



# Vision, Goals, and Strategic Plan

## Bay Area Ecosystems Climate Change Consortium

### Our vision of success

Because of our work today, in 30 years the Bay Area will still be one of the world's most beautiful and ecologically diverse metropolitan areas, supporting vibrant and healthy wildlife populations and human communities.

### Our mission

BAECCC brings together natural resource managers, scientists, and others to collaboratively understand and reduce the negative impacts of climate change on Bay Area ecosystems and communities.

### Our long-range goals

Our work is based on the understanding that healthy ecosystems make the region more resilient to climate change, that nature is a valuable component of our economy and quality of life, and that restoring ecosystems is a cost-effective strategy for adapting to the impacts of climate change.

**Thus, our long-range goals are to:**

- Reduce the negative impacts of climate change on Bay Area ecosystems and wildlife.
- Secure nature's ecological, recreational, and economic benefits for our community.
- Enhance the role of natural ecosystem processes to sequester carbon, reduce flood impacts, moderate climate extremes, and address other impacts of climate change on human communities.

**To reach these goals, we have identified four specific desired outcomes, along with the strategies and objectives to reach them.**

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Photo left: Cait Hutnik. Background image courtesy NASA Visible Earth





# Five-year desired outcomes, strategies, and objectives

## > 1

### Desired Outcome

Natural resource managers, scientists, non-governmental organizations, and regulators collaborate to identify climate change impacts to ecosystems and develop **climate-smart** solutions.

**Climate-smart** solutions address climate change impacts and other threats by relying on nature-based solutions whenever possible to reduce greenhouse gas emissions, enhance ecosystem services, and improve the ability of wildlife and people to adapt to a rapidly changing climate.

*After PRBO Conservation Science and the National Wildlife Federation*

**Strategy:** Facilitate dialogue that identifies and supports 1) climate-smart management, restoration, and other actions, 2) management questions amenable to scientific investigations, and 3) advancement of such investigations.

**Objective 1.1:** Engage and assist managers and scientists to build collaborative relationships that foster work across disciplinary, ecological, and jurisdictional boundaries, and assist scientists in understanding and addressing questions faced by natural resource managers.

**Objective 1.2:** Facilitate identification of emerging questions, gaps in understanding, and the development of practical ways to address them that engage resource managers, scientists, and others.

**Objective 1.3:** Help managers to understand climate smart options and facilitate the implementation of these options and evaluation of their effectiveness.

## > 2

### Desired Outcome

A collaborative monitoring network identifies and measures indicators of climate change impact on **ecosystem health**, regularly summarizes ecosystem and management responses to climate change, and provides information to improve management and projections for future planning.

**Strategy:** Facilitate the development and implementation of a region-wide monitoring network to assess ecological impacts of climate change by coordinating existing monitoring efforts in an **adaptive management** framework and disseminating public reports on impacts and progress.

**Objective 2.1:** Build a regional consensus around key indicators of ecosystem response to climate change, including indicators of **ecosystem resilience**.

**Objective 2.2:** Facilitate working relationships among ecological monitoring programs across the region.

**Objective 2.3:** Help secure long-term funding for implementation of a regional monitoring network.

**Objective 2.4:** Develop partnerships for reporting on monitoring results to both technical and nontechnical audiences.

**Ecosystem health**, a goal of many environmental laws and policies, is defined by BAECCC as the degree to which ecosystems retain their valued attributes and sustain the services upon which humans depend, including clean water and air, nutrient cycling, flood control, carbon sequestration, and biodiversity.

**Adaptive management** is a systematic process for continually improving management policies and practices by learning from the outcomes of previously employed policies and practices.

**Ecosystem resilience** is the capacity of ecosystems to remain healthy in the face of stressors such as climate change.



# Five-year desired outcomes, strategies, and objectives

## > 3

### Desired Outcome

Policymakers and the public understand that healthy ecosystems and **nature-based solutions** allow for both mitigation and adaptation, and thus are key to addressing the impacts of climate change.

**Nature-based solutions**, often called “green infrastructure,” use natural processes to reduce the severity of climate change impacts such as extreme weather. These solutions can also enhance climate change mitigation through removal of greenhouse gases from the atmosphere.

Regional examples of nature-based solutions include the Yolo Bypass on the Sacramento River (a portion of the flood plain that provides flood control, wildlife habitat, and agricultural productivity), and the Mountain View marsh in Martinez, which treats wastewater while providing valuable habitat.

*After The Nature Conservancy*

**Climate-smart ecological restoration** is the process of enhancing ecological function of degraded, damaged, or destroyed areas in a manner that prepares them for the consequences of a rapidly changing climate.

*After PRBO Conservation Science*

**Strategy:** Advocate for **climate-smart ecological restoration** and nature-based infrastructure to advance mitigation and adaptation regionally and locally.

**Objective 3.1:** Communicate to regional and local practitioners the value of healthy ecosystems as well as the importance of nature-based strategies for mitigation and adaptation.

**Objective 3.2:** Facilitate the development and delivery of consistent messages by BAECCC partners.

**Objective 3.3:** Actively inform and become a key resource for local and regional policymakers and the public about the importance of maintaining ecosystem functions to address the impacts of climate change.

## > 4

### Desired Outcome

BAECCC shares our knowledge with and learns from communities addressing climate change worldwide.

**Strategy:** Document BAECCC’s successes and challenges and share this information in journals, online, and through other avenues.

**Objective 4.1:** Build relationships and exchange information with other regional partnerships addressing ecosystem impacts of climate change.

**Objective 4.2:** Assess, report, and disseminate globally BAECCC’s progress toward our objectives and our important lessons learned.



Photos: Frances Freyberg Blackburn (above), Kathy Switky (background)





# Bay Area Ecosystems Climate Change Consortium

**BAECCC facilitates collaboration between natural resource managers, scientists and other interests** through regular meetings, focused workshops, pilot projects, on-line communications and more to secure nature's ecological and economic benefits for the Bay Area. We work to limit the negative impacts of climate change on the world-renowned upland, estuarine, and marine wildlife, habitats, and ecosystems of the nine county Bay Area and the Gulf of the Farallones. We also seek to enhance the role of these natural systems in protecting human communities. BAECCC partners have collectively brought millions of dollars in climate change research and pilot project funding to the region.

**For information** about current BAECCC initiatives and how you can participate, visit [www.BAECCC.org](http://www.BAECCC.org) or email us at [info@baeccc.org](mailto:info@baeccc.org).

## **Founding partners**

California Coastal Conservancy  
Gulf of the Farallones National Marine Sanctuary  
PRBO Conservation Science  
U.S. Geological Survey  
U.S. Fish & Wildlife Service

*Additional partners* include the Bay Area Flood Protection Agencies Association, Bay Area Open Space Council, California Department of Fish and Wildlife, National Park Service, National Oceanic and Atmospheric Administration, San Francisco Bay Conservation and Development Commission, San Francisco Estuary Partnership, San Francisco Bay Joint Venture, San Francisco State University, The Nature Conservancy, and University of California, Berkeley.



**[www.BAECCC.org](http://www.BAECCC.org)**