

San Francisco Bay Area Conservation Commons

The Need

More and more, environmental managers are embracing an integrated regional and local approach in response to threats to biodiversity and water resources. Understanding our ecosystems and the changes they are undergoing is necessary to identify opportunities to conserve habitat, protect groundwater, promote land stewardship, and protect the natural processes that allow adaptation to change. Core to this approach are: 1) access to scientific information and 2) a community that uses and builds upon it. Environmental documents, maps, and data made useful for technical and non-technical users alike will enhance our ability to face environmental management challenges of the present and future.

While there are many organizations providing data and information online, there is currently no system for finding, using, and communicating about San Francisco Bay Area environmental data in a common interface.

The Solution: A Regional Conservation Commons

A vast amount of knowledge about our region's resources as well as the talent to use it resides within our community— its people and organizations— and we are the community working to develop our region's environmental solutions.

It is at the regional scale that ecosystems function and change, that people collaborate, and environmental information is put into practical use to guide resource management practices.

We believe that by bringing our information together, cooperating to develop commonly-needed tools, and supporting active involvement in information exchange, we can better leverage our collective knowledge toward the collaborative solutions we seek.

The San Francisco Bay Area Conservation Commons is an effort dedicated to this goal by making our region's environmental information more accessible and useful for conservation purposes, including: preparing for the impact of climate change, regional conservation planning, and local stewardship. The SF Commons core team designs technical solutions and coordinates with other groups promoting standards and practices for open data sharing and networking, such as the USGS National Spatial Data Infrastructure and the International Conservation Commons. Participation is open to everyone.

Benefits of a Regional Conservation Commons

- Services and shared data produced by this effort will support environmental conservation and education in all organizations, with and without GIS services, at the policy, research, restoration, preservation, and community stewardship levels.
- Costs per partner for common data services are reduced with increasing numbers of contributing partners.
- A coherent set of solutions and services will be cooperatively developed that would not be possible if each organization were to continue working separately.



The SF Commons is a partnership of Sonoma Ecology Center, PRBO Conservation Science, San Francisco Estuary Institute, The Information Center for the Environment, and CERES.

The SF Commons Strategy

Our strategy is two-fold:

- Develop the tools needed to easily share, find, view, and use information about projects, organizations, and data resources for regional purposes, including specialized services for collaboratively using geospatial data.
- Provide the training, assistance, and communications that will enable active data exchange and maximize the use of the knowledge base of the community.

Our approach is to develop a central website that provides core services and access to a living, distributed digital library network, using next-generation web technology. This architecture will embrace existing data systems, reduce redundancy, and provide for a nested flow of resources between local, state, national, and international scales of conservation data exchange. A conservation commons built by and for a specific community is the final link needed for connecting the existing state, national, and international data systems with users and the issues they are intended to serve.

Current Participants

The SF Commons Steering Committee and Core Technical Team consist of staff from Sonoma Ecology Center, San Francisco Estuary Institute, UC Davis Information Center for the Environment, California Resources Agency CERES Program, and PRBO Conservation Science. Supporters who have participated in data sharing, standards development, training workshops, and/or have funded or donated software for SF Commons projects, include: Laguna de Santa Rosa Foundation, Bodega Marine Lab, UC Davis Agricultural Extension Hopland Field Station, Sonoma County Agricultural Preservation and Open Space District, Bay Area Open Space Council, San Francisco Bay Joint Venture, NOAA National Marine Fisheries Service, Ducks Unlimited, Audubon Canyon Ranch, Center for Social and Environmental Stewardship, Sonoma State University Geographic Information Center, Sonoma State University Preserves, and ESRI.

The core team members each have a history of research in the area of distributed digital libraries, data sharing, environmental data integration, and the Semantic Web. We have been conceptualizing and collaborating on aspects of a regional conservation commons for more than a decade.

How To Get Involved

The SF Commons is a long-term project that will require multiple collaborations, contributions, and funding sources to become an integral part of our environmental community. All are welcome to contribute information resources at <http://sfcommons.org>. More training workshops and utilities for sharing and viewing data will become available as funding allows.

We seek funding from regional agencies and foundations to continue this important effort. For more information please contact one of the following: Deanne DiPietro, deanne@sonomaecologycenter.org, 707-996-0712 Ext. 114; Jim Quinn, jfquinn@ucdavis.edu; or Grant Ballard gballard@prbo.org.