

Sierra Nevada Carbon Cooperative

Sierra Solutions Conference
10.03.08

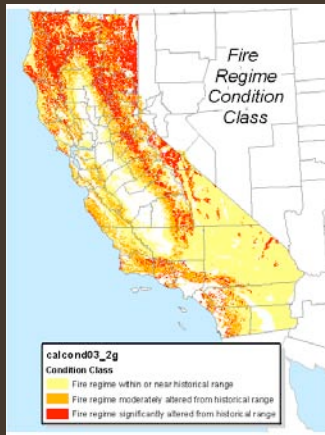
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SBC Mission

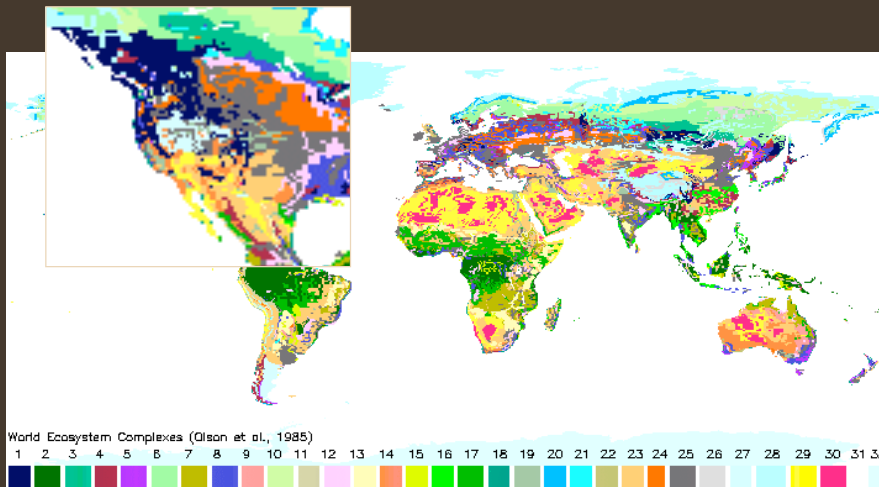


Pioneering innovative approaches and solutions to foster community vitality, economic prosperity, environmental quality, and social fairness in the Sierra Nevada

Why Sierra Nevada Carbon Cooperative?



Carbon Density



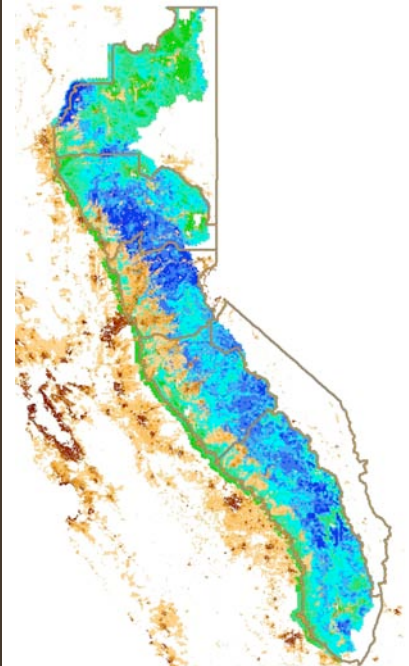


- High-Carbon Forests**
- Coast Redwood forest, California**
 1600-2800 t ha⁻¹
 highest carbon in the world
 at Humbolt Redwoods State Park
 (Busing and Fujimori 2005)
 - 320 ± 150 t ha⁻¹**
 Mailliard Redwoods State Reserve
 (this research)
 - 100 ± 40 t ha⁻¹**
 Garcia River forest
 (this research)
 - Sierra Nevada conifers, California**
 160 ± 3 t ha⁻¹
 (this research)
 - Amazon rainforest**
 170 ± 9 t ha⁻¹
 (Baker et al. 2004)

Natural Capital Project

- Biodiversity
- Rarity
- Intactness
- Carbon Storage
- Water Yield
- Water Quality

*Hotspots
 & Beneficiaries*



Voluntary Carbon Market Growth

	VOLUME		VALUE	
	2006 (Mt CO _{2e})	2007 (Mt CO _{2e})	2006 (\$ million)	2007 (\$ million)
CCX	10.3	22.9	38.3	72.4
OTC	14.3	42.1	58.5	258.4

Value-Added Carbon Offsets



Sierra Nevada Carbon Cooperative

GOAL: to capture the opportunity for the Sierra Nevada to mitigate and adapt to climate change in a way that promotes ecological integrity and brings economic prosperity to the region.

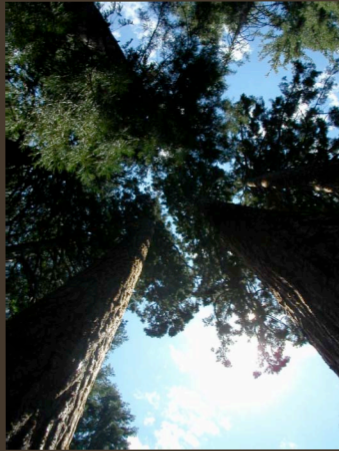
WHY: To reinvest in the Sierra and develop a conservation and restoration economy

HOW: Reduce barriers of participation in emerging carbon market for individual landowners

Carbon Market Barriers

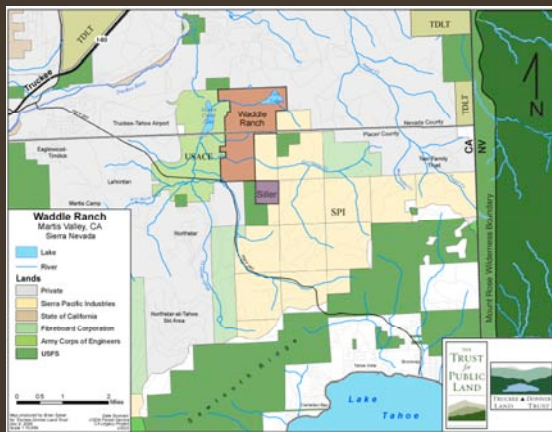
- Conservation easements
- Conceptual project development
- Upfront costs (inventory, registration, reporting, verification)
- Ongoing costs
- Risk of loss (fire, pests, pathogens, etc.)

Project Types



1. Conservation management
2. Reforestation
3. Avoided Conversion

Waddle Ranch 1,462 acres Martis Valley, CA

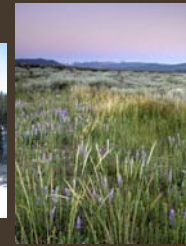
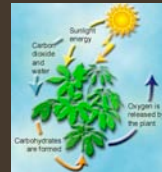


Waddle Ranch- project activity

Business As Usual

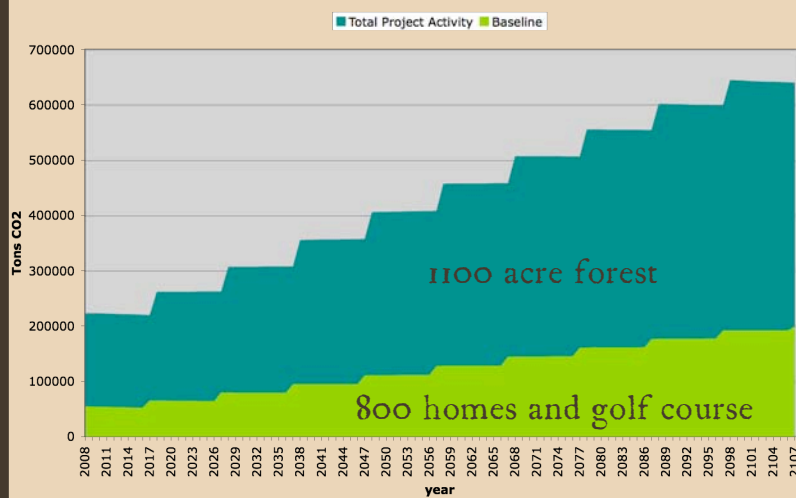


Avoided Conversion



Project Baseline

Waddle Baseline and Project Activity

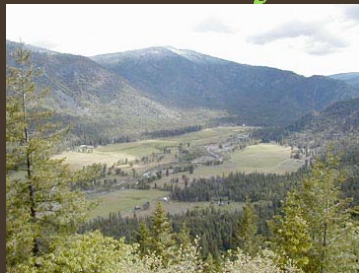


Calculations

- 1100 acres of forestland
- Today's price \$10-15 per ton
- \$1.5 - 2.25 million dollars for long-term stewardship and monitoring
- \$30-45 thousand per year for 100 years



Other Projects?



Heart K Ranch

EXPAND:

- 8-10 projects in three years
- 5000 acres
- 1 million tons of CO₂ emission reductions
- \$10 million leveraged through carbon sales for stewardship activities

Start Up Costs

- Project Development & Management --
\$25-50K
- Forest Carbon Inventory --
\$30/acre
- 3rd Party Verification --
\$20K
- TOTAL -- \$100K

SBC Services

- Project Development and Management
- Upfront Financing
- Marketing Value-Added Offsets
- Potentially managing buffer pool for insurance
- Negotiating Conservation Easements with Landowners

SBC Mission



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