

Fighting Climate Change with Forests in CA

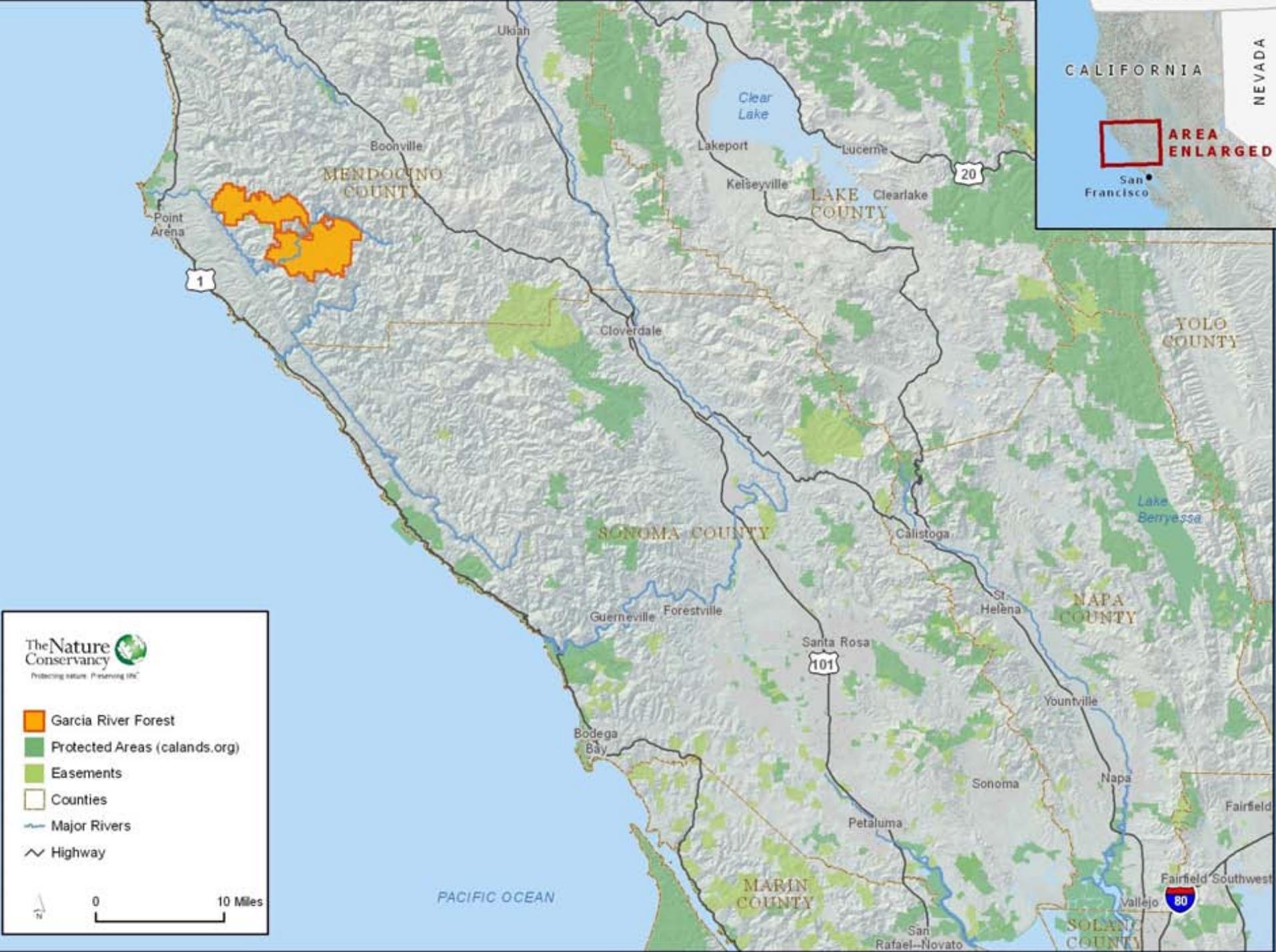
INTEGRATING POLICY, SCIENCE & PLACE



Garcia River Forest Project

23,780 acre working forest
35% ecological reserves
Sustainable forest management
Redwood forest restoration /
conservation
CCAR climate change project
registered 2004
Scientific research on forest
carbon and biodiversity





The Nature Conservancy
Preserving nature. Preserving life.

- Garcia River Forest
- Protected Areas (calands.org)
- Easements
- Counties
- Major Rivers
- Highway

0 10 Miles

CALIFORNIA
NEVADA
AREA ENLARGED
San Francisco

PACIFIC OCEAN

MENDOCINO COUNTY

LAKE COUNTY

SONOMA COUNTY

NAPA COUNTY

MARIN COUNTY

SOLANO COUNTY

YOLO COUNTY

Point Arena

1

Ukiah

Boonville

Lakeport

Kelseyville

Lucerne

20

Cloverdale

Guerneville

Forestville

Calistoga

St. Helena

Santa Rosa

101

Bodega Bay

Yountville

Sonoma

Napa

Fairfield

Petaluma

Fairfield Southwest

Vallejo

80

San Rafael-Novato

Partners



THE CONSERVATION FUND

America's Partner in Conservation



A photograph of a dense forest. The trees are tall and thin, with dark trunks and lush green foliage. The forest appears to be a secondary growth redwood forest. The lighting is somewhat dim, suggesting a canopy that filters the sunlight.

**Garcia River forest
Secondary Growth Redwood Forest**

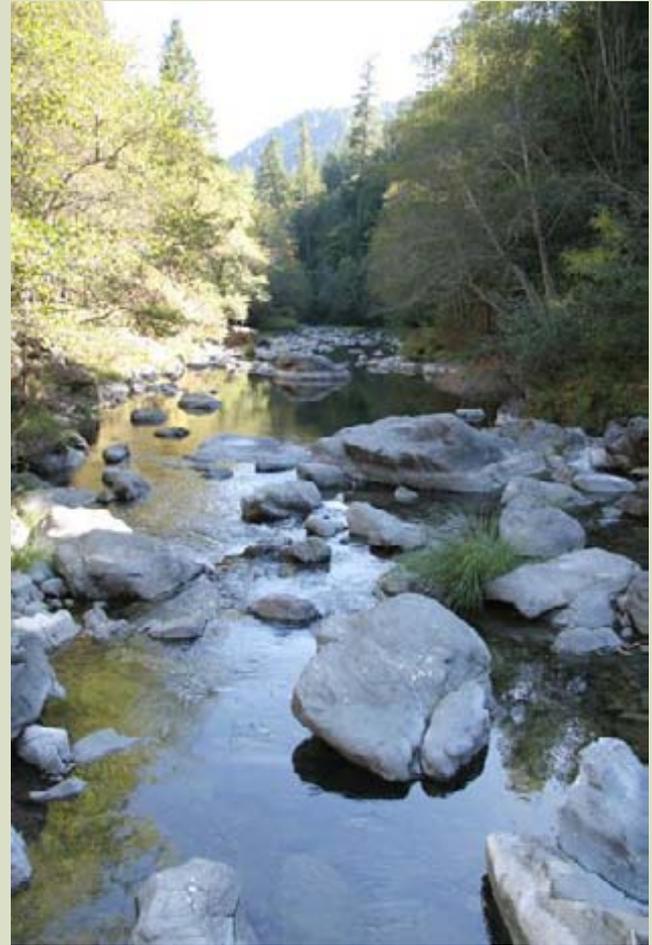
***Sequoia sempervirens* (coast redwood) and
Lithocarpus densiflorus (tanoak)**

Garcia River Forest: project hypotheses

- Sustainable forestry can help stabilize the climate.
- Carefully planned timber harvest is compatible with protecting and restoring forest ecosystems.

Multiple benefits

- Climate
- Forest conservation / biodiversity
- Community / economic stability



Key carbon project principles

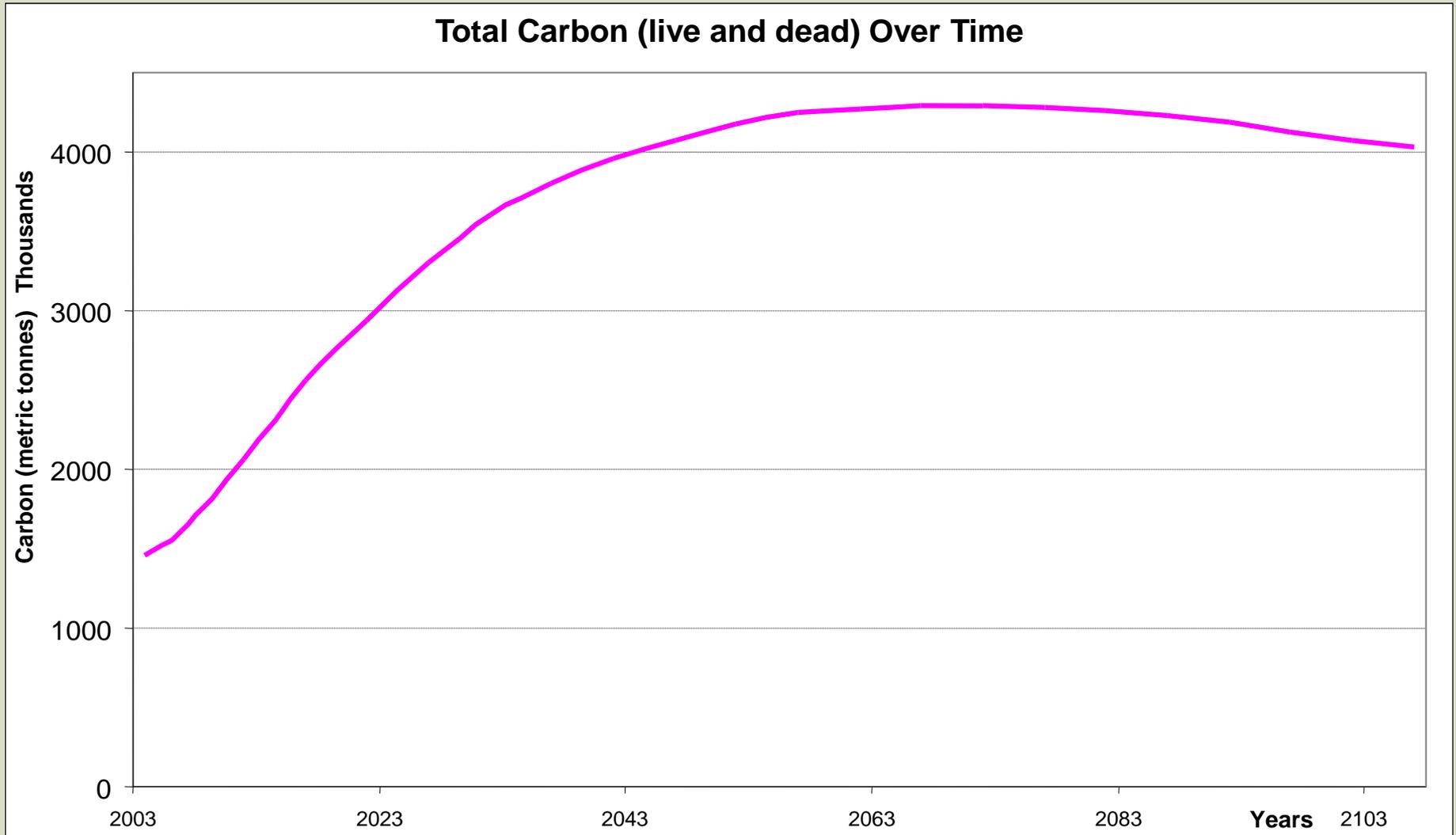
1. Permanence - TNC owns conservation easement required by CCAR rules to secure land base in perpetuity
2. Ecologically integrity – CCAR rules ensure real, measurable reductions; require native species and natural forest management

Key carbon project principles

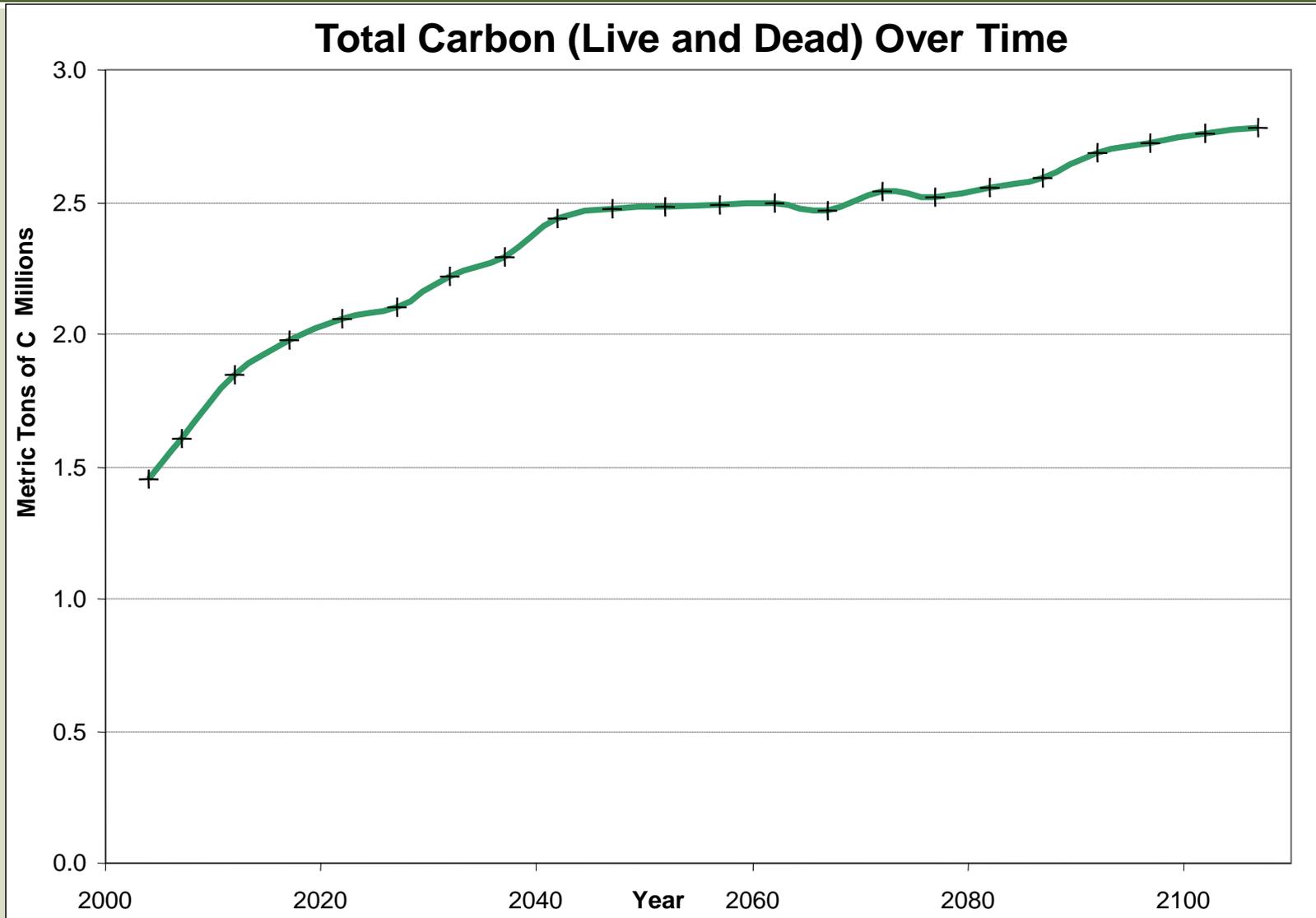
3. Baseline – Maximum harvest allowed under CA Forest Practice Rules – clearcut with 60 year rotation

4. Additionality – regulatory; light-touch, single tree selection logging with one third reserves

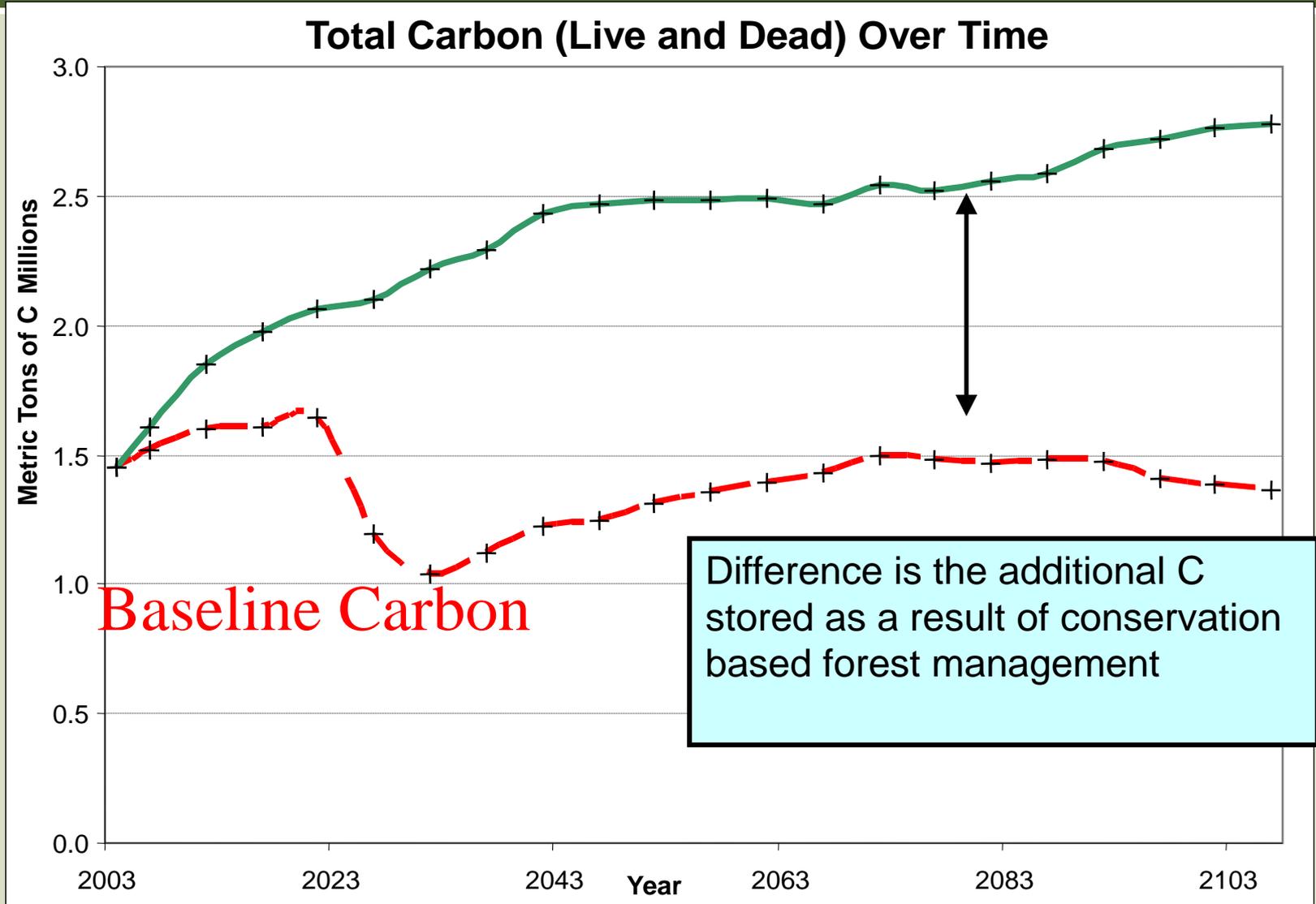
Modeling results: Carbon with no management



Modeling results: Project carbon with management



Baseline carbon added



Key carbon project principles

5. Verification – independent, 3rd party certification

6. Leakage – activity shifting, controlled by entity- wide reporting

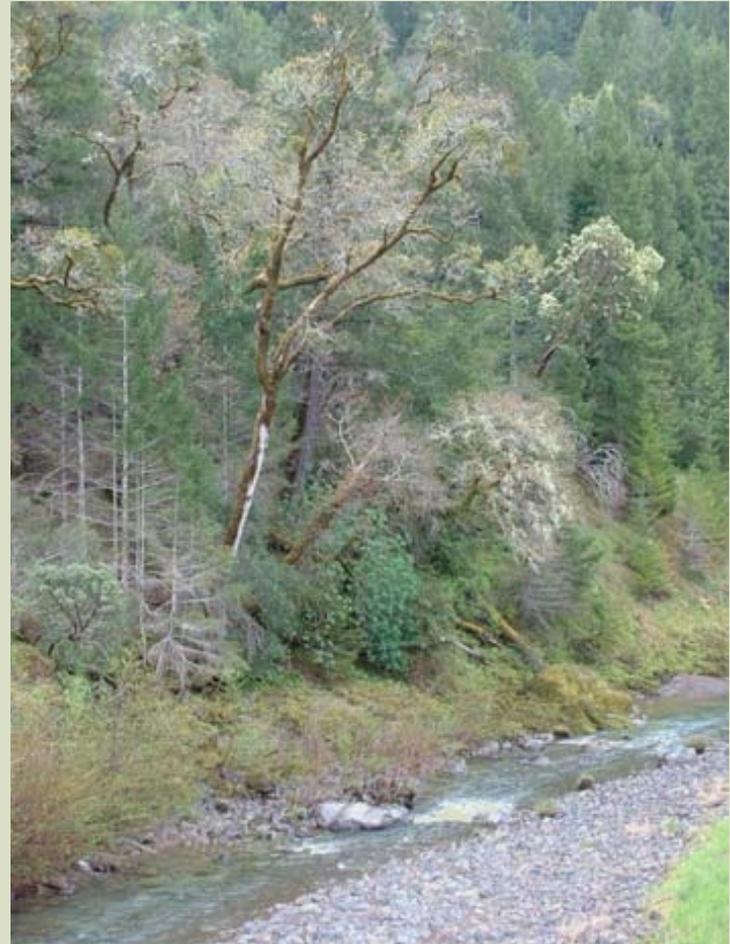
Results

Storing 77,000 tCO₂e
per year

Equivalent of 51,700
passenger cars

Important source of
additional revenue

Restoration underway



Lessons

- CA has established a policy platform producing high-value, credible emissions reductions
- Integrity generates confidence in buyers and demand on the voluntary market
- Proof of concept of viability of forest carbon market - sets model
- Evaluating economic and ecological sustainability

Questions

