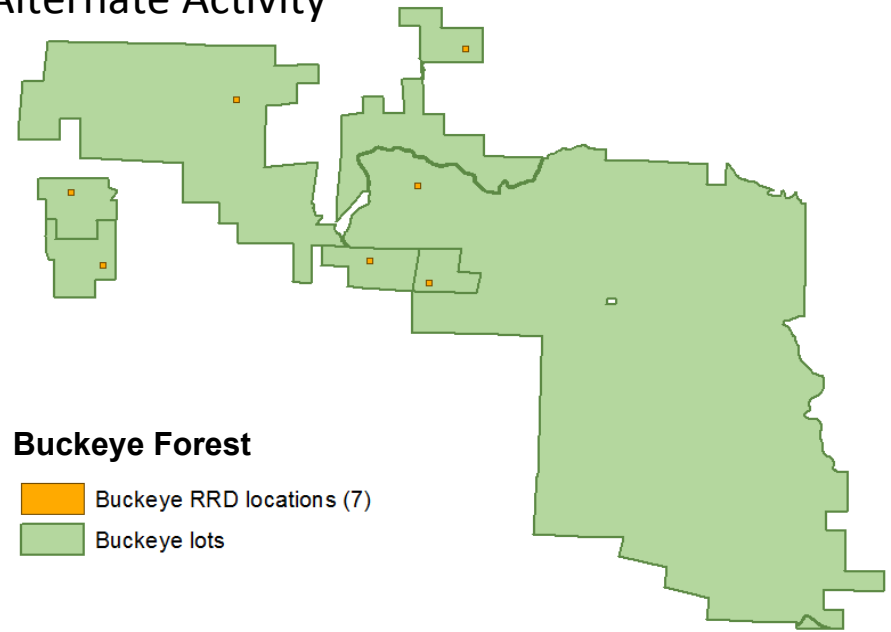
## Jurisdictional-scale GHG Accounting

- Carbon inventory
- GHG baseline and reduction scenarios
- Ongoing monitoring and reporting at different scales
- Verification

## Baseline Activity



## Alternate Activity



# Activity Example: Avoided Conversion

		Tonnes CO2e 2010	Tonnes CO2e 2030
Baseline Activity	Preservation Ranch Scenario	8,685,577	8,516,019
Alternate Activity	Buckeye Forest Scenario	8,685,577	9,491,862
<b>Total Reductions (CO2e)</b>			<b>975,843</b>

# Climate Policy Progress

- Green House Gas Reduction Fund Budget Process
  - \$92 million for 2014/15
  - Potential \$175+ million for 2015/16
- GHG Investment Plan Update
- Post-2020 GHG reduction goals
- Other opportunities – CEQA?

# Project Status and Next Steps

- Summer 2015:
  - Finish urban forest module
  - Augment and road test GHG tool
- Early Fall 2015:
  - GHG tool and template available
  - Report/"How to" guide
- Ongoing:
  - Outreach and climate policy alignment

# Discussion and Questions

- How would this tool be valuable in your work?
- How could this tool/project be made more valuable?
- Other questions?



Thank You

