



Collaborative Mitigation Planning by California's Infrastructure Agencies: Lessons Learned from RAMP and SAMI

**2012 AEP Annual State Conference
7 May 2012**

Moderator* & Panelists:

- Debra Bishop*,
HTH
- Andrea Williams,
CT
- Natasha Nelson,
DWR
- Dick Cameron,
TNC
- Roberta Gerson,
USFWS
- Brenda Johnson,
DFG

RAMP Benefits

- Protection of landscape scale ecosystems and ecosystem function
- Support of regional conservation priorities
- Advanced timeframe
- Faster and more efficient project delivery



Unplanned Mitigation Approaches Ineffective



Infrastructure:

- Inefficient project-by-project analysis
- Costly and difficult to manage mitigation sites
- Delayed project delivery

Unhealthy Ecosystems:

- Isolated islands of habitat, disconnected from natural systems
- Lost opportunities due to conversion
- Missed opportunities for other benefits

Agency and Stakeholder Coordination



US Army Corps
of Engineers®
Sacramento District

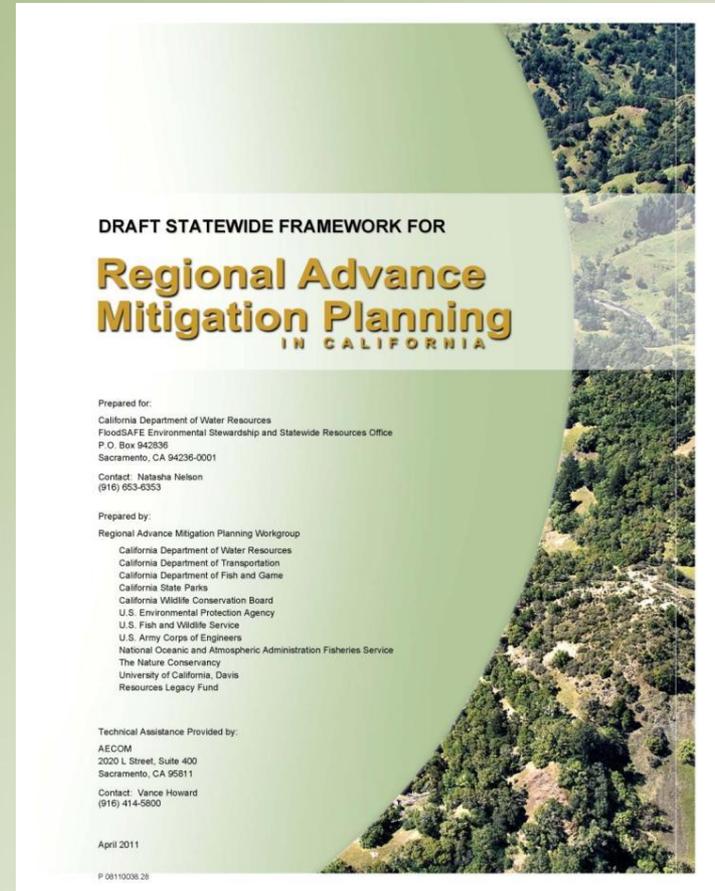


RESOURCES LEGACY FUND



RAMP Documents

Document Type	Purpose
Statewide Framework	Set overarching goals and create a structure for multiple regional assessments
Regional Assessment	Establish the opportunities and constraints in a region
Action Plan	Select a course of action to pursue in order to get advance mitigation established in the region



Possible Infrastructure Projects in Pilot Area



California Department of Transportation
Division of Transportation Planning
May 2010



LEGEND

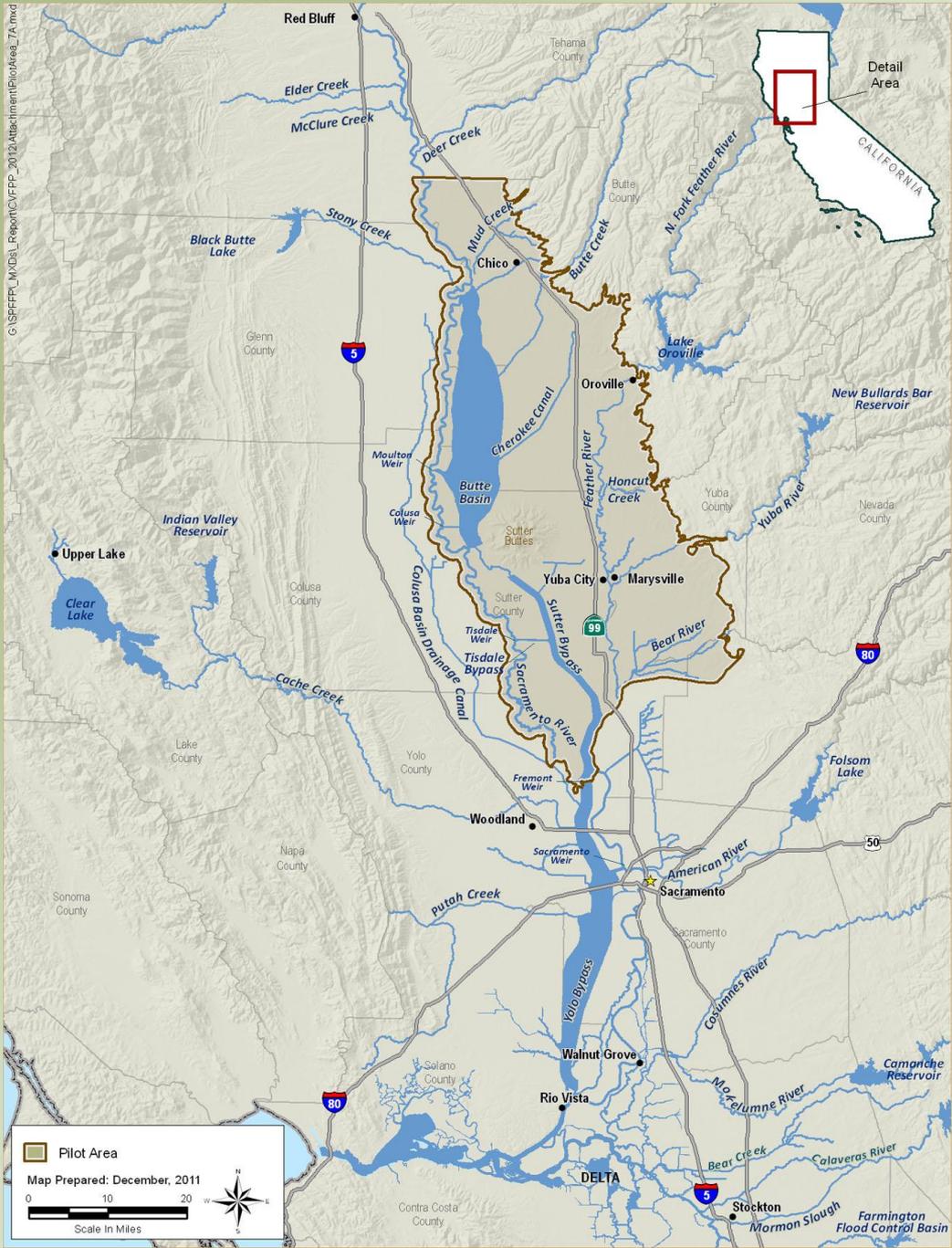
Future Development Plan

- TCIF Port - Programmed
- TCIF Grade Separation - Programmed
- Highway (Focus, HOV, TCIF, TIGER) - Programmed/Planned
- Rail (Intercity, Regional Rail, TCIF, and TIGER) - Programmed/Planned

Existing System

- ✈ Airports
- Park and Ride Lots
- Interregional Road System and Major Int'l Trade Highway Routes
- Amtrak, Regional Rail, and Major Int'l Trade Railroad Routes
- ⋯ Amtrak Thruway
- Urbanized Areas
- Goods Movement Priority Regions
- Metropolitan Planning Organizations (MPO)
- Regional Transportation Planning Agencies (RTPA)

Pilot Project: Central Sacramento Valley



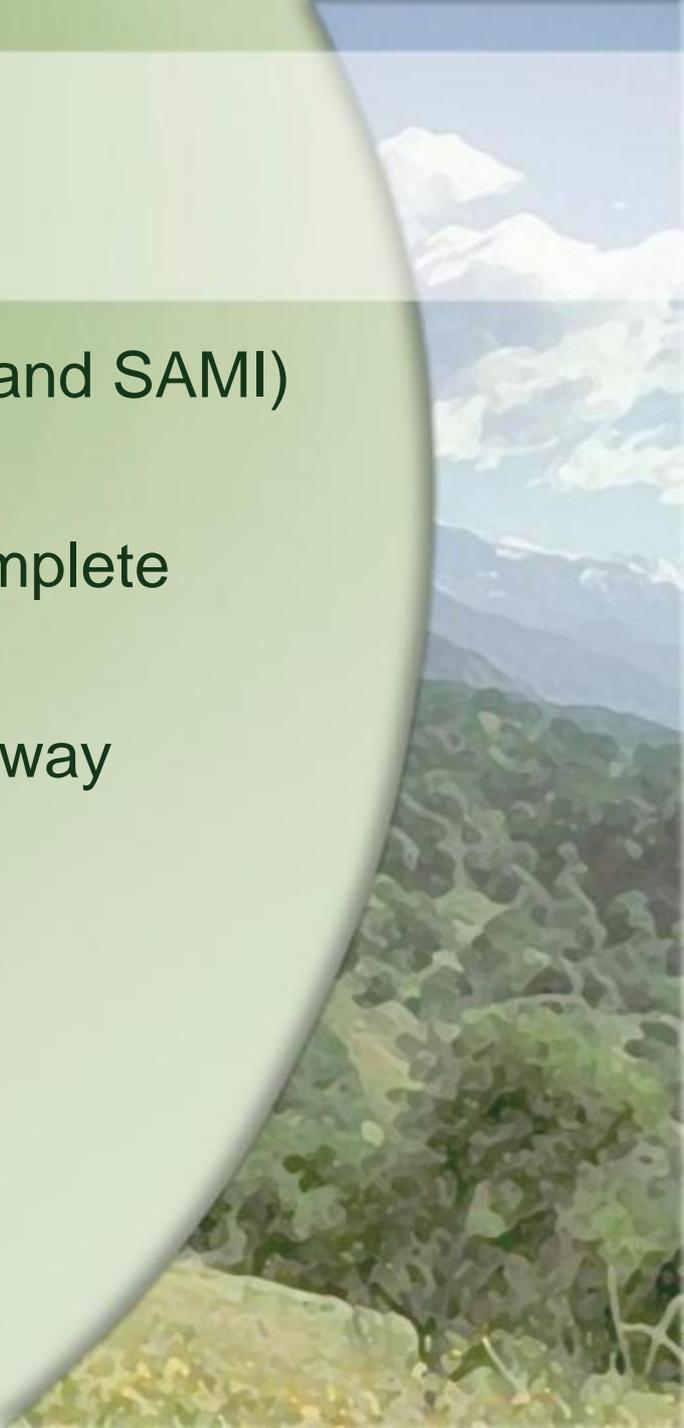
Mitigation Needs for Pilot Area

- Federal Wetlands
 - Preservation
 - Creation
- Species (up to 20) with examples of:
 - VELB
 - GGS
 - Bank Swallow
- Bank and bed of streams
- Sensitive Habitat Types
 - Riparian Forest
 - Valley Oak



RAMP Progress to Date

- Two MOUs signed (Statewide RAMP and SAMI)
- Draft Statewide Framework nearly complete
- Central Sacramento Valley pilot underway
- State legislation developed
- Implementation opportunities



Fundamental Challenges

- Funding strategies
- Agency capacity
- Policy needs
- Culture change



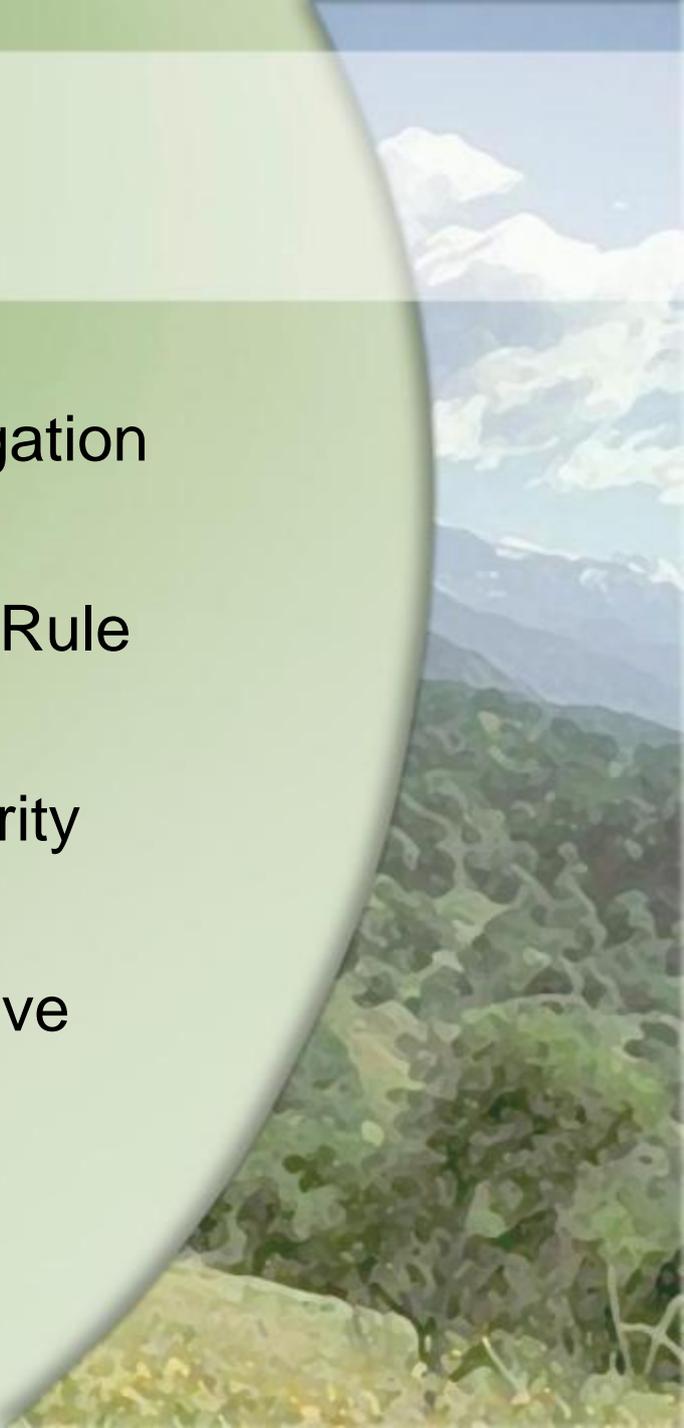
Other Potential Applications

- General Plans
- Sustainable Communities Strategies
- Regional greenprints
- State infrastructure plan
- California Interregional Blueprint



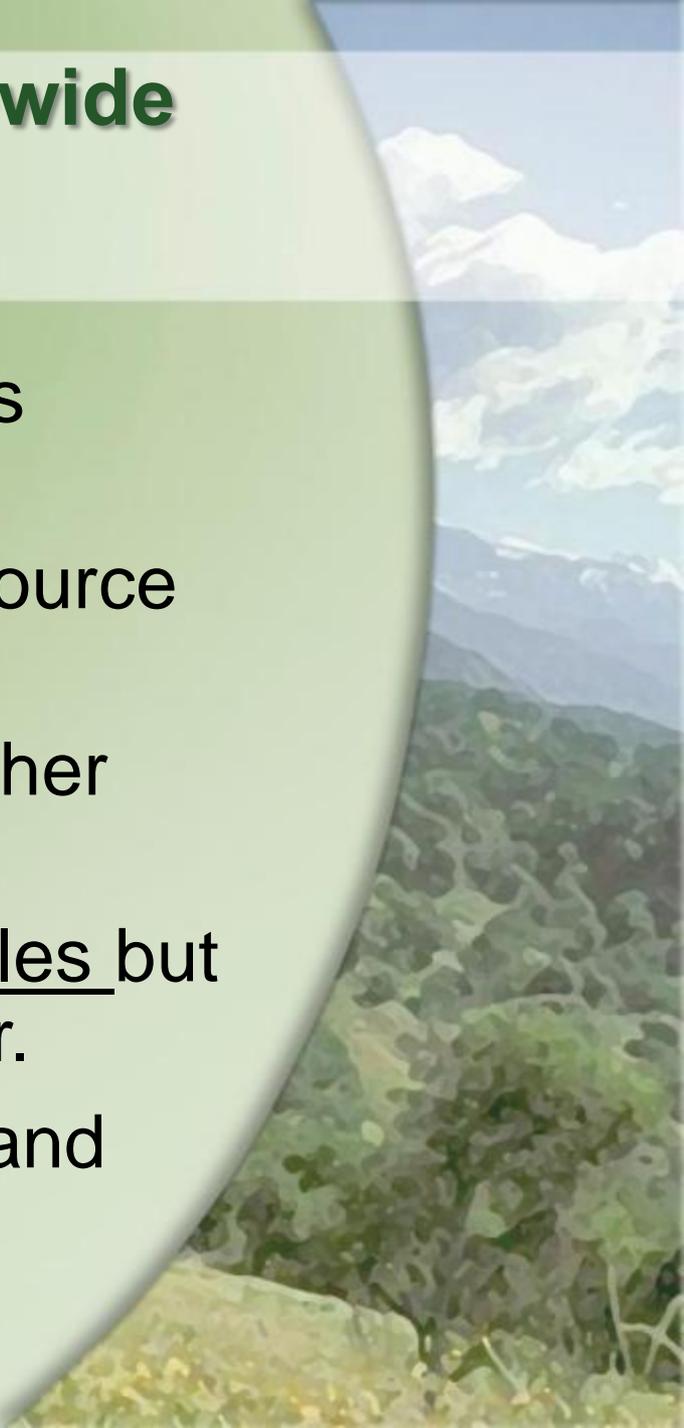
Federal & State Guidance

- SAFETEA-LU 6001 – Consult on Mitigation
- FHWA Eco-Logical
- Corps 2008 Compensatory Mitigation Rule
- ESA Section 7(a)(1) – Use Authority
- Fish & Game Code 2055 – Use Authority
- California Strategic Growth Initiative
- Conservation into Infrastructure Initiative



Implementation: Caltrans' Statewide Advance Mitigation Initiative (SAMI) Program

- Statewide offsite-mitigation needs program
- Collaborative leadership with resource agencies
- Leverage RAMP solutions and other programs
- Comply with current mitigation rules but on a large and integrated manner.
- Provide transparency on credits and costs



SAMI – Working Organization

- **Policy Board for Leadership**
 - Multiple Agencies
- **Solutions Working Group (s)**
 - Caltrans
 - DFG / Interagency
- **Independent IRTs**
 - Multiple Agency
- **Annual Reporting**
 - Transparency
- **Mitigation Flexibility**



SAMI – Status & Next Steps

- **Ultimate Goal**: Programmatic statewide advance mitigation program with federal transportation funds
- **Programming & Accounting Steps**
 - FHWA Every Day Counts Initiative
 - FHWA Innovative Program Delivery
 - MAP-21 Programmatic Advance Mitigation Language
- **Draft Three Stage Implementing Agreements (MOA) with DFG**
 - Development, Plans, Implements

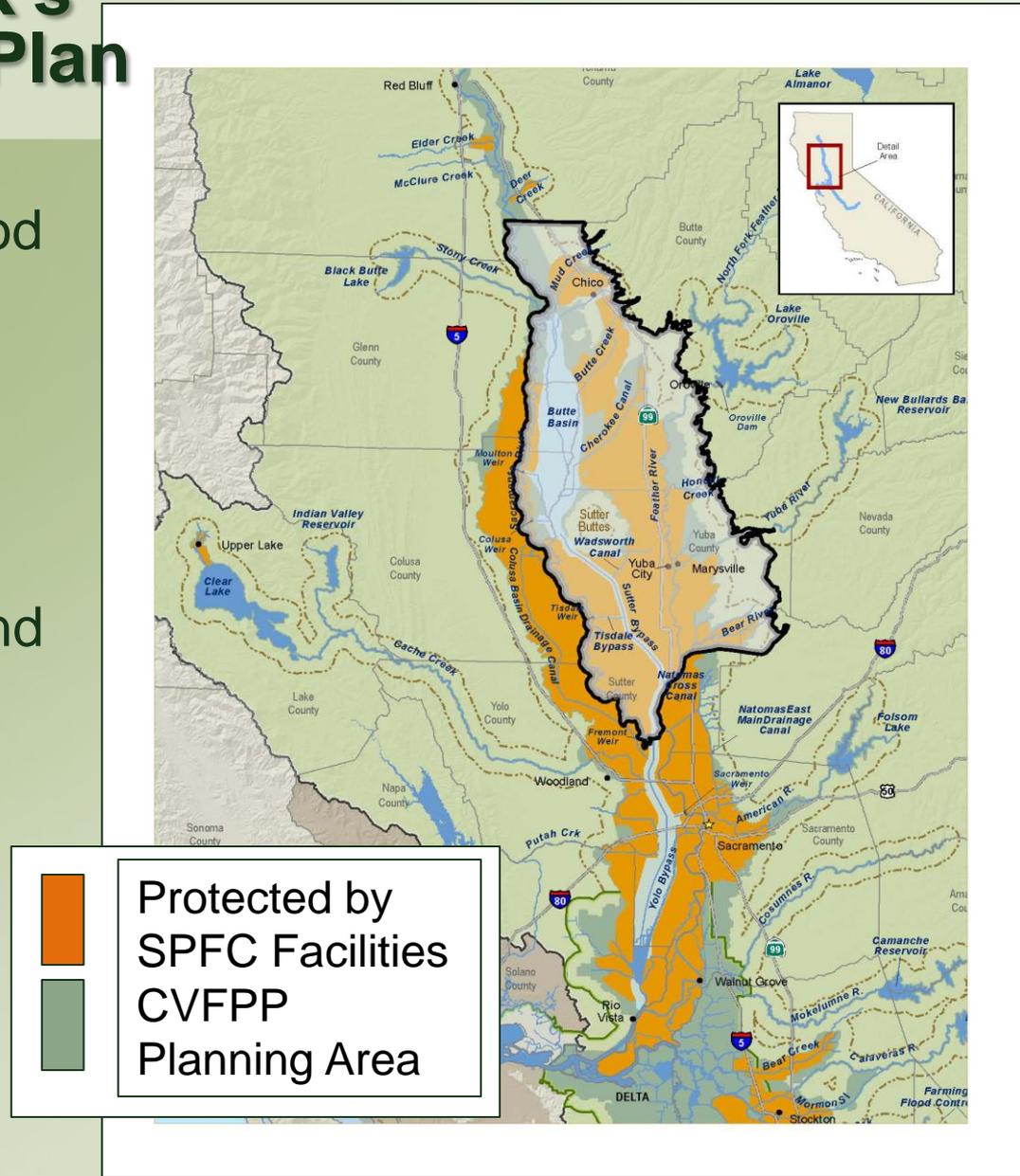
Environmental Planning at DWR

- FloodSAFE
- Environmental Stewardship
 - ✓ Director's Policy (October 2010)
 - ✓ Guidance (April 2012)
- CV Flood Protection Act (2008)

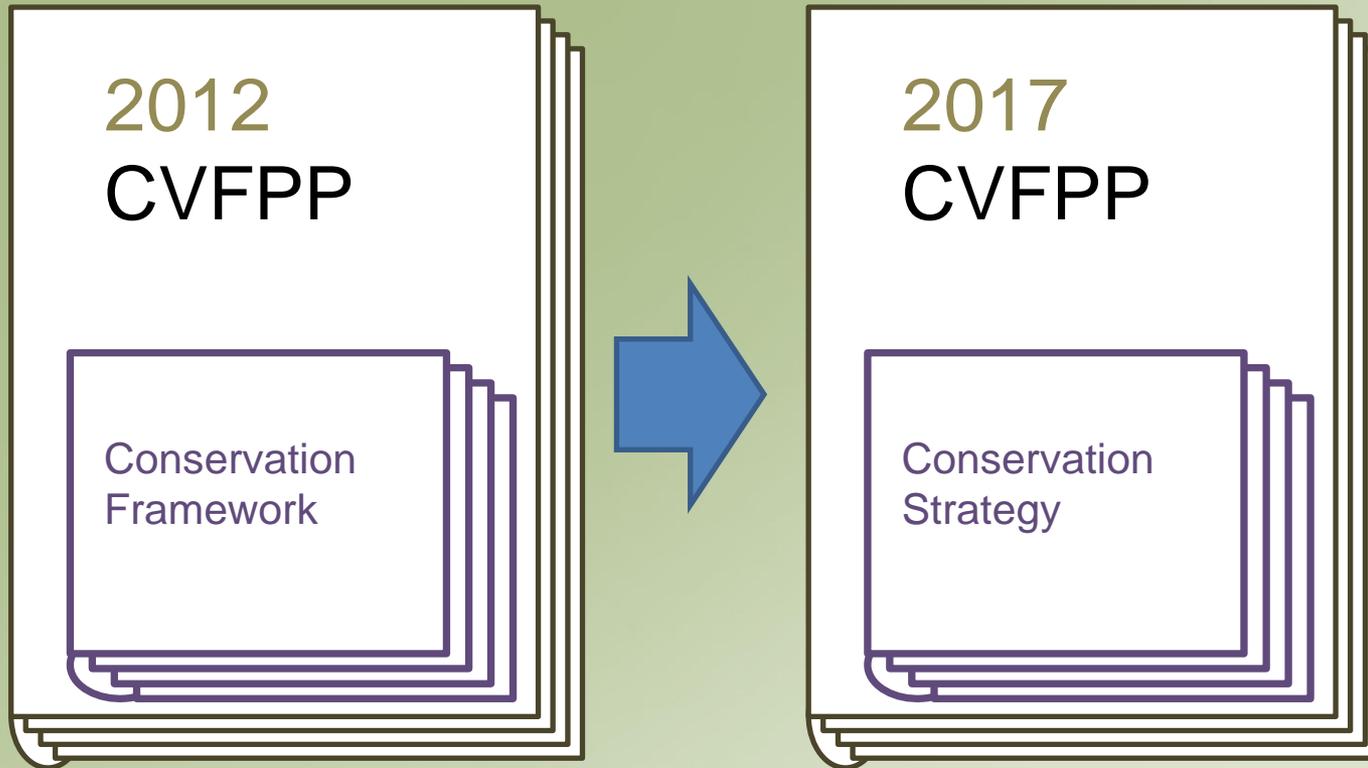


Implementation: DWR's CV Flood Protection Plan

- CVFPP is intended to be a sustainable, integrated flood management plan
- First plan by 2012, and update plan every 5 years
- New Water Codes 9614 and 9616
 - Promote natural hydrologic and geomorphic processes
 - Increase and improve habitat
 - Promote species recovery



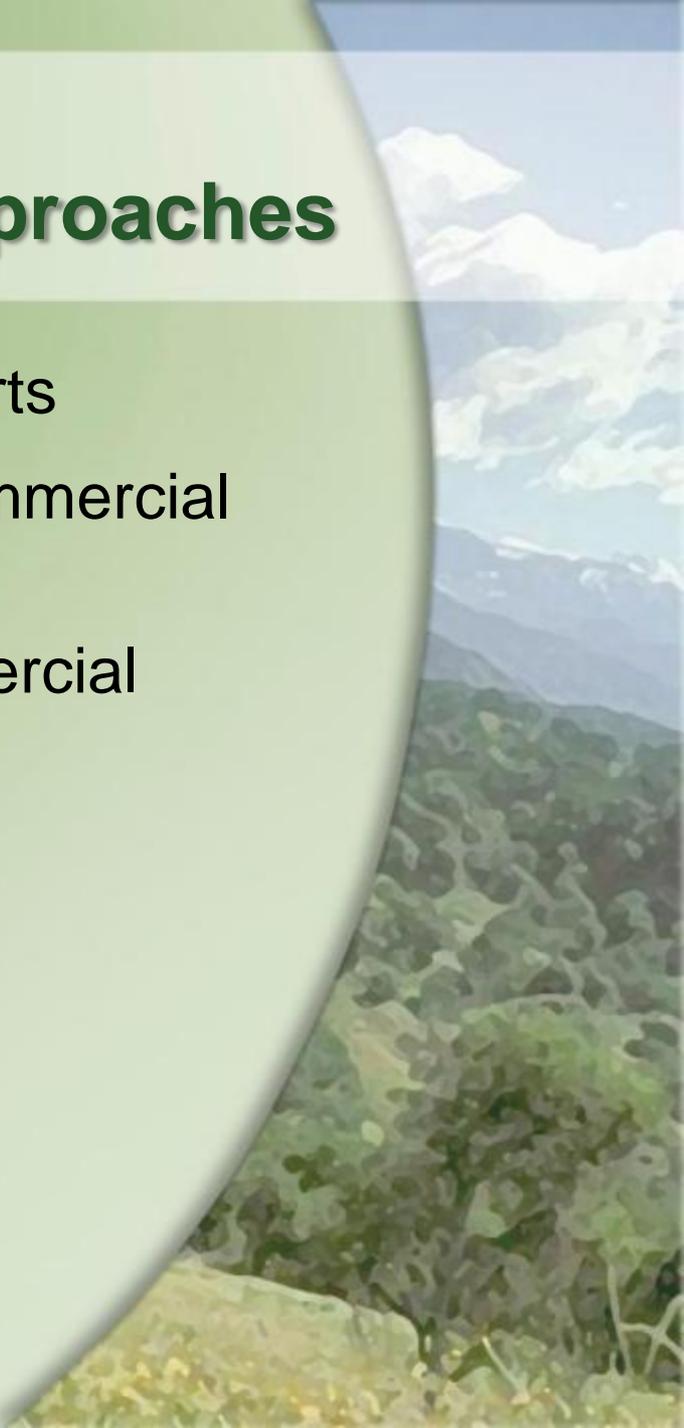
CVFPP's Conservation Framework



- RAMP Attachment to the Conservation Framework
- Future work within context of the Conservation Strategy
- RAMP is an important component of all

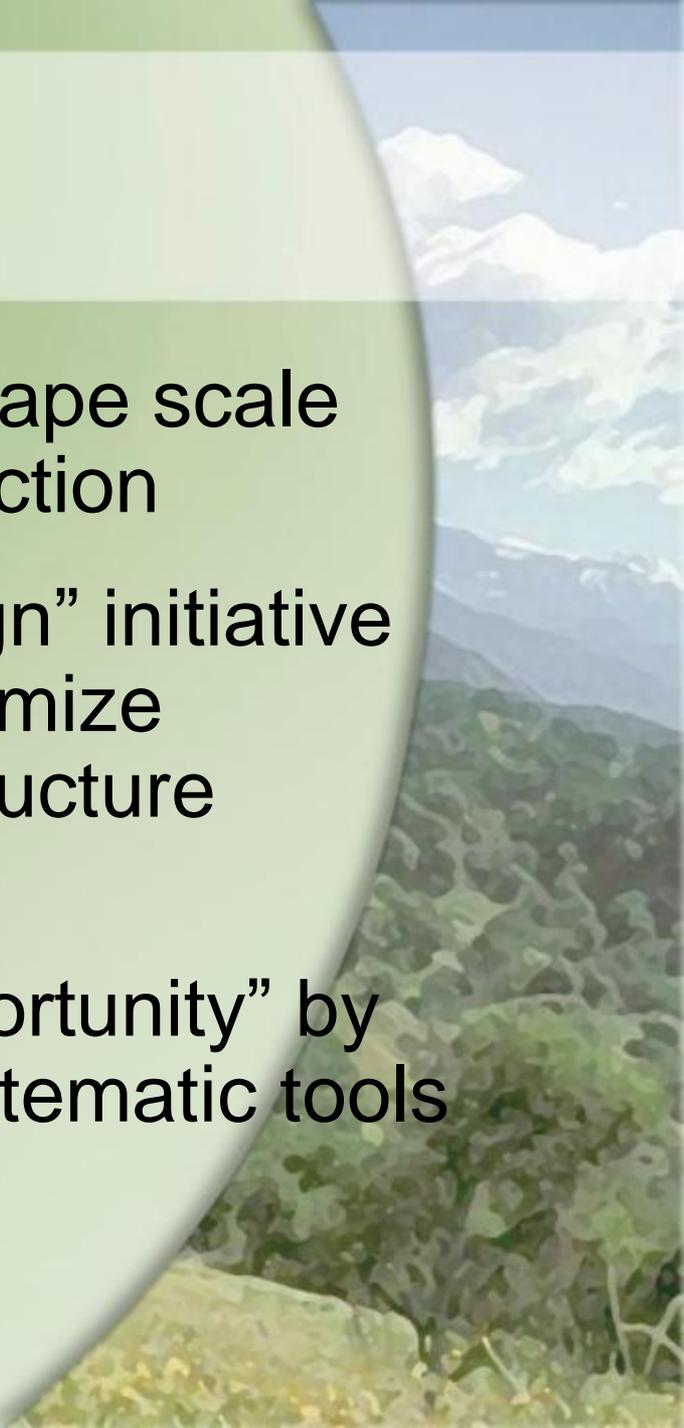
Considering all Mitigation Approaches

- Joining current HCP/NCCP efforts
- Bulk purchases from private commercial bankers
- Partnerships with private commercial bankers to develop new banks
- Agency-sponsored banks

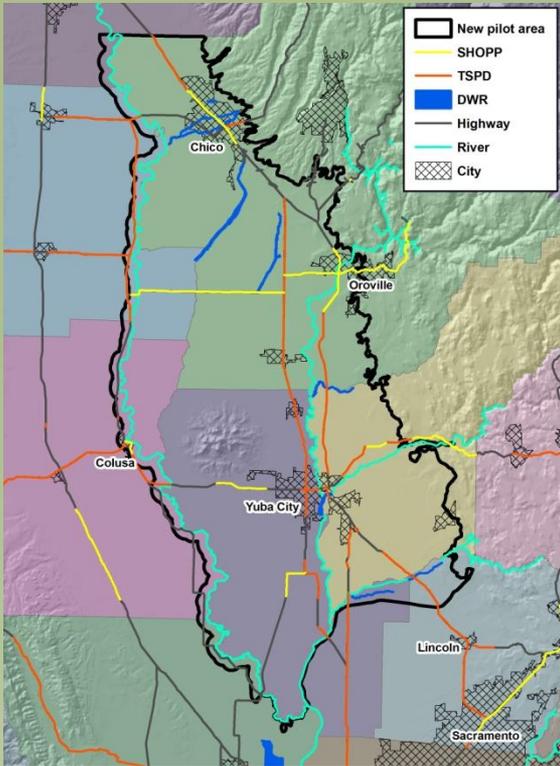


Why TNC is involved?

- Our work: Protection of landscape scale ecosystems and ecosystem function
- Global “Development by Design” initiative uses landscape planning to optimize conservation efforts and infrastructure efficiencies
- Turning a “threat” into an “opportunity” by getting out in front, applying systematic tools



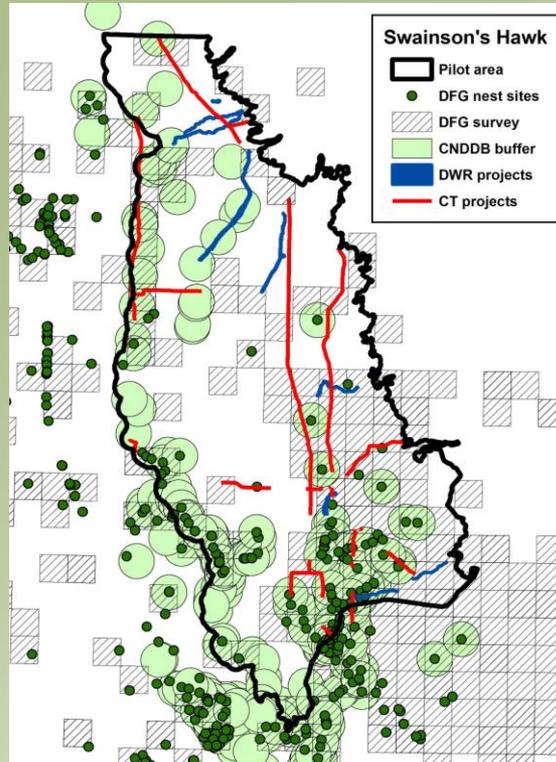
Analytical steps can be replicated anywhere in state



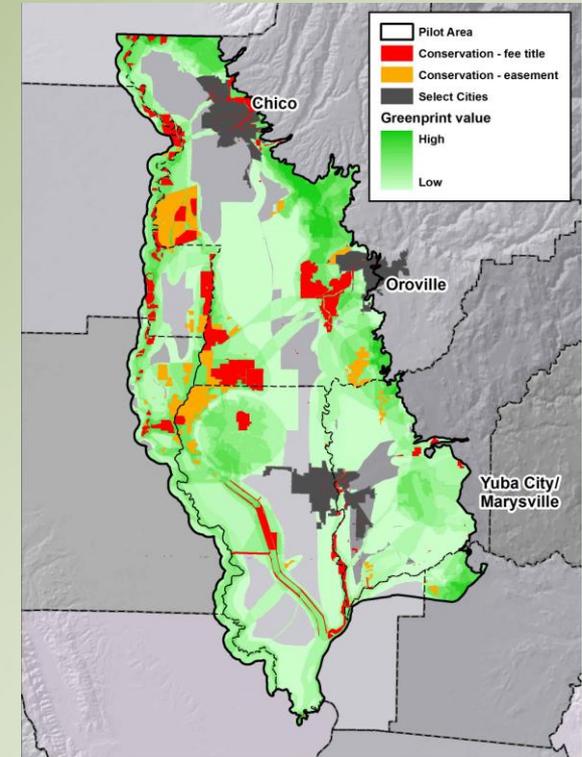
Map planned infrastructure projects



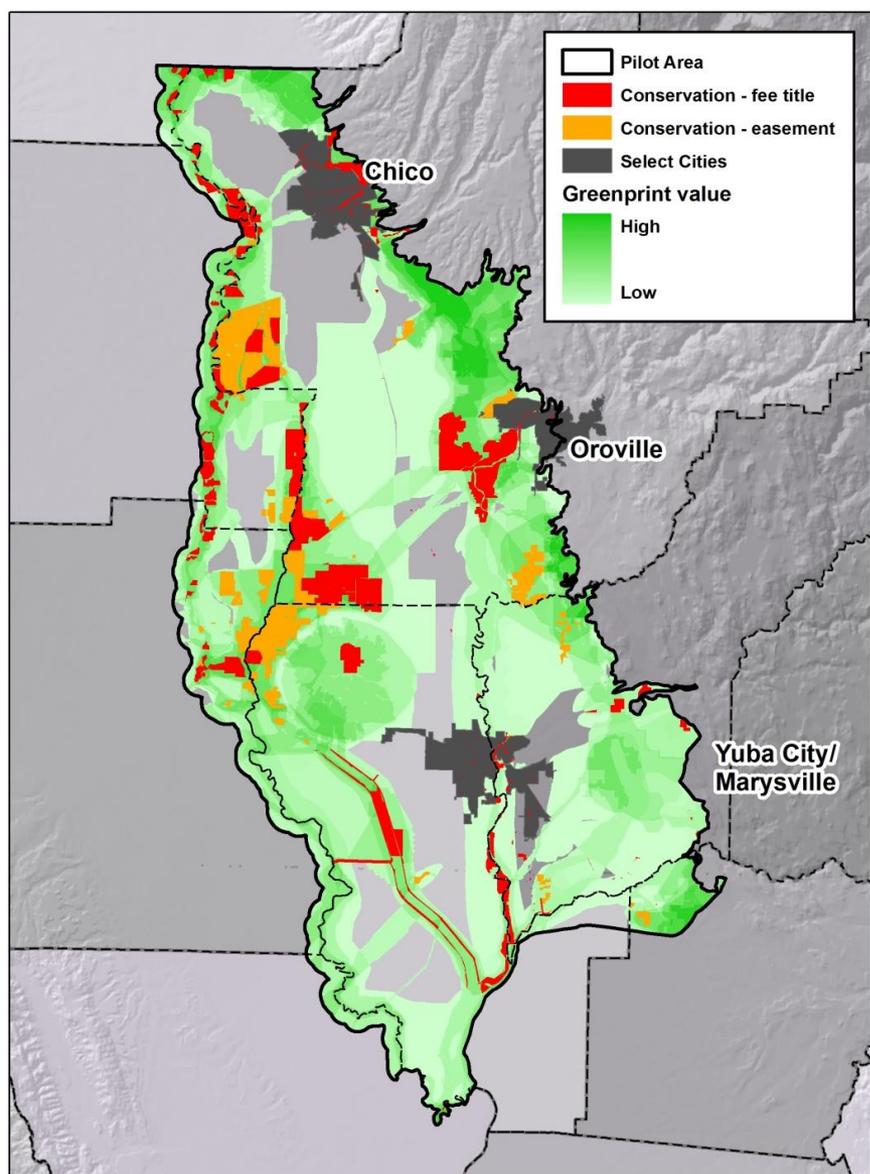
Map resources that may need mitigation due to potential impacts



Map locations of existing conservation land and other conservation priorities as a "Greenprint"



Greenprints



Planning Agencies	Data Type
DFG	ACE II; LAE; CAPP
USFWS	Vernal Pool Core Areas; Butte County Meadow Foam
CEHC	Ca. Essential Habitat Connectivity Report
Placer County	HCP/NCCP Acquisition Areas
The Nature Conservancy	Sac. River Project; Ecoregional Priorities
CRCC	Ca. Rangeland Cons. Coalition areas of high biological resources
Audubon Society	Important Bird Areas
Huber, UC Davis	Core conservation areas

Future Mitigation Analysis

- Marxan is a conservation planning tool to develop potential suitable sites
- Advantage: uses a systematic approach incorporating factors to minimize in selection of sites: \$ cost, road density, urban density, crop value, urban growth
- Disadvantage: preparation time for scenarios and difficulty integrating expert input

Purpose of ESA is “to provide a means whereby the **ecosystems** upon which endangered and threatened species depend may be conserved

Section 7 of the ESA: a Federal action will not jeopardize the continued existence of the listed species “will not reduce appreciably the likelihood of both the survival and recovery of listed species”

- “Will not reduce appreciably the likelihood of both the survival and recovery of the listed species”

San Joaquin kit fox



Early collaboration in landscape planning and conservation in advance =

- better informed infrastructure planning
- greater flexibility in meeting mitigation/conservation needs.
- provide greater assurance for all agencies



Vernal pool and fairy shrimp



Photo Credit: U.S. Fish and Wildlife Service

Desert tortoise, Mojave



Benefits of Regional Approach

Using a regional approach in species conservation strategies and subsequent compensation/mitigation needs in advance of projects will provide opportunities

- permanently conserve and protect larger more defensible lands
- Protect essential habitat corridors
- Avoid temporal effects



Largest Obstacles

- Difference in perspectives and terminology
- Educational gap in terms of understanding various infrastructure procedures



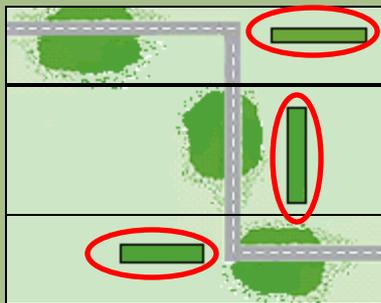
Overlapping Agency Missions

Greenprint Agency	Common Missions	Blueprint Agency
<p>Biodiversity Conservation</p> <p>California Department of Fish and Game</p> <p>US Fish and Wildlife Service</p>	<p>Environmental Stewardship</p> <p>Public Service</p> <p>Partnerships</p> <p>Sustainability</p> <p>Public Safety</p>	<p>Transportation Caltrans</p> <p>Water California Department of Water Resources</p> <p>Energy California Energy Commission</p>

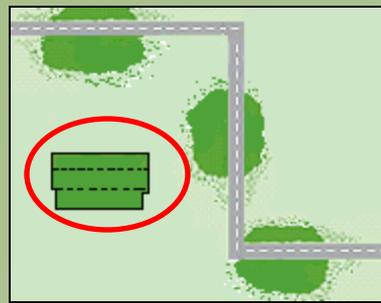
New Mandates and Initiatives

Safe Accountable Flexible Efficient Transportation Equity Act (SAFETEA-LU) of 2005 (Federal)	habitat connectivity	Caltrans
SB 391 (2008)	transportation plan to meet California's climate change goals under AB 32 (Global Warming Solutions Act of 2006).	Caltrans
California FloodSAFE Initiative	sustainable integrated flood management protect and enhance environmental resources promote beneficial floodplain processes	DWR
Delta Reform Act SBX71 (2009)	Protect, restore, and enhance natural resources	DWR and Delta Stewardship Council

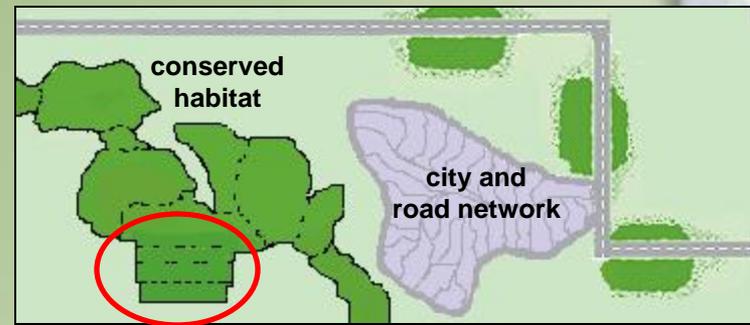
Biodiversity Conservation AND Infrastructure Improvement



**Project-by-Project
On-site
Mitigation**



**RAMP
and
Mitigation
Banking**



**Mitigation in Regional
Conservation Planning**

lower

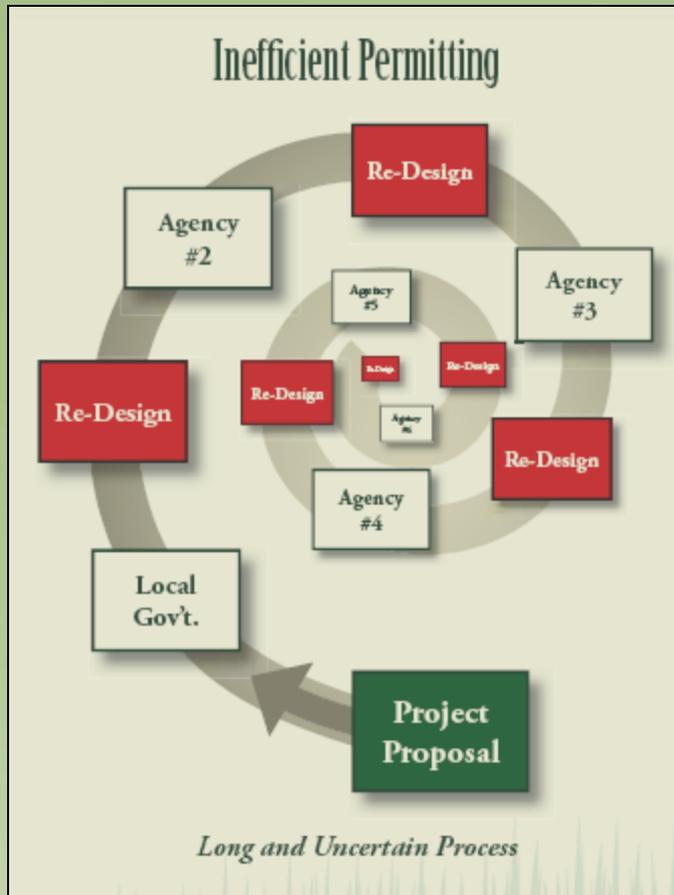
higher



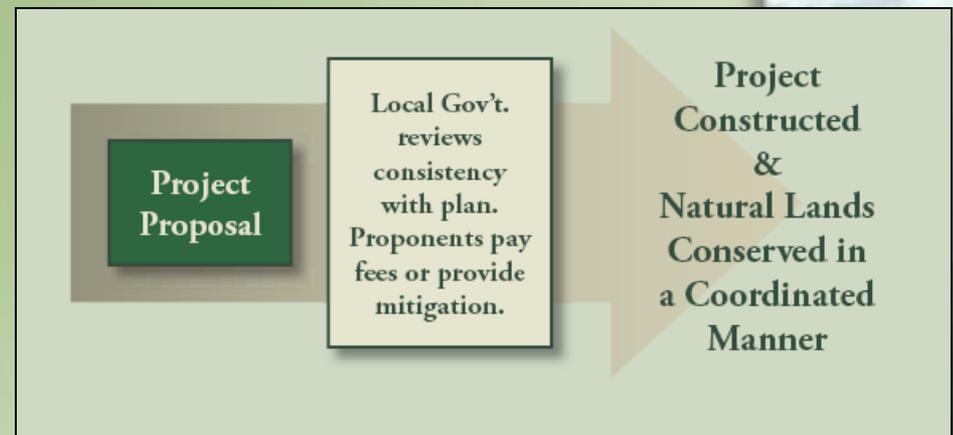
- Effectiveness for conservation
- Efficiency of cost
- Permit streamlining for blueprint agencies

Creative new ways to satisfy needs of infrastructure agencies for permits

Before NCCP



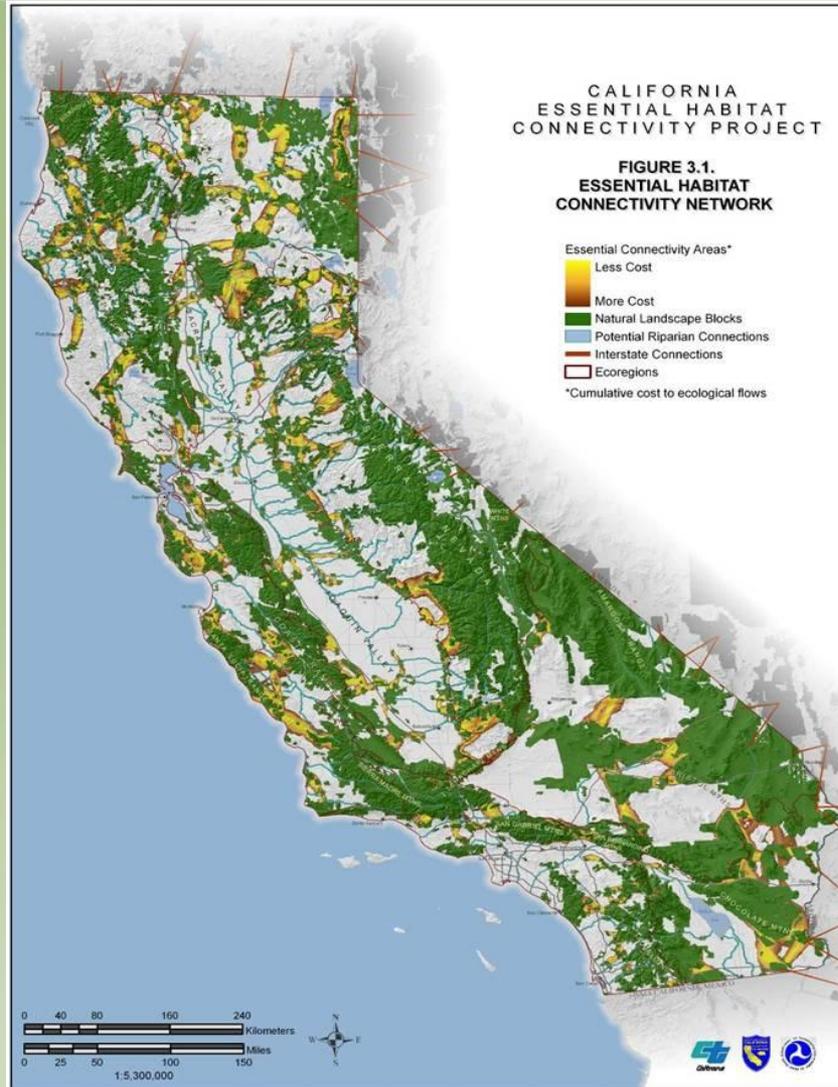
After NCCP



Source:

East Contra Costa County Habitat Conservation Plan Association

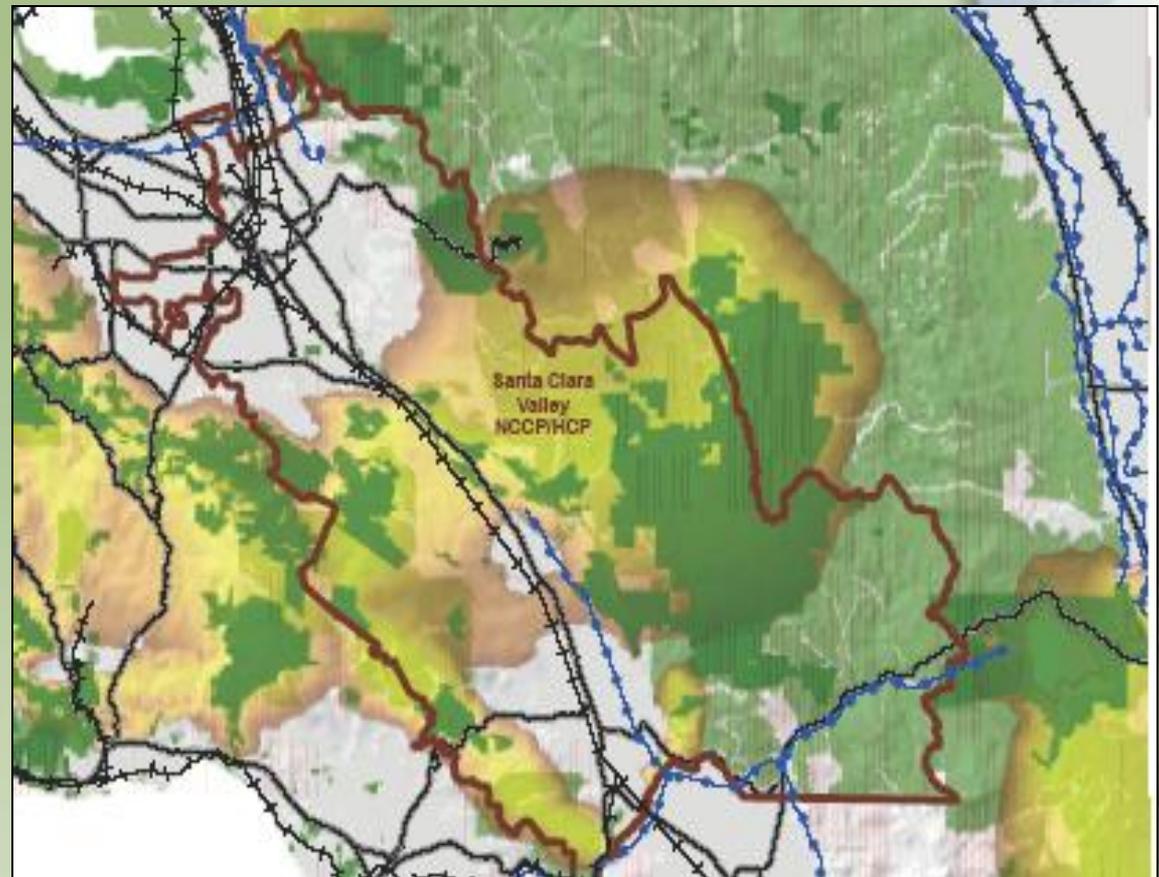
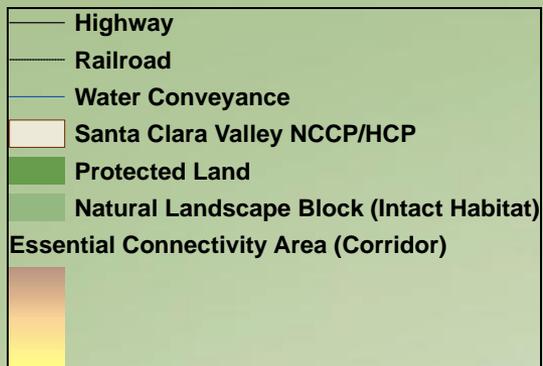
New tools for statewide wildlife connectivity and climate change planning



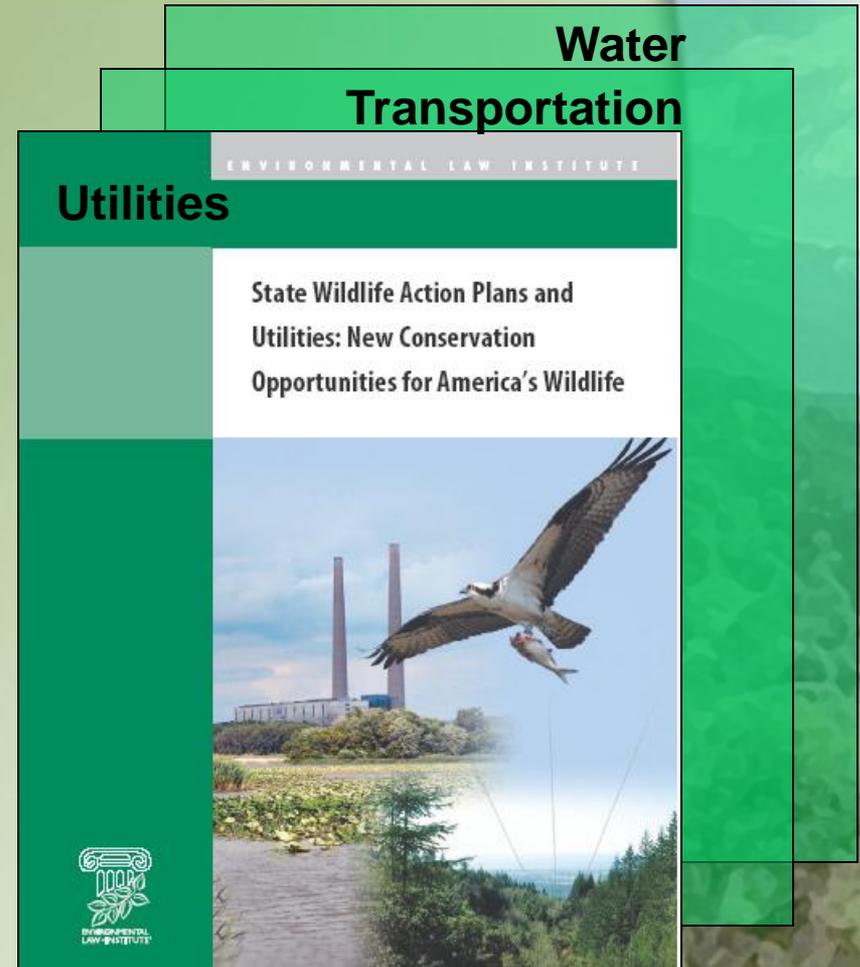
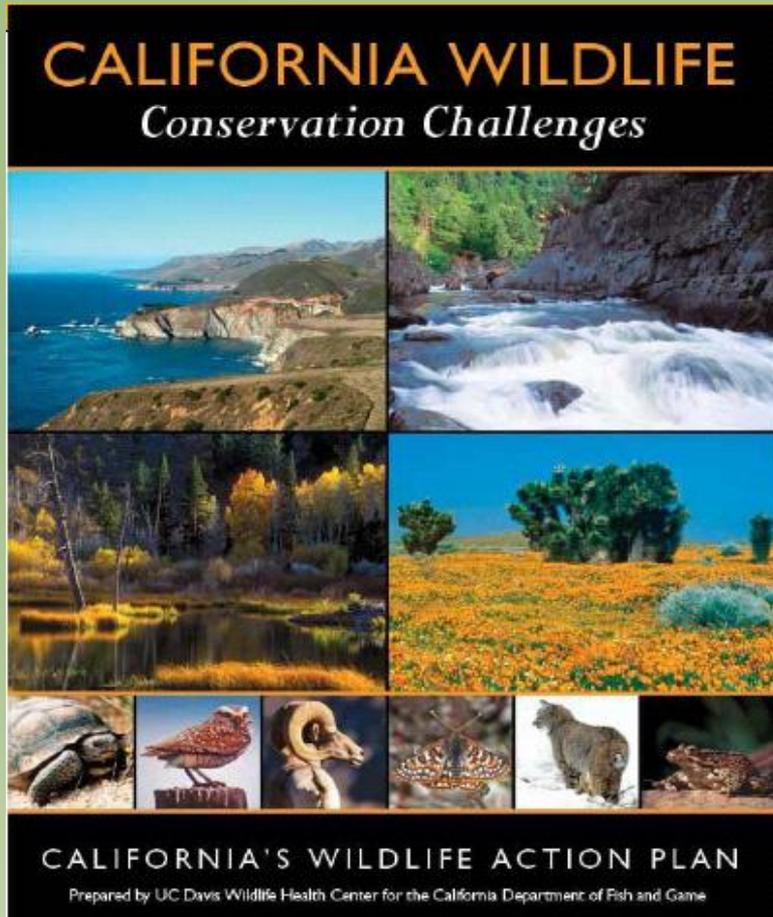
Integrated, proactive planning

Example:

Santa Clara
Valley NCCP



Agencies collaborate in implementation of State Wildlife Action Plan



Companion Plans

Next steps

- Distribute the draft Statewide Framework
- Complete draft Regional Assessment; develop and implement Action Plan for Pilot Project
- Develop RAMP “How-To” Manual
- Consider initiating other pilot regions and establishing a statewide program



More Information

<https://rampcalifornia.water.ca.gov>

