# The Value of Protecting the Sonoma Coast

THE HEALTHY LANDS AND HEALTHY ECONOMIES INITIATIVE

CASE STUDY



#### CONTEXT

Since 1990, Ag + Open Space and its partners have protected over 18,000 acres of coastal landscapes in Sonoma County. These lands are rich natural capital resources that provide many services, including natural beauty, carbon sequestration, recreation, soil retention, and wildlife habitat. Had these lands been developed rather than conserved, substantial natural capital would have been lost. California and Sonoma County have a legacy of strong coastal protection, but many areas around the world do not, and it is important to recognize the impact of policies on development outcomes.

Counting only natural beauty and carbon sequestration services, the consulting firm Abt Associates estimated that conservation of Sonoma County's coastal landscapes has preserved natural capital worth up to \$3.5 million annually.

The coastal parcels conserved by Ag + Open Space provide a number of other natural capital services besides natural beauty and carbon sequestration. These services are outlined in the table at right.

#### FINDINGS

#### Value: NATURAL BEAUTY

The undeveloped Sonoma Coast provides aesthetic value that residents and thousands of visitors enjoy each year, and land conservation by Ag + Open Space has played a major role in preserving these views. In fact, Ag + Open Space protected land accounts for 25% of the land visible from the coastal region's major scenic corridors. Based on an estimate of the number of sightseeing trips to the coast each year, and figures from previous studies of the value of pristine views to tourists, the researchers estimated this service to have an annual value of up to \$2 million.

#### Value: CARBON SEQUESTRATION

Clearing land for residential development releases carbon stored in soils and woody vegetation and prevents future sequestration when lands are covered by pavement or buildings. The result is a net addition of climate-warming gases to the atmosphere. The researchers estimated how much carbon would have been released under three different scenarios of residential development on the parcels conserved by Ag + Open Space, and then estimated the value of avoiding those carbon emissions. The result: more than \$44 million through 2050.



## QUANTIFIED ECOSYSTEM SERVICES

Natural Beauty	Up to \$2 million per year.
Carbon Sequestration	Up to \$1.5 million per year.

# ECOSYSTEM SERVICES NOT QUANTIFIED BY THIS STUDY

Recreation	12 Ag + Open Space properties in the coastal region are actively used recreation destinations.
Moderation of Extreme Events	The protected properties include two estuary areas which help to protect shorelines from storm surges and rising sea levels.
Habitat and Nursery	Properties with less development and that are adjacent to other protected parcels preserve large intact habitat areas, which is known to have a positive impact on biodiversity.
Soil Retention	Undeveloped land helps to hold soil in place, reducing erosion, and helping to preserve habitat in streams for salmon and other fish.
Other Services	Other services of potential value include water quality, water supply, food production, and air quality.



Sonoma County Ag + Open Space permanently protects the diverse agricultural, natural resource and scenic open space lands of Sonoma County for future generations. We are responsible for the perpetual protection of over 116,000 acres of land throughout our region. These agricultural and open space lands are protected through a quarter-cent sales tax approved by voters in 1990 and reauthorized in 2006. For more information, please visit www.sonomaopenspace.org.



### THE HEALTHY LANDS AND HEALTHY ECONOMIES INITIATIVE

The Healthy Lands and Healthy Economies Initiative documents the economic value and community benefits of natural and working landscapes. This research helps to show that Sonoma County's investments in land conservation pay real dividends, now and into the future. This Initiative would not have been possible without contributions from the Gordon and Betty Moore Foundation, the S. D. Bechtel, Jr. Foundation, and the California State Coastal Conservancy.







To learn more, visit www.sonomaopenspace.org/HLHE

Inside left image by **Robert Janover** (www.robertjanover.com). All other images provided by **Ag + Open Space**.

**FULL REPORT:** Abt Associates. 2015. The Economic Value of Natural Capital on the Sonoma Coast. Report prepared for Sonoma County Ag + Open Space.

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**RESEARCH BY:** Abt Associates — www.abtassociates.com