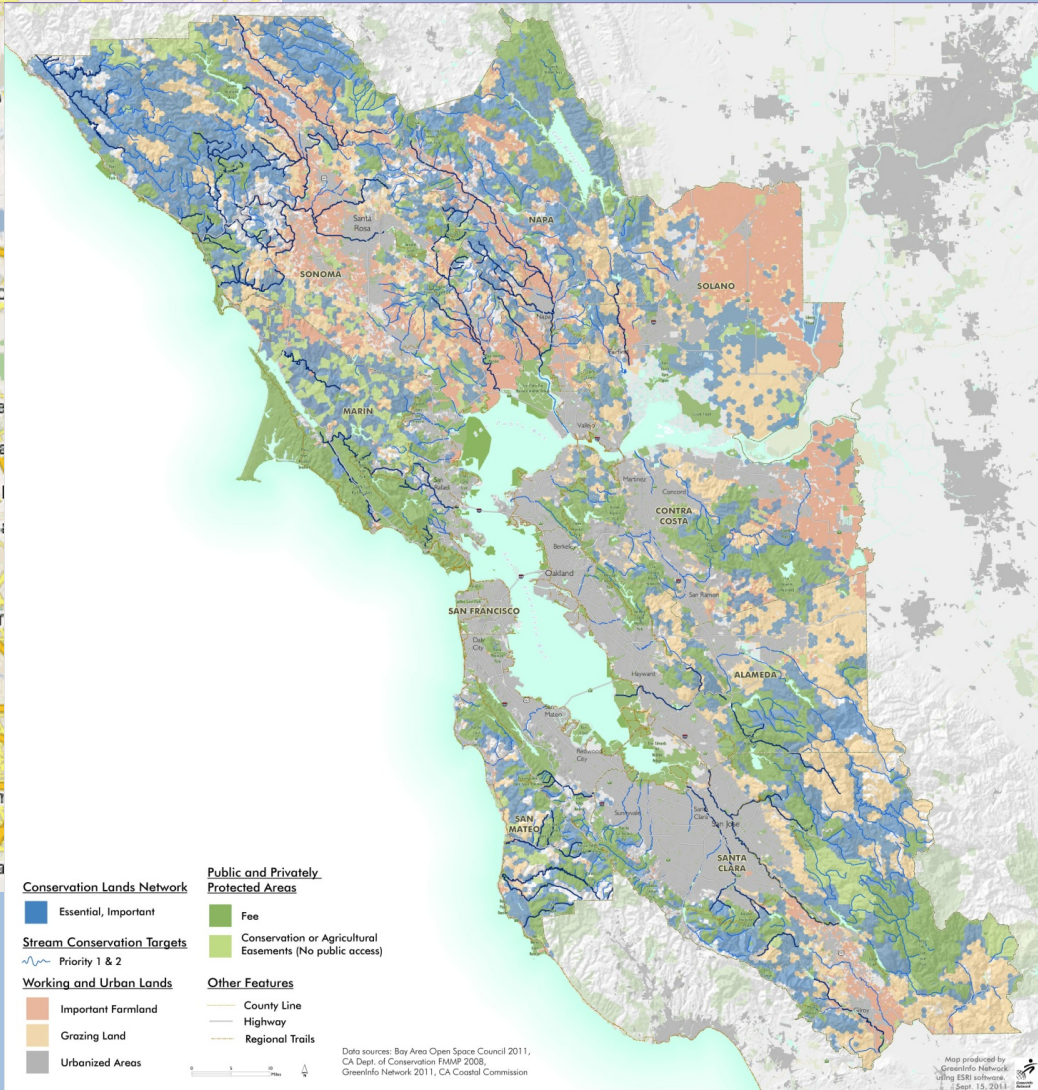
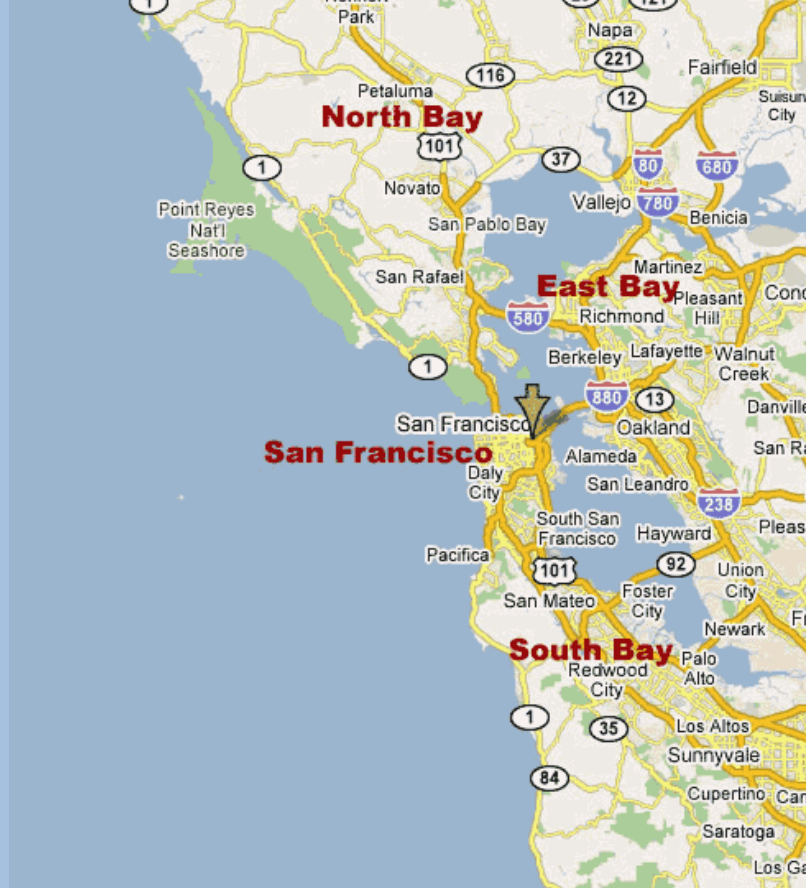
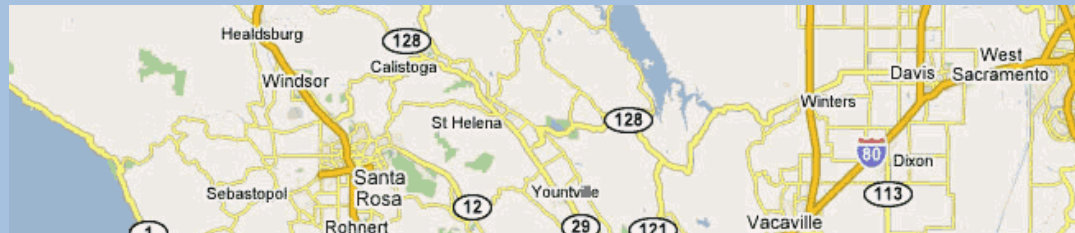


Putting Nature on the Map

Greenprints to RAMP: A Multiple Benefit Approach



*Liz O'Donoghue
The Nature Conservancy
California Chapter
January 31, 2015*



Conservation Lands Network

- Essential, Important
- Fee
- Conservation or Agricultural Easements (No public access)
- Important Farmland
- Grazing Land
- Urbanized Areas
- Stream Conservation Targets
- Priority 1 & 2
- Working and Urban Lands
- Important Farmland
- Grazing Land
- Urbanized Areas

Public and Privately Protected Areas

- Fee
- Conservation or Agricultural Easements (No public access)

Other Features

- County Line
- Highway
- Regional Trails

Data sources: Bay Area Open Space Council 2011, CA Dept. of Conservation FIMMP 2008, GreenInfo Network 2011, CA Coastal Commission

Map produced by GreenInfo Network using ESRI software, Sept. 15, 2011

Outline of Talk

- Setting the stage
- Trends
- Regional Greenprints
- RAMP
- San Francisco Bay Area as a model

The Challenge

- Population increase
 - Infrastructure development
 - Increased **demand for** natural resources
 - Growth patterns
- Climate change
 - Stress on ecosystems
- Land use and infrastructure planning focuses primarily on the built environment

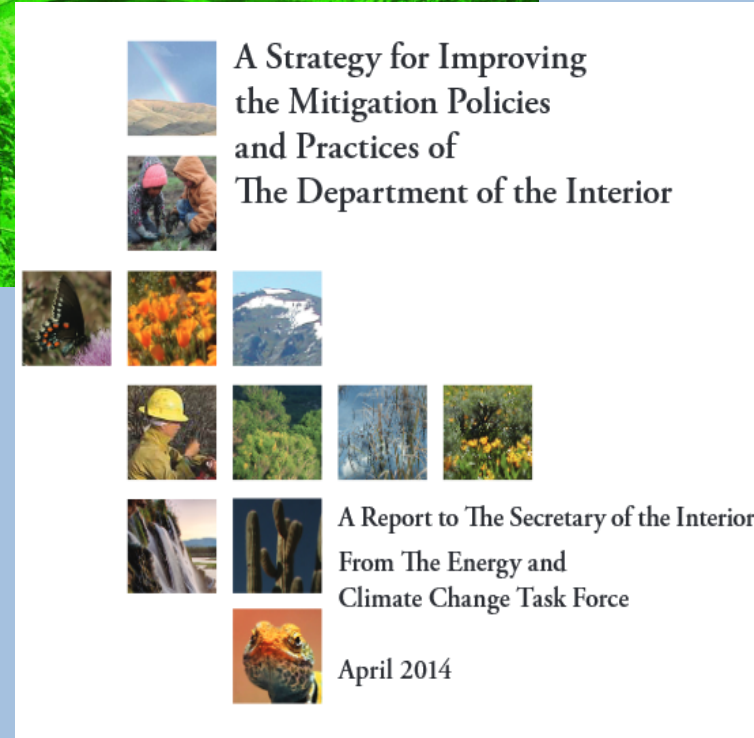


Goal and Hypothesis

- **Goal:** to protect California's natural resources and working lands in growing communities, thereby preserving the benefits they provide to people and the environment
- **By:**
 - Integrating conservation early in the process
 - Demonstrating the value
- **Through:**
 - Regional greenprints and strategic mitigation

Trends

- Integrated Regional Planning
 - Assessment of growth and potential impacts
 - Conservation greenprints
- Landscape Scale Mitigation



Conservation as Land Use/Climate Driver

- Encourage compact development that focuses growth in developed areas, and preserves the natural lands/waters and farms/ranches for:
 - Nature's benefits to healthy communities
 - Green infrastructure solutions
 - Carbon sequestration
 - Avoided GHG emissions from
 - Avoided Vehicle Miles Traveled
 - Avoided conversion
 - Quality of life and economic vitality

Habitat

Streams, grasslands, T&E species
forests, estuaries, wetlands, etc.

Wild pollinators
Irrigation water
Pest control

*Wildlife
connectivity*

*Wildlife viewing,
fishing, hunting*

Parks and open space

Local parks
State Parks
Regional Trails
Federal parks and lands

Working lands

Farmlands
Grazing lands
Timberlands



*Recreation,
Refuge,
Exercise*

*Fresh,
healthy
food*

*Market
for goods*

Complete Communities

Healthy residents
Green infrastructure

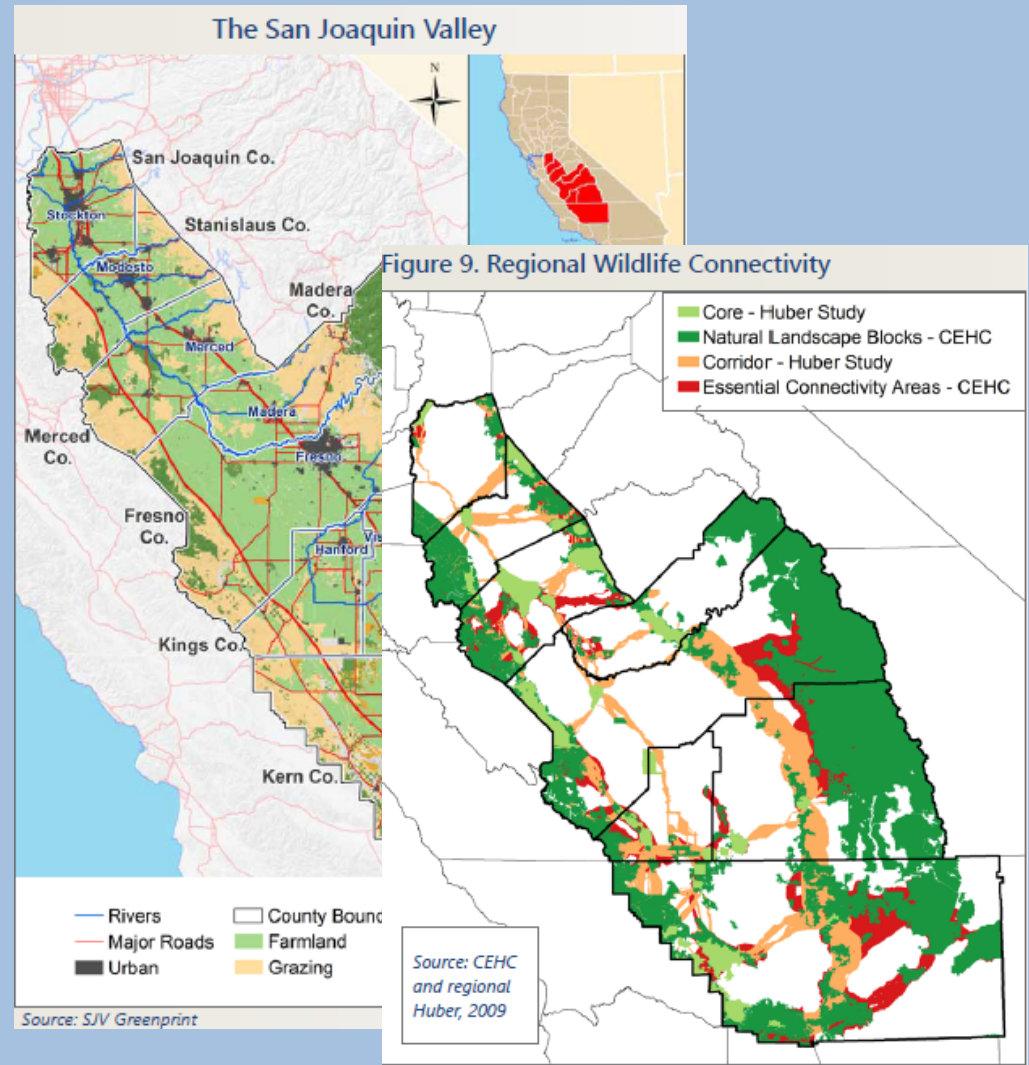
Nature's Goods and
Services:

Carbon storage
Groundwater storage

Water filtration
Flood risk reduction

Regional Greenprint

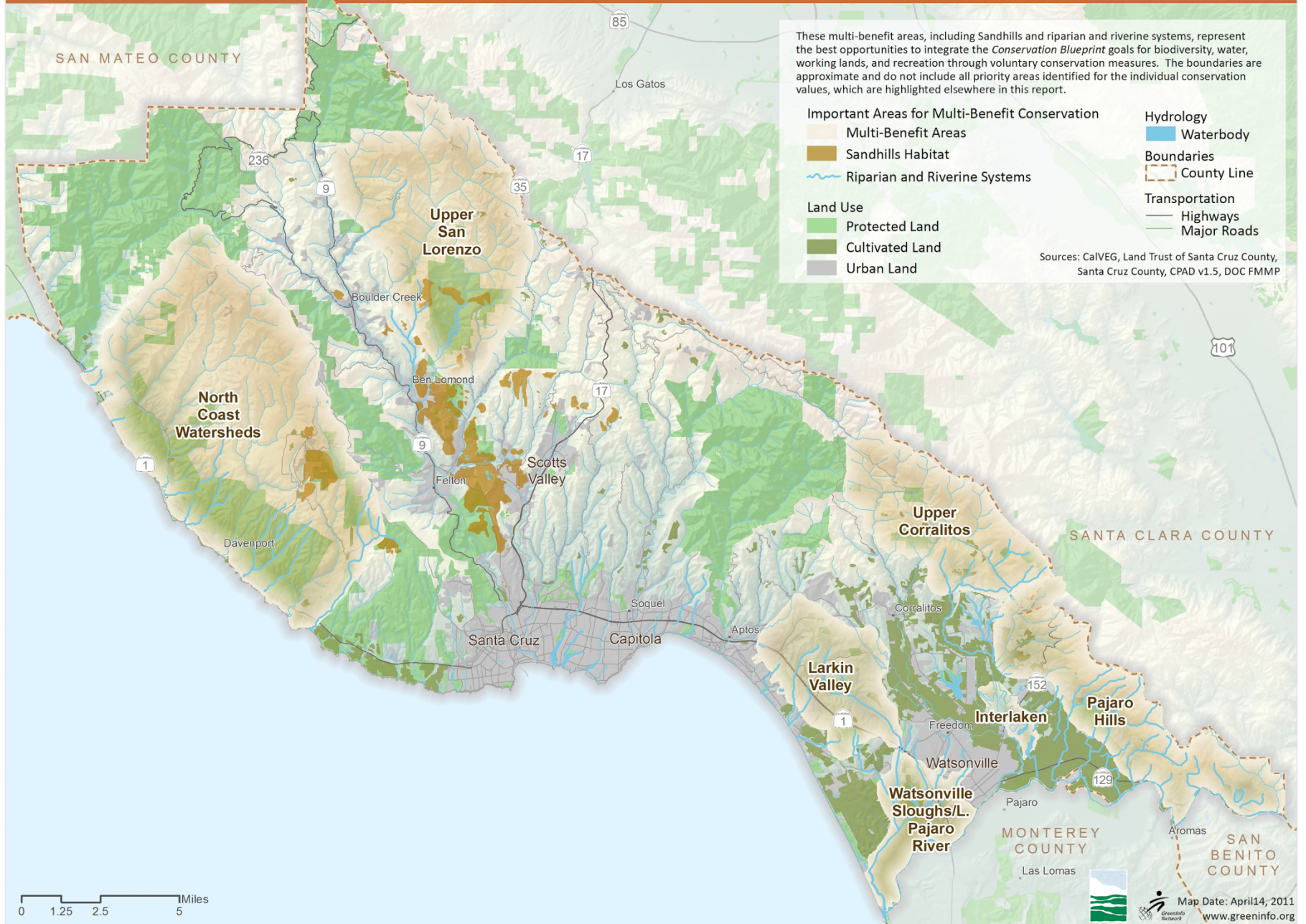
- Strategic Growth Council Regional Greenprint Plan
- San Joaquin Valley Regional Greenprint
- Mid-South (TN) Regional Greenprint



What does it do?

- Integrates conservation with other community values and plans
- Demonstrates the value of nature to communities
- Provides a baseline of information for decisions
- Reduces risk of infrastructure development
- Guides mitigation decisions
- Provides a roadmap for conservation investment

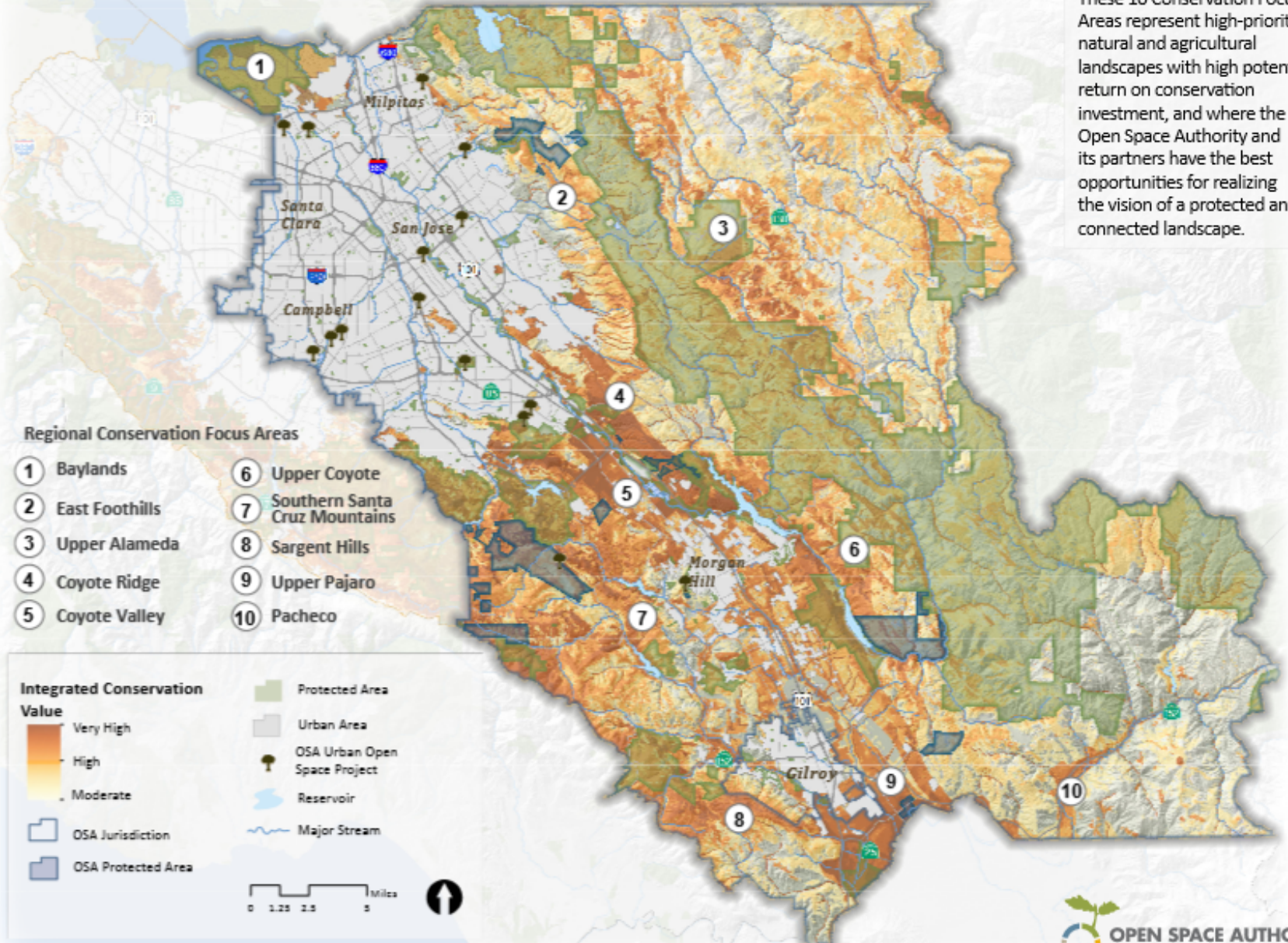
Important Areas for Multi-Benefit Conservation



Santa Clara Valley Open Space Authority

Figure 13: Conservation Focus Areas

These 10 Conservation Focus Areas represent high-priority natural and agricultural landscapes with high potential return on conservation investment, and where the Open Space Authority and its partners have the best opportunities for realizing the vision of a protected and connected landscape.

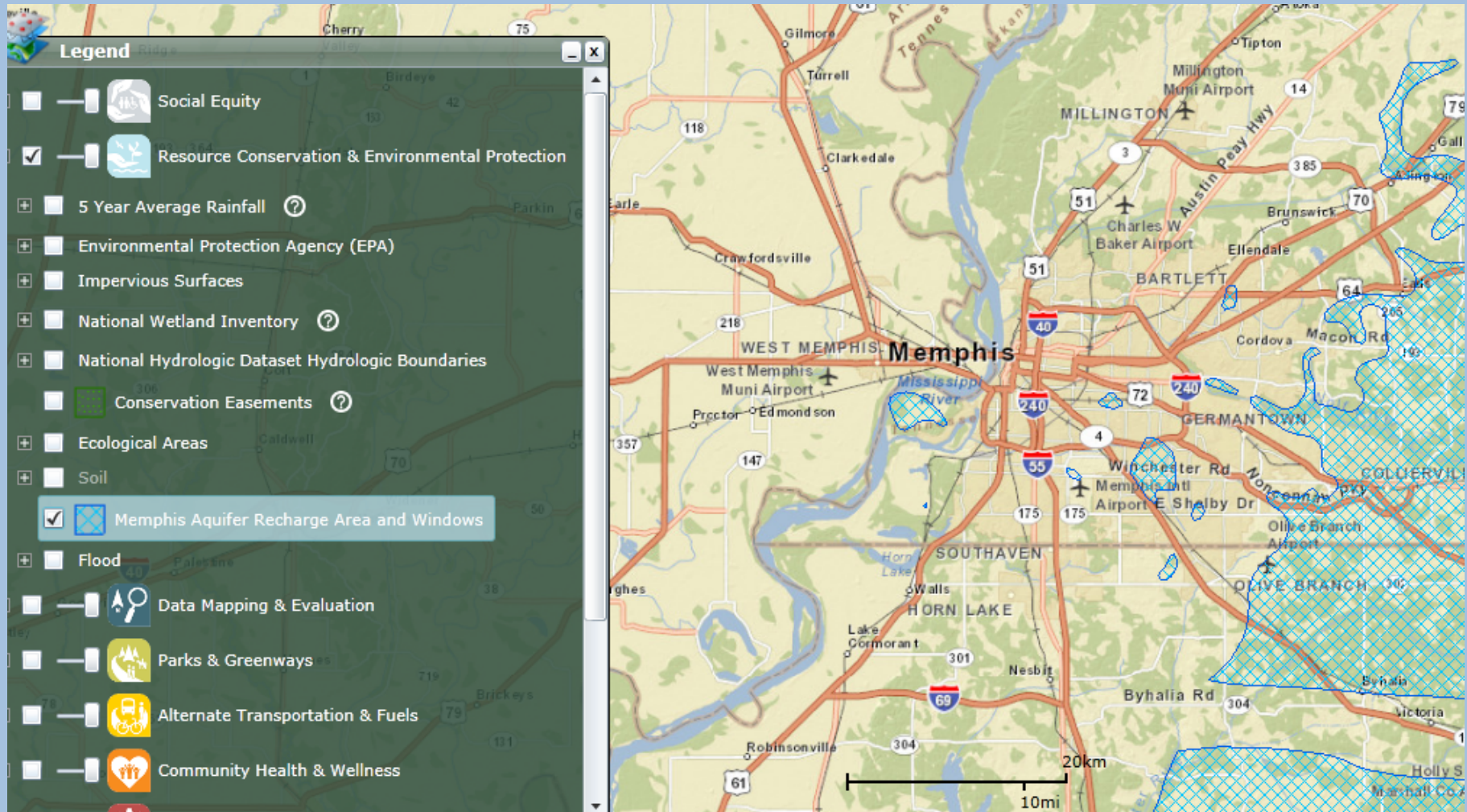


Maryland's “Smart, Green and Growing”



GreenPrint
AgPrint
GrowthPrint

Shelby County TN Regional Greenprint



Implementation Opportunities

- County General Plans
- Land use decisions
- Regional Transportation Plans/SB 375 Sustainable Communities Strategies
- Infrastructure Mitigation:
 - Regional Advance Mitigation Planning

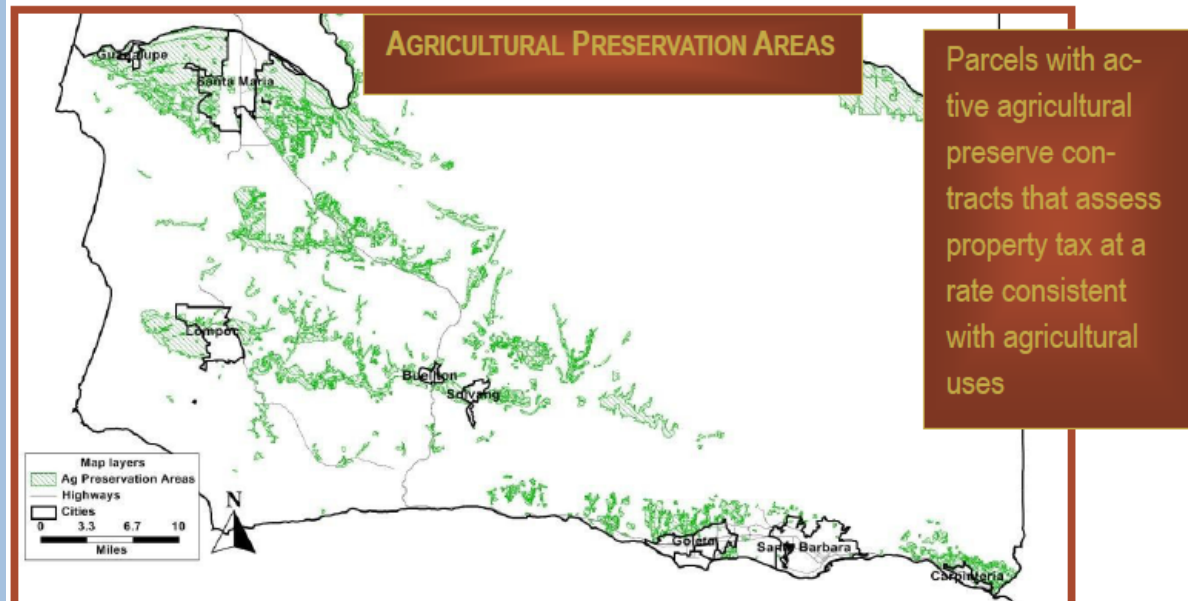
Regional Transportation Plans/ Sustainable Community Strategies

Santa Barbara RTP/SCS

The result: infill/
transit oriented
development
plan

SANTA BARBARA COUNTY REGIONAL GREENPRINT

The regional Greenprint spatially analyzes open space, agricultural, and habitat resources as constraints to growth of urbanized areas.



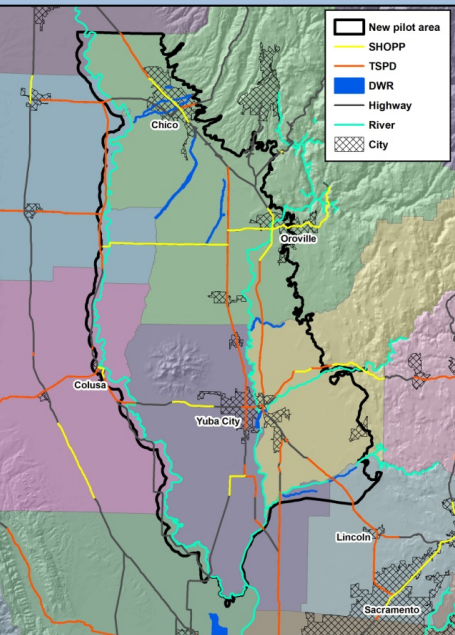
Regional Advance Mitigation Planning

- Problem:
 - Traditional or Unplanned Mitigation Approaches are ineffective, expensive and risky

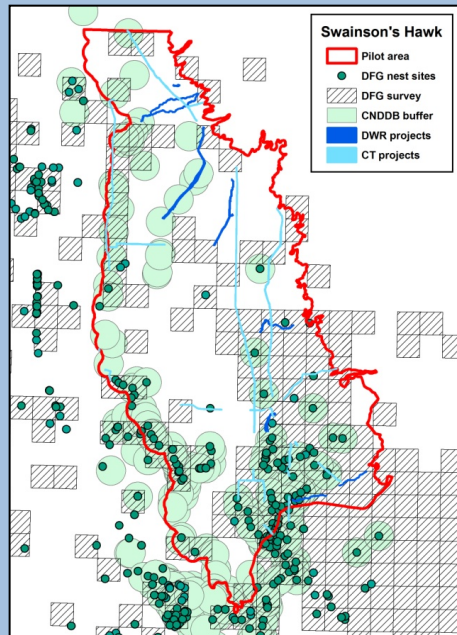


Courtesy of Chicago Metropolitan Agency for Planning

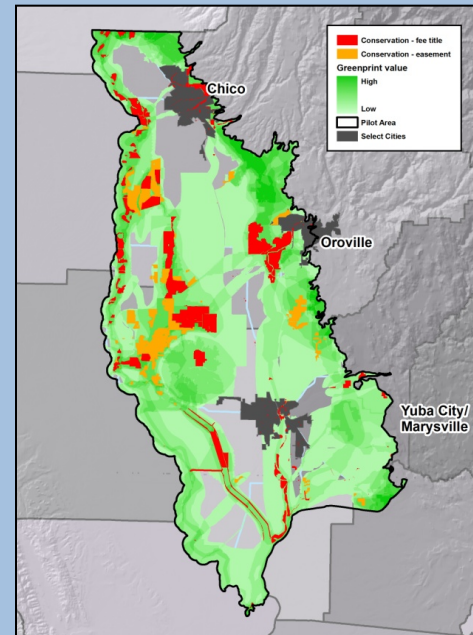
RAMP Methodology



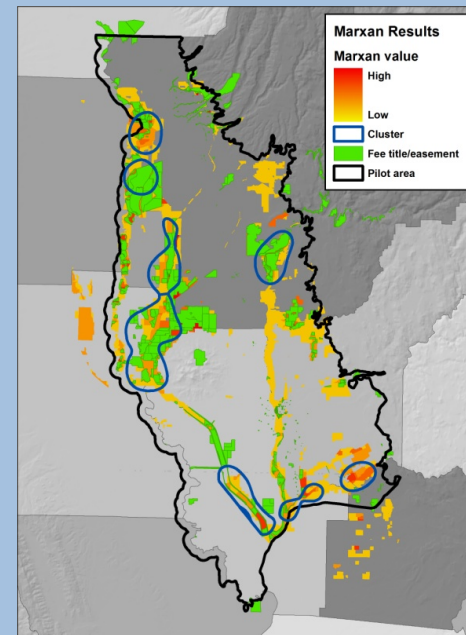
1



2



3



4

Central Sacramento River Pilot



RESOURCES LEGACY FUND

DRAFT STATEWIDE FRAMEWORK FOR

Regional Advance Mitigation Planning IN CALIFORNIA

Prepared for:

California Department of Water Resources
FloodSAFE Environmental Stewardship and Statewide Resources Office
P.O. Box 942836
Sacramento, CA 94236-0001

Contact: Natasha Nelson
(916) 653-6353

Prepared by:

Regional Advance Mitigation Planning Work Group

California Department of Water Resources
California Department of Transportation
California Department of Fish and Game
California State Parks
California Wildlife Conservation Board
U.S. Environmental Protection Agency
U.S. Fish and Wildlife Service
U.S. Army Corps of Engineers
National Oceanic and Atmospheric Administration Fisheries Service
Federal Highway Administration
The Nature Conservancy
University of California, Davis
Resources Legacy Fund

Technical Assistance Provided by:

AECOM
2020 L Street, Suite 400
Sacramento, CA 95811

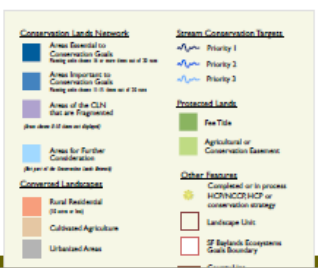
Contact: Vance Howard
(916) 414-5800

April 2012

P 08110038.28

San Francisco Bay Area

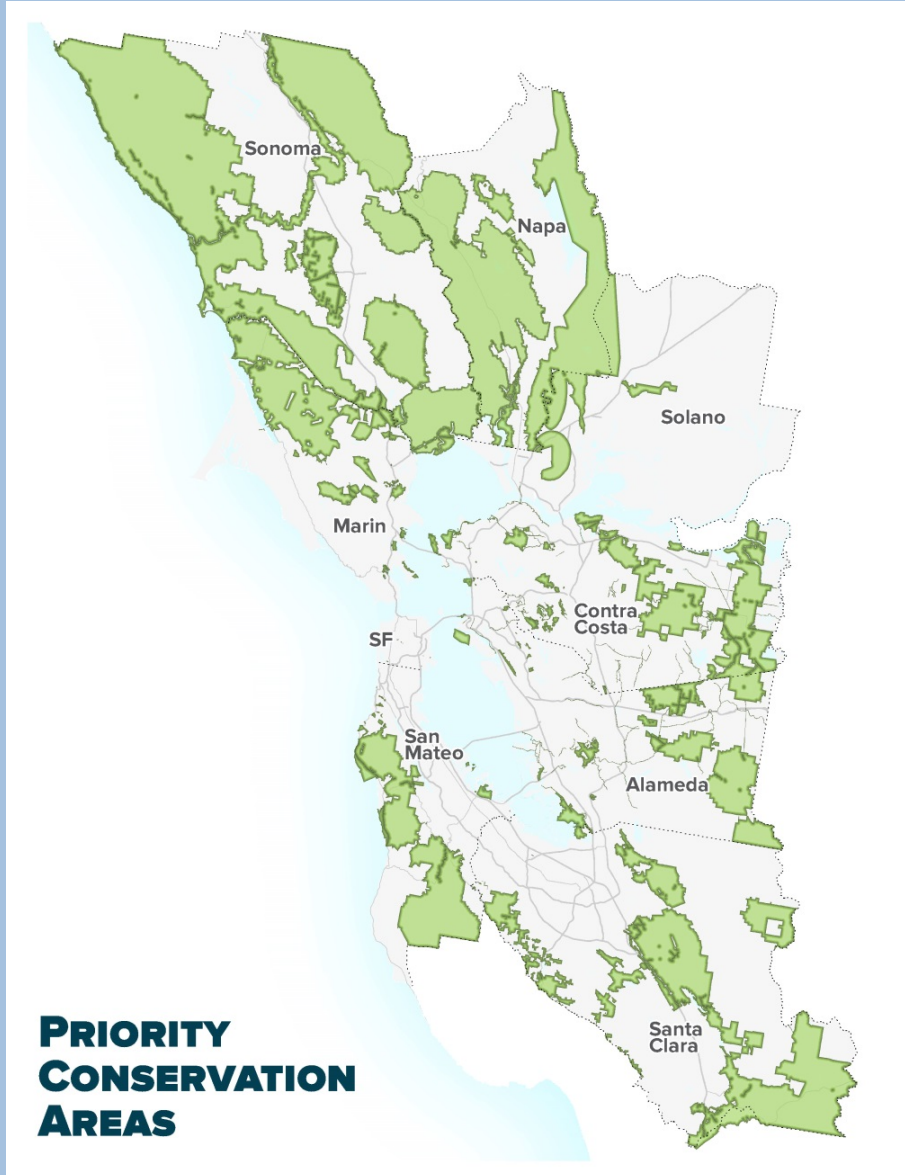
- Conservation in the Regional Transportation Plan
 - 2013
 - Growth assumed to be held to urban growth boundaries
 - Investment in Priority Conservation Areas
 - 2017
 - Build on the successes
 - Frame as tools to achieve goals



- PCA's
- Mitigation greenprint
- Tool development
- Climate assessments

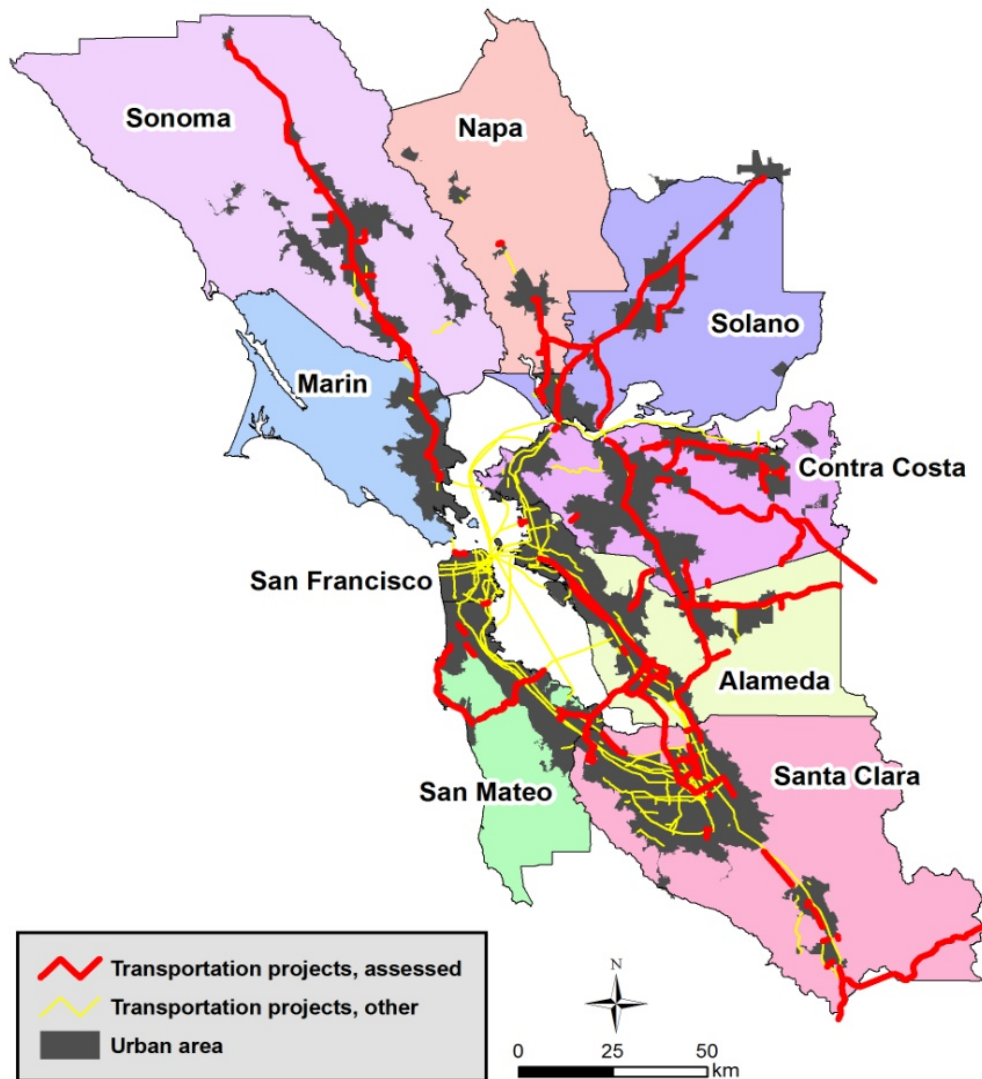
- PCA's
- Mitigation greenprint
- Tool development
- Climate assessments

Priority Conservation Areas



- Revamp to be science based and collaborative
- Investment to promote smart growth vision
- Leverage other funding sources for conservation
- Guide infrastructure and land use planning decisions

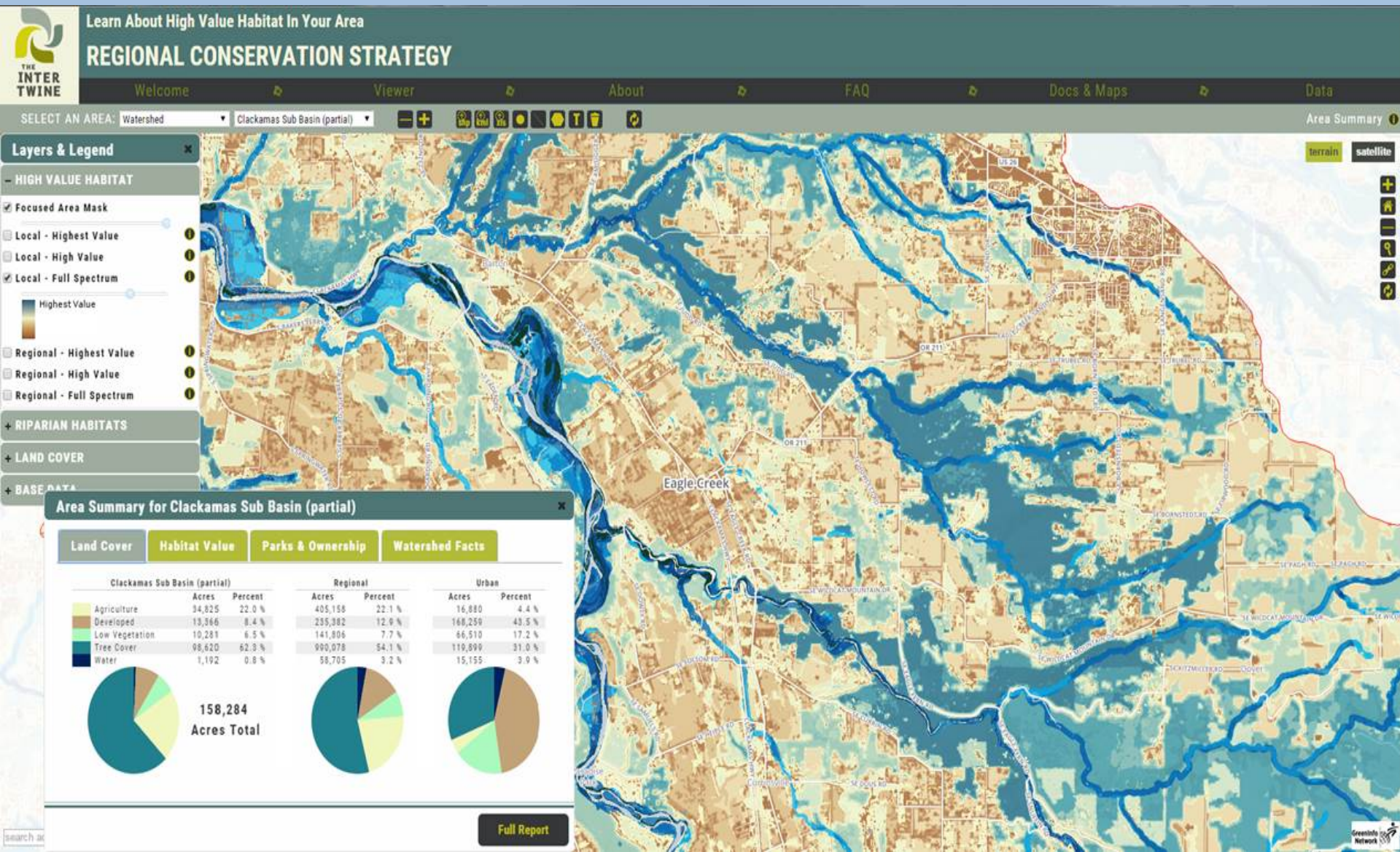
BAY AREA TRANSPORTATION ENVIRONMENTAL IMPACT ASSESSMENT PROJECT



Region or Type of Project	Number of Projects Listed in MTC Report	Number of Projects Included in Analysis	Projected Total Costs for Selected Projects (in millions)
Bay Area Region/ Multi-County	72	20	5,882
Alameda County	117	36	4,752
Contra Costa County	106	39	2,158
Marin County	29	*	
Napa County	20	15	299
San Francisco County	54	*	
San Mateo County	58	15	733
Santa Clara County	155	33	10,989
Solano County	46	10	989
Sonoma County	31	13	614
Total	688	181	21,623

Source: Jim Thorne, Patrick Huber, UC Davis

Tool development



Climate Adaptation



Climate Change Adaptation Pilot Project

December 12, 2014



Questions?

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