



Tomales Bay / Bodega Bay Watershed Boundary Study

Point Reyes National Seashore
Marin and Sonoma Counties, California

July 1995

View of the rugged Marin County coastline (cover)

 *Printed on recycled paper.*

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Rugged Marin coast at the mouth of Tomales Bay. On the right is Tomales Point in Point Reyes National Seashore

Resources in the Proposed Boundary Addition and Adjacent Areas

- ❖ Twenty-three special-status plants, including two federally-listed, six state-listed, and 14 federally-proposed species are found in the study area.
- ❖ Over 60 special-status animal species, including birds, mammals, reptiles, amphibians, invertebrates, and fish are known to occur or have the potential to occur in the study area.
- ❖ Forty-five species of fish, including many commercial species, inhabit Esteros Americano and de San Antonio.
- ❖ Over 70 species of marsh and water birds, plus more than 60 species of terrestrial birds, have been observed in Esteros Americano and de San Antonio.
- ❖ Nearly 50,000 shorebirds and waterfowl winter in the rich habitat within the Tomales Bay/Bodega Bay watersheds. Little other suitable habitat is available to them between San Francisco Bay and Humboldt Bay.
- ❖ Over 30 Native American (Coast Miwok) archeological sites exist in the 3,000 acres which have thus far been surveyed in a total study area of 38,000 acres.
- ❖ Historically significant dairy and beef operations have been in continuous operation in the area since the mid-1800s.
- ❖ In 1993, growers harvested 18% of California's commercial oyster crop in Tomales Bay.
- ❖ In 1994, fishermen landed 98% of the California Pacific herring run in the Department of Fish and Game's San Francisco district, which includes Tomales Bay.

The Estero Americano forms the Marin and Sonoma county borders



Summary

This proposal is a model for preservation of open space, resource protection, cultural landscape protection, recreational use, and sustainability of an economic way-of-life.

The potential for urbanization of west Marin County prompted county government and locally concerned citizens to ask the National Park Service (NPS) and Congresswoman Lynn Woolsey, Sixth District, to study an expansion of Point Reyes National Seashore. The proposed expansion area is located in Marin and Sonoma counties, California. It includes a large component of the Tomales Bay/Bodega Bay watershed and is adjacent to Point Reyes National Seashore (PRNS) and Golden Gate National Recreation Area (GGNRA).

Expansion legislation was introduced during the 103rd Congress in the U.S. House of Representatives (H.R. 3079) and the U.S. Senate (S. 1455). Both bills propose to

- ❖ preserve productive long-term agriculture and mariculture in the region
- ❖ furnish watershed and environmental protection of Tomales Bay and Bodega Bay
- ❖ maintain the relatively undeveloped nature of the land surrounding Tomales Bay and Bodega Bay by providing guarantees for non-development
- ❖ protect the pastoral nature of the land adjacent to Point Reyes National Seashore and Golden Gate National Recreation Area

The National Park Service has authorization from Congress [16 USC 1a-7(b)(4)] to review modifications of external boundaries to adjacent lands which might be related to park purposes. Thus, at a House subcommittee hearing on the proposed expansion legislation on July 14, 1994, NPS Deputy Director John J. Reynolds announced a comprehensive boundary study of 38,000 acres along the eastern side of Tomales and Bodega bays.

Using NPS criteria, the overall evaluation found the proposed boundary addition can be recommended for addition to Point Reyes National Seashore and protection of Golden Gate National Recreation Area.

Recognizing the federal government's financial limitations, the study determined that purchase of conservation easements for most of the proposed boundary addition lands is the protection method which will best preserve an economic lifestyle and conserve an exceptional diversity of ecological resources. The purchase price of conservation easements is estimated to be 40% of the full-fee purchase price. Both the NPS and a public trust organization in a public/private partnership would acquire easements and conduct monitoring activities.

Operating and management costs for the proposed boundary addition are considered minimal with staffing required for law enforcement, trail maintenance, and easement monitoring.

The proposed boundary addition would have a positive impact on natural, scenic, and cultural resource protection. Recreational opportunities would also be impacted positively. The regional economy would be both positively and negatively impacted.

This proposal is a model for sustainability of an economic way-of-life, open space preservation, natural resource and cultural landscape protection, and recreational use. It has broad-based support from a diverse group of constituents, including ranchers, residents, local merchants, conservationists, and willing land owners who would be most directly affected.

Scenic Highway 1 north of Marshall



Summary

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Purpose and Need

Background

The potential for urbanization of west Marin County prompted county government and locally concerned citizens to ask the National Park Service (NPS) and Congresswoman Lynn Woolsey, Sixth District, to study an expansion of Point Reyes National Seashore. The proposed boundary addition area is located in Marin and Sonoma counties. It includes a large component of the Tomales/Bodega Bay watersheds and is adjacent to Point Reyes National Seashore (PRNS), Golden Gate National Recreation Area (GGNRA), and the Gulf of the Farallones National Marine Sanctuary (GFNMS).

Legislation was introduced during the 103rd Congress in the U.S. House of Representatives (H.R. 3079) (Appendix B) and the U.S. Senate (S. 1455) to expand the boundaries of PRNS. Both bills propose to

- ❖ preserve productive long-term agriculture and mariculture in the region
- ❖ furnish watershed and environmental protection of Tomales Bay and Bodega Bay
- ❖ maintain the relatively undeveloped nature of the land surrounding Tomales Bay and Bodega Bay by providing guarantees for nondevelopment
- ❖ protect the pastoral nature of the land adjacent to Point Reyes National Seashore and Golden Gate National Recreation Area

The General Management Plan (NPS 1980) for Point Reyes National Seashore did not discuss or analyze boundary adjustments. Since then, however, NPS management has recognized the need for a comprehensive inventory. In 1994, Deputy Director John J. Reynolds authorized a study of 38,000 acres along the eastern side of Tomales and Bodega bays.

Marin Agricultural Land Trust (MALT) is a nonprofit, member-supported organization created by a coalition of local ranchers to preserve Marin County agricultural land. Within the study area, MALT has already acquired conservation easements on 10,800 acres, about 30% of the total acreage.

A conservation easement is a legal agreement made by property owners to restrict the type and amount of development that can take place on their property. When conservation easements are used in conjunction with preserving agriculture, they are referred to as agricultural conservation easements (See Appendix D for sample conservation easement). MALT's previous acquisition of some development rights in the proposed boundary adjustment area provides a partnership opportunity for the National Park Service.

Although Tomales and Bodega bays, as well as Esteros Americano and de San Antonio are protected by the Gulf of the Farallones National Marine Sanctuary, the sanctuary only has jurisdiction over the water column and not the surrounding lands. Degradation of lands along the east side of Tomales and Bodega bays would have significant impacts on natural resources within the sanctuary.

Looking west towards Tomales Point and the mouth of Tomales Bay



Boundary Study Guidelines

Sections 1216 and 1217 of Public Law 101-628 outline the statutory content of NPS boundary studies. Guidelines for meeting these requirements are outlined in the NPS Criteria For Boundary Adjustments, Supplement to Planning Process Guideline, NPS-2, (NPS 1991).

In addition to evaluating an area's potential value to the existing park unit, discussed here under Issues, the NPS is also required to

- ❖ assess the impact of potential boundary adjustments on local communities and surrounding areas
- ❖ consult with affected agencies of state and local governments, surrounding communities, landowners, and private, national, regional, and local organizations
- ❖ provide a cost estimate for acquiring each tract
- ❖ indicate the priority for each tract's acquisition relative to other lands in the adjacent established unit and the NPS



Purpose and Need

Purpose of Point Reyes National Seashore

To save and preserve, for the purpose of public recreation, benefit, and inspiration, a portion of the diminishing seashore of the United States that remains undeveloped. – P.L. 87-657 (1962)

(This National Seashore)... shall be administered by the Secretary (of the Interior) without impairment of its natural values, in a manner which provides for such recreational, educational, historic preservation, interpretation, and scientific research opportunities as are consistent with, based upon, and supportive of the maximum protection, restoration, and preservation of the natural environment within the area. – P.L. 94-544 (1976)

On September 13, 1962, President John F. Kennedy signed legislation which authorized the establishment of Point Reyes National Seashore. The seashore boundaries enclose a variety of terrain and vegetation, with a belt of rich marine life along the shores of Tomales Bay and the Pacific Ocean. The area contains unique elements of biological and historical interest in a spectacularly scenic panorama of thunderous ocean breakers, open grasslands, brushy hillsides, and forested ridges. Native land mammals number about 37 species and include the elusive mountain lion and an endemic race of mountain beaver. Marine mammals augment this total by another dozen species.

The Point Reyes peninsula is an outstanding scenic, scientific, and historic area. That such an area remains in close proximity to a major metropolitan area is a marvel.

Over 430 recorded species of avifauna (45% of the bird species in North America) make the peninsula one of the best birdwatching and ornithological research areas in the United States. Though Point Reyes comprises less than one-tenth of one percent of California's land area, over 18% of California flora is represented on the peninsula. Some 850 plant species, a few of which are found nowhere else, occur in this relatively small area.

The biological diversity stems from a favorable location in the middle of the state and the natural occurrence of many distinct habitats. Some of the most windswept beaches and headlands on the Pacific Coast are located here, as are gentle salt marshes and estuaries. Coastal grasslands, soft and hard chaparral, plus a variety of broad-leaved and coniferous forests harbor many plant and animal species. Perhaps the most unique aspect of this diversity is that a very unusual ecosystem can be located just a few minutes away from a completely different environment. Yet each ecosystem is very characteristic of its type.

Historical sites abound on the peninsula. The Coast Miwok Indians once inhabited the Point Reyes peninsula, and human density before European contact was probably greater at that time than now. At least 113 known village sites exist, primarily on the lowlands. Point Reyes may also contain the site of the first known English contact in what is now the United States. According to many experts, Sir Francis Drake landed here in June, 1579, to careen his ship for routine maintenance before continuing his circumnavigation of the globe. History abounds with subsequent accounts of other adventurers and shipwreck sites of early traders and wanderers. In the early 1800s, the peninsula became a favorite landing place for the Spanish and several rancheros were established. Spanish expeditions were followed by a wave of American ranching operations which continue to this day in the seashore pastoral zone. In response to the many shipwrecks on the treacherous coastal waters, key lighthouses and lifesaving stations were established by the United States Government in the late 1800s and early 1900s.

In November, 1988, the UNESCO "Man and the Biosphere Program" approved the inclusion of Point Reyes National Seashore in the Central California Coast Biosphere Reserve (CCCCBR), an international example of protection and wise resource use. PRNS is the first reserve in the International Biosphere Reserve Program to include terrestrial, estuarine, and marine zones.

Spanning over 100 square miles, the Point Reyes peninsula is an outstanding scenic, scientific, and historic area. That such an area remains in close proximity to a major metropolitan area with a population exceeding 6.5 million people is a marvel. Resource management efforts must perpetuate this portion of the California coastline in a state of minimal development and yet provide for economic activity, public recreation, and inspiration.

Purpose of Golden Gate National Recreation Area

Because Golden Gate National Recreation Area borders the proposed boundary addition, the purposes for which the Recreation Area were established provide supplementary background information.

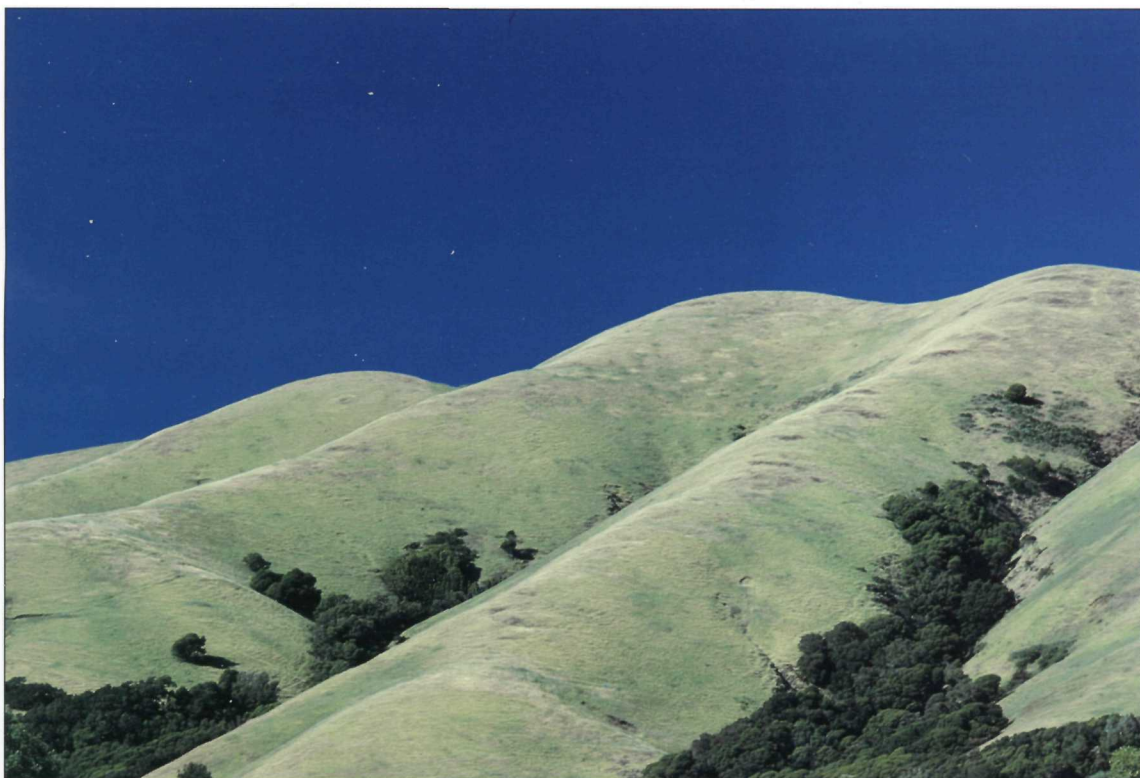
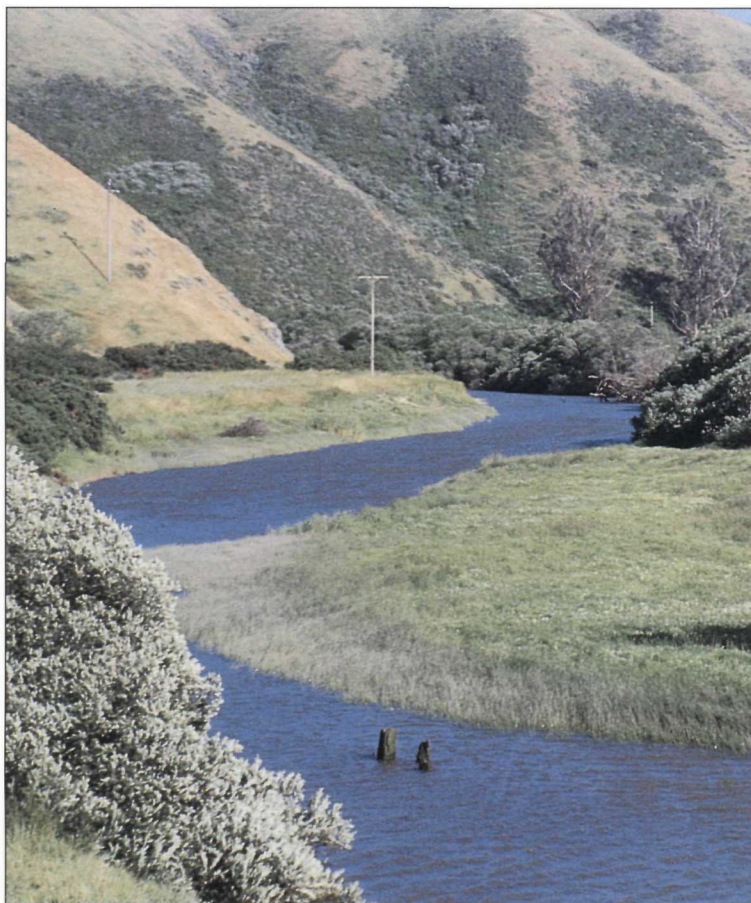
In order to preserve for public use and enjoyment certain areas of Marin and San Francisco counties (San Mateo County added by – P.L. 96-607) possessing outstanding natural, historic, scenic, and recreational values, and in order to provide for the maintenance of needed recreational open space necessary to urban environment and planning, the Golden Gate National Recreation Area (hereinafter referred to as the "recreation area") is hereby established. In the management of the recreation area, the Secretary of the Interior (hereinafter referred to as the "Secretary") shall utilize the resources in a manner which will provide for recreation and educational opportunities consistent with sound principles of land use planning and management. In carrying out the provisions of the Act, the Secretary shall preserve the recreation area, as far as possible, in its natural setting, and protect it from development and uses which would destroy the scenic beauty and natural character of the area. – P.L. 92-589 (1972)

Land Management Issues

Issues involving the loss or degradation of park-related values in the area surrounding Tomales and Bodega bays and the Point Reyes peninsula are many, and often are interrelated and synergistic in their effects including

- ❖ loss of an economic way-of-life that has sustained this region since the early 1800s through agriculture, fishing, and mariculture
- ❖ loss of biodiversity
- ❖ gradual loss or compromise of viewshed integrity and particular attributes of scenic vistas
- ❖ increased incompatible development adjacent to PRNS, GGNRA, and GFNMS
- ❖ gradual loss of air and water quality due to increased air pollution and effluent disposal into Tomales and Bodega bays and surrounding watersheds

Additionally, activities such as suburban encroachment (houses, trailers, roads, utilities, introduction of alien plants, and viewshed intrusions), fragmentation of wildlife habitat and movement corridors, off-road vehicle use, and destruction of archeological and historic resources all impact resource values along the boundaries of PRNS and GGNRA.



Ranch found within boundary addition area (top)

Walker Creek delta (middle left)

The Olema Valley with Point Reyes Station (middle right)

One of the highest points in Marin County, Black Mountain stands at the southern portion of the proposed boundary addition (left)



The boundary adjustment study addresses two main issues.

The extent to which the tracts meet the criteria identified in the National Park Service's Criteria for Boundary Adjustments (NPS 1991):

Does the proposed boundary addition area offer significant resources or opportunities for public enjoyment related to the purposes of the park?

Does the proposed boundary addition area have the potential to address operational and management issues such as access and boundary identification?

Would the proposed boundary addition area contribute to the protection of park resources critical to fulfilling the park's purpose?

Would the added lands be feasible to administer considering size, configuration, ownership, costs, and other factors?

Are there other alternatives for management and resource protection?

The extent to which the proposed boundary addition area meets priorities for land acquisition and addresses environmental consequences within Point Reyes National Seashore.





View of the historic village of Tomales, just north of the mouth of Tomales Bay (above)

Rugged, undeveloped coastline along the border of the Marin and Sonoma counties (above left)

Dairy cattle grazing along Tomales Bay (left)

Affected Environment

Size and Location of Study Area

The proposed boundary addition area is located on the east side of Tomales and Bodega bays in Marin and Sonoma counties, approximately 45 miles north of San Francisco. The area has been used as pasture for dairy and beef ranching for over 100 years. California State Highway 1 parallels the land from north to south for approximately 25 miles.

...the esteros have steeply sloping hillsides, and the abrupt transition from uplands to open water results in a fjord-like quality not seen in other California wetlands.

Located on the central California coast across the Golden Gate Bridge from San Francisco, Marin County has a population of about 250,000. Much of the population growth of this small county occurred immediately after the 1906 earthquake, with a second period of growth after the opening of the Golden Gate Bridge in 1937. The population of the county has been relatively stable since 1970. Sonoma County, directly north of Marin and also facing the coast, has a population of 427,500, most of which is the result of post-war growth of the 1950s and the San Francisco Bay area suburban boom of the 1970s through the present.

Tomales Bay is a long, shallow, 6,780-acre bay which lies in west Marin County. Much of the watershed lies in federal parkland and the entire bay below the tide line is part of the Gulf of the Farallones National Marine Sanctuary. The major drainages in the watershed are Lagunitas, Walker, and Salmon creeks. Approximately one-fifth of the Tomales Bay watershed lies within the proposed boundary addition.

The Tomales Bay watershed comprises almost half the area of Marin County. About 80% of the watershed is in agricultural use, and nearly 30,000 head of the cattle and 20,000 sheep graze the rich hillsides. Tomales, Inverness, Point Reyes Station, Lagunitas, and other towns (with a total population of approximately 11,000) cover less than 1% of the area. The remainder of the watershed is federal or state parkland.

Bodega Bay is a broad basin without tidal flats, with depths from 30 to 70 feet. It is partially isolated from the open ocean by an underwater ridge running from Tomales Point to Bodega Head. Much of the watershed is drained by Cheney Gulch, which empties into Bodega Harbor and is the northern boundary of the study area, with the Esteros Americano and de San Antonio.

The Esteros Americano and de San Antonio are similar coastal estuaries located on Bodega Bay. Their adjacent watersheds drain about 6,800 acres of rolling hills in Marin and Sonoma counties. Originally formed from drowned river valleys, the esteros have steeply sloping hillsides, and the abrupt transition from uplands to open water results in a fjord-like quality not seen in other California wetlands.

Both coastal estuaries are also included in the boundary of the Gulf of the Farallones National Marine Sanctuary and the Central California Coastal Biosphere Reserve.

The total acreage within the proposed boundary addition area includes 34,002.54 acres in Marin County and 3,967.06 acres in Sonoma County.



Physical Characteristics

Tomales Bay is the largest unspoiled coastal embayment on the coast of California, and supports important marine fisheries, commercial oyster beds, and recreational boating. Several species of ocean fish, anadromous fish such as salmon and steelhead, marine mammals, crustaceans, and migratory waterfowl inhabit the waters. Estuarine wetland habitat rings the eastern and southern edges. Environmental degradation due to sedimentation is a major concern of resource management agencies and many citizens who live in the area. Another concern is the long-term viability of agriculture in the surrounding watershed, a land use now threatened with loss of productivity due to soil erosion (California Coastal Conservancy 1984).

Bodega Bay is separated from commercial impacts by a sand-spit which encloses the lagoon known as Bodega Harbor. Almost all commercial and recreational access to the bay originates from the harbor, and commercial development is centered there. The bay supports major commercial and sport fishing and recreational boating (Connors 1990).

The steeply sloping hillsides of Esteros Americano and de San Antonio create an abrupt transition between uplands and open water, making them unique among coastal wetlands. During the late spring and early summer months, sand bars form at the mouths of the esteros. At that time, they lose their connection with the sea and become more saline than the ocean (Prunuske 1994).

Along the entire coast of California, marshes, lagoons, and estuaries are threatened by the tremendous increase in sedimentation brought about by nearly 200 years of logging, farming, and urbanization of coastal watersheds. This increased erosion has not only affected the environment by filling lagoons and smothering wetlands, but indirectly is destroying the ecosystems of streams, reducing agricultural productivity, and increasing the pressure for urbanization of these valuable resources.

The coastal ranges of California are susceptible to some of the most severe erosion rates experienced anywhere on the North American continent. Much of this erosion occurs in a very short period of time during extreme rainstorms which initiate mudflows and cause landslides to dump sediment into the creeks (California Coastal Conservancy 1984). Future development, particularly grading for roads and house pads, could greatly increase the rate of erosion. Barren road surfaces and rapid enlargement of gullies on the east side of the Tomales Bay could engender sediment loss of 7,000 - 50,000 tons per square mile per year, up to several hundred times the present rate (Wahrhaftig 1972).

Physical Characteristics

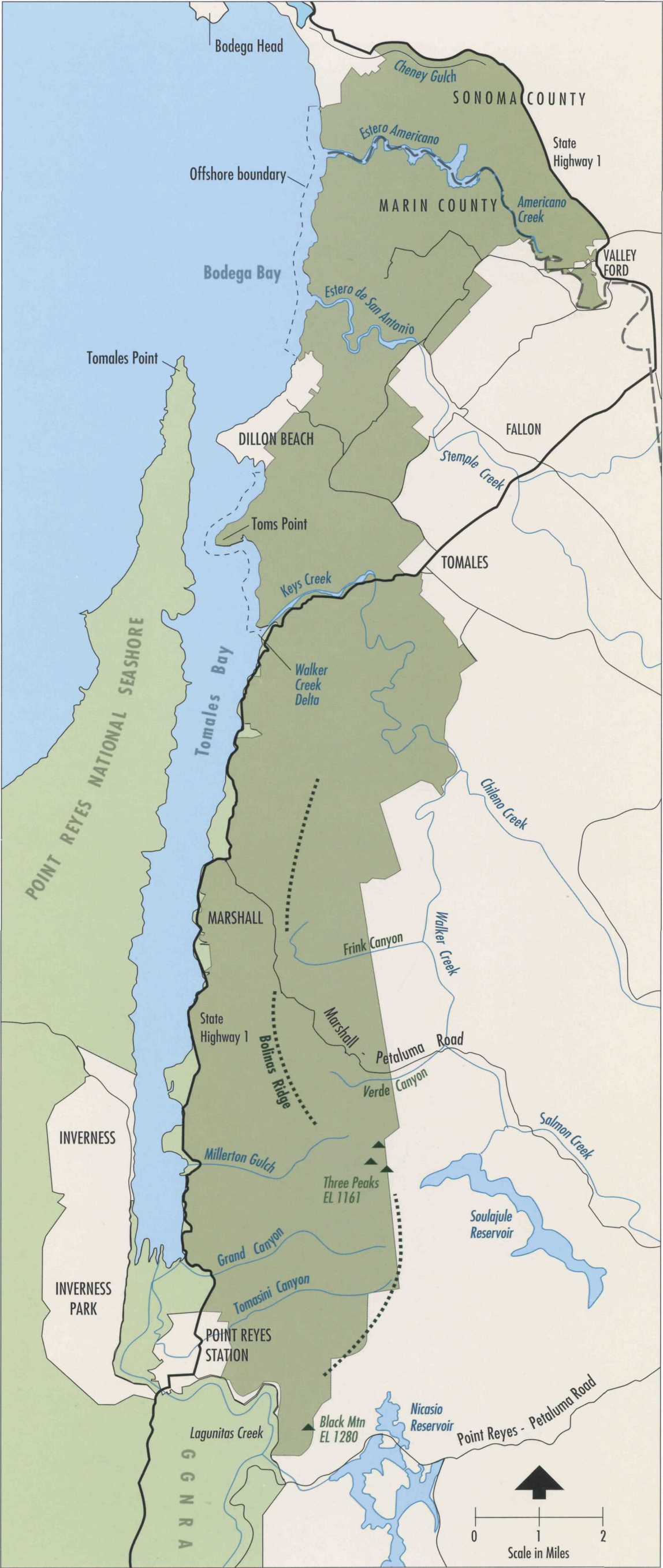
LEGEND

Existing national and state parklands

Proposed boundary addition area

Private

County line



Affected Environment

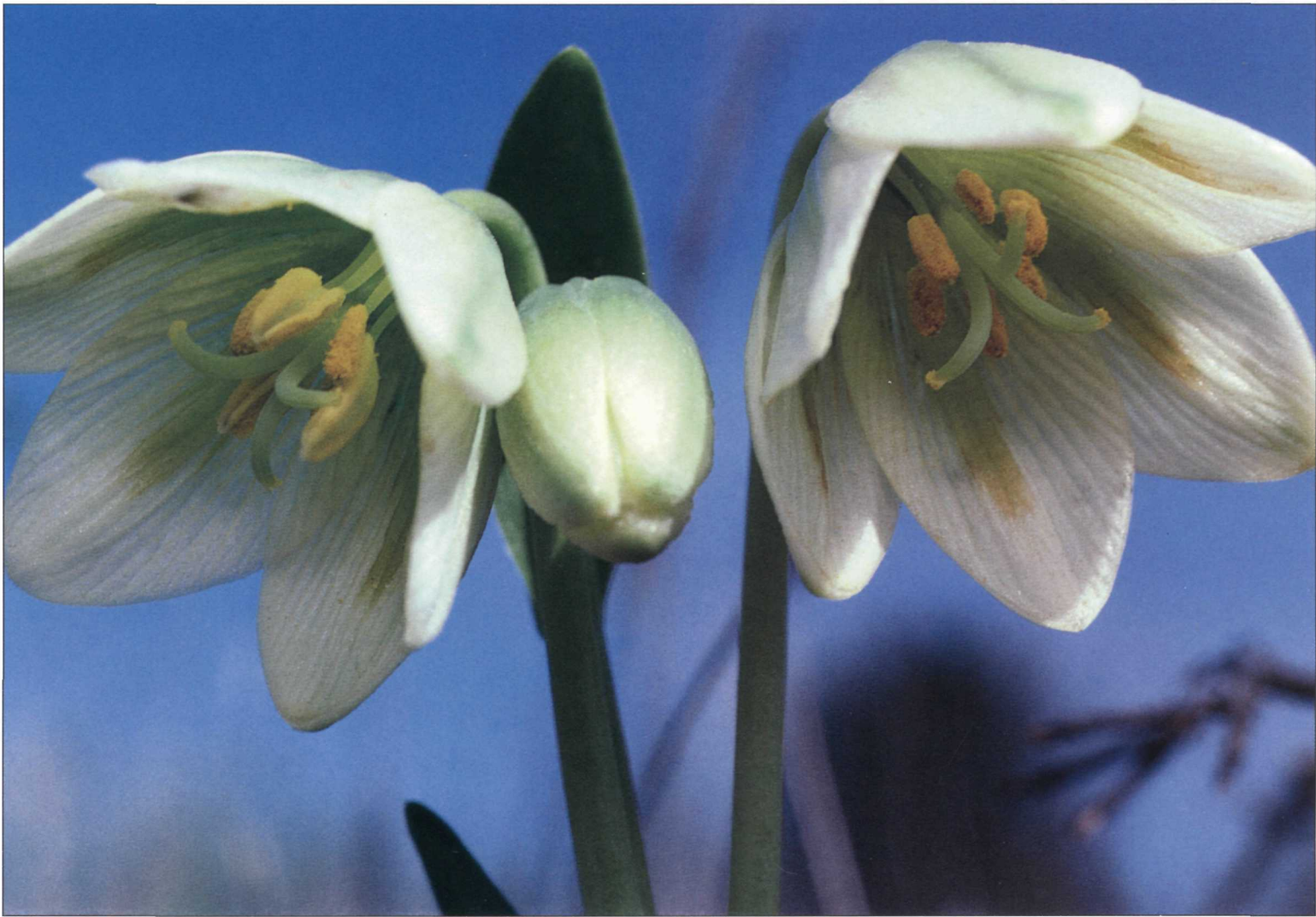
Vegetation

Several well-defined plant habitats exist in the proposed boundary addition area. These include coastal strand, freshwater marsh, coastal brackish marsh, salt marsh, northern vernal pool, grassland/coastal terrace prairie, northern coastal scrub, and riparian corridors. Rolling pastures and grasslands are the dominant physical vegetation features, with intermittent wooded areas along riparian corridors.

While it is true that annuals introduced from the Mediterranean region now dominate grasslands in the drier, interior parts of California, native perennials are still a primary component of many coastal grasslands, and they occur in significant stands on many properties within the proposed boundary addition. Although livestock influenced the alteration of California's native grasslands, they are now essential to maintaining species diversity in this altered system that includes many aggressive, highly competitive non-natives (Bush 1994).

The proposed boundary addition contains 23 special-status plant species (Appendix C). Included are two federally-listed species, six state-listed species, and 14 federal-candidate species. Fifty-two colonies of the federally-listed candidate, Point Reyes bird's beak, *Cordylanthus maritimus* ssp. *palustris*, are found along Tomales Bay (Marcus 1994).

Significant populations of the rare salt marsh plant, Tiburon Indian paintbrush, *Castilleja affinis* ssp. *neglecta*, occur along the shores of Tomales Bay and require stable supplies of fresh water for germination (Kelly 1994).



Fragrant fritillary (above)

Oakland star tulip (right)

State- and federally-listed plant species

- Blasdale's bent grass, *Agrostis blasdalei*
- Tiburon Indian paintbrush, *Castilleja affinis* ssp. *neglecta*
- Baker's larkspur, *Delphinium bakeri*
- Yellow larkspur, *Delphinium luteum*
- Marin western flax, *Hesperolinon congestum*
- North coast semaphore grass, *Pleuropogon hooverianus*



Birds

The proposed boundary addition is located on the Pacific flyway, a main path of travel for migrating birds. Forty-five percent of the bird species found in North America have been recorded in the Point Reyes area, one of the top three locations in the country for the annual Audubon Society Christmas Bird Count.

In winter, between 17,000 and 20,000 shorebirds inhabit Tomales and Bodega bays, approximately 33% of the shorebirds that winter along the coast north of San Francisco Bay to Bodega Bay (Kelly 1993). Little other habitat is available northward for 400 miles to Humboldt Bay. The birds concentrate on the deltas of Walker and Lagunitas creeks. Critical habitat provided by the Walker Creek delta and Bivavle areas of Tomales Bay is directly influenced by runoff from Walker, Lagunitas, and Grand Canyon creeks.

Tomales Bay differs from other, generally shallower coastal estuaries and lagoons in having a much larger area of open water at low tide, thus providing more habitat for waterbirds. Between 22,000 and 25,000 loons, grebes, ducks, cormorants, geese, and other open-water birds winter here. Bufflehead on the bay represent about 25% of California's coastal population. Rare ducks include black scoters, red-necked grebes, oldsquaws, and harlequins. One possible reason Tomales Bay supports such large waterbird populations is its importance as a major spawning area for millions of Pacific herring. Estuarine conditions suitable for spawning and protection of eel grass require an adequate supply of fresh water and control of sediments transported into the bay from the watershed.

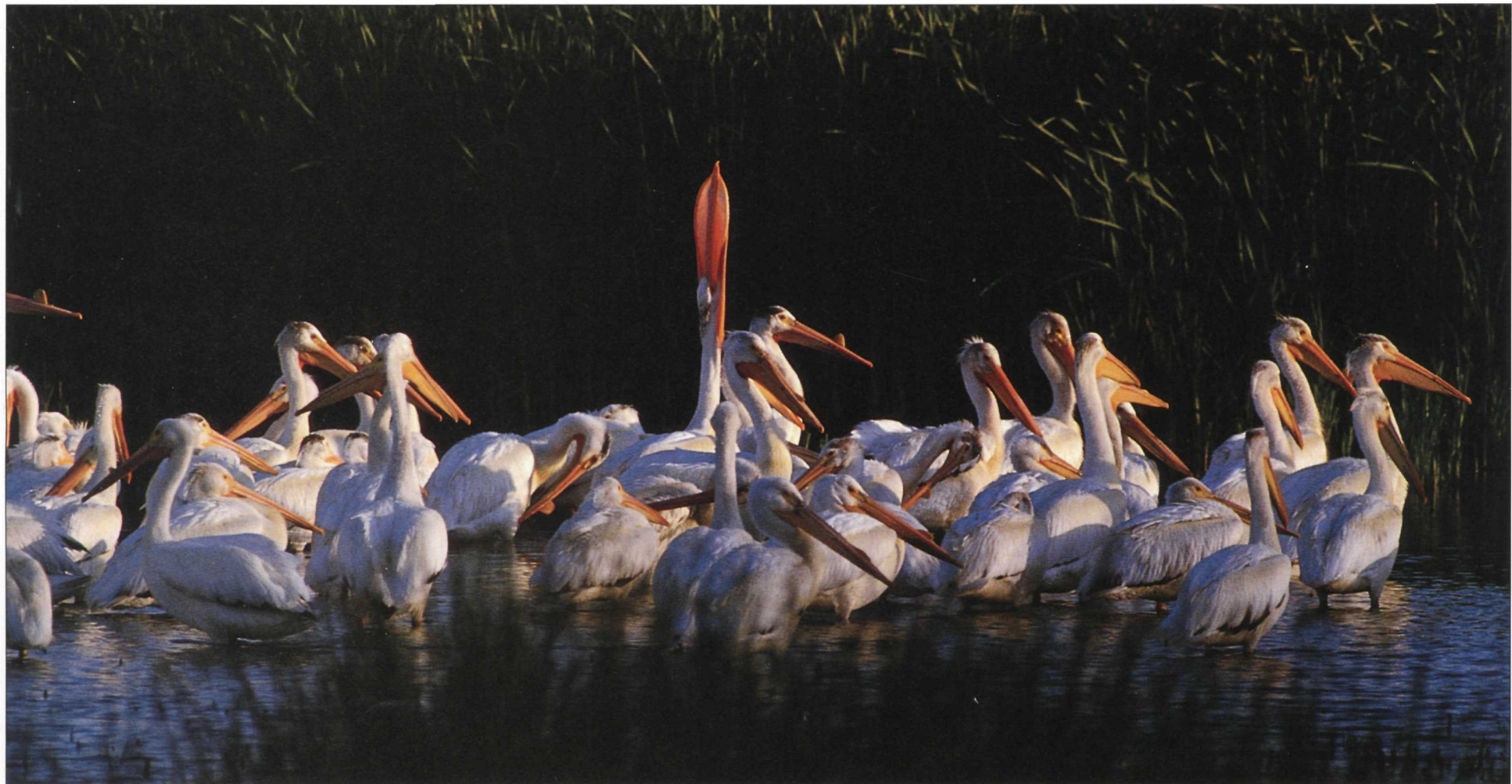
Over 70 species of water and marsh birds, in addition to over 60 species of terrestrial birds, have been observed in Esteros Americano and de San Antonio. The relatively substantial bird population is due in part to the abundant marine invertebrates inhabiting the mudflats, eel grass beds, and channel bottom or *benthos* of the two esteros.

One possible reason Tomales Bay supports such large waterbird populations is its importance as a major spawning area for millions of Pacific herring.

Black-crowned night heron (above)

Northern pintail (left)

White pelicans (below)



Fish

The value of estuaries as nursery grounds for many marine fish species has been well-documented, and juvenile forms of those species collected are likely to occur in the estuaries (Nielson 1990).

Forty-five species of fish representing 22 families including the tidewater goby, *Eucyclogobius newberryi*, a federally-listed endangered species, are found in Estero de San Antonio. Coho salmon, which spawn in the watershed, need suitable spawning beds, adequate supplies of fresh water, and healthy estuarine zones to support out-migrating smolts.

San Francisco, Tomales, and Bodega bays have supported healthy commercial fisheries since at least 1872, according to catch records. The richness of these cold waters is attested to by the large number of fishing ports in the area.

Through the years, herring has been the leading catch of the Tomales Bay fishery, but other species landed include salmon, crab, sole, shark, and ling cod, with lesser numbers of surf perch and smelt.

Tomales and Bodega bays have supported healthy commercial fisheries since at least 1872.

Pacific herring, an ocean fish closely related to the sardine, groups into large schools in the early winter and migrates to deposit its eggs in coastal bays and estuaries. The eggs attach to subtidal vegetation, especially the abundant eelgrass which accounts for 75% of the vegetation in Tomales Bay. Historically, Tomales Bay is one of California's major herring spawning grounds. From the 1930s to the 1970s, herring landings in Tomales Bay varied from 200 to 1,500 tons per season (CDFG 1981). While catches decreased in the intervening years, in 1994, 98% of the California Pacific herring run, worth \$2,016,940, was landed in the San Francisco District, Department of Fish and Game, which includes Tomales Bay (CDFG 1994d).

Tomales Bay once supported a large coho salmon fishery. Now it is rare to land even one due to overfishing, siltation, and damming of rivers. However, sardines, which were once common in the bay, are making a comeback. (Point Reyes Light 1994).

Invertebrates

Mariculture came to Tomales Bay in 1875, as oyster growers in San Francisco Bay sought cleaner waters to escape the effects of pollution there. Chinese shrimp camps were abandoned by 1897, but by 1920 about a half dozen oyster farms were in operation. Today oysters are grown commercially from planted spats. In 1993, Tomales Bay comprised 18% of the State's commercial harvest of marine aquaculture with Drakes Bay (within the Point Reyes National Seashore boundary) accounting for an additional 39%, making this region accountable for 57% of California's total harvest, worth over \$2,500,000 (CDFG 1994d).

Tomales Bay hosts over 30 species of epibenthic invertebrates. Economically important species include shrimp, *Crangon franciscorum* and *C. nigricauda*, and Dungeness crab, *Cancer magister*. There are over 70 species of benthic invertebrates, ranging from 1,000 to 122,000 individuals per square meter of bottom.

The mouth areas of Esteros de San Antonio and Americano appear to be nursery grounds for juvenile Dungeness crab (CDFG 1977).

A natural dune pond rarely seen on the Pacific coast is found near Tom's Point on Tomales Bay. The pond provides seasonal marsh/pond habitat and is surrounded by native dune vegetation. The area is also rich in native coastal prairie, the habitat for Myrtle's Silverspot Butterfly, *Speyeria zerene myrtleae*, which is federally-listed as endangered.



Commercial fishing boats anchored in Tomales Bay

- ❖ 17,000 wintering shorebirds found in the Bodega Bay watershed
- ❖ 45 species of fish, including the tidewater goby, a federally-listed endangered species, inhabit Esteros Americano and de San Antonio
- ❖ 23 special-status plant species, including 52 colonies of the federally-listed candidate, Point Reyes bird's beak
- ❖ 98% of California's Pacific herring catch landed in CDFG's San Francisco district, which includes Tomales Bay
- ❖ sand bars just offshore of Toms Point provide haul-out and pupping sites for over 400 harbor seals
- ❖ 20,000 wintering shorebirds found along Tomales Bay
- ❖ 25,000 waterfowl rely on this area for winter feeding grounds
- ❖ 18% of California's commercial oyster crop harvested in Tomales Bay in 1993
- ❖ over 30 Native American archeological sites located thus far on 3,000 acres surveyed (only 8% of the proposed boundary addition)
- ❖ San Andreas fault zone runs beneath the entire length of Tomales Bay
- ❖ historically and regionally significant dairy and beef operations found throughout the proposed boundary addition

Resource Significance

LEGEND

Existing national and state parklands

Proposed boundary addition area

Private

County line



Affected Environment

Cultural Features

All of the proposed boundary addition area lies in the former territory of the Coast Miwok, who inhabited the lands comprising today's Marin and Sonoma counties until the establishment of the Spanish missions at San Francisco, San Rafael, and Sonoma. The Coast Miwok, who utilized the abundant marine resources of the coastal area, were composed of some 15 independent tribes of up to 200 people each. Numerous village sites have been identified, most of which were located in drainages near a saltwater bay or estuary. Spanish explorer Lieutenant Don Felipe de Goycochea noted in 1793 "a wonderment of various settlements along the [Tomales] Bay Shore" (Thalman 1993). Some of these sites are now protected within the boundaries of PRNS and GGNRA.

Russian hunters occupied the northern part of the study area after 1793. During the Mexican period, 1821-1846, lands were divided into grants of about two leagues each. The proposed boundary addition area lies within the historic ranchos of Nicasio, Soulajule, Bolsa de Tomales, Blucher, and Bodega. After the American takeover, these lands found new owners and were further divided into the ranch parcels we find today; the boundaries of all parcels have remained little altered for the past 100 years.

Agriculture, dominated by the dairy industry, has been the primary historical land use in the entire study area. Dairies, cattle and sheep ranches, fisheries, feed farms, egg and poultry ranches, and oyster farms contributed to the commerce of the new and growing state. Marin County was the leading producer of dairy products in California from 1860 to 1900, with Sonoma County close behind. The ranches and farms were operated largely by an immigrant population from Switzerland, the Azores, Italy and Scandinavia, which formed the foundation of the 20th century population of Marin and Sonoma counties. Most of these historical agricultural uses continue, resulting in a cultural landscape with remarkable integrity.

Approximately 80 agricultural parcels now exist, and the region has seen farm consolidation on only a small scale, such as a family buying an adjacent ranch. Virtually all of the ranches were originally dairies; many are now used for raising beef cattle. Most of the ranches have retained their 19th-century features, with the addition of concrete milking barns, modern houses (although the older house usually remains as a secondary unit), and metal sheds.

Because most of the land is private, only 8% has been studied for significant cultural features. Within that small percentage of land, a very high density of cultural features exists.

The proposed boundary addition area contains 31 recorded Native American and two cultural resources listed with the California Archeological Inventory (Hagel 1994). These resources tend to be situated in close proximity to the coast on terraces and flats near reliable sources of fresh water. State and federal inventories list three registered historic properties. Eight previous archeological field studies included approximately 3,000 acres, but an adequate survey of complete archeological and historical resources is lacking.

Recreational Resources

West Marin and Sonoma counties have long been favorite recreational destinations, both for residents of the San Francisco Bay area and out-of-state travelers. Among the most popular visitor activities are hiking, bicycling, fishing, clamming, canoeing, kayaking, windsurfing, and boating, including small power boats. Hunting is popular on private lands with permission, and birdwatching is excellent in the entire area.

The most prevalent use of the area is sightseeing, as travelers on California's famous Highway 1 visit the area on day trips and vacations. The back roads of west Marin and Sonoma counties are popular attractions for San Francisco Bay area residents, as well. Bed and breakfast inns have increased in numbers, contributing substantially to the local economy.



Commercial fishing boats on herring run (top)

Sharp-shinned hawk (middle)

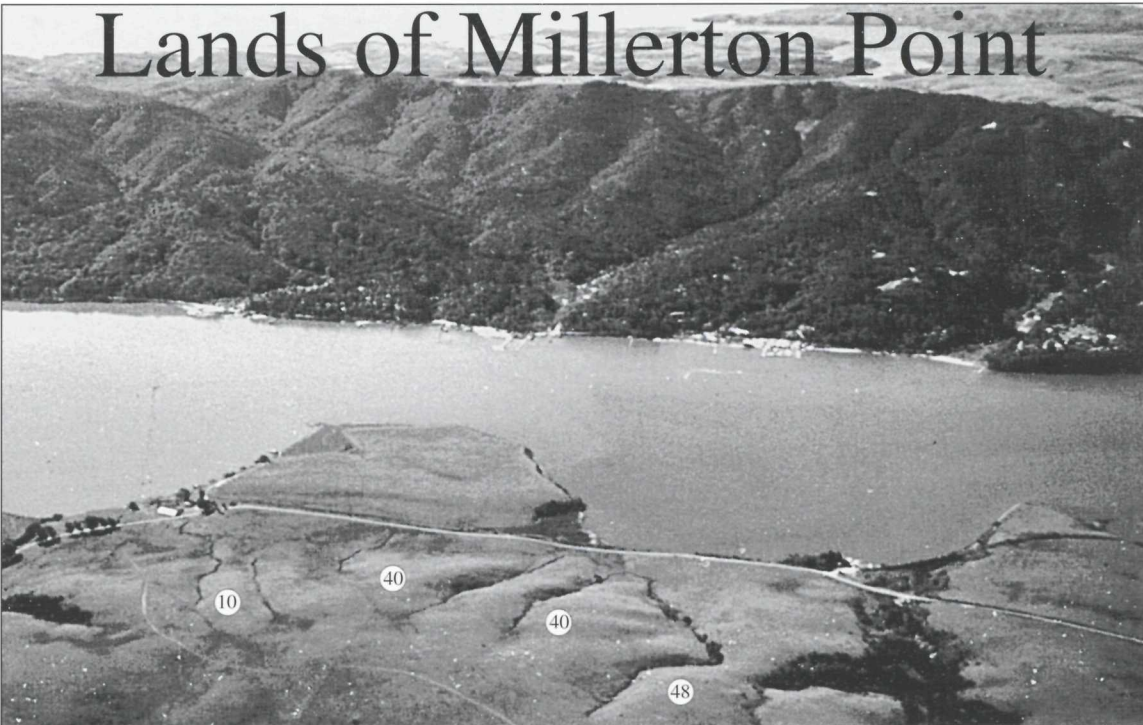
Sail boarding is a popular activity on Tomales Bay (bottom)

History of Development Threats

With their close proximity to the San Francisco Bay Area, west Marin and Sonoma counties have been long-time targets for urban development. In 1964, the West Marin Preliminary Master Plan envisioned a \$20 million tourist industry for the Marin coast from Bolinas to the Sonoma County line and a population of 9,630 by 1990, with an "ultimate holding capacity" of 66,330. At the time of the report, the population in the area was 2,271. Black Mountain was ticketed for "estate development," Olema for cluster housing, the marshes for commercial centers, apartments, and lagoons. A few cows were to remain to add "character" to the area (Mason 1976).

In September, 1971, the Chicken Ranch Beach case (Marks v. Whitney) provided a dramatic illustration of property rights along the coast when the State Supreme Court denied Larry Marks Jr. exploitive rights to his own tidelands. The decision had vast ramifications on California coastal preservation. Three months later the Marin County Supervisors established A-60 zoning, by which 60,000 acres of west Marin were zoned "agricultural" with a limit of one house every 60 acres. Sonoma County followed suit with an agricultural zoning policy even more restrictive than Marin's. In 1972 California voters passed Proposition 20, "keeping coastal waters in plain view of everybody, subdivisions in progress notwithstanding" (Mason 1976).

These actions, and the creation of Point Reyes National Seashore, Golden Gate National Recreation Area, and three state parks, have effectively retained an intact scenic viewshed in the entire western two-thirds of Marin County and much of western Sonoma County. But while the parklands protect the open space in perpetuity, local zoning can be readily changed by a vote of the board of supervisors. Several proposed developments throughout the proposed



West Marin...no place in all of California so charms the eye with all of nature's fullest endowments. These parcels are special. The Lands of Millerton Point, overlooking Tomales Bay, offers parcels of 10, 40, and 48 acres sites. All offers will be considered! **ESTATE PLANNING FORCES IMMEDIATE SALE.**

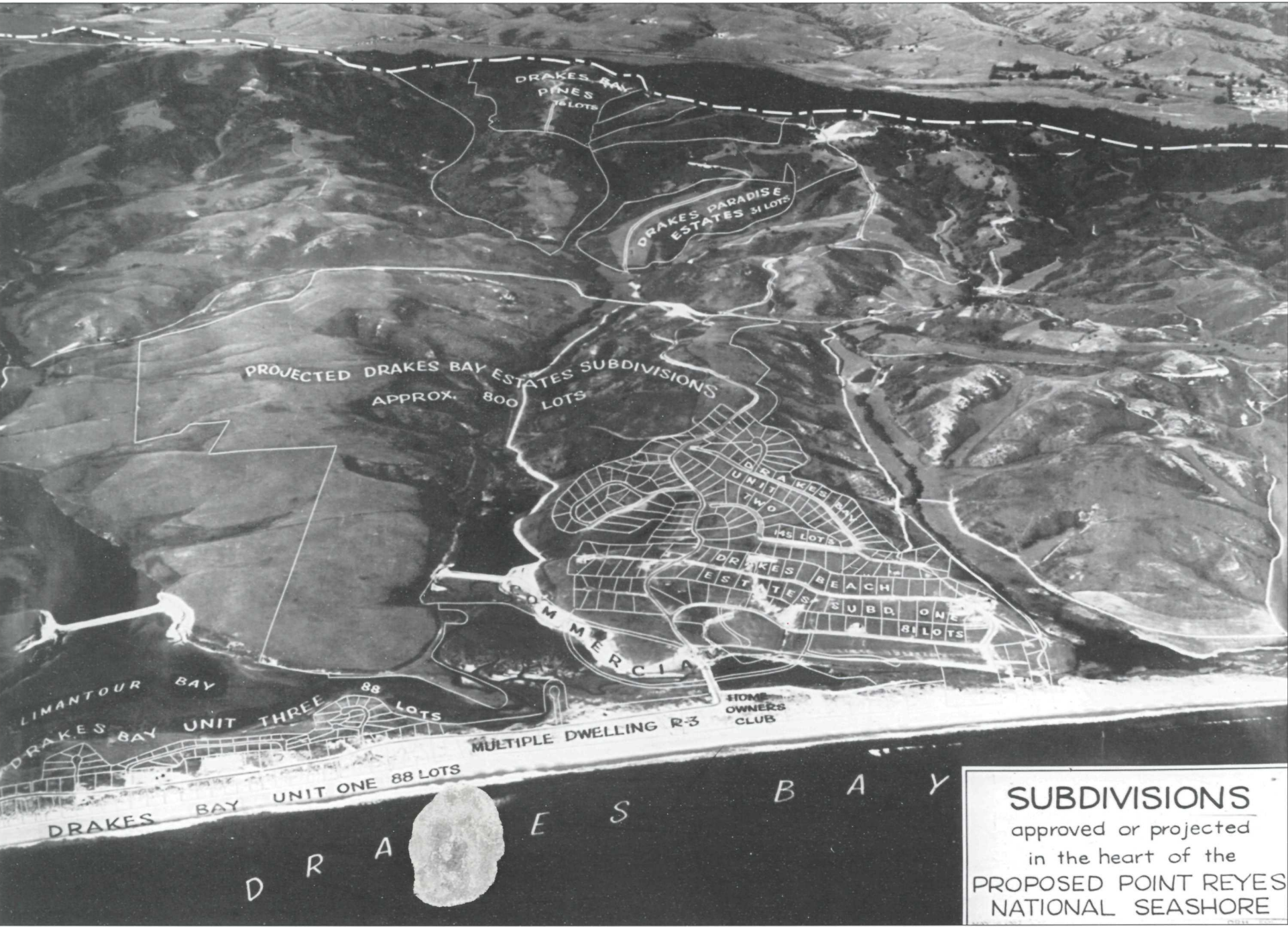
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boundary addition area pose a threat to agriculture and resources. These development activities would affect the watersheds of both Tomales and Bodega bays and negatively impact the commercial fishing and mariculture industries of the region. The proposed developments include the Marin Coast Golf Ranch (1,350 acres), the Borello lands (850 acres), the Marina complex (360 acres), and the Millerton Point Lands (138 acres).

Contemporary advertisement for residential development within the proposed boundary addition areas

Major development plans for Limantour Beach, now within Point Reyes National Seashore, included hundreds of residential units plus a commercial center



SUBDIVISIONS
approved or projected
in the heart of the
**PROPOSED POINT REYES
NATIONAL SEASHORE**

Affected Environment



Fjord-like hills along Estero de San Antonio
Estero Americano (right)



Current Land Use

Marin County has three agricultural zoning districts: A-60 (Agriculture); C-ARP-60 (Agricultural Residential Planned); and C-APZ-60 (Coastal Agricultural Production Zone). Most of the land within these three zoning districts has a 60-acre minimum lot size requirement, although the A and ARP districts include areas with minimum lot size of two acres.

Within Sonoma County the proposed boundary addition area is zoned AE(P)-CC-B6-160/640 which allows agricultural activity and one residential unit per 160 acres.

Under C-APZ, which is the primary land use zoning in the proposed boundary addition area, all development must be clustered in 5% of the gross acreage to retain the maximum amount of land in agricultural production or available for agricultural use. The remaining acreage must be left in agricultural production and/or open space.

Any discussion of agriculture in Marin County is incomplete without recognition of its relationship to agriculture in Sonoma County. Many Marin County dairies import hay and grain from Sonoma County. The Marin and Sonoma dairies depend upon one another to support the dairy cooperatives necessary for marketing their product. The California Cooperative Creamery, located in Petaluma (Sonoma County), began in 1913 with 33 dairies from the Petaluma area. Marin County dairy farmers first joined in the early 1950s. Today, 53 of the 65 dairies in Marin are members and they contribute 40% of the milk (Marin County Planning Department 1993).

Number of Acres by Ownership

OWNER	ACRES
Private	35,791.85*
U.S. Government	10.28
State of California	2,109.95
County of Marin	1.03
North Marin Water District	56.49
TOTAL	37,969.60

*10,800 acres under agricultural conservation easements

Existing Parks and Open Space

Adjacent to the proposed boundary addition area are a number of parks and open space areas administered by both public and private agencies. They include:

National Park Service (Golden Gate National Recreation Area, North District, 15,293 acres); (Point Reyes National Seashore, 64,505 acres)

California Department of Parks and Recreation (Tomaes Bay State Park, 360.11 acres)

Audubon Canyon Ranch (Cypress Grove, Hog Island, Toms Point, 398 acres)

Marin County Parks (Miller Landing)

Areas Currently Under Conservation Easements

LEGEND

Existing national and state parklands

Proposed boundary addition area

Private

MALT-owned conservation easements

County line

A detailed map of Marin County, California, illustrating land use, parks, and conservation easements. The map shows the coastline from Bodega Head in the north to the Golden Gate National Recreation Area (GG N R A) in the south. Key features include Bodega Bay, Tomales Bay, and the Point Reyes National Seashore. Land is color-coded: light green for existing national and state parklands, dark green for the proposed boundary addition area, tan for private land, and medium green for MALT-owned conservation easements. Major roads like State Highway 1 and Petaluma Road are shown. Water bodies such as Soulajule Reservoir and Nicasio Reservoir are also depicted. A legend in the bottom left corner explains the color coding and symbols. A scale bar in the bottom right corner indicates a distance of 0 to 2 miles.

17

Evaluation of Study Area Using NPS Criteria

Does the proposed boundary addition offer significant resources or opportunities for public enjoyment related to the purposes of the park?

The proposed boundary addition has significant natural, cultural, recreational, and scenic resources which are directly related to and integral to Point Reyes National Seashore. The specific resources within the boundary area also enhance the resources at Point Reyes National Seashore. Recreational, scenic, and natural resources as elaborated below are not adequately represented at PRNS.

A recent survey estimated that over 6.5 million people travel to west Marin County annually, and 2.6 million visitors entered Point Reyes National Seashore in 1994.

The Tomales Bay/Bodega Bay watersheds provide a variety of habitat for an abundance of wildlife. Nearly 50,000 shorebirds and waterfowl winter within the two watersheds because of the ideal habitat and rich food sources available.

Approximately 20 special-status plant species have been observed in the study area, including the federally-listed endangered and state-listed threatened species Tiburon Indian paintbrush, *Castilleja affinis* ssp. *neglecta*, and an additional state-listed threatened species, Marin western flax, *Hesperolinon congestum* (CDFG 1994a). Approximately 60 special-status animal species have been counted, including seven federally-listed endangered and four federally-listed threatened animal species (USFWS 1994). However, less than 10% of the area has been surveyed, since the

remainder is in private ownership. Additional special-status species are likely to exist in the area (Appendix C).

Cultural resources include 31 Native American archeological sites listed with the California Archeological Inventory, and three registered historical properties. Only 3,000 of the 38,000 acres have been surveyed, leading to the conclusion that many more cultural resources may exist (Hagel 1994). In addition, the study area contains 19th-century ranches that retain the bulk of their historical features and are considered significant and could be nominated to the National Register of Historic Places.

The proposed boundary addition will enhance recreational opportunities, including direct access to Tomales and Bodega bays and Esteros Americano and de San Antonio. Recreational opportunities such as fishing, boating, kayaking, birdwatching, hiking, and sightseeing would be increased. A recent survey estimated that over 6.5 million people travel to west Marin County annually, and 2.6 million visitors entered Point Reyes National Seashore in 1994 (Point Reyes Light 1994).

Does the proposed boundary addition have the potential to address operational and management issues such as access and boundary identification?

The proposed boundary addition would significantly provide for improved operation and management of important resources partially within PRNS current boundaries. Tomales Bay and its watershed are now partially under NPS management; if the study area were added to PRNS, almost the entire Tomales Bay watershed would be under one management authority. A single jurisdiction would facilitate effective operation and management. In addition, a section of the Bodega Bay watershed which influences water quality in Tomales Bay and areas within PRNS would be more effectively managed.

The proposed boundary addition would also create a readily identifiable park boundary by primarily following the eastern ridgeline. Currently, the PRNS boundary is located 1/4 mile offshore in Tomales Bay and is not readily known by the general public. Boundary identification is also complicated by the small sections of land along Tomales Bay which are in the GGNRA boundary.

Would the proposed boundary addition contribute to the protection of park resources critical to fulfilling the park's purpose?

Scenic qualities of the National Seashore are considered critical to fulfilling the park's purpose (NPS 1980, NPS 1993a). Development of the study area would substantially alter the view from Tomales Point and other prominent public use areas. The spectacular views of historic settings, estuaries, bays, and rolling hills would be negatively impacted. Protection of the study area would improve and preserve the scenic qualities of the viewshed.

Preservation of natural resources is a critical management objective for PRNS. Because the proposed boundary addition is connected by natural systems to PRNS and GGNRA, long-term protection of wildlife populations, including shorebird and marine mammal populations are tied to the health of these adjacent lands. Degradation of the Tomales Bay/Bodega Bay watersheds would seriously diminish the wildlife populations of PRNS.

Would the added lands be feasible to administer considering size, configuration, ownership, costs, and other factors?

Addition of the study area would result in minimal long-term operational costs to the federal government. Presently, law enforcement is conducted in the adjacent Point Reyes National Seashore and Golden Gate National Recreation Area by NPS and State Park staff. Staffing would be needed to manage and operate the proposed expansion. Monitoring of the conservation easements would require specialized expertise, which is currently available among PRNS staff and MALT staff who have expressed an interest in offering assistance. It is estimated that two additional staff persons would be required to monitor purchased conservation easements and respond to law enforcement concerns. The easement monitoring could be accomplished through a contractual arrangement. If trails are developed, personnel needed for maintenance would depend on the amount of trails constructed.

Evaluation of Study Area Using NPS Criteria

The cost of the proposed boundary addition is estimated at approximately \$40,000,000. Of the total 38,000 acres (124 tracts), approximately 500 acres (19 tracts) would be purchased in fee; on 24,000 acres (58 tracts) conservation easements would be purchased; and 13,500 acres (47 tracts) already have conservation easements on them or are in public ownership, and would not require any funds for purchase. The tracts not to be purchased are currently under agricultural easements owned by MALT. It is anticipated that MALT would continue to manage the conservation easements and establish a public/private partnership with the National Park Service to promote cooperative management.

Utilizing conservation easements on the majority of the tracts to be purchased significantly reduces the overall cost of acquisition. Cost estimates for the proposed boundary addition were prepared by the Lands Division, Western Regional Office, NPS.

Based on information reviewed, the lands within the boundary addition are not known to contain hazardous waste or other ground contaminants. However, the West Marin Sanitary Landfill parcel at the southern end of the boundary addition could cause operational problems if contaminants were to travel to adjacent parcels. The landfill site is not to be acquired.

Are there other alternatives for management and resource protection?

Alternatives for the management and resource protection of the proposed boundary addition include

- ❖ management by another public agency
- ❖ continued management by private landowners
- ❖ management by a nonprofit land trust

Acquisition of the tracts within the proposed boundary addition area by another public agency such as the California Department of Parks and Recreation (CDPR) and its management as open space would achieve the primary NPS goal. However, neither CDPR nor any other public agency has plans to acquire additional land in the study area.

Management of the tracts by private landowners could be continued. Local plans and zoning ordinances call for the retention of land in agricultural use compatible with the park. But based on past experience with zoning changes and development pressures, this protection is not considered permanent.

Purchase of all the remaining conservation easements by a nonprofit organization, such as a land trust, does not appear to be a viable option. Although MALT has been successful in purchasing approximately 10,800 acres in easements thus far, it does not have the necessary funds to complete the acquisition of all the remaining easements. Monitoring of the easements by a land trust is a viable option, and MALT has expressed an interest in doing so. In addition, the Sonoma Land Trust has expressed an interest in purchasing some of the remaining conservation easements in Sonoma County.

The best and most feasible alternative for acquisition and protection of land in the proposed boundary addition is a public/private partnership. In this partnership, the NPS would seek to acquire some federal funding for acquisition and monitoring, and private organizations would also continue to acquire easements and monitor land use activities.

Priority for Land Acquisition

Because of the potential for development, the proposed boundary addition area is considered a high priority for acquisition. The Land Protection Plan (NPS 1992) would be amended to place these tracts in a high priority category.

Evaluation Summary

This proposal is a model for preservation of open space, resource protection, cultural landscape protection, recreational use, and sustainability of an economic way-of-life. It has broad-based support from a diverse group of constituents, including ranchers, residents, local merchants, conservationists, and willing landowners who would be most directly affected.

Overall evaluation demonstrates the proposed boundary addition meets the boundary criteria for addition to the National Park system.

Operating and management costs for the proposed boundary addition are considered minimal with staffing required for law enforcement, trail maintenance, and easement monitoring.

Recognizing the federal government's financial limitations, the study determined that purchase of conservation easements for most of the proposed boundary addition lands is the protection method which will best preserve an economic lifestyle and conserve an exceptional diversity of cultural and natural resources. The purchase price of conservation easements is estimated to be 40% of the full-fee purchase price.

The proposed conservation easements to be purchased can be tailored to meet specific needs. In Marin County, the easements are tailored for agricultural uses. Permitted uses are described very broadly to take into account not only the variety of current agricultural uses and practices, but also future changes in economic conditions, agricultural technologies, and farm and ranch management practices (Diehl 1988). In addition, future easements can be written to ensure that specific natural and cultural resources are protected.

If implemented, a partnership with a land trust and the purchase of conservation easements would produce greater public value by leveraging limited federal dollars with contributions from other sectors of society. This public/private partnership would be a model of how the National Park Service can work with other agencies and organizations to find creative solutions to provide land protection and management.

*...a partnership with
a land trust and
the purchase of
conservation easements
would produce
greater public value
by leveraging limited
federal dollars with
contributions from
other sectors of society.*



Historic dairy ranch within the proposed boundary addition area

Alternatives / Impacts of the Alternatives

The enabling legislation for Point Reyes National Seashore and Golden Gate National Recreation Area established broad objectives for the areas, implying substantial flexibility in the long-term configuration of these units of the NPS. All of the study area parcels (looked upon as one unit) evaluated here could contribute to realizing the broad objectives of the two parks, including protecting cultural and natural resources, protecting scenic vistas, and providing additional recreation opportunities. Two alternatives are presented for consideration.

ALTERNATIVE A:

No Change in Authorized Boundaries

Under this alternative, no change in the authorized boundary would be proposed, and no action would be taken by the National Park Service to acquire interest in the study area parcels.

Alternative A: No Change in Authorized Boundaries

Environmental impacts from development activities would alter the immediate lands and would also affect the watersheds of Tomales and Bodega bays. Threats to commercial fishing and mariculture industries would severely reduce the economic viability of this two-county region. Alternative A assumes development will occur on the proposed Marin Coast Golf Ranch (1,350 acres), the Borello lands (850 acres), the Marina complex (360 acres), and the Millerton Point lands (138 acres). The potential for additional acreage to be sold to developers for urbanization also threatens the remaining lands.

Impact on Natural Resources

Important natural resources within the study area would be negatively affected, including a number of rare, threatened, endangered, and special-status species (Appendix C). Development would replace natural plant and animal habitat with man-made structures and non-native landscaping, and to some extent reduce the value of adjacent habitat through disturbance from incompatible human activities. Development plans are imminent on more than 2,700 acres of the study area. The sale of additional parcels to developers is likely.

Increased urbanization would also negatively impact natural resources in existing adjacent state and federal parklands. Water quality in Tomales and Bodega bays would potentially be degraded. Construction would have short- and long-term impacts on soil stability causing increased erosion and sedimentation which could reduce the commercial fishing industry catch as well as the production of commercially harvested oysters and other shellfish.

Impact on Cultural Resources

Development, such as the construction of housing and commercial facilities, would potentially disturb the cultural resources in the proposed boundary addition, and in some cases, would directly negatively impact cultural sites. Historic buildings would also be adversely impacted if new development is allowed.

Cultural resources such as Native American middens would also be disturbed and negatively impacted by construction activities. On lands acquired in fee, the Native American Grave Protection and Repatriation Act (NAGPRA), P.L. 101-601, as well as the Archeological Resources Protection Act (ARPA), P.L. 96-96, are two laws that would impact any developments in the study area. Archeological studies have shown that over 30 archeological sites exist on the approximately 3,000 acres which have thus far been surveyed. Mitigation measures to reduce the negative impacts on cultural resources would need to be established.

Impact on Scenic Resources

Development of the study area would have major negative impact on scenic resources viewed from both Highway 1 and from the west side of Tomales Bay within Point Reyes National Seashore. Specifically, the viewshed of the congressionally designated wilderness area along Tomales Point, which was set aside for its high scenic value, would be severely impacted by urbanization on the eastern shores of Tomales and Bodega bays. The viewshed along Sir Francis Drake Boulevard near Inverness and Inverness Park would also be negatively impacted.

Impact on Recreational Use

Limited designated recreational sites exist in the proposed boundary addition. Esteros Americano and de San Antonio and Tomales Bay all receive moderate use by kayakers, canoeists, fishermen, and hunters. Many of the parcels adjacent to Highway 1 also receive heavy use from birdwatchers and cycling enthusiasts. No additional negative impacts on existing recreational use are anticipated by this alternative.

Impact on Regional Economy

Development of the proposed boundary addition would negatively impact the existing local economy. Dairy and beef industries which have survived for over a century would be displaced. West Marin's agricultural industry contributed \$52 million to the local economy in 1994 (Marin County Department of Agriculture 1994).

Urbanization of the proposed boundary addition would also negatively impact the commercial fishing industry of Tomales and Bodega bays. The tolerance level of many commercial species of fish, crustaceans, and mollusks is low when disturbance by increased salinity and sedimentation occur. Such a disturbance would lead to a reduction in the commercially-harvested species which contributed over \$5 million to the two-county economy in 1993 (CDFG 1994d).

Alternative B: Enhance Existing Parkland

This alternative proposes the acquisition of the conservation easements of most of the parcels in the proposed boundary addition area which would have the potential to be developed for residential or commercial use. This alternative would preserve an economic way-of-life that has been in place since the 1800s and would also preserve natural and cultural resources, including state- and federally-listed rare, threatened, endangered, and special-status plant and animal species (Appendix C).

Impact on Natural Resources

Protection of the proposed boundary addition area from increased development would have a positive impact on natural resources. Acquisition of the conservation easements or purchase of parcels in fee would ensure the protection of natural resources by continuing to provide habitat for many special-status species of flora and fauna. Water quality would not be significantly impacted, either positively or negatively.

Impact on Cultural Resources

Protection of the proposed boundary addition area from increased development would have a positive impact on cultural resources. Acquisition of the conservation easements or purchase in fee would ensure protection because the lands would remain undeveloped. Historic sites would be preserved. The area would be surveyed for archeological sites and historic structures, and actions implemented to protect it from future negative impacts.

Impact on Scenic Resources

Existing scenic values associated with undeveloped open space, especially ridgeline views, would be protected and positively impacted by NPS management.

Impact on Recreational Use

Use of the proposed boundary addition area by recreationists, including hikers, birdwatchers and canoeists, would be enhanced. No adverse effects on current recreational use would be felt under this alternative.

Impact on Regional Economy

The preservation of open space also means the preservation of an existing economic way-of-life in the form of dairy and beef ranching – a staple of the local economy since the 1800s. Continuation of ranching operations would have a positive long-term impact on the local economy as seen by the \$52 million contributed in 1994 by agriculture in Marin County.

Continuation of the commercial fishing industry and commercial oyster farming would be preserved. No increase in soil erosion sedimentation or water salinity in Tomales and Bodega bays would occur. If these processes did occur, the commercial fishing industry and commercial oyster farming would be jeopardized by increasing sedimentation and water salinity.

West Marin restaurants, shops, and bed and breakfast inns would earn increased revenues from park visitors drawn to the expanded national park. A recent study shows that \$107 million was contributed to the local economy by visitors to PRNS (Hornback 1995).

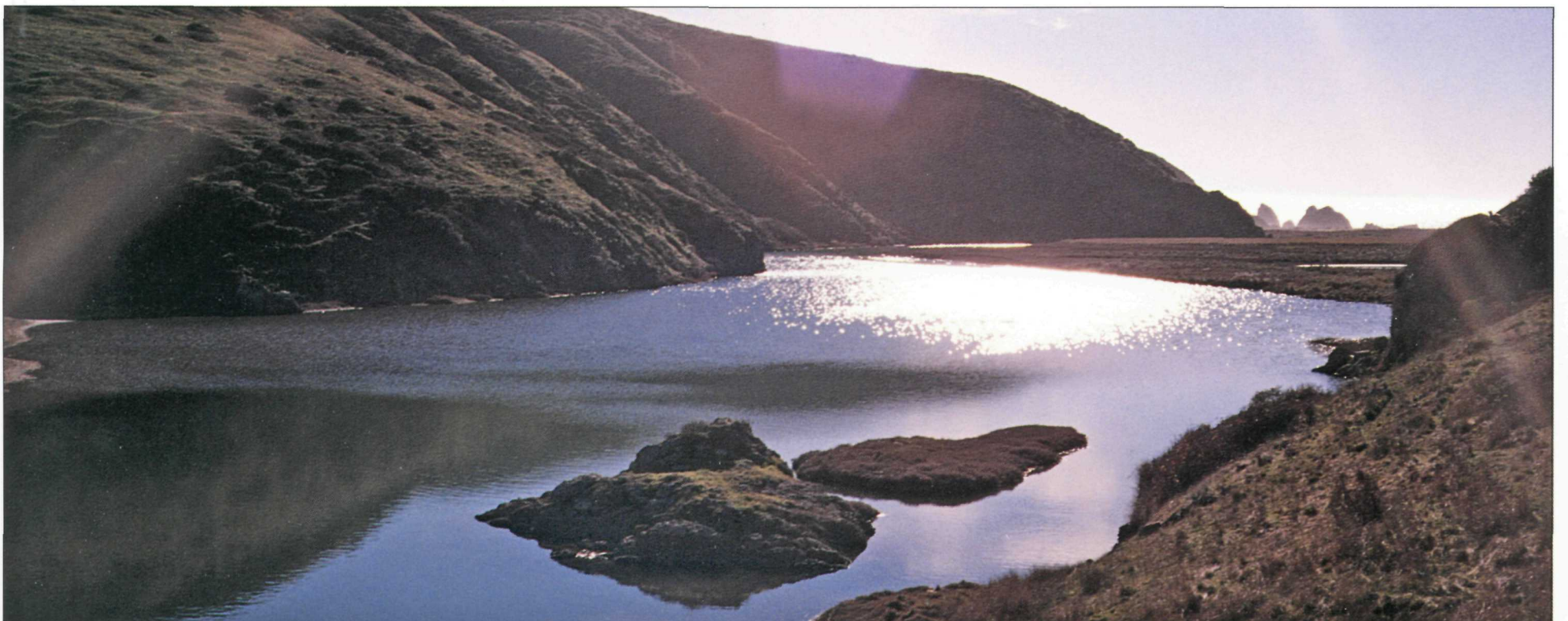
Lack of potential subdivision development could negatively affect that segment of the local economy. Commercial and residential development would be limited to areas around the towns of Tomales, Inverness, Point Reyes Station, and Olema.

ALTERNATIVE B:

Enhance Existing Parkland

This alternative would expand on and enhance Point Reyes National Seashore's existing land base. Boundary changes made would not significantly affect the park's level of operations or the range of opportunities offered to the visiting public. The parcels added to the boundary as a whole unit would continue to provide an economic way-of-life, enhance the economic tax base of Marin and Sonoma counties, provide visual and open space values, and further protect both natural and cultural resources.

Estero de San Antonio



Consultation and Coordination

The boundary addition proposal to Point Reyes National Seashore has been shaped with extensive public input. Over the past two years, 18 public meetings have been held to discuss the proposal and the extent of the area to be protected by future National Park Service management.

In addition, the Point Reyes National Seashore/Golden Gate National Recreation Area Citizen's Advisory Commission discussed the proposal at three public meetings between March, 1993 and September, 1994. The Commission approved a motion to support the boundary addition at its September 22, 1994 meeting.

During the 103rd Congress, a hearing was held by the House Subcommittee on National Parks, Forests, and Public Lands on July 14, 1994. Public and NPS Deputy Director testimony is contained in Appendix A.

The proposed boundary addition has been formally endorsed by the American Farmland Trust, Marin Agricultural Land Trust, Sonoma Land Trust, Sonoma County Agricultural and Open Space District, Marin County Farm Bureau, Marin County Board of Supervisors, Sonoma County Board of Supervisors, Marin Conservation League, West Marin Chamber of Commerce, Point Reyes Station Village Association, Gulf of the Farallones National Marine Sanctuary, Tomales Bay Advisory Committee, Environmental Action Committee of West Marin, Inverness Association, and Greenbelt Alliance.

Fishing boats on eastern shore
of Tomales Bay near Marshall



**National
Park Service
and Public
Testimony**

Testimony of John J. Reynolds, Deputy Director National Park Service
on H.R. 3079
Before the House Subcommittee on Natural Resources,
Forests, and Public Lands
House Committee on Natural Resources
July 14, 1994

Mr. Chairman, thank you for the opportunity to provide the subcommittee with the views of the Department of the Interior on H.R. 3079, a bill to expand the boundaries of Point Reyes National Seashore and enhance Golden Gate National Recreation Area.

We support H.R. 3079 with appropriate amendments to accommodate the finding of the boundary study that the National Park Service will undertake over the next few months.

This legislation proposes a unique method to protect 36,000 acres of coastal chaparral and private agricultural lands adjacent to Point Reyes National Seashore and Golden Gate National Recreation Area. This protection would be accomplished through acquisition of interests in lands, including development rights and conservation easements. Current agricultural and existing limited residential uses would continue.

The National Park Service is interested in exploring options to maintain the pastoral viewshed of Point Reyes National Seashore, to protect the Tomales Bay ecosystem and enhance Golden Gate National Recreation Area. However, federal land acquisition is not the only means to accomplish this objective. Cooperative agreements, local zoning alternatives are available. We have not completed an assessment and survey of related resources on lands adjacent to Point Reyes National Seashore and Golden Gate National Recreation Area. This study will evaluate what combination of protection strategies would best serve the goals of the legislation.

The cultural landscape at Point Reyes is integral to protecting the park values. The 14 - mile long peninsula along Tomales Bay and the San Andreas fault is home to 26 dairy ranches, some still operating. Maintaining the pastoral setting of Point Reyes is, unquestionably, in jeopardy. Growth throughout Marin County is high. Open pastures and ranches are being sold and segmented for various types of development. Major land-use changes on the lands forming the eastern slope of Tomales Bay will directly and negatively impact public enjoyment of Point Reyes National Seashore and likely place significant stress on the Tomales Bay ecosystem.

A private non-profit group, the Marin Agricultural Land Trust, or MALT, has made significant headway in protecting the rural setting of these properties. The 13-year old group has over 25,000 acres protected by easements. However, the protective efforts of this dedicated group cannot keep pace with development pressures.

National Park Service representatives have been in contact with proponents of H.R. 3079 to address mutual objectives and concerns. The discussions have been positive and productive. It is encouraging to have a grassroots organization, such as MALT, involving local residents and landowners working with the National Park Service to protect park values and the local environment. This is in keeping with our emphasis on partnerships in the protection of significant resources. We look forward to nurturing this relationship to achieve mutual objectives.

Since our evaluation of the proposal is not complete, it is difficult to place a cost figure on the acquisitions associated with this bill. MALT currently holds agricultural easements on several thousand acres of land within the proposal. Additionally, it is our understanding that MALT is interested in developing a formula for sharing acquisition costs.

The protection of this area is important to the protection of Point Reyes National Seashore and furthering the purposes of Golden Gate National Recreation Area. Over the next few months, we propose to carry out an evaluation of the area, enter into discussion with prospective partners to facilitate protection, and develop a specific proposal for consideration by the Committee. We would appreciate the opportunity to complete the boundary study which could result in significant cost savings to the United States.

If H.R. 3079 were enacted, funding for land acquisition would be contingent upon federal budgetary constraints and Administration funding priorities.

This concludes my statement. I would be pleased to answer any questions.

Appendix A

National Park Service and Public Testimony

Testimony of Robert Berner, Executive Director
Marin Agricultural Land Trust
on H.R. 3079
Before the Subcommittee on National
Parks, Forests and Public Lands
House Committee on Natural Resources
July 14, 1994

My name is Robert Berner. I am Executive Director of Marin Agricultural Land Trust, a private nonprofit organization whose mission is to help preserve productive farmland in Marin County, California.

Although our county is known primarily as one of the most desirable residential communities in the San Francisco Bay area and home of one of the most visited federal parks in the country, Marin also continues to be an important agricultural community. 40% of the county's land area, about 150,000 acres, is in productive agricultural use.

This agricultural land is a fundamental part of the environmental quality and community character which make Marin County such a desirable place to live, work, and visit.

These are not gentlemen's farms, but economically viable businesses, many of which have been in the same families for 3 and 4 generations. But farming on the edge of the 4th largest metropolitan area creates special problems for farming families which have been described in other testimony today.

Marin Agricultural Land Trust was created in 1980 to help save the county's agricultural land by providing landowners a conservation alternative to the sale or development of their land. We do this by acquiring agricultural conservation easements in voluntary transactions with landowners. By compensating landowners for giving the "development rights" in their property, the conservation easements assure that the land will remain undeveloped and restricted to agricultural uses in perpetuity.

Over the past fourteen years MALT has acquired conservation easements on 37 farms and ranches totalling 25,291 acres, approximately 20% of the County's privately owned farmland. The lands on which we acquire conservation easements remain in private ownership and on the tax rolls.

We have acquired these easements for a total cost of approximately \$14 million. Most of the easements acquired by purchase involved a partnership between MALT and a public agency. The State Coastal Conservancy made a one million dollar grant to MALT in 1984 to establish a prototype or model program to preserve agricultural land in Marin's coastal zone. Since 1988 MALT has worked in cooperation with the county government to preserve farmland using \$15 million of funds available to the county from state conservation bond funds.

MALT holds the easements acquired with these state and county funds and has assumed responsibility for monitoring and enforcing the conservation easements.

In both of these public/private partnerships, MALT supported its own operating expenses, saving state and county taxpayers hundreds of thousands of dollars in acquisition and easement monitoring costs.

H.R. 3079 proposes an innovative and cost-effective way to preserve land and natural resources which are integral to the character, quality, and environment of our great national parks. By using conservation easements rather than fee purchases to protect land, the government stands to save at least 50% of the up front acquisition costs. By using the specialized experience, expertise and capabilities of a self-supporting local land trust for doing acquisitions and conducting easement monitoring, the government stands to save the substantial management burdens and ongoing costs of these programs.

Fourteen of the conservation easements which MALT holds protect 10,300 acres within the area proposed for inclusion in H.R. 3079. This represents an investment of \$6,800,000. The cost to acquire those same conservation easements today, of course, would be much greater. If H.R. 3079 is enacted, the federal government will not have to pay for the protection and preservation of these lands.

We are prepared to work in partnership with the federal government to permanently preserve the remaining lands within the boundaries of H.R. 3079. We are interested in assisting with both acquisition and easement monitoring, and we would not look to the government to pay any of our operating costs.

H.R. 3079 offers an exciting, far-sighted opportunity to establish a program that will preserve lands and natural resources important to the country at a fraction of the cost of traditional park programs.

Testimony of Sharon Doughty
on H.R. 3079
Before the Subcommittee on National
Parks, Forests and Public Lands
House Committee on Natural Resources
July 14, 1994

My name is Sharon Mendoza Doughty. I was raised on the "Historic B Ranch", which is now part of the Point Reyes National Seashore. I am not the first of my family to testify before Congress for your help to protect this unique island of productive open space which lies so close to a large metropolitan area. My grandmother, Zena Mendoza Mair, a Portuguese immigrant who proudly became an American citizen, testified before hearings in the late 1960s when Point Reyes National Seashore was created. Due to that testimony, my father and my brother still operate a dairy on this land under a reservation of use and occupancy with the National Park Service.

After college, I married a local dairyman and in 1973 moved to a 773-acre dairy on the east side of Tomales Bay across from Point Reyes National Seashore, within the area proposed to be included in H.R. 3079. Since being widowed in 1984, I have continued to operate this dairy. We milk about 300 cows twice daily, producing 2400 gallons of milk per day which, along with 50 other dairies in Marin County, provide 25% of the milk supply for the San Francisco metropolitan area.

These are not hobby farms. They are family farms made viable by 10-hour days and often 7-day weeks for me. My ranch provides jobs for more than six families and income for our numerous suppliers and their employees, benefitting the economy of the entire surrounding area. I have served on the Board of Directors of the Marin Agricultural Land Trust since 1986, but I am here representing myself as an agricultural landowner and member of the Marin County agricultural community.

This is not the first time that the agricultural community has had to appeal for help to save this area from urban expansion. In the late 1960s freeways were planned – syndicates came in and purchased farmland for speculative prices in anticipation of developer's values. Thank goodness a responsive Board of Supervisors and community recognized the impending disaster and passed the A-60 zoning restrictions. The agriculturists have since then re-purchased that land and restored it to productive agriculture. My father owns 2,500 acres of that land for grazing young stock.

My family and I are committed to agriculture. It is hard work, but it is what we know and love. Although it was certainly not our purpose, agriculture preserved what is now Point Reyes National Seashore from second-home, suburban and commercial development until it was acquired as a national park in the early 1960s. For the past thirty years, agriculture has also preserved the east shore of Tomales Bay from development that would otherwise destroy the extraordinary pristine quality of the Bay and the integrity and character of Point Reyes National Seashore.

However, operating a dairy, or any other agricultural enterprise, sandwiched between a six million population metropolitan area on one side and one of the most visited national parks on the other side brings special problems which threaten the future of agriculture in the area, and, consequently, also threaten Tomales Bay and Point Reyes. Loss of this private farmland would drastically diminish the quality, appeal and value of these irreplaceable public resources.

Some of these threats are visible and obvious: proposals to build private golf resorts and residential development; an application to expand a local landfill into a regional waste facility. Other threats are less obvious but more insidious. Because of the beauty and character of our agricultural land and its proximity to the metropolitan bay area and a national park, there is persistent escalation of land prices well beyond any based on agriculture. This escalation makes it hard to keep land in farming families due to high estate taxes, the difficulty of buying out partners or co-owners, the barrier of high land values to young farmers trying to establish new operations, and the lure of an offer that is hard to resist.

All of these factors contribute to uncertainty about the future of agriculture in the area. Will new development reach out our way? Will my neighbors be in agriculture five years from now? Will an offer come that can't be refused?

Marin Agricultural Land Trust has done a tremendous job of providing agricultural landowners with a conservation alternative to sale or development. MALT's purchase of conservation easements has helped solve many of the problems I mentioned, and MALT has become a crucial factor in the expectation that there can be a long-term future for agriculture in Marin County. But MALT is a private organization whose limited resources are insufficient to meet the constantly growing threats to agriculture.

I speak for the Marin County Farm Bureau and most agricultural landowners when I say that H.R. 3079 offers a critical means of keeping land in productive agricultural use on the tax rolls and yet protect the irreplaceable resource of Tomales Bay and the significant public investment in Point Reyes National Seashore.

It is rare, I understand, for farm groups to support park legislation. H.R. 3079 presents an inspirational and innovative approach. The Marin County agricultural community welcomes the opportunity to work with the Congress and the Park Service in enacting and implementing this vitally important legislation.

Thank you.

*H.R. 3079 offers a critical
means of keeping land in
productive agricultural use
on the tax rolls and yet
protects the irreplaceable
resources of Tomales Bay
and the significant public
investment in Point Reyes
National Seashore.*

103rd Congress
Proposed House
Legislation

103D CONGRESS
1ST SESSION

H. R. 3079

To protect the integrity of the Point Reyes National Seashore and the Golden Gate National Recreation Area (GGNRA), and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 14, 1993

Ms. WOOLSEY (for herself, Mr. BECERRA, Mr. BEILENSEN, Mr. BERMAN, Mr. BROWN of California, Mr. DELLUMS, Mr. EDWARDS of California, Ms. ESHOO, Mr. FARR, Mr. FAZIO, Mr. FILNER, Mr. HAMBURG, Ms. HARMAN, Mr. MARTINEZ, Mr. MATSUI, Mr. MILLER of California, Mr. MINETA, Ms. PELOSI, Ms. ROYBAL-ALLARD, Ms. SCHENK, Mr. STARK, Mr. TORRES, Mr. TUCKER, Ms. WATERS, and Mr. WAXMAN) introduced the following bill; which was referred to the Committee on Natural Resources

A BILL

To protect the integrity of the Point Reyes National Seashore and the Golden Gate National Recreation Area (GGNRA), and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. PURPOSES.

The purposes of this Act are to—
(1) furnish watershed and environmental protection for the Tomales Bay;

2

(2) maintain the relatively undeveloped nature of the land surrounding Tomales Bay by providing guarantees of nondevelopment;

(3) protect the pastoral nature of the land adjacent to the Point Reyes National Seashore and GGNRA; and

(4) preserve productive long-term agriculture in the region.

SEC. 2. EXPANSION OF POINT REYES NATIONAL SEASHORE AND ACQUISITION OF DEVELOPMENT RIGHTS.

(a) EXPANSION.—Section 2 of the Act entitled “An Act to establish the Point Reyes National Seashore in the State of California, and for other purposes” (16 U.S.C. 459c–1) is amended by adding at the end the following:

“(c) The Point Reyes National Seashore shall also include the area depicted on the map numbered and dated . Such map shall be on file and available for public inspection in the Offices of the National Park Service, Department of the Interior, Washington, District of Columbia.”.

(b) ACQUISITION.—Section 3 of such Act (16 U.S.C. 459c–2) is amended by adding at the end the following:

“(d)(1) Notwithstanding subsections (a) through (c) of this section, the Secretary, within the area depicted on

•HR 3079 IH

3

the map referred to in section 2(c) of this Act, may acquire lands or interests in lands from the owners thereof only by donation, purchase with donated or appropriated funds, or exchange, except as provided in paragraph (4). The Secretary shall give a priority to acquiring interests in lands (including development rights and conservation easements) and to acquiring such interests from nonprofit corporations.

“(2) In acquiring lands under this subsection, the Secretary may negotiate for the acquisition of lands specifically for trail purposes.

“(3) Lands or interests in lands may not be acquired under this subsection without the consent of the owner thereof, unless the Secretary determines that, in his judgment the lands are subject to, or threatened with, uses which are having, or would have, an adverse impact on the area.

“(4) Lands, and interests in lands, within the area referred to in paragraph (1) which are owned by the State of California, or any political subdivision thereof, may be acquired only by donation or exchange.

“(5) Section 5 does not apply with respect to lands and interests in lands acquired under this subsection.”.

(c) AUTHORIZATION OF APPROPRIATIONS.—Section 9 of such Act (16 U.S.C. 459c–7) is amended by adding

•HR 3079 IH

103D CONGRESS
1ST SESSION

H. R. 3079

To protect the integrity of the Point Reyes National Seashore and the Golden Gate National Recreation Area (GGNRA), and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

SEPTEMBER 14, 1993

Ms. WOOLSEY (for herself, Mr. BECERRA, Mr. BEILENSEN, Mr. BERMAN, Mr. BROWN of California, Mr. DELLUMS, Mr. EDWARDS of California, Ms. ESHOO, Mr. FARR, Mr. FAZIO, Mr. FILNER, Mr. HAMBURG, Ms. HARMAN, Mr. MARTINEZ, Mr. MATSUI, Mr. MILLER of California, Mr. MINETA, Ms. PELOSI, Ms. ROYBAL-ALLARD, Ms. SCHENK, Mr. STARK, Mr. TORRES, Mr. TUCKER, Ms. WATERS, and Mr. WAXMAN) introduced the following bill; which was referred to the Committee on Natural Resources

A BILL

To protect the integrity of the Point Reyes National Seashore and the Golden Gate National Recreation Area (GGNRA), and for other purposes.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. PURPOSES.

The purposes of this Act are to—

(1) furnish watershed and environmental protection for the Tomales Bay;

Table C-1: Known or Potentially Known Occurring Special-Status Plant Species

Common Name	Scientific Name	Federal/State/ CNPS Status
Pink sand-verbena	<i>Abronia umbellata</i> ssp. <i>breviflora</i>	C2/-/1B
Blasdale's bent grass	<i>Agrostis blasdalei</i>	C2/SR/1B
Coast rock cress	<i>Arabis blepharophylla</i>	C3c/-/4
Oakland star-tulip	<i>Calochortus umbellatus</i>	-/-/4
Swamp harebell	<i>Campanula californica</i>	C2/-/1B
Tiburon Indian paintbrush	<i>Castilleja affinis</i> ssp. <i>neglecta</i>	FPE/ST/1B
Woolly-headed spineflower	<i>Chorizanthe cuspidata</i> var. <i>villosa</i>	-/-/1B
Franciscan thistle	<i>Cirsium andrewsii</i>	-/-/4
Point Reyes bird's beak	<i>Cordylanthus maritimus</i> ssp. <i>palustris</i>	C2/-/1B
Baker's larkspur	<i>Delphinium bakeri</i>	C2/SR/1B
Yellow larkspur	<i>Delphinium luteum</i>	C1/SR/1B
Marin checker lily	<i>Fritillaria affinis</i> var. <i>tristulis</i>	-/-/1B
Fragrant fritillary	<i>Fritillaria liliacea</i>	C2/-/1B
Short-leaved evax	<i>Hesperevax sparsiflora</i> var. <i>brevifolia</i>	-/-/4
Marin western flax	<i>Hesperolinon congestum</i>	FPT/ST/1B
Point Reyes horkelia	<i>Horkelia marinensis</i>	C2/-/1B
North coast semaphore grass	<i>Pleuropogon hooverianus</i>	C2/SR/1B
Marin knotweed	<i>Polygonum marinense</i>	C2/-/3
Lobb's aquatic buttercup	<i>Ranunculus lobbii</i>	-/-/4
Tamalpais jewel-flower	<i>Streptanthus batrachopus</i>	-/-/1B
Mount Tamalpais jewel-flower	<i>Streptanthus glandulosus</i> ssp. <i>pulchellus</i>	C3c/-/1B
Showy Indian clover	<i>Trifolium amoenum</i>	C2/-/1B
San Francisco owl's clover	<i>Triphysaria floribunda</i>	C2/-/1B

Rare, Threatened,
Endangered, and
Special-Status
Species

Status Definitions

Federal	U.S. Fish and Wildlife Service (50 CFR 17.12; 55 FR 6184, February 21, 1990)
FPE	Federally proposed, endangered
FPT	Federally proposed, threatened
C1	Enough data on file to support federal listing
C2	Threatened and/or distribution data are insufficient to support Federal listing
C3c	Too widespread and/or not threatened
State	California Department of Fish and Game (1987)
SE	State-listed, endangered
ST	State-listed, threatened
SR	State-listed, rare
CNPS	California Native Plant Society (Skinner and Pavlik, 1994)
1B	Plants rare, threatened, or endangered in California and elsewhere
3	Plants about which more information is needed—a review list
4	Plants of limited distribution—a watch list

Coast rock cress (right)

Swamp harebell (far right)



Appendix C

Rare, Threatened,
Endangered, and
Special-Status
Species

Table C-2: Known or Potentially Known Occurring Special-Status Animal Species

Common Name	Scientific Name	Federal/State Status
<i>Birds</i>		
Common loon	<i>Gavia immer</i>	-/CSC
Clark's grebe	<i>Aechmophorus clarkii</i>	-/*
Western grebe	<i>Aechmophorus occidentalis</i>	-/*
American white pelican	<i>Pelecanus erythrorhynchos</i>	-/CSC
California brown pelican	<i>Pelecanus occidentalis californicus</i>	FE/SE
Double-crested cormorant	<i>Phalacrocorax auritus</i>	-/CSC
Great blue heron	<i>Ardea herodias</i>	-/*
Great egret	<i>Casmerodius albus</i>	-/*
Snowy egret	<i>Egretta thula</i>	-/*
Black-crowned night heron	<i>Nycticorax nycticorax</i>	-/*
White-faced ibis	<i>Plegadis chihi</i>	2/CSC
Aleutian Canada goose	<i>Branta canadensis leucopareia</i>	FT/-
Barrow's goldeneye	<i>Bucephala islandica</i>	-/CSC
Harlequin duck	<i>Histrionicus histrionicus</i>	2/CSC
Cooper's hawk	<i>Accipiter cooperi</i>	-/CSC
Sharp-shinned hawk	<i>Accipiter striatus</i>	-/CSC
Golden eagle	<i>Aquila chrysaetos</i>	-/CSC
Ferruginous hawk	<i>Buteo regalis</i>	2/CSC
Swainson's hawk	<i>Buteo swainsoni</i>	-/ST
Northern harrier	<i>Circus cyaneus</i>	-/CSC
Black-shouldered kite	<i>Elanus caeruleus</i>	-/*
Bald eagle	<i>Haliaeetus leucocephalus</i>	FE/SE
Osprey	<i>Pandion haliaetus</i>	-/CSC
Merlin	<i>Falco columbarius</i>	-/CSC
Prairie falcon	<i>Falco mexicanus</i>	-/CSC
American peregrine falcon	<i>Falco peregrinus anatum</i>	FE/SE
California black rail	<i>Laterallus jamaicensis coturniculus</i>	2/ST
Western snowy plover (coastal)	<i>Charadrius alexandrinus nivosus</i>	FT/CSC
Long-billed curlew	<i>Numenius americanus</i>	-/CSC
California gull	<i>Larus californicus</i>	-/CSC
California least tern	<i>Sterna antillarum browni</i>	FE/SE
Caspian tern	<i>Sterna caspia</i>	-/*
Elegant tern	<i>Sterna elegans</i>	2/CSC
Forster's tern	<i>Sterna forsteri</i>	-/*
Marbled murrelet	<i>Brachyramphus marmoratus</i>	FT/SE
Short-eared owl	<i>Asio flammeus</i>	-/CSC
Long-eared owl	<i>Asio otus</i>	-/CSC
Burrowing owl	<i>Speotyto cunicularia</i>	-/CSC
Northern spotted owl	<i>Strix occidentalis caurina</i>	FT/-
Vaux's swift	<i>Chaetura vauxi</i>	-/CSC
Willow flycatcher	<i>Empidonax traillii</i>	-/SE
California horned lark	<i>Eremophila alpestris actia</i>	2/CSC
Purple martin	<i>Progne subis</i>	-/CSC
Bank swallow	<i>Riparia riparia</i>	-/ST
Loggerhead shrike	<i>Lanius ludovicianus</i>	2/CSC
Tricolored blackbird	<i>Agelaius tricolor</i>	2/CSC
Yellow warbler	<i>Dendroica petechia brewsteri</i>	-/CSC
Saltmarsh common yellowthroat	<i>Geothlypis trichas sinuosa</i>	2/CSC

Horned lark and great blue heron are just two of many species found in the boundary addition area



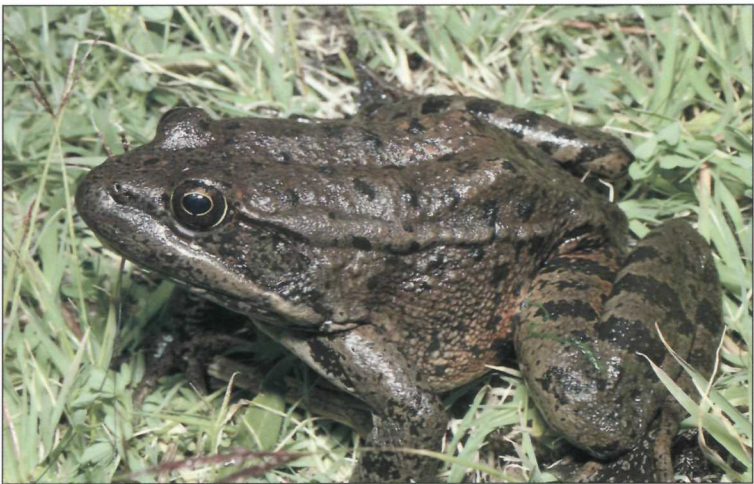
Table C-2: Known or Potentially Known Occurring Special-Status Animal Species

Common Name	Scientific Name	Federal/State Status
<i>Mammals</i>		
Pallid bat	<i>Antrozous pallidus</i>	-/CSC
Long-eared myotis	<i>Myotis evotis</i>	2/-
Fringed myotis	<i>Myotis thysanodes</i>	2/-
Yuma myotis	<i>Myotis yumanensis</i>	2/-
Townsend's big-eared bat	<i>Plecotus townsendii townsendii</i>	2/CSC
Point Reyes mountain beaver	<i>Aplodontia rufa phaea</i>	2/CSC
Point Reyes jumping mouse	<i>Zapus trinotatus orarius</i>	2/CSC
American badger	<i>Taxidea taxus</i>	-/*
<i>Reptiles</i>		
Northwestern pond turtle	<i>Clemmys marmorata marmorata</i>	2/CSC
Alameda striped racer	<i>Masticophis lateralis euryxanthus</i>	FPE/ST
<i>Amphibians</i>		
California red-legged frog	<i>Rana aurora draytonii</i>	FPE/CSC
Foothill yellow-legged frog	<i>Rana boylei</i>	2/CSC
<i>Invertebrates</i>		
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	FPE/-
Tomales isopod	<i>Caecidotea tomalensis</i>	2/-
California freshwater shrimp	<i>Syncaris pacifica</i>	FE/SE
Sandy beach tiger beetle	<i>Cicindela hirticollis gravida</i>	2/-
Globose dune beetle	<i>Coelus globosus</i>	2/-
Bumblebee scarab beetle	<i>Lichnanthe ursina</i>	2/-
Pheres blue butterfly	<i>Icaricia icarioides pheres</i>	2/-
Marin elfin butterfly	<i>Incisalia mosii</i>	2/-
Myrtle's silverspot butterfly	<i>Speyeria zerene myrtleae</i>	FE/-
<i>Fish</i>		
Tidewater goby	<i>Eucyclogobius newberryi</i>	FE/CSC

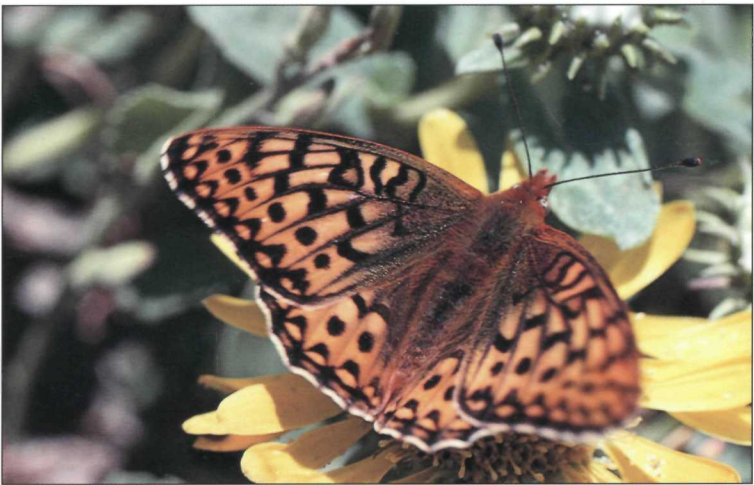
Status Definitions

Federal	
FE	Listed as Endangered by the Federal Government
FT	Listed as Threatened by the Federal Government
FPE	Proposed as Endangered by the U.S. Fish and Wildlife Service
FSS	Federal (BLM and USFS) Sensitive Species
2	Category 2 Candidate for listing by the U.S. Fish and Wildlife Service (existing information indicates taxa may warrant listing, but substantial biological information necessary to support a proposed rule is lacking)
State	
SE	Listed as Endangered by the State of California
ST	Listed as Threatened by the State of California
CSC	California Department of Fish and Game, "Species of Special Concern"
*	These species fall into one or more of the following categories: species that are biologically rare, very restricted in distribution, declining throughout their range; populations in California that may be peripheral to the major portion of a species' range, but which are threatened with extirpation within California; species closely associated with a habitat that is declining in California at an alarming rate (California Department of Fish and Game).

Rare, Threatened,
Endangered, and
Special-Status
Species



California red-legged frog



Myrtle's silverspot butterfly



Northwestern pond turtle

Sample
Conservation
Easement and
Assignment of
Conservation
Easement

When Recorded Mail To:

Deed of Agricultural Conservation Easement

THIS DEED OF AGRICULTURAL CONSERVATION EASEMENT (the "Deed") is made by _____, ("Grantors"), to _____, a California nonprofit public benefit corporation ("Grantee").

WITNESS THAT:

WHEREAS, Grantors are the owners in fee simple of certain real property in _____ County, California, more particularly described in Exhibit A attached hereto and incorporated herein by this reference (the "Property"); and

WHEREAS, the Property possesses agricultural, natural, open space and scenic values of great importance to Grantors, the people of _____ County, the people of the State of California, and the people of the United States by virtue of its location in the watershed of Tomales Bay and within the boundaries of Point Reyes National Seashore as expanded by [title or name of Act] and;

WHEREAS, Grantors intend that the Property be maintained in agricultural production by the maintenance of the agricultural values thereof and that the natural, open space and scenic values of the Property be preserved by the continuation of the agricultural uses that have proven historically compatible with such values; and

WHEREAS, Grantors intend, as owners of the Property, to convey to Grantee the right to preserve and protect the agricultural, natural, open space and scenic values of the property in perpetuity; and

WHEREAS, Grantee is a publicly supported, tax-exempt nonprofit organization qualified under Section 501(c)(3) and 170(h) of the Internal Revenue Code, whose primary purpose is the preservation and protection of agricultural, natural, open space and scenic lands in Marin County, California; and

WHEREAS, Grantee intends, by acceptance of the grant made hereby, forever to honor the intentions of Grantors to preserve and protect in perpetuity the agricultural, natural, open space and scenic values of the Property;

NOW, THEREFORE, for good and valuable consideration, and in consideration of the mutual covenants, terms, conditions, and restrictions contained herein, and pursuant to the laws of the State of California including, inter-alia, Sections 815-816 of the California Civil Code, Grantors do hereby voluntarily grant to Grantee an Agricultural Conservation Easement in gross in perpetuity over the Property of the nature and character and to the extent hereinafter set forth (the "Easement").

1. Purpose. It is the purpose of this Easement to enable the Property to remain in agricultural use for the production of food and fiber by preserving and protecting in perpetuity its agricultural values, character, use and utility, and to prevent any use of the Property that would significantly impair or interfere with its agricultural values, character, use or utility. It is also within the purpose of this Easement to protect the natural, open space and scenic values of the Property consistent with the continuing agricultural use thereof.

2. Affirmative Rights and Interests Conveyed. To accomplish the purpose of this Easement, the following rights and interests are conveyed to Grantee by this Easement:

(a) To identify, to preserve and to protect in perpetuity the agricultural values, character, use and utility, including the soil and water quality, and the open space and scenic values of the Property. (The agricultural values, character, use and utility, and the natural, open space and scenic values of the property are hereinafter referred to collectively as "the protected values".)

(b) To enter upon, inspect, observe, and study the Property for the purposes of (1) identifying the current uses and practices thereon and the baseline condition thereof, and (2) monitoring the uses and practices regarding the Property to determine whether they are consistent with this Easement. Such entry shall be permitted upon prior notice to Grantors, and shall be made in a manner that will not unreasonably interfere with Grantors' use and quiet enjoyment of the Property.

(c) To prevent any activity on or use of the Property that is inconsistent with the purpose and terms of this Easement and to require the restoration of such areas or features of the Property that may be damaged by any inconsistent activity or use. However, it is the intention of this Easement not to limit Grantors' discretion to employ their choices of farm and ranch uses and management practices so long as those uses and practices are consistent with the purpose and terms of this Easement.

(d) Subject to Grantors' consent, to erect and maintain a sign or other appropriate marker in a prominent location on the Property, visible from a public road, bearing information indicating that the Property is protected by Grantee. The wording of the information shall be determined by Grantee, but shall clearly indicate that the Property is privately owned and not open to the public. Grantee shall be responsible for the costs of erecting and maintaining such sign or marker.

3. Current Practices and Conditions; Baseline Data. In order to establish the present condition of the Protected Values, Grantee has examined the Property and prepared a report (the "Easement Documentation Report") containing an inventory of the Property's relevant features and conditions, its improvements and its natural resources (the "Baseline Data"). A copy of the Easement Documentation Report has been provided to Grantor, and another shall be placed and remain on file with Grantee. The Easement Documentation Report has been signed by Grantors and Grantee, and thus acknowledged accurately to represent the condition of the Property at the date of the conveyance of this Easement. The parties intend that the Baseline Data shall be used by Grantee to monitor Grantors' future uses of the Property and practices thereon. The parties further agree that, in the event a controversy arises with respect to the condition of the Property or a particular resource thereof, the parties shall not be foreclosed from utilizing any other relevant document, survey, or report to assist in the resolution of the controversy. Grantors and Grantee recognize that changes in economic conditions, in agricultural technologies, in accepted farm and ranch management practices, and in the situations of Grantors may result in an evolution of agricultural uses of the Property, provided such uses are consistent with the purpose and terms of this Easement.

4. Prohibited Uses. Grantee and Grantors intend that this Easement shall confine the uses of the Property to agriculture, ranching, residential use associated with the agricultural use of the Property, and the other uses which are described herein. Examples of uses and practices which are inconsistent with the purpose of this Easement, and which are hereby expressly prohibited, are set forth below. The uses and practices set forth below are not necessarily exhaustive recitals of inconsistent activities. They are set forth to establish specific prohibited activities, and to provide guidance in determining the consistency or inconsistency of other activities with the purpose of this Easement.

(a) Subdivision. The legal or defacto division or subdivision of the Property. Grantors shall not sell or otherwise convey the Property other than as a whole parcel except with the express written consent of Grantee. A lease of a portion of the Property for agricultural use shall not be prohibited by this paragraph.

(b) Commercial or Industrial Use. Any commercial or industrial uses, provided, however, that neither ranching, agriculture, nor the production or processing of food and fiber products as contemplated by the provisions of Paragraph 5(b) hereof, shall be prohibited by this paragraph.

(c) Building. The construction of any road or structure except as provided in Paragraph 5(c) hereof.

(d) Soil Erosion or Degradation. Any use or activity which causes significant soil degradation or erosion or significant pollution or degradation of any surface or subsurface waters;

(e) Excavation. Any alteration of the general topography or natural drainage of the Property including, without limitation, the excavation or removal of soil, sand, gravel, rock, peat, or sod, except as may be required for uses permitted herein; provided that construction materials such as rock, soil, sand, and gravel may be taken for use on the Property from locations and in amounts approved by Grantee.

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- (f) Alteration of Streams or Ponds. The alteration or manipulation of ponds and watercourses located on the Property or the creation of new water impoundments or watercourses for any purpose other than natural habitat enhancement or permitted agricultural uses of the Property. Any existing or new water impoundments for natural habitat enhancement or permitted agricultural uses may be maintained, repaired, rebuilt, and periodically dredged to maintain their capacity.
- (g) Tree Cutting. The pruning, cutting down, or other destruction or removal of live trees except to control or prevent hazards, diseases, or fire; for the heating of ranch or residential facilities on the Property; or to enhance the growth of healthy trees in accordance with generally accepted forestry practices or in accordance with a resource management plan approved by Grantee.
- (h) Feedlots. The establishment or maintenance of any commercial feedlot, which is defined for the purposes of this Easement as a confined area or facility within which the land is not grazed or cropped at least annually and which is used to receive for feeding and fattening for market livestock, poultry and other fowl that has not been raised on the Property.
- (i) Dumping. The dumping or other disposal of wastes, refuse, or debris on the Property, except for organic material which is generated by permitted agricultural uses on the Property; provided that any such dumping or disposal of organic materials shall be in accordance with applicable law and generally accepted agricultural management practices.
- (j) Signs and Billboards. The placement of any signs or billboards on the Property, except that signs whose placement, number, and design do not significantly diminish the scenic character of the Property may be displayed to state the name and address of the Property and the names of persons living on the Property, to identify the Property as one protected by Grantee or any successor, to advertise an on-site activity permitted pursuant to Paragraph 5, to advertise the Property for sale or rent, and to post the Property to control unauthorized entry or use.
- (k) Sale or Transfer of Water or Water Rights. Sale or transfer of any water or water rights belonging to the Property to any other property or entity, or the use of any of the water rights appurtenant to the Property for any use other than permitted agricultural uses, conservation and natural habitat enhancement purposes, and permitted residential uses.
- (l) Recreational Vehicles. The recreational use on the Property of off-road or all-terrain vehicles or motorcycles.

5. Reserved Rights. Grantors reserve to themselves, and to their personal representatives, heirs, successors, and assigns, all rights accruing from their ownership of the Property, including the right to engage in or permit or invite others to engage in all uses of the Property that are not expressly prohibited herein and are not inconsistent with the purpose and terms of this Easement, provided all applicable governmental approvals and permits are properly obtained. The following rights are not necessarily exhaustive recitals of reserved rights. They are set forth both to establish specific permitted uses and activities, and to provide guidance in determining consistency of other uses and activities with the purpose of this Easement.

- (a) Primary Residence. To reside on the Property.
- (b) Agriculture. To engage in any and all agricultural uses of the Property in accordance with sound, generally accepted agricultural practices. For the purposes of this Easement "agricultural uses" shall be defined as: breeding, raising, pasturing, and grazing livestock of every nature and description for the production of food and fiber; breeding and raising bees, fish, poultry, and other fowl; planting, raising, harvesting, and producing agricultural, aquacultural, horticultural, and forestry crops and products of every nature and description; and the processing, storage, and sale, including direct retail sale to the public, of crops and products harvested and produced principally on the Property, provided that the processing, storage, and sale of any such crops or products that are not food or fiber shall require the consent of Grantee; provided, however, that such agricultural uses shall not result in significant soil degradation, or significant pollution or degradation of any surface or subsurface waters.
- (c) Improvements. To maintain and repair existing structures, housing, fences, corrals, roads, ditches, and other improvements on the Property. Additional improvements accessory to the residential use of the Property, and additional structures, housing, facilities and roads reasonably necessary to the agricultural uses of the Property, shall be permitted, provided that Grantors obtain the express written approval of Grantee for the construction of any such additional improvements, structure, housing, facility or road, including the size, function, capacity and location, which consent should not be unreasonably withheld. Grantor shall provide Grantee written notice of Grantor's intention to undertake such construction, together with information on its size, function, capacity and location, not less than sixty (60) days prior to the commencement thereof. Additional fencing deemed by Grantors to be reasonably necessary to ranching and agricultural activities may be constructed without Grantee's consent. In the event of destruction, deterioration or obsolescence of any improvements, structures, housing, fences, corrals, roads, or ditches, whether existing at the date hereof or constructed subsequently pursuant to the provisions of this paragraph, Grantors may replace the same with improvements or structures of similar size, function, capacity and location.
- (d) Water Resources and Impoundments. To develop and maintain such water resources and impoundments on the Property as are necessary or convenient for ranching, agricultural, conservation and residential uses, provided that the creation, alteration or enlargement of any water impoundment shall not damage, impair or interfere with significant natural, open space or scenic values of the Property.
- (e) Agrichemicals. To use agrichemicals such as fertilizers, pesticides, herbicides and fungicides in accordance with county, state and federal laws and regulations. Such use shall be carefully circumscribed near surface water and during periods of high ground water.
- (f) Recreational Uses. To utilize the Property for recreational or educational purposes that require no surface alteration or other development of the land.
- (g) Water Rights. All right, title and interest in and to all tributary and non-tributary water, water rights, and related interests in, on, under, or appurtenant to the Property, provided that such water rights are used on the Property in a manner consistent with the purpose and terms of this Easement.
- (h) Mineral Rights. All right, title, and interest in subsurface oil, gas and minerals; provided that the manner of exploration for, and extraction of any oil, gas or minerals shall be only by a subsurface method, and shall not damage, impair or endanger the protected values of the Property.

6. Arbitration. If a dispute arises between the parties concerning the consistency of any proposed use or activity with the purpose and terms of this Easement, and Grantors agree not to proceed with the use or activity pending resolution of the dispute, either party may refer the dispute to arbitration by request made in writing upon the other. Within thirty (30) days of the receipt of such a request, the parties shall select a single arbitrator to hear the matter. If the parties are unable to agree on the selection of a single arbitrator, then each party shall name one arbitrator and the two arbitrators thus selected shall select a third arbitrator; provided, however, if either party fails to select an arbitrator, or if the two arbitrators selected by the parties fail to select the third arbitrator within fourteen (14) days after the appointment of the second arbitrator, then in each such instance a proper court, on petition of a party, shall appoint the second or third arbitrator or both, as the case may be. A judgment on the arbitration award may be entered in any court having jurisdiction thereof. The prevailing party shall be entitled, in addition to such other relief as may be granted, to a reasonable sum as and for all its costs and expenses related to such arbitration, including, without limitation, the fees and expenses of the arbitrator(s) and attorneys' fees, which shall be determined by the arbitrator(s) and any court of competent jurisdiction that may be called upon to enforce or review the award.

7. Grantee's Remedies. If Grantee determines that Grantors are in violation of the terms of this Easement or that a violation is threatened, Grantee shall give written notice to Grantors of such violation and demand corrective action sufficient to cure the violation and, where the violation involves injury to the Property resulting from any use or activity inconsistent with the purpose of this Easement, to restore the portion of the Property so injured. If Grantors fail to cure the violation within thirty (30) days after receipt of notice thereof from Grantee, or under circumstances where the violation cannot reasonably be cured within a thirty (30) day period, fail to begin curing such violation within the thirty (30) day period, or fail to continue diligently to cure such violation until finally cured, Grantee may bring an action at law or in equity in a court of competent jurisdiction to enforce the terms of this Easement, to enjoin the violation by temporary or permanent injunction, to recover any damages to which it may be entitled for violation of the terms of this Easement or injury to any protected values, including damages for any loss thereof, and to require the restoration of the Property to the condition that existed prior to any such injury. If Grantee, in its sole discretion, determines that circumstances require immediate action to prevent or mitigate significant damage to the protected values of the Property, Grantee may pursue its remedies under this paragraph without waiting for the period provided for cure to expire. Grantee's rights under this paragraph apply equally in the event of either actual or threatened violations of the terms of this Easement, and Grantors agree that Grantee's remedies at law for any violation of the terms of this Easement are inadequate and that Grantee shall be entitled to the injunctive relief described in this paragraph, both prohibitive and mandatory, in addition to such other relief to which Grantee may be entitled, including specific performance of the terms of this Easement, without the necessity of proving either actual damages or the inadequacy of otherwise available legal remedies. Grantee's remedies described in this paragraph shall be cumulative and shall be in addition to all remedies now or hereafter existing at law or in equity.

7.1 Costs of Enforcement. Any costs incurred by Grantee in enforcing the terms of this Easement against Grantors, including, without limitation, costs of

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suit and attorneys' fees, and any costs or restoration necessitated by Grantors' violation of the terms of this Easement shall be borne by Grantors. If Grantors prevail in any action to enforce the terms of this Easement, Grantors' costs of suit, including, without limitation, attorneys' fees, shall be borne by Grantee.

7.2 Grantee's Discretion. Enforcement of the terms of this Easement shall be at the discretion of Grantee, and any forbearance by Grantee to exercise its rights under this Easement in the event of any breach of any term of this Easement by Grantors shall not be deemed or construed to be a waiver by Grantee of such term or of any subsequent breach of the same or any other term of this Easement or of any of Grantee's rights under this Easement. No delay or omission by Grantee in the exercise of any right or remedy upon any breach by Grantors shall impair such right or remedy or be construed as a waiver.

7.3 Acts Beyond Grantors' Control. Nothing contained in this Easement shall be construed to entitle Grantee to bring any action against Grantors for any injury to or change in the Property resulting from causes beyond Grantors' control, including, without limitation, fire, flood, storm, and earth movement, or from any prudent action taken by Grantors under emergency conditions to prevent, abate, or mitigate significant injury to the Property resulting from such causes.

8. Costs and Taxes. Grantors retain all responsibilities and shall bear all costs and liabilities of any kind related to the ownership, operation, upkeep and maintenance of the Property. Grantors shall pay any and all taxes, assessments, fees and charges levied by competent authority on the Property or on this Easement. It is intended that this Easement constitute an enforceable restriction within the meaning of Article XIII Section 8 of the California Constitution and that this Easement qualify as an enforceable restriction under the provisions of California Revenue and Taxation Code Section 402.1.

9. Hold Harmless. Grantors shall hold harmless, indemnify, and defend Grantee and its directors, officers, employees, agents, and contractors and the heirs, personal representatives, successors, and assigns of each of them (collectively "Indemnified Parties") from and against all liabilities, penalties, costs, losses, damages, expenses, causes of action, claims, demands, or judgments, including, without limitation, reasonable attorneys' fees, arising from or in any way connected with: (1) injury to or the death of any person, or physical damage to any property, resulting from any act, omission, condition, or other matter related to or occurring on or about the Property, regardless of cause, except to the extent of the adjudicated proportionate fault of any of the Indemnified Parties; (2) the obligations specified in Paragraph 8.

10. Access. No right of access by the general public to any portion of the Property is conveyed by this Easement.

11. Development Rights. The parties acknowledge that under currently applicable zoning regulations of the County the property is so classified that upon receipt of required government approvals the Property could be developed to a density of () single family residential dwelling units ("the development rights"). The parties agree to deal with the development rights as follows:

(a) Grantors retain one (l) of the () development rights associated with the Property. [The development right retained by Grantor shall apply and relate to the existing residential improvements on the Property which consist of Grantors reserve the right to maintain, use, repair, and replace the existing improvements on the property with approval of appropriate governmental agencies and in conformity with Paragraph 5(c) hereof and all other applicable provisions of this Deed. The development right retained by Grantors shall not be used to support or enable the creation of any additional residential uses or units on the Property except as expressly provided in Paragraph 5(c) hereof.] [If property has no existing residence: The development right retained by Grantors shall apply to and may be utilized on the Property. Grantors may build, use, maintain, repair and replace a residence on the Property with the approval of appropriate governmental agencies and in conformity with all applicable provisions of this Deed, provided that Grantors first obtain the express written approval of Grantee as to the exact size and location of such residence.]

(b) The () development rights associated with the Property which are not retained by Grantors are hereby extinguished.

(c) Neither Grantors nor Grantee shall use or receive the benefit from any increase in allowable development rights associated with the Property resulting from future zoning changes.

12. Extinguishment. If circumstances arise in the future such as render the purpose of this Easement impossible to accomplish, this Easement can only be terminated or extinguished, whether in whole or in part, by judicial proceedings in a court of competent jurisdiction, and the amount of the compensation to which Grantee shall be entitled from any sale, exchange, or involuntary conversion of all or any portion of the Property subsequent to such termination or extinguishment, shall be determined, unless otherwise provided by California law at the time, in accordance with paragraph 13.

13. Compensation. This Easement constitutes a real property interest immediately vested in Grantee. For the purpose of paragraph 12, the parties stipulate that this Easement has a fair market value determined by multiplying (i) the fair market value of the property unencumbered by the Easement by (ii) the ratio of the value of the Easement at the time of this grant to the value of the Property, unencumbered by the Easement, at the time of this grant. The values at the times of this grant shall be those values established by the appraisal prepared by _____ dated _____. The ratio established by this paragraph 13(ii) shall remain constant, and on a subsequent sale, exchange, or involuntary conversion of all or any portion of the Property, pursuant to the provisions of paragraph 12, Grantee shall be entitled to a portion of the proceeds equal to such proceeds (minus any portion attributable to improvements made after the date of this grant) multiplied by the ratio established by this paragraph 13(ii). In the event of extinguishment of the easement by sale to Grantors (subject to the extinguishment provisions of paragraph 12), Grantee shall be entitled to receive an amount equal to the fair market value of the Property at the time of such sale (minus such amount as is attributable to improvements made after the date of this grant), as established by independent appraisal, multiplied by the ratio established by this paragraph .

14. Condemnation. If the Easement is taken, in whole or in part, by exercise of the power of eminent domain, Grantee shall be entitled to compensation in accordance with applicable law.

15. Assignment of Grantee's Interest. Grantee may assign its interest in this Easement only to a "qualified organization", within the meaning of Section 170(h) of the Internal Revenue Code of 1954, as amended, or any successor provision.

16. General Provisions.

(a) Controlling Law. The interpretation and performance of this Easement shall be governed by the laws of the State of California.

(b) Liberal Construction. Any general rule of construction to the contrary notwithstanding, this Easement shall be liberally construed in favor of the grant to effect the purpose of this Easement and the policy and purpose of the California Conservation Easement Act of 1979, as amended. If any provision in this instrument is found to be ambiguous, an interpretation consistent with the purpose of this Easement that would render the provision valid shall be favored over any interpretation that would render it invalid.

(c) Severability. If any provision of this Easement, or the application thereof to any person or circumstance, is found to be invalid, the remainder of the provisions of this Easement, or the application of such provision to persons or circumstances other than those as to which it is found to be invalid, as the case may be, shall not be affected thereby.

(d) Entire Agreement. This instrument sets forth the entire agreement of the parties with respect to the Easement and supersedes all prior discussions, negotiations, understandings, or agreements relating to the Easement, all of which are merged herein.

(e) No Forfeiture. Nothing contained herein will result in a forfeiture or reversion of Grantor's title in any respect.

(f) Joint Obligation. The obligations imposed by this Easement upon Grantors shall be joint and several.

(g) Successors. The covenants, terms, conditions, and restrictions of this Easement shall be binding upon, and inure to the benefit of the parties hereto and their respective personal representatives, heirs, successors, and assigns and shall continue as a servitude running in perpetuity with the Property.

(h) Termination of Rights and Obligations. A party's rights and obligations under this Easement terminate upon transfer of the party's interest in the Easement or Property, except that liability for acts or omissions occurring prior to transfer shall survive transfer.

(i) Future Conveyance. Grantors agree that reference to this Deed will be made in any subsequent deed or other legal instrument by means of which they convey any interest in the Property (including but not limited to a leasehold interest).

(j) Not Governmental Approval. No provision of this Easement nor the acquisition of this Easement by any governmental entity shall constitute govern-

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mental approval of any improvements, construction or other activities which may be permitted under this Easement.

IN WITNESS WHEREOF, Grantors have executed this Deed of Easement this ____ day of _____, 19__.

Grantors

By:_____

By: _____

Accepted:
[Grantee]

By:_____

[Notarization of Grantors' signatures].
Sample Assignment of Conservation Easement
(Not for Execution)

When Recorded Mail To:

ASSIGNMENT OF DEED OF AGRICULTURAL CONSERVATION EASEMENT

THIS ASSIGNMENT OF DEED OF CONSERVATION EASEMENT (the "Assignment") is made by _____, a California nonprofit public benefit corporation ("Assignor"), to United States of America, acting through the Secretary of the Interior under the authority of Public Law _____ ("Assignee").

RECITALS

WHEREAS, Assignor holds a Deed of Agricultural Conservation Easement over certain real property in _____County, California (the "Property"), recorded _____ 199_, as Recorder's Serial No._____ of the Official Records of _____ County, California, attached hereto as Exhibit A and incorporated herein by this reference (the "Easement"); and

WHEREAS, the Property possesses agricultural, natural, open space and scenic values of great importance to the people of Marin County, the people of the State of California and the people of the United States; and

WHEREAS, the Property is located within the boundaries of Point Reyes National Seashore as expanded by Public Law_____; and

WHEREAS, Assignee is authorized by Public Law_____ to acquire conservation easements on land within the expanded boundaries to protect the integrity of Point Reyes National Seashore and to preserve long-term agriculture in the region; and

WHEREAS, Assignor and Assignee intend that the Easement shall continue to be maintained and enforced to preserve and protect the agricultural, open space and scenic values of the Property; and

WHEREAS, Assignor desires to assign the Easement to Assignee to continue to effectuate those intentions by restricting and limiting the uses of the Prop-erty upon the express terms and conditions and for the specific purposes set forth in the Easement; and

WHEREAS, Assignee intends, by acceptance of the assignment made hereby, to preserve and to protect in perpetuity the agricultural, open space and scenic values of the Property in accordance with the purpose and terms of the Easement;

NOW, THEREFORE, for good and valuable consideration, and in consideration of the mutual covenants contained herein and in the Easement, based upon the common law [and pursuant to the laws of the State of California including inter alia Sections 815-816 of the California Civil Code], Assignor hereby assigns, conveys and transfers to Assignee all of Assignor's right, title and interest in and to the Easement, in perpetuity over and across the Property as such right, title and interest is more fully described in Exhibit A.

IN WITNESS WHEREOF, Assignor has executed this Assignment of Deed of Easement this_____day of_____, 19__.

Assignor: By:_____

Assignee hereby accepts the above Assignment of Deed of Conservation Easement.

UNITED STATES OF AMERICA

By:_____

Bibliography

- Barbour, Michael, Bruce Pavlik, Frank Drysdale, and Susan Linstrom
1993 *California's Changing Landscapes*. Diversity and Conservation of California Vegetation. California Native Plant Society.
- Bush, Lisa
1994 "Native Grasses Flourish on Marin Ranches." MALT News.
- California Department of Fish and Game (CDFG)
1975 *The Natural Resources of Bodega Harbor*. Prepared by Jon Standing, Bruce Browning and John W. Speth.
1977 *The Natural Resources of Esteros Americano and de San Antonio*. Prepared by Madrone Associates, Environmental Consultants.
1981 *Fish Bulletin 171: Status of the Pacific Herring, Clupea harengus pallasii, Resource in California 1972 to 1980*. Jerome D. Spratt, Marine Resources Region.
1994a Endangered, Threatened, and Rare Plants of California List, April, 1994.
1994b Natural Diversity Database, Special Animals Listing, August, 1994.
1994c Letter from Ken Hashagen, Coordinator Natural Diversity Database, to Virginia Norris, Point Reyes National Seashore, October 11, 1994.
1994d Files at California Fish and Game, Bodega Bay Office, Tom Moore.
- California Coastal Conservancy
1984 *A Program for Restoring the Environment of Tomales Bay*. Tomales Bay Estuarine Enhancement Program.
- Chan, Gordon L., Ph.D.
n.d. *A Report on the Survey of Major Marine Organisms at the Point Reyes National Seashore Park*.
- Connors, Peter G. Ph.D., and John L. Maron, M.S.
1990 *E-13: Estero Americano Bird Population Study*. Santa Rosa Subregional Water Reclamation System, Long-term Detailed Studies. Development of Reclamation Alternative, Phase 2 Draft Report; Volume 3—Receiving Waters—Laguna and Esteros.
- Corwin, Ruthann
1971 *Summary of Existing Data on Tomales Bay, Marin County, California*.
- Daetwyler, Calvin C.
1966 *Marine Geology of Tomales Bay, Central California*. Scripps Institution of Oceanography and Pacific Marine Station, Research Report No.6.
- Dickinson, A. Bray
1993 *Tomales Township—A History*. The Story of Bolsa de Tomales before the North Pacific Coast Railroad. Tomales History Center.
- Diehl, Janet and Thomas S. Barrett
1988 *The Conservation Easement Handbook*. Managing Land Conservation and Historic Preservation Easement Programs. Trust for Public Land and the Land Trust Exchange.
- Evans, Jules G.
1993 *The Natural History of the Point Reyes Peninsula*. Revised Edition. Point Reyes National Seashore Association.
- Hagel, Lisa C.
1994 Letter from Lisa C. Hagel, Researcher II, Northwestern Information Center, Sonoma State University to John A. Dell'Osso, Point Reyes National Seashore, October 31, 1994.
- Hornback, Kenneth E.
1995 Memorandum from Kenneth E. Hornback, Chief, Socio-Economic Studies, NPS to Superintendent, Point Reyes National Seashore, February 13, 1995.
- Kelly, John P.
1993 Letter from John P. Kelly, Resident Biologist Cypress Grove Preserve, to Congresswoman Lynn Woolsey, July 7, 1993.
1994 *World Headquarters on Tomales Bay? Ecology of a Rare Salt Marsh Plant*. The Ardeid. Audubon Canyon Ranch.
- Litton, R. Burton, Jr. with Michael Laurie and Nancy Wakeman
1972 *The Landscape as a Visual Resource*.
- Livingston, Dewey
1989 *Hamlet: 1844-1988, A History of "Jensen's Oyster Beds"*. Historic Resource Study. National Park Service, Point Reyes National Seashore.
- Marcus, Laurel
1994 Letter to Jerry Friedman, September 20, 1994.
- Marin County Department of Agriculture
1994 Annual Livestock and Agricultural Crop Report, April 1, 1994.
- Marin County Planning Department
1995 The Marin Countywide Plan. Revised Plan April, 1993. Marin County Planning Department, Civic Center.
- Marin Independent Journal
1994 *Marin Dairies Adapt, Play Key Role*. Beth Ashley, Marin Independent Journal, June 27, 1994.
- Mason, Jack
1970 *Point Reyes: The Solemn Land*. North Shore Books.
1975 *Making of Marin*. In collaboration with Helen Van Cleave Park. North Shore Books.
1976 *Earthquake Bay—A History of Tomales Bay, California*. North Shore Books.
- National Park Service (NPS), U.S. Department of the Interior
1980 General Management Plan, Point Reyes National Seashore, California.
1988 Management Policies.
1991 Criteria for Boundary Adjustments, Supplement to Planning Process Guideline (NPS-2).
1992 Land Protection Plan, Point Reyes National Seashore.
1993a Statement for Management (Revision), Point Reyes National Seashore.
1993b Guiding Principles of Sustainable Design. Denver Service Center.
1994 NPS-28, Cultural Resource Management Guidelines.
- Nielsen, Jennifer and Karen Nerman-Boudreau
1990 *E12: Fishery Development Opportunity*. Santa Rosa Subregional Water Reclamation System, Long-term Detailed Studies. Development of Reclamation Alternative, Phase 2 Draft Report; Volume 3 - Receiving Waters - Laguna and Esteros.
- Point Reyes Light
1994 *The Uncountable Millions*. Don Schinske, Point Reyes Light, November 17, 1994.
- Prunuske, Liza and M. Kim Cordell, Susan Holve and Martha Neuman
1994 *Stemple Creek/Estero de San Antonio Watershed Enhancement Plan*. Prunuske Chatham, Inc. for California State Coastal Conservancy.

Skinner, Mark and Bruce Pavlik

- 1994 *California Native Plant Society, Inventory of Rare and Endangered Vascular Plants of California.*
California Native Plant Society.

Smith, Edmund H., and Ralph G. Johnson

- 1971 *The Environmental State of Tomales Bay.* Scope of the study, summary and conclusion.

Smith, S.V. and J.T. Hollibaugh

- 1990 *Nutrient Status of the Estero Americano.* NOAA Technical Memorandum, Gulf of the Farallones National Marine Sanctuary.

Suer, Anna L.

- 1987 *The Herring of San Francisco and Tomales Bays.*
The Ocean Research Institute.

Thalman, Sylvia Barker

- 1993 *The Coast Miwok Indians of the Point Reyes Area.*
Point Reyes National Seashore Association.

United States Fish and Wildlife Service, (USFWS) U.S.

Department of the Interior

- 1994 Letter from Joel A. Medlin, Field Supervisor, Ecological Services, to John Dell'Osso, Acting Chief of Interpretation, Point Reyes National Seashore, October 21, 1994.

Wahrhaftig, Clyde and J. Ross Wagner

- 1972 *Tomales Bay Environmental Study. Summary of the Geologic Report.*

View of sunset looking southwest towards Tomales Bay



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As the nation's principal conservation agency, the Department of the Interior has responsibility for most of our nationally owned public lands and natural and cultural resources. This includes fostering sound use of our land and water resources, protecting our fish, wildlife, and biological diversity, preserving the environmental and cultural values of our national parks and historical places, and providing for the enjoyment of life through outdoor recreation. The department assesses our energy and mineral resources and works to ensure that their development is in the best interest of all our people by encouraging stewardship and citizen participation in their care. The department also has a major responsibility for American Indian reservation communities and for people who live in island territories under U.S. administration.

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