



californialcc.org

Science-Management Framework

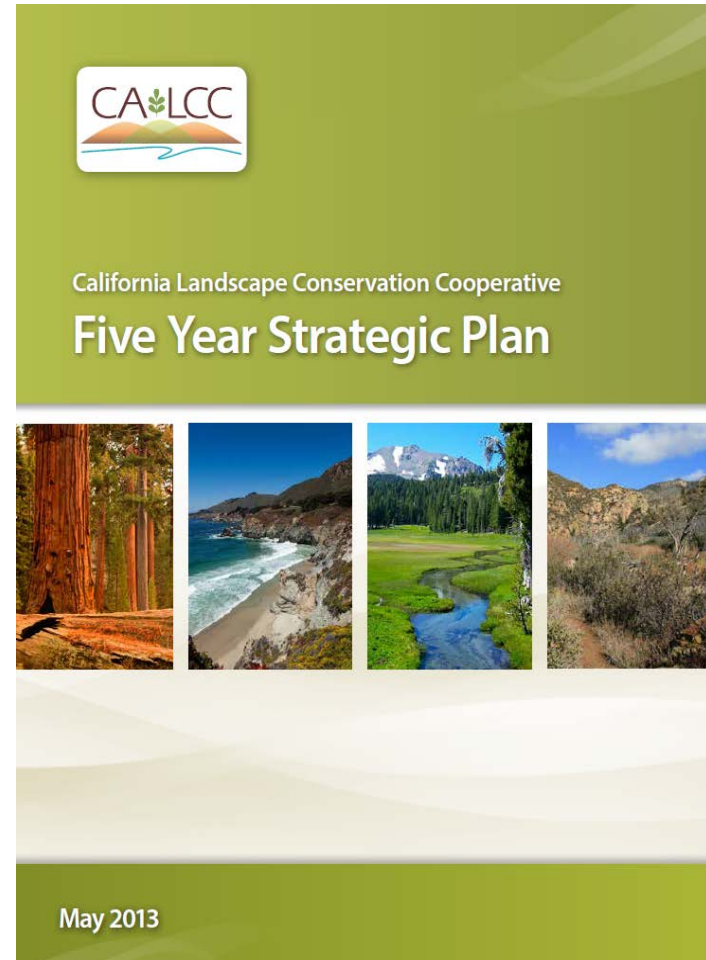
Debra Schlafmann, Coordinator
Rebecca Fris, Science Coordinator
Karen Thorne, Science Advisor



Highlighted Science-Management Strategies

- ✓ Identify key science needs and improve delivery for strategy implementation
- ✓ Support place-based projects in 8 Ecoregions
- ✓ Promote understanding of ecosystem processes across sectors
- ✓ Facilitate partner collaboration

... to advance climate-smart, landscape-scale conservation

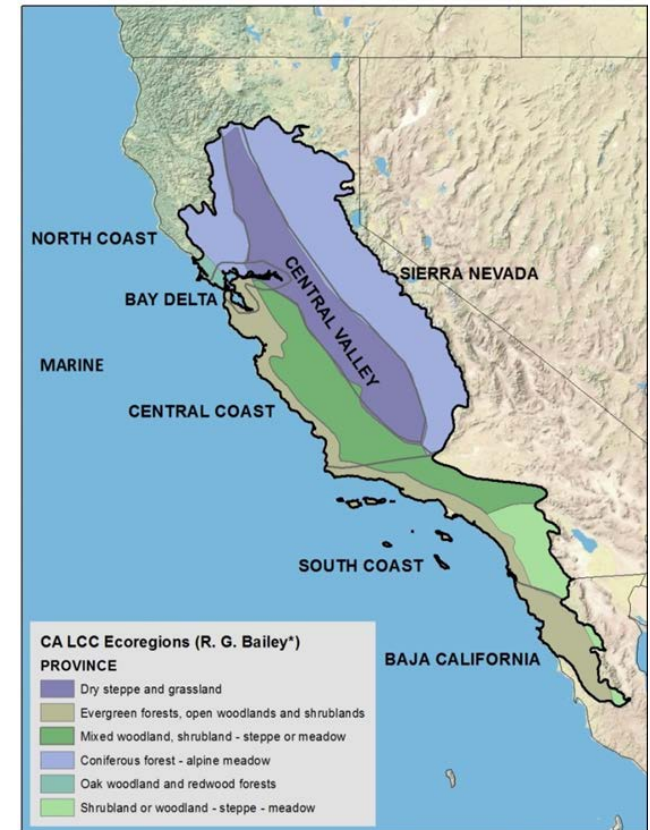




Science-Management Framework

Process

- 23 members with diverse expertise
- Conference calls and an in-person meeting on August 8, 2013
- Excellent input on two versions of draft Framework





Science-Management Framework

Purpose

*Provide scientific support
for natural resource
managers to incorporate
climate-smart
conservation strategies*



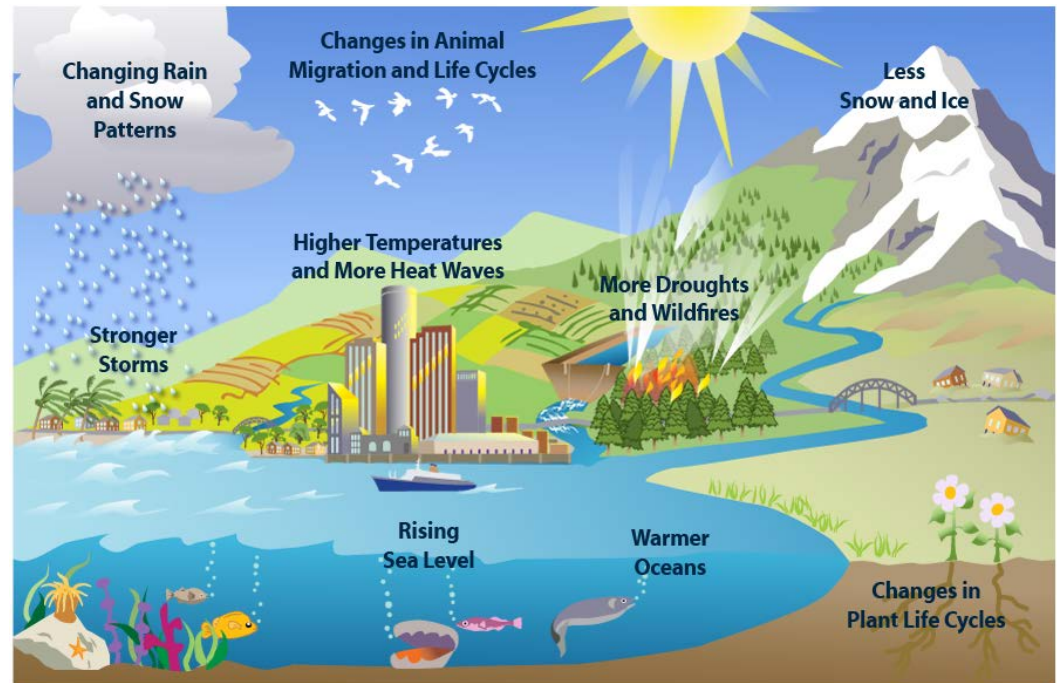
CA LCC Boundary



Science-Management Framework

Intentional and deliberate consideration of climate change in natural resource management

- ✓ *Forward-looking goals*
- ✓ *Linking actions to key climate impacts and vulnerabilities*





Science-Management Framework

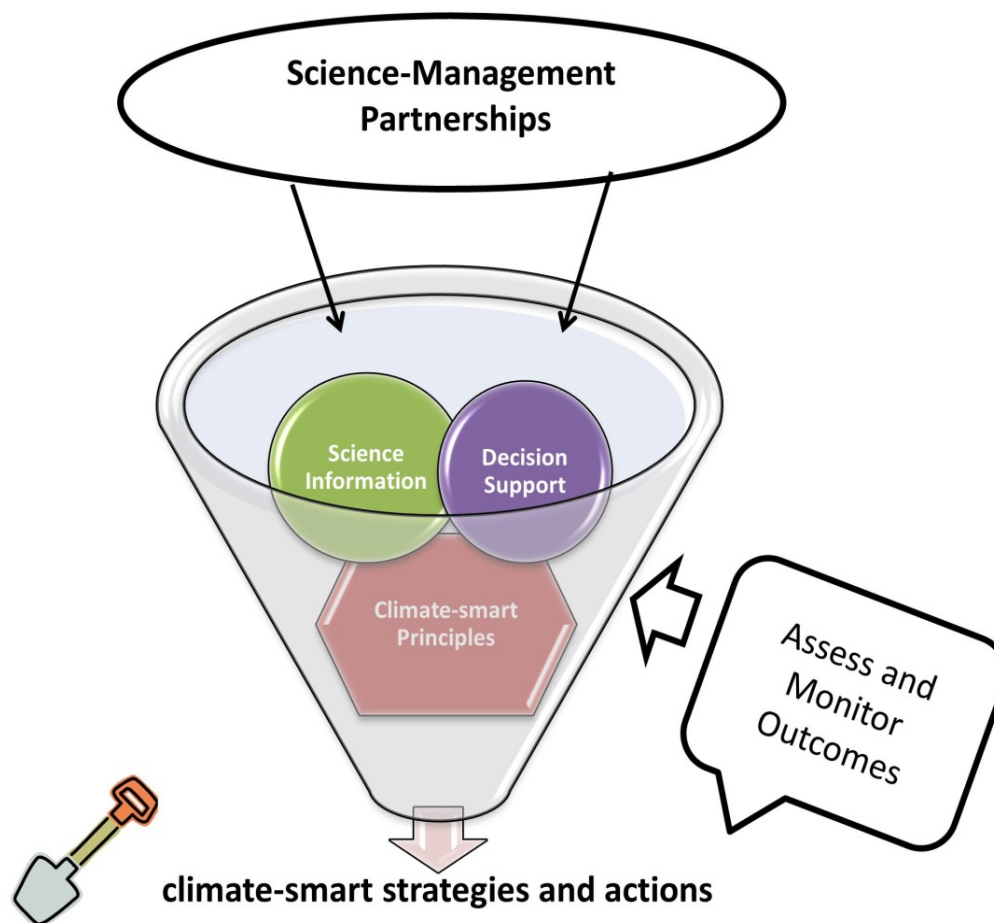
- ✓ Science information delivery and exchange
- ✓ Decision-support methodologies
- ✓ Strategies and actions for climate-smart conservation





Science-Management Framework

Needs & Delivery

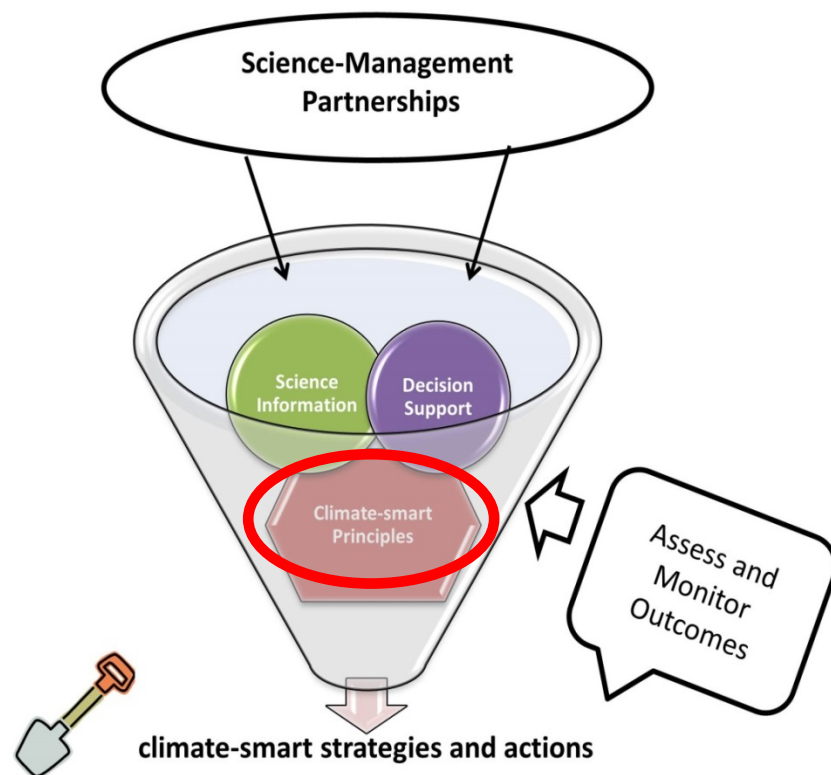




Science-Management Framework

Climate-Smart Principles

- ✓ Forward looking goals
- ✓ Actions linked to climate impacts
- ✓ Robust strategies for an uncertain future
- ✓ Actions designed in a landscape context
- ✓ Agile & informed management





Conservation Goals

Goals, Objectives, Strategies

- ✓ **Conserve & restore resilient, adaptable ecosystems that maintain California's biodiversity**
- ✓ **Promote landscape-scale connectivity and ecological processes**
- ✓ **Ameliorate climate change impacts and other top stressors to ecosystems and species**





Four Five-Year Objectives

- ✓ **Place-based projects**
- ✓ **Projects to address ecosystem processes**
- ✓ **Landscape conservation designs**
- ✓ **Partners applying lessons learned**

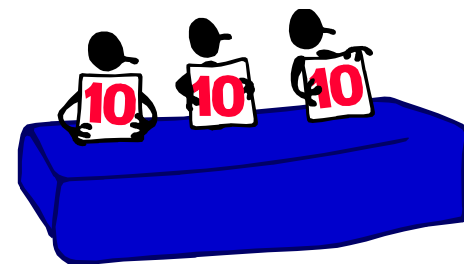




Objective #1: Places

Support ten or more place-based projects distributed across all CA LCC ecoregions that lead to climate-smart conservation actions by resource managers

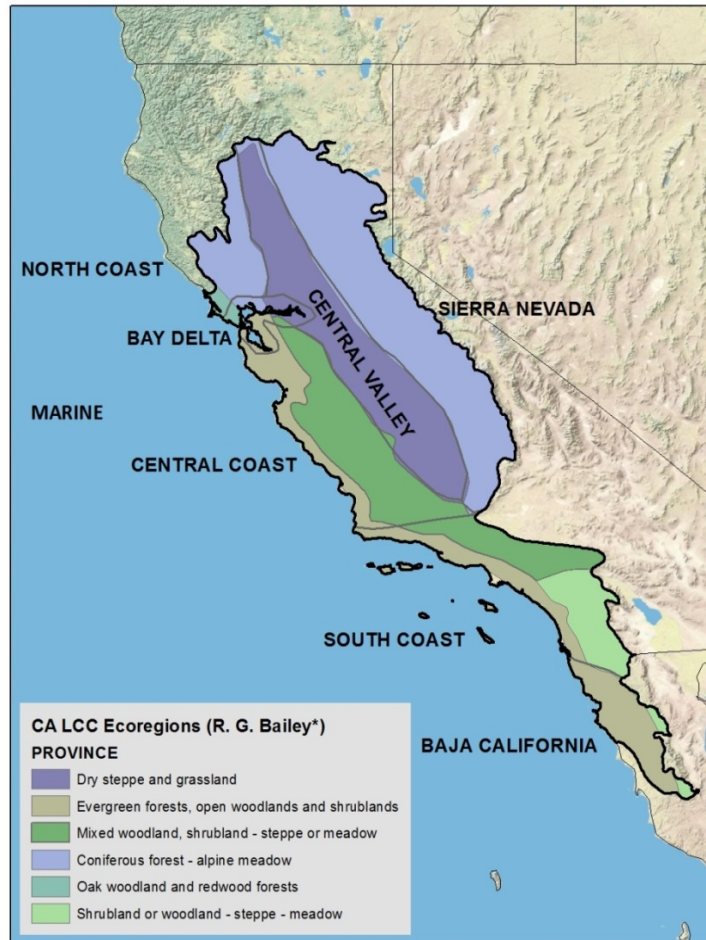
- ✓ Include key success elements:
people, information, decision-support, strategies, action
- ✓ Address ecoregional priorities & needs
- ✓ Ensure high LCC value-added, high impact, relevance to managers, & transferable results



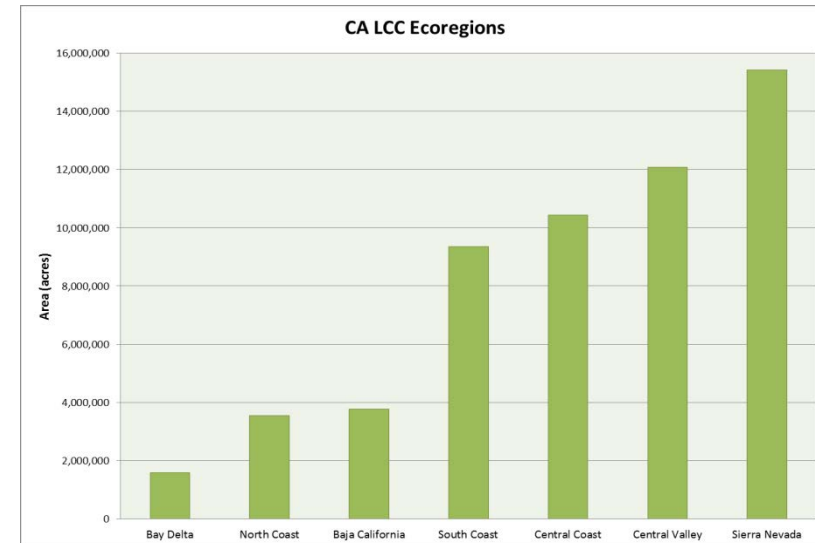


Science-Management Framework

8 Ecoregions



56 million acres





Place-Based Project

Case Study

Vulnerability assessment and adaptation strategies for focal resources of the Sierra Nevada





Objective #2: Processes

*Implement at least two interdisciplinary projects to assess and address climate change impacts to **priority ecosystem processes** at a landscape scale*

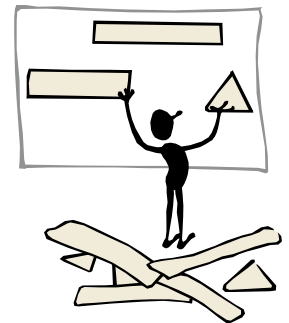


Changing Ecosystem Processes & Effects

Priorities

- ✓ Hydrologic regimes
- ✓ Sediment regimes
- ✓ Fire regimes
- ✓ Meteorological changes (e.g. air temperature)
- ✓ Sea-level rise & changing ocean conditions
- ✓ Storm frequency & intensity

Effects of the above on ecosystems, vegetation communities & species

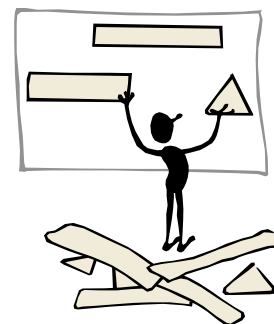




Objective #2: Processes

Implement at least two interdisciplinary projects to assess and address climate change impacts to priority ecosystem processes at a landscape scale

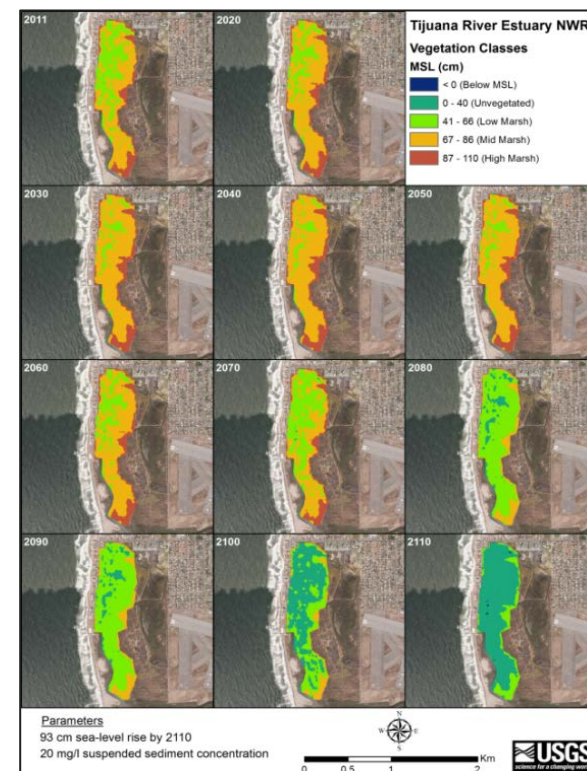
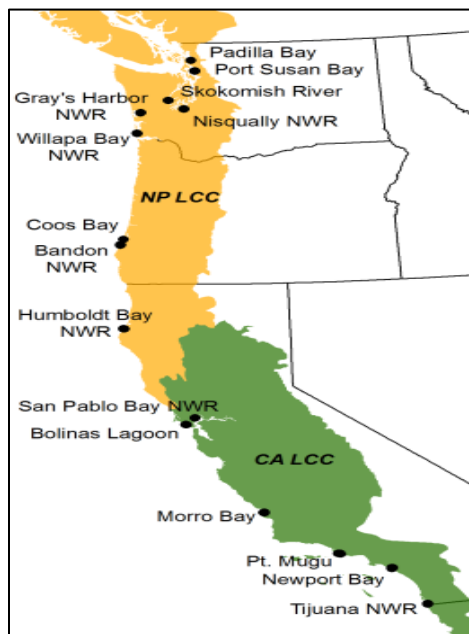
- ✓ Include key success elements:
people, information, decision-support
- ✓ Ensure high LCC value-added and potential for high impact & relevance to managers





Ecosystem Processes Project

Sea-level rise modeling across the California salt marsh gradient for resource managers

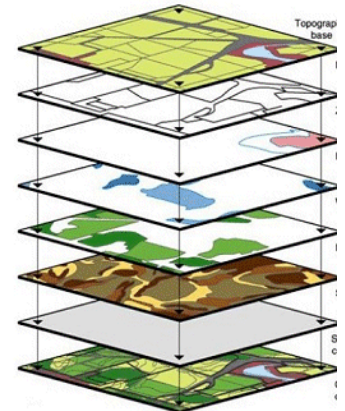




Objective #3: Designs

Develop at least 2 landscape conservation designs to provide spatially explicit blueprints that will support climate-smart conservation strategies

- ✓ Inventory & synthesize existing planning efforts
- ✓ Incorporate key design elements (e.g. appropriate scale for a clearly defined purpose).
- ✓ Ensure approaches can be transferred or replicated elsewhere
- ✓ Coordinate across LCC & with adjacent LCCs

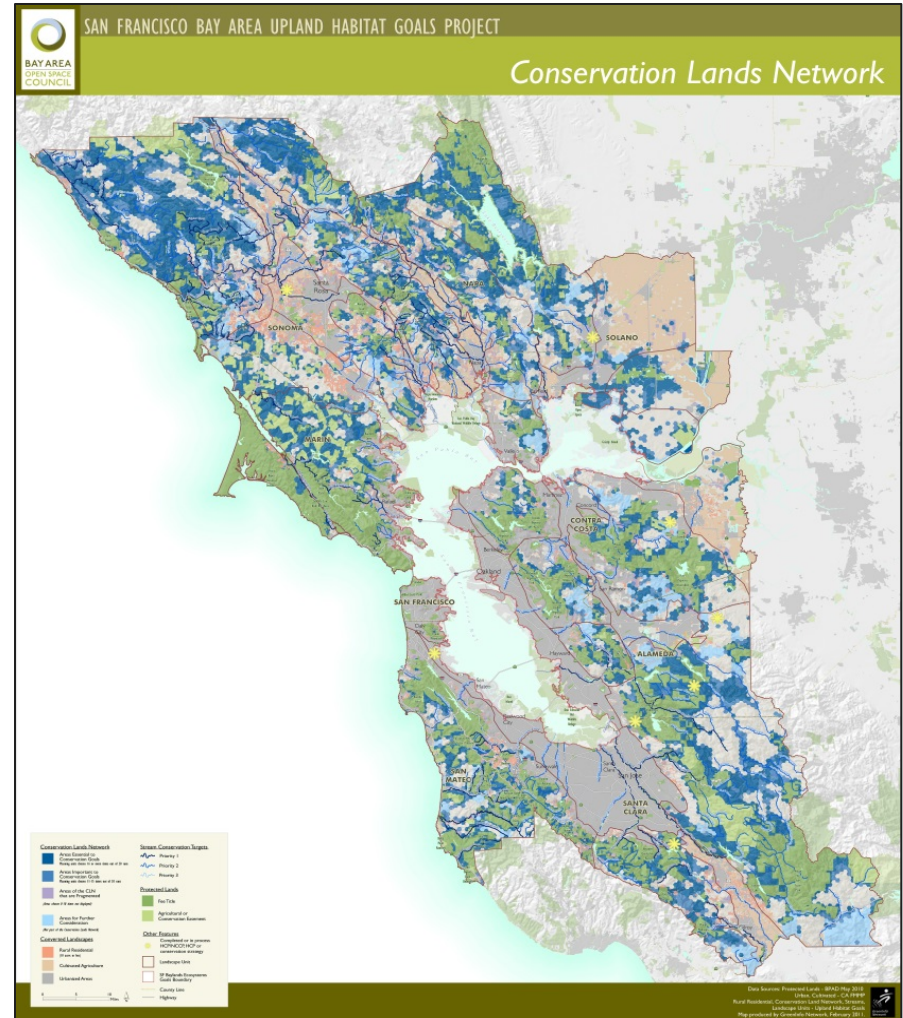




Landscape Design

Case Study

Conservation Lands Network

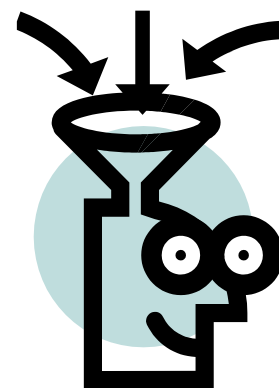




Objective #4: Application

Lessons learned from all LCC projects are applied by partners when implementing climate-smart strategies and actions

- ✓ **Annually evaluate project outcomes and successful/unsuccessful approaches**
- ✓ **Science-Management Team works with LCC Communication Team to document and share lessons learned**

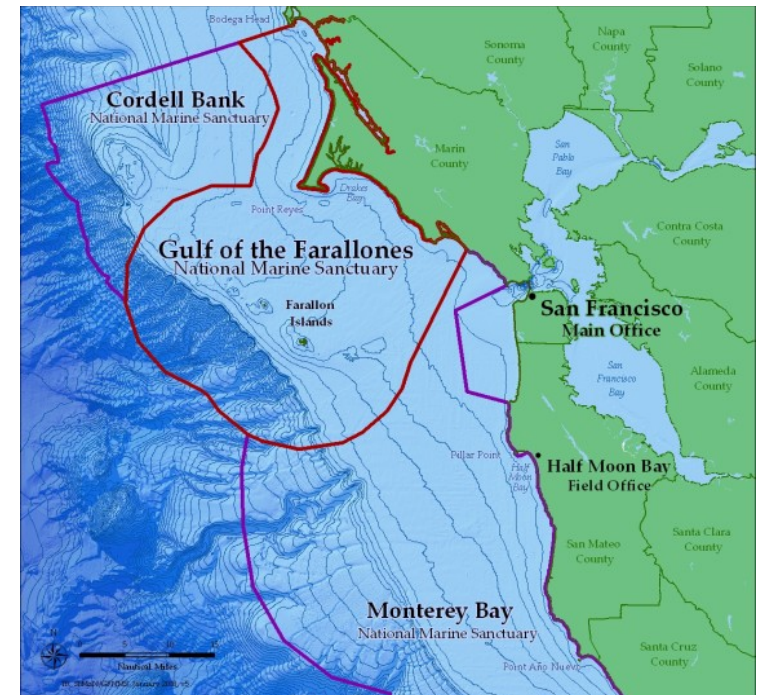




Partners Apply Lessons Learned

Case Study

North-central California Coast and Ocean Climate Smart Adaptation project





Partners Apply Lessons Learned

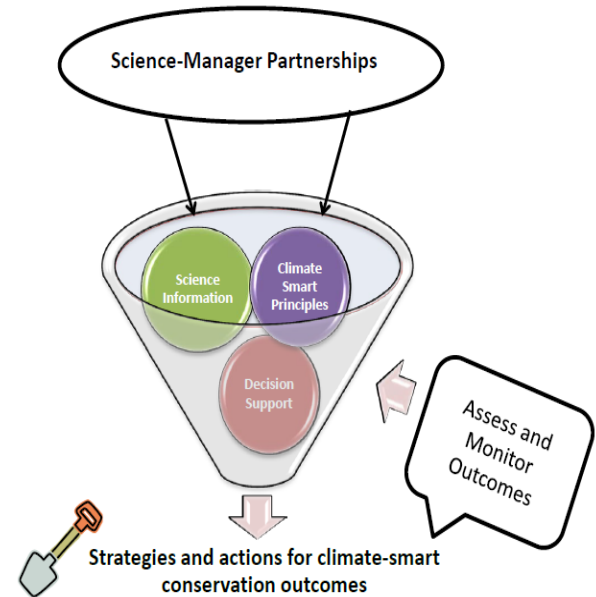
Case Study





California Landscape Conservation Cooperative

A growing community of resource managers, scientists, conservation practitioners, and others that are successfully collaborating to advance and implement actions that promote resilient and adaptable ecosystems across the landscape in the face of environmental change.



California Landscape Conservation Cooperative
Five Year Strategic Plan

