Pacific West Region National Park Service
U.S. Department of the Interior

"So much of the natural world we have come to associate with the seashore—the smell of eucalyptus (exotic), the undulating open terrain (grazed lands), and the tranquil pastoral scene (market economy)—was the result of a long relationship between humans and nature on the Point. More importantly, untangling people from natural systems at the park may not be as productive or possible without understanding the story of how people have affected those systems and why, over time."

From the foreword
DAVID LOUTER
National Park Service
Seattle, Washinton

Edited under a Cooperative Agreement with

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ORGANIZATION OF AMERICAN HISTORIANS

TOMALES BAY ENVIRONMENTAL HISTORY AND HISTORIC RESOURCE STUDY
POINT REYES NATIONAL SEASHORE

Pacific West Region National Park Service
U.S. Department of the Interior

TOMALES BAY ENVIRONMENTAL HISTORY AND HISTORIC RESOURCE STUDY

POINT REYES NATIONAL SEASHORE



CHRISTY AVERY
HISTORIAN, PWRO–SEATTLE

Tomales Bay Environmental History and Historic Resource Study

Christy Avery
Pacific West Regional Office-Seattle
National Park Service



Fig. 1a. Looking south over Marshall and eastern Tomales Bay. Robert Campbell photo.

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Pacific West Region
National Park Service
U.S. Department of the Interior
2009

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National Park Service

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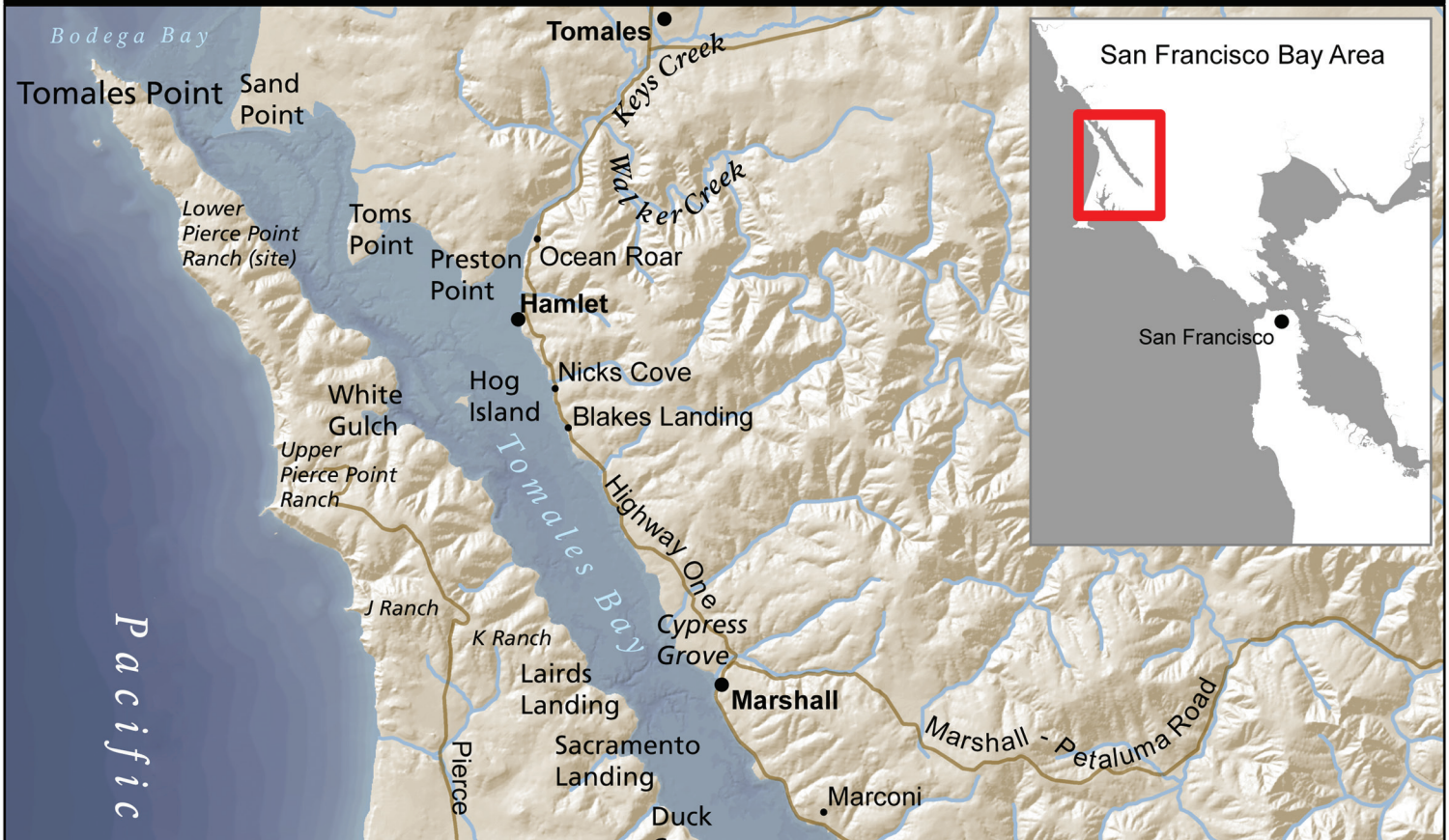
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Joseph Kinyon, Pacific Coast Science & Learning Center, NPS, August 2008, UTM Zone 10 N NAD83

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Acknowledgements

This project—a unique combination of both environmental history and historic resource study—was the brainchild of Pacific West Regional Office Historian David Louter and Point Reyes National Seashore Cultural Resources Chief Gordon White. I would like to thank both of them for the opportunity to produce this study. David provided constant guidance along the way as well; his insights and critiques were invaluable. Linda Nash, environmental history professor at the University of Washington, also deserves thanks for reviewing the manuscript. Special thanks to the staff at Point Reyes National Seashore, especially those who critiqued the first draft of this study. This history could not have been written without the help of Carola Derooy, archivist and librarian at Point Reyes National Seashore. She helped to find documents, scanned photographs, and provided access to the Jack Mason Museum. I'd also like to thank Don Neubacher, Superintendent of Point Reyes National Seashore and Stephanie Toothman, Chief of Cultural Resources for the Pacific West Regional Office of the National Park Service, for their support.

The majority of the research for this project was conducted at archives and libraries in California. The Marin County Free Library System contains a wealth of information about the county's history, and library staff were always willing to provide assistance in my quest for primary and secondary source materials. Special thanks to Jocelyn Moss at the Anne T. Kent California Room in the Marin County Civic Center Library for her help with this project. The staff at the Bancroft Library at the University of California, Berkeley and the California State Archives in Sacramento proved helpful as well. Though the Tomales Bay area remains lightly populated, the local community supports two wonderful local history repositories. The Jack Mason Museum in Inverness was a valuable source for information about tourism and early settlement in West Marin County, and I'd like to thank the staff for their assistance. The Tomales Regional History Center has a terrific photograph collection and especially good information about the area's agricultural history. The center's Lois Parks and Ginny Mackenzie-Magan were quite helpful to this endeavor. Finally, I would also like to thank Historian Dewey Livingston, author of a number of

books about the Point Reyes and Tomales Bay area and probably the most knowledgeable person on the subject of West Marin history, for answering my questions throughout the project.

Christy Avery
Point Reyes Station, California
May 25, 2006

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Foreword

Environmental History and National Parks

Environmental history provides the historic context for environmental change, and though a wide-ranging field, it focuses on the changing relationship between people and nature through time, paying close attention to the intended and unintended consequences of human activities in nature, as well as the ways people have shaped and in turn been shaped by the natural world. When the opportunity arose to bring the perspective of environmental history to a more traditional history of a national park, one that focused on the human past and built environment, there seemed to be no better example than Point Reyes National Seashore. Here the region's environmental history seems so visible. It would be difficult for anyone to suggest that if we just pulled back the agricultural curtain of this ranching landscape that we would find primordial nature intact. So much of the natural world we have come to associate with the seashore—the smell of eucalyptus (exotic), the undulating open terrain (grazed lands), and the tranquil pastoral scene (market economy)—was the result of a long relationship between humans and nature on the Point. More importantly, untangling people from natural systems at the park may not be as productive or possible without understanding the story of how people have affected those systems and why over time. Although not a history of the entire park, this study of Tomales Bay brings to light many of the strengths and the potential of environmental history. While the study still makes recommendations for interpreting the history of Tomales Bay and identifies historic properties, it operates under the notion that nature has a role in the human past and that nature has a history. In this way, we hope the study will deepen our awareness of the complex relationship between people and the natural world through time in national parks.

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Introduction

Tomales Bay: A Diverse Landscape

Set forty-five miles northwest of San Francisco, Tomales Bay is a coastal estuary that lies along a rift valley of the San Andreas Fault between the Point Reyes Peninsula and the California mainland. Shaped by dramatic geological and meteorological forces, the landscape around Tomales Bay reveals startling contrasts. The grassy, windswept hills on the bay's east side are sparsely populated and dotted with dairy and beef ranches, while a handful of oyster farms, restaurants, and marinas line the shore. Serene beaches and lush bishop pine forests lure visitors to the bay's western side. Settlements of strikingly different character, from the picturesque homes and gardens of Inverness to the trailer park at Lawson's Landing, are set along both sides of the bay. Tomales Bay is twelve-and-a-half miles long and drains 228 square miles, almost half of Marin County. The bay and its shores are habitat for tens of thousands of birds, home to thousands of people, production point of a fifth of California's oyster crop, and host to millions of visitors per year.

The bay might be the most managed and studied body of water along the West Coast. Much of the Tomales Bay area is preserved by national, state, local, and non-profit agencies. Point Reyes National Seashore boundaries protect much of the western side of the bay, while a great deal of the eastern side of the bay lies within the boundaries of Golden Gate National Recreation Area. The estuary is part of the Gulf of the Farallones National Marine Sanctuary and the Golden Gate Biosphere Reserve. State and county parks and wildlife sanctuaries line its shores, and agricultural easements maintain the rural character of the surrounding hillsides.

Contemporary visitors see Tomales Bay as one of the last pristine estuaries on the California coast. They come to kayak, swim, bird watch, or simply relax. They wander along trails above the bay and visit National Park Service (NPS) interpretive sites such as Pierce Point Ranch to learn about the area's dairy ranching history. Some buy fresh oysters or locally made cheeses, reminders



Fig. 2. The 6800 acre estuary occupies a rift valley caused by the San Andreas fault, which runs directly underneath the bay. Tomales Point separates the bay from the ocean. Courtesy of PRNS Archives.

that strands of the bay's working past have continued to the present. People, however, have not always valued the bay for its scenery, recreational opportunities, and undeveloped character. While current visitors view the bay as an ideal vacation spot and a place to be preserved and studied, the area's history shows us that this view is a relatively recent cultural invention.

The purpose of this study is not only to examine the political, social, and economic changes brought about by successive generations of Tomales Bay residents but also to examine the interactions between these residents and the natural world. Humans have utilized the estuary and its surroundings for thousands of years, and the last 150 years of natural resource use and development, in particular, have profoundly affected this environment. To different peoples at different times, the Tomales Bay area was an abundant landscape of marine and terrestrial resources, a potentially valuable mission site, and a rancher's paradise. While some visualized economic opportunities in the waters and tidelands or on the hills above the bay, others have valued the area as a peaceful retreat from urban life or as pristine wildlife habitat. An environmental history furthers our understanding of why people came to Tomales Bay and how their

different expectations have affected the natural environment, and how the natural environment has, in turn, shaped their history.

Cultural changes result in environmental changes, and each successive group of residents brought different sets of expectations that affected their surrounding environment. The earliest residents, the Coast Miwok, found the bay an abundant landscape. Villages and smaller settlements dotted the bay's shores, and they procured a diverse array of marine and terrestrial resources from the estuary and the surrounding grasslands, forests and tributary streams. The group managed and modified their surroundings through the use of fire and selective harvesting, and thousands of years of Coast Miwok land use shaped the natural landscape of the bay area. Tomales Bay confused the first European explorers, who thought they had discovered a great river. The bay later appealed to Spanish explorers and administrators due to its strategic location on the northern frontier, its potential labor supply (the Coast Miwok), and its fresh water, timber, and grassland resources. Due to shifts in global politics, a Tomales Bay mission was never built, but the estuary served as the northwestern border for Mission San Rafael's lands. Spanish cattle grazed freely around the Tomales Bay landscape, but missionaries paid little attention to the large estuary. Mexican rancho owners similarly found the area's grasslands valuable in their pursuit of profit through the hide and tallow trade, but they, too, all but ignored the nearby bay. The ranching activities of both groups began to transform the Tomales Bay landscape, but the area remained a remote, sparsely settled area.

New cultural conceptions of the value of Tomales Bay and the surrounding hillsides, as well as a new economic system and new forms of transportation, brought about rapid and profound changes in the mid-nineteenth century. During and after the California Gold Rush of 1848, the area became a valuable hinterland for San Francisco, linked to the urban center by a water route through Tomales Bay. Driven by the growth of the city, settlers in this capitalist economy sought to earn their fortune supplying beef, dairy products, potatoes, and grain to urban consumers and merchants. As a result, these immigrants created an agricultural landscape along the bay's shores. Overland travel was difficult and time consuming in the undeveloped state, and water transportation gave Tomales Bay area farmers an important advantage. The inauguration of railroad service brought about even greater changes, and railroad engineers literally reshaped the bay in their quest to build a line through the rugged



Figures 2a and 2b. The coastal fogs that linger along Inverness Ridge nurture a lush, forested landscape (2b) that contrasts with the dry, grassy eastern shores of the bay (2a). Courtesy of the California Coastal Records Project.

terrain. The railroad, which tightened the connection between San Francisco and its hinterland, enabled the development of new industries along the bay. Residents and newcomers capitalized on these economic opportunities as they expanded their production and export of agricultural products, fish, and shellfish for the urban market. These groups reordered the natural landscape in their quest to produce marketable commodities, and their actions resulted in both intentional and unanticipated changes to their environment.

Thinking about Tomales Bay's natural environment as part of San Francisco's hinterland helps us to understand the way that the bay was inexorably linked to the growing urban area. Hinterland, in this case, means not just the land that lies outside of the city, but the area that falls within the city's economic influence. In *Nature's Metropolis: Chicago and the Great West*, William Cronon used the term in this way. Cronon argues that the economic and environmental relationship between Chicago and its hinterland—the Great Plains—spurred the radical environmental transformation of the Plains in the nineteenth century. As the countryside supplied the raw materials that were needed to fuel the city's growth, this rural landscape, too, was transformed. "City, town and



county. . . worked together as a system," Cronon contends, "joining to become the most powerful environmental force reshaping the American landscape since the glaciers began their long retreat to the north." [1] His framework is useful for understanding the environmental changes that occurred on Tomales Bay, since the area served as a hinterland for San Francisco during the nineteenth and twentieth centuries.

Many Americans began to rethink the value of the natural environment in the mid-twentieth century, and Tomales Bay became a different kind of hinterland for San Francisco Bay area residents. The increase in automobile ownership, new roads, and the opening of the Golden Gate Bridge allowed larger numbers of tourists to visit Tomales Bay, and many residents of the rapidly sprawling San Francisco Bay area now valued the estuary and its shores as a place for leisure and recreation. Many residents wanted the area to remain scenic and

1. William Cronon, *Nature's Metropolis: Chicago and the Great West* (New York: W.W. Norton and Co., 1991), 265.



Fig. 3. Looking east over Tomales Bay. Courtesy of PRNS Archives, Don Gunn Collection.

undeveloped, and this vision became the dominant force shaping the Tomales Bay landscape in the late twentieth century. Others who valued most highly the agricultural and natural resource-based products of the region contested this idea, and government administrators and non-profit agencies created unique solutions in an attempt to reconcile these two visions. Debates about water quality, land use, and historic preservation remain hotly contested issues, and as cultural conceptions of the value of Tomales Bay change, these ideas will continue to shape its landscape.

Chapter One

An Abundant Landscape: The Coast Miwok and Tomales Bay

Before dairy ranches, oyster farms, and summer homes spread across the Tomales Bay landscape, the estuary was home to a large number of Coast Miwok Indians. The bay and the surrounding hillsides have a long human history. The Coast Miwok—the native peoples of Marin and southern Sonoma Counties—first settled the Tomales Bay area between 2,000 and 4,000 years ago. Archaeologists estimate that there were about 2,000 to 3,000 Coast Miwok before Spanish settlement. The Coast Miwok were a semisedentary people who hunted, gathered, and fished to procure a diverse array of resources.[2] They depended on the fish, wild plants, and waterfowl of the estuary, and through the use of fire, they managed and modified the land surrounding the bay.

While there are over 600 archaeological sites in Marin County, archaeologists still know relatively little about the Coast Miwok during the precontact period. Furthermore, the Spanish failed to record many observations about the group during first contact. Consequently, many of the conclusions reached by anthropologists are based on the Miwok way of life in the nineteenth century.[3] Anthropologists, however, believe that this portrait may be reasonably accurate, and since evidence suggests that while the Coast Miwok adapted new technologies after contact, they retained many traditional ways in regard to settlement and procurement.[4]

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2. Isabel Kelly, "Coast Miwok," in *Handbook of North American Indians*, ed. Robert F. Heizer (Washington, D.C.: Smithsonian Institution, 1978), Vol. 8: California , 414.

3. Lynn Compas, "Research Design, Case Study and Proposed Management Plan: Post-Contact Coast Miwok Settlement Patterns and Procurement Strategies in Point Reyes National Seashore" (MA thesis, Sonoma State University, 1998), 32. Archaeologists in Marin County have instead preferred to focus on the landing sites of European explorers or on postcontact period Coast Miwok sites.

4. Ibid., 43.

The Coast Miwok that lived in the Tomales Bay area before European settlement inhabited a substantially different environment than present-day residents. While the twenty-first century visitor would recognize the bay's contours, the topography of the surrounding hillsides, and the stark contrast between forest and grasslands on opposite sides of the bay, a closer look during the prehistoric period would reveal significant differences in the landscape. The sandy and clay loam soils in the eastern Tomales Bay area supported productive perennial grasses such as bunchgrasses and sod grasses. California oatgrass, tufted hairgrass, California fescue, beardless wild rye, pine bluegrass, blue wild rye, purple needlegrass, and june grass dominated the grasslands east of the bay. Native annuals such as blue-eyed grass, buttercups, sanicula, and lupine were interspersed throughout the area. Tree species that could withstand the wind, salt air, fires, and lack of rainfall, such as coast live oaks and bay laurel, inhabited the steepest slopes and canyons of eastern Tomales Bay. These grasslands and woodlands provided habitat for antelope, deer, elk, bear, cougar and coyote.[5] Bishop pines thrived in the low elevation coastal climate on the western side of the bay along with manzanita, huckleberry, salal, and rhododendron.[6]

Tomales Bay provided an abundant landscape for the Coast Miwok, and the group inhabited a number of villages and smaller settlements on the estuary.[7] The bay's shores contain some of the highest concentration of archaeological sites in Marin County as well as the majority of sites within Point Reyes National Seashore. The Coast Miwok located their settlements in sheltered coves on the bay with easy access to freshwater streams. There were at least

5. Clerin W. Zumwalt, "Consideration of Vegetation and Soils on the Tomales Bay Watershed," *Tomales Bay Environmental Study: Compendium of Reports* (Washington D.C: The Conservation Foundation, 1972), 74.

6. Faith Louise Duncan, "Botanical Reflections of the Encuentro and the Contact Period in Southern Marin County, California" (PhD diss., University of Arizona, 1992), 221.

7. Randall Milliken, *A Time of Little Choice: The Disintegration of Tribal Culture in the San Francisco Bay Area, 1769-1810* (Menlo Park and Novato, Ca: Ballena Press, 1995), 254. The political organization of the Coast Miwok is unclear, and archaeologists disagree about the relationship between villages and smaller settlements. Some archaeologists have designated the Coast Miwok that lived near Tomales Bay the Tamales Indians, as indicated by Spanish mission records. "Tamales" may have been a general Coast Miwok term for northerners and not indicative of a political affiliation.

two major village sites on streams on the east side of the bay during this time. Echacolom (also spelled Echa-kolum') was located at Marconi Cove, and Olemaloque (also called Olema) was near Olema. Spanish mission records indicate that there were groups of Coast Miwok living at Tom's Point and Tomales Point. In addition, there were a number of other small settlements along both sides of Tomales Bay. Though the Coast Miwok located larger villages on the eastern side of the bay, the west side of the bay contained a higher number of settlements, probably due to the shelter provided by the forested landscape as well as the abundance of plant foods and acorn bearing oaks.[8]

Marine foods were particularly important to the Coast Miwok, and Tomales Bay was the primary source of food stuffs such as fish, shellfish, and waterfowl. The Coast Miwok netted eel, sturgeon, flounder, perch, and herring on the bay's calm waters from rafts and boats made with tule reeds. Salmon were speared (using the cannon bone of a deer as a spear point), netted, or trapped in tributary creeks. The group fished for smelt from shore with surf nets as well.[9] They dug clams from the bay's beaches and pried mussels from rocks at Hog Island with digging sticks. Evidence suggests that the Coast Miwok consumed oysters rarely. In addition, mudhens and geese were netted or shot with bow and arrow from the bay's shores. The Coast Miwok utilized a variety of other birds, such as brown pelicans, great blue herons, and ducks, for food, feathers and ceremonial accessories.[10]

Since Tomales Bay provided a wealth of edible resources in a relatively calm, sheltered environment, the Coast Miwok made only infrequent trips to the ocean coast to procure foods. They ventured to ocean beaches to gather rockfish, abalone, Dungeness crab, sculpin, and seaweed, but there is no evidence to show that they fished in the open ocean, where the rough seas would have

8. Compas, 47. Other significant sites of settlement included Otroomiah, probably at the south end of the bay, and Segloque, east of Tom's Point, but it is not known if these sites were inhabited during the precontact period.

9. Mary E. T. Collier and Sylvia Barker Thalman, eds., *Interviews with Tom Smith and Maria Copa: Isabel Kelly's Ethnographic Notes on the Coast Miwok Indians of Marin and Southern Sonoma Counties, California (*San Rafael, CA: Miwok Archaeological Preserve of Marin, 1991), 141-43.

10. Ibid., 126-27.

overwhelmed their small rafts.[11] Their religious beliefs may have also discouraged the use of ocean resources, since the Coast Miwok believed that the dead resided to the west and that they traveled on sea foam to the afterlife.[12]

The Coast Miwok procured foodstuffs on a seasonal cycle. They gathered salmon and waterfowl in the winter, when vegetal foods and some game were scarce. During the summer, the focus shifted from the bay to the adjacent hills, where the Coast Miwok hunted game such as elk, deer, and rabbit. They also collected plant foods such as acorns and seeds that could be dried for winter consumption. The acorns were ground and boiled into mush, then mixed with water to make bread. Fowl, seaweed, and fish were sun and wind-dried and stored for the winter.[13]

While land was not privately owned, the Coast Miwok observed some private property restrictions. Specific food producing trees such as oaks could be privately owned, as could fishing, shellfishing, and hunting privileges to a certain area. Clam beds were often considered the private domain of a particular individual or family. The group held exclusive rights to the Tomales Bay clam beds from which the local currency, the clamshell disk bead, was gathered and manufactured. They traded the beads to the Southern Pomo, Wappo, and Southern Patwin Indians for food, such as dried deer meat and obsidian. Obsidian was used as arrows and knives to butcher game and could not be obtained near Tomales Bay.[14]

The hills surrounding Tomales Bay provided resources that were manufactured into structures, clothing, and tools. Coast Miwok dwellings were conical, grasscovered, and framed with willow or driftwood. Bunches of grass, rushes, or tule reeds were tied onto the outside, like shingles. These shingles were fastened together by cords made of lupine roots. They made bows—their main hunting weapon—from wood backed with pelican wing sinew, and the string

11. Compas, 48.

12. Geri Emberson and Dorothea Theodoratus, *Point Reyes National Seashore Cultural Affiliation Report*, (Novato, CA: The Federated Coast Miwok Cultural Preservation Association in cooperation with the National Park Service, 1999), 18.

13. Kelly, 416.

14. Ibid., 418; Compas, 50.

was made of sinew or lupine cord. Deer skins were made into clothing for both men and women. Women wore skirts of deerskin or tule, while men sometimes wore deerskin loincloths. The Coast Miwok used beach rocks as mortars and made trees into paddles and utensils. They obtained all of these items from Tomales Bay and the surrounding hillsides.[15]

Like many California Indian groups, the Coast Miwok used fire to manage their environment. They intentionally burned the hills surrounding Tomales Bay to facilitate their natural resource use. Annual fires sustained grass communities while discouraging brush and encroaching woodlands. Hunting and driving game and protecting settlements from invaders were easier in a burned landscape, since periodic fires increased visibility and decreased brush. Furthermore, game was attracted by the palatable young grasses in meadows that had experienced burning. Fire turned older and dead plants into organic materials that fertilized the soil, and it encouraged the growth of the plants and grasses whose seeds were made into pinole, a staple flour. Low intensity fires may also have increased acorn production in oaks just as it increased productivity of plants and grasses used for basket making. The deep roots of native bunch grasses were protected from fire, and these perennials had the ability to regenerate from their roots after burning.[16]

The Coast Miwok usually burned in the fall, following the seed harvest, and fire facilitated the collection of other foodstuffs. The Miwok dug for roots after the fall burning, when it was easier to turn the soil. To harvest wild rye, they burnt the fields; the fire moved so quickly that it felled but only scorched the grain. There is also evidence to suggest that Indians set fires to suppress disease and pests. The Coast Miwok actively managed their surroundings in other ways as well. Certain plants, such as bay laurel, tobacco, and elderberry, were encouraged by pruning, limited harvesting, and seed dispersal.[17]

15. Kelly, 416-418.

16. Richard D. Shultz, "The Effects of Fire and Fire Management on Cultural Resources," (National Park Service, 2003), 52; Duncan, 214.

17. Duncan, 181-243.

Although European explorers began to visit the Tomales Bay area in the late sixteenth century, the resources in and around the bay remained almost exclusively utilized by the Coast Miwok through the late eighteenth century. These native peoples managed and manipulated the natural resources of the area for sustenance for thousands of years without destroying their environment's capacity to sustain them. Subsequent groups would bring different values and assumptions about the natural landscape with them to Tomales Bay. They would view the area in terms of exploitable resources, a place to extract resources for distant markets, and this shift would bring change to the Tomales Bay landscape.

CHAPTER TWO

On the Edge of Empire: Conversion and Commerce on Tomales Bay

Between the late sixteenth and mid-nineteenth centuries, Europeans, seeking to exploit the natural resources of the California coast, explored the Tomales Bay area. The Spanish were searching for a supply stop for their Manila galleons and a strategic, resource-rich location for a mission site. Missions needed vast amounts of land for cattle ranching, and the Spanish mission at San Rafael incorporated the Tomales Bay area's grasslands into their domain. Russian and American merchants also attempted to profit from the marine resources of the bay as they searched for otter pelts along the northern California coast. The few Mexican ranchers who settled near Tomales Bay capitalized on the area's grasslands as they raised cattle for the hide and tallow trade. These European groups viewed the landscape differently than did the Coast Miwok that preceded them, and they placed different values on the bay's natural resources. In varying ways, these Europeans sought to profit from the Tomales Bay landscape and to incorporate the natural resources of the area into the global economy.

SPANISH EXPLORERS ALONG THE MARIN COAST

Spanish explorers on the California coast were looking for safe harbors, for supplies, and for locations that would further their goals of religion and empire. Spain's claim to California was based on the 1492 Treaty of Tordesillas, in which the Pope gave Spain the western coasts of North and South America. In 1595, the Spanish actively began to seek a location on the northern California coast that could provide their Manila galleons with fresh water and food. Later explorations focused on locating strategic sites for missions, which would serve to convert Indians and provide tangible evidence of Spain's claim to the

region.[18] Spanish explorers sought out Tomales Bay, in particular, in order to assess its value for natural resources and defense.

The first European to sight Tomales Bay was Estevan Lopez, boatswain of the *Tres Reyes*, in 1603, but the bay's rough entrance prevented the ship from exploring the estuary. The *Tres Reyes* was a small auxiliary vessel that had become separated from a larger Spanish ship commanded by Sebastian Vizcaíno during a storm off the Marin Coast. Vizcaíno and his crew explored the California coast in hopes of finding at least two sheltered harbors in which ships could take refuge from storms. The Spanish government also charged him with asserting a Spanish presence along the California coast. English pirates frequently attacked the Manila galleons, and the Spanish needed to establish their authority in the region. After Lopez sighted Tomales Bay, ship cosmographer Geronimo Martin Palacios wrote that they "found a very large river which had several fathoms of water at the entrance; it flowed from the southeast one quarter mile east of the interior, and the force of the current prohibited us from entering." Palacios likely assigned the designation "Rio de San Sebastian" to the bay, which the expedition's map depicted as a river without a source. [19]

No European entered the bay until 1775, when Lieutenant Juan Francisco de la Bodega y Quadra spotted the estuary while returning from explorations to the north in the schooner *Sonora*. Ignorant of the maps produced on the Vizcaíno expedition, the Sonora's pilot recorded, "We soon discerned the mouth of a considerable river. . . and some way up we therefore concluded this to be the harbor of San Francisco, which we were in search of." Bodega, too, mistook their location. He wrote, "I discovered a river of great volume, and, entering through it, I saw a large harbor. At the same time the sea came up with extraordinary violence and whereupon I thought it must be the port I was searching for; so I entered and anchored off the Punta de Arenas." The Spaniards soon realized their geographic mistake and named the bay "de la Bodega."[20]

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18. Iris H.W. Engstrand, "Seekers of the 'Northern Mystery': European Exploration of California and the Pacific," in *Contested Eden: California before the Gold Rush*, Ramón A. Gutiérrez and Richard J. Orsi, eds. (Berkeley: University of California Press, 1998), 87.

19. Clinton R. Edwards, "Wandering Toponyms: El Puerto de la Bodega and Bodega Bay," *Pacific Historical Review 33* (August 1964), 254. As the ship's cosmographer, Palacios' duties would have included navigation and mapmaking.

20. Edwards, 254-55.



Fig 4. Powerful winds, strong currents, and obstacles such as Sand Point, at the mouth of Tomales Bay, posed problems for Spanish explorers. Courtesy of PRNS Archives.

Powerful winds and strong currents again posed problems for the Spanish explorers in Tomales Bay, and they failed to find the natural resources they sought. They anchored for a night off of Sand Point, at the bay's entrance, where heavy surf brought by strong tides and high winds swamped the vessel. The ship had difficulty exiting the bay's narrow, turbulent mouth as well. Bodega wrote, "The entrance to the port is easy, since the northwest winds are at the stern for entering, but in leaving, unless it is done with a southeast wind, it is necessary to wait for the ebb tide and make sail while under tow, which is far from easy because of the force of the seas." Pilot Francisco Antonio Maurelle described the bay as "very large and sheltered," and he recommended that subsequent explorers inspect the estuary.[21] The Spanish were searching, in part, for sources of wood, but Maurelle had disappointing news once he saw the grassy hills surrounding Tomales Bay. "The mountains here are nearly naked, with

21. Edwards, 256. George Vancouver's 1794 map also called the bay "Bodega," and what is now Bodega Bay is absent from his map.

only grass on them," he observed. The expedition, however, failed to explore the bay's southern half, where timber was plentiful along the western shores.[22]

Despite the bad weather, dangerous tides and seeming lack of resources at Tomales Bay, Bodega y Quadra believed that the estuary could play a valuable military role. The Spanish had established a mission and a presidio at present day San Francisco in 1776, but Northern California remained a remote and undeveloped part of Spain's empire due to the area's vulnerability to foreign occupation. After James Colnett, the English captain of the Argonaut, landed in Bodega Bay for supplies and repairs, the Spanish feared that their rivals would return to the area to establish a permanent settlement. Bodega y Quadra, who had become the naval commander at San Blas, Mexico, decided that the Spanish should establish an outpost on the remote estuary (called el Puerto de la Bodega on his map) in order to secure the northern coast. In 1791, the Spanish Viceroy in Mexico followed Bodega y Quadra's recommendation and sent Juan Bautista Matute to establish a permanent presence at Tomales Bay.[23]

In April of 1792, Matute set out from San Blas in the schooner *Sutil*, while Felipe Goycoechea, the commandant at the Santa Barbara presidio, led an overland expedition from San Francisco to Tomales Bay. For unknown reasons, Matute did not have Bodega's map, and he believed that Bodega y Quadra intended Bodega Bay, rather than Tomales Bay, for the settlement. The *Sutil* became stuck on a sandbar in the shallow harbor as it entered. Not only was Bodega Bay too shallow for ship traffic, the perplexed Matute noted that there was no available wood for building. Once freed from the sandbar, Matute turned south toward Tomales Bay, where he spent three days.[24]

Despite the dangerous conditions at the bay's entrance, the estuary and its surrounding landscape impressed Matute. He found the bay to be "a port well provided with the facilities for the discharge of my commission, and a very good one for a ship of not more than fifteen feet draft, the depth of water at the entrance." Though it would be an expensive undertaking, Matute

22. Henry Wagner, "The Last Spanish Exploration of the Northwest Coast and the Attempt to Colonize Bodega Bay," *Quarterly of the California Historical Society 10* (December 1931), 337.

23. Wagner, 337-38.

24. Edwards, 264.



Fig. 5. Spanish explorers, hoping to find sources of timber, were disappointed by the "nearly naked" hills surrounding the northern part of the bay. Courtesy of PRNS Archives.

recommended that the Spanish found missions at Tomales Bay (which he called Puerto Nuevo) as well as Bodega Bay. Matute experienced some of the same problems as did Bodega y Quadra at the bay's mouth, and he also correctly deduced that a sandbar lay near the entrance. He warned, "Nevertheless the entrance is dangerous, because in my opinion, during the fresh winds from the northwest and other quarters, it must have a bar."[25] The local Indians presented another problem for Matute. While the Coast Miwok did procure supplies for the Spanish, Matute worried about potential conflicts with the group. He recommended that if a settlement was built, a cavalry unit should be sent to "induce some respect in" the Coast Miwok.[26]

As Goycoechea, along with eleven men and thirty horses, made his way up the Olema Valley to Tomales Bay (which he called Puerto de San Juan Francisco) to meet Matute, he too was impressed by the natural resources near the bay. As he journeyed north through the Olema Valley to the southern end of the bay, he wrote, "The place is well fitted for any kind of establishment. There are good

25. Ibid., 265.

26. Wagner, 341.

lands for crops, a sufficient supply of water and a great abundance of wood-red pine, oak, madrone, laurel, willow and a grove of hazelnut trees." Goycoechea named the area Los Mártires, and he advised the governor that it would be a perfect spot for settlement due to the natural amenities and ample labor supply (the local Indian population). He wrote that the site was "most appropriate for founding any mission or establishment, as all around there is a sufficient number of natives." He continued, "there are many deer there, some very good pasture and springs in all parts, very appropriate for raising cattle of all kinds and very extensive." Local Coast Miwok told the explorers that Tomales Bay teemed with fish, but the Spaniards did not express interest in the bay's marine resources.[27]

The Coast Miwok advised the explorers to continue up the west side of the bay to Tomales Point, where the Indians had observed Matute's vessel offshore. Though the forested western side of the bay actually provided more obstacles than the grassy eastern shores, the Indians told Goycoechea that the eastern shores were impassible. With "some labor," the party crossed the marsh at the south end of the bay and made their way to Tomales Point, passing "a wonderment of various (Coast Miwok) settlements along the bay shore." Their interpreters indicated that the Coast Miwok were prepared to battle the Spanish, but instead, the Indians living on the bay presented gifts of pinole (ground corn) and fruit.[28]

Upon reaching Tomales Point, Goycoechea expressed his belief that he had been tricked into traveling up the western side of the bay. He paid a group of Indians to row to the Sutil and bring Matute to Tomales Point, where the two met briefly. Goycoechea then headed back around the bay's southern end and made his way up the eastern side to Bodega Bay. He was much more impressed with the Tomales Bay area than he was with foggy, unforested Bodega Bay, where he believed the Spanish government wanted to locate a settlement. Unlike at Tomales Bay, Goycoechea did not locate any convenient fresh water or good pasture for his horses. Matute had left chickens and pigs for the overland explorers, and Goycoechea recruited local Indians to procure firewood and fresh water.[29]

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27. Ibid., 342-45.

28. Ibid., 342. The group passed nine Indian settlements along the way.

29. Ibid., 342-43.

The most thorough Spanish examinations of Tomales Bay were made by Don Juan Martínez, the second pilot on a patrol voyage aboard the schooner *Mexicana*, a vessel sent to rendezvous with Matute and the Sutil. Martinez discovered that the "great river" on his map was, in fact, a bay. He wrote, "Observing to the southeast an inlet which gave promise of being a large port, we directed ourselves to that with great risk of losing the anchors which had dragged since we had anchored, thus preventing us from making a careful scrutiny of the north lagoon and its qualities. By five-thirty in the afternoon we were already inside the port referred to, which runs inland some distance. We followed it until we saw a vast number of shoals." The crew explored the bay in a small launch for the next six days. Marnez, like Matute and Goycoechea, believed the Tomales Bay landscape could help fulfill the Spanish goals of religion and empire. He considered the timber valuable for building material and firewood. He wrote, "At the end of (Tomales Bay) are some forests of trees which, although I did not recognize their character, could not but be useful for any purpose." He viewed the surrounding grasslands, however, as useless.[30]

Despite the strategic location and availability of timber and fresh water, the bay's dangerous entrance gave the Spaniards second thoughts about establishing a mission on the estuary. Like Matute, Martínez believed that the bay could become a valuable harbor if only the entrance was safer. "The port is fifteen miles long in all. . . and if the entrance were [sic] deep enough for vessels of size there would be no better one on all the coast, since from the shoals inward there is a depth of four to six fathoms of water."[31]

Although Matute had been ordered to establish an outpost at Tomales Bay, he headed back to San Blas without completing his mission, still mistakenly thinking shallow Bodega Bay was the intended site. By the time he arrived, Bodega y Quadra had been transferred, and thus, the confusion between Bodega and Tomales Bay was not sorted out. International diplomacy soon rendered Tomales Bay useless as a settlement site. After the British and the Spanish settled their disputes over North America, the Spanish felt that they did not need to

30. Ibid., 331.

31. Ibid.

protect their northern possessions, and they made no further attempts to settle Tomales Bay.[32] However, as they increased their presence in other parts of the San Francisco Bay area, social and environmental changes began to spread to the Tomales Bay landscape.

SPANISH COLONIZATION OF CALIFORNIA, 1769–1821

The next phase in Tomales Bay's history was set in context of Spain's colonization of California. Between 1769 and 1821, Europeans began to incorporate the natural resources of the Tomales Bay area into the global economy. As the hide and tallow trade grew more lucrative, the grasslands of eastern Tomales Bay became pasture for Spanish mission cattle. The bay's marine resources also attracted attention, and European and American merchants converged on the Marin coast in search of sea otter furs. The bay and the surrounding lands, however, proved less valuable to these Europeans than they had hoped. The biggest environmental changes during this time resulted not from the extraction of resources but from the cessation of certain land use techniques. Over two-thirds of the Coast Miwok were interned in four San Francisco Bay area missions, and this population shift brought ecological changes to the Tomales Bay area landscape.

Spain colonized Northern California in an effort to stave off foreign encroachment and convert the native population to Christianity. As Russia, Great Britain, and France began to search farther and wider for natural resource commodities, Spain decided it needed to establish a firmer hold on its North American possessions. England had vastly increased its North American territory at the end of the French and Indian Wars in 1763, and Spain feared that they might expand across the American continent into Spanish territory. Russian encroachment from the north concerned the Spanish as well, since the silver mines in New Spain were vulnerable without a physical Spanish presence.[33] In 1769, California governor Gaspar de Portola worried, "The Russians are about to invade us."[34] Between 1769 and 1823, the Spanish established a series

32. Ibid., 339.

33. Steven W. Hackel, "Land, Labor and Production: The Colonial Economy of Spanish and Mexican California," in *Contested Eden, 113*.

34 .Jack Mason, *Early Marin* (Petaluma, Calif.: House of Printing, 1971), 3.

of twenty-one missions, four presidios, and three civilian settlements along a 650 mile stretch of Alta California. While Spanish explorers had recommended Tomales Bay as a military or mission site, the Spanish government instead located their northernmost missions at San Rafael, which offered easier water access to San Francisco Bay and Sonoma.

Tomales Bay's natural resources became incorporated into the Spanish mission system after the establishment of the San Rafael mission in 1817. Missions raised cattle for local consumption and for hides and tallow (used for cooking as well as making soap and candles) which they exported to Europe.[35] As the hide and tallow trade became more lucrative in the 1820s, missions increasingly concentrated their efforts on this endeavor. In 1828, the San Rafael mission boundaries were extended to include the entire eastern side of Tomales Bay, since the expanded cattle raising operation required extensive landholdings.[36] Even before the mission's boundaries were officially extended to Tomales Bay, mission cattle roamed freely, and likely inhabited the grassy eastern side of the estuary as they strayed from both the San Rafael and the Sonoma missions.[37]

Cattle ranching at Mission San Rafael began to reorder the natural landscape of Marin County, as it had throughout much of California. By 1832, the mission had over two thousand cattle on approximately 50,000 acres of land.[38] As German naturalist George H. von Langsdorff observed, "The cattle, horses and sheep do not require any particular attention. The herds are left in the open the whole year through." The animals consumed native grasses, compacted and disturbed the soil, and increased dispersal of exotic seeds through their manure. Despite the abundant native grasslands of the area, mission fathers sought to "improve" upon the existing pastures as they introduced a number of European species of forage plants. The Spanish cultivated narrowleaf plantain,

35. Guadalupe Vallejo, "Ranch and Mission Days in Alta California," *Century Magazine*, 16 (December 1890), 16.

36. Susan Kemp Tanner, "The Marin Peninsula: The Impact of Inhabiting Groups on the Landscape from the Indian to the Railroad" (MA thesis, University of California, Berkeley, 1971), 112.

37. Duncan, 108.

38. Tanner, 133.

wild oats, and mustard on the dunes and coastal prairies outside of mission boundaries for livestock fodder.[39]

According to Historian William Preston, the grasslands of California experienced "the most dramatic alterations anywhere in continental America" after colonization.[40] California's native plants could not compete with the more competitive and adaptive European species. As the Spanish introduced exotic plants, they spread outside of mission boundaries and replaced native plants. Early settlers marveled at how quickly wild oats, an introduced species, colonized abandoned fields. Many of the non-native species were successful because they produced more seeds per plant than native species. Their seeds sprout after years of dormancy, and they thrive in disturbed soil.[41] It is unclear how much the Tomales Bay landscape was invaded by exotic species during this time, but it is likely that non-native plants began to establish themselves in the area.

At the same time, Coast Miwok land use practices such as harvesting, seed dispersal, and intentional fires largely ceased during this period. The Spanish interned about 2,000 of the approximately 3,000 Coast Miwok in missions, and the reduction in population and natural resource use along Tomales Bay's shores impacted the environment. In May of 1793, Don Jose Joaquin de Arrillaga, interim governor of California, issued a decree that prohibited intentional burning by Indians. This proscription, designed to prevent property damage—combined with the internment of Coast Miwok in missions—meant that the Tomales Bay landscape experienced fires less and less. Fossil pollen evidence shows that the decree did have an effect. Fire-dependent species decreased while non-native annual grasses and herbs increased. Wooded areas began to encroach upon grasslands, and brush thickened. The number of rodents, deer, elk, and antelope also increased due to the decrease in hunting activity. Despite the competition from domestic livestock and the introduction of exotic species, the lack of human predators enabled wildlife populations to skyrocket.

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39. Joshua Paddison, ed., *A World Transformed: Firsthand Accounts of California before the Gold Rush* (Berkeley: Heydey Books, 1998), 117; and Duncan, 259.

40. William Preston, "Serpent in the Garden: Environmental Change in Colonial California," in *Contested Eden*, 272.

41. Duncan, 244 and 231.

Some animal populations, such as grizzly bears, increased since mission livestock provided an almost unlimited new food supply. Coast Miwok population fell from about three thousand to between 300 and 500 at the end of Spanish occupation. The Tomales Bay landscape gradually adjusted to the cessation of Coast Miwok land use practices, often by becoming more uniform in species composition.[42]

The Spanish ignored Tomales Bay's marine resources, but the estuary's marine mammal populations attracted the interest of European and American fur traders. These merchants were in search of the sea otter pelts that fetched top dollar in the Chinese market, and they converged upon the Northern California coastline beginning in the 1780s. Nearby Bodega Bay and the Farallon Islands, with their large otter populations, soon attracted hunters' attention. They only visited Tomales Bay after 1808, when populations elsewhere had been reduced. The hunters probably reduced the otter, bird, and seal populations in Tomales Bay, but the estuary, with its lack of kelp beds, did not sustain large numbers of otters. The Russians found other parts of the California coastline valuable enough to establish a fort, but they found Tomales Bay's resources lacking in comparison.[43]

Since neither the Spanish nor the Russians found the estuary attractive enough to settle, the mission period affected the Tomales Bay landscape in largely indirect ways. The enslavement of the Coast Miwok reduced the number of human inhabitants on the bay, and thus reduced natural resource use and land management techniques. Spanish land use practices overall were quite damaging to native flora and fauna surrounding their missions, and some of these changes likely extended to the hillsides surrounding Tomales Bay.

MEXICAN CALIFORNIA AND RANCHING ON TOMALES BAY, 1821–1848

Largely overlooked by Spain and Russia, Tomales Bay continued to attract little attention during Mexican colonization as well. The Spanish government

42. Compas, 51; Duncan, 349; Shultz, 55; Preston, 274-278.

43. Adele Ogden, *The California Sea Otter Trade* (Berkeley: University of California Press, 1941), 32-34.

practically ignored their North American colonies in the late eighteenth and early nineteenth centuries as the French Revolution and the Napoleonic Wars diverted their attention from their peripheral holdings. Also, Mexico's colonial status meant that Californians had little control over their government. For example, the colony lacked the authority to export and trade with other nations. Some Mexican residents started an independence movement after Napoleon's conquest of Spain, and beginning in 1810, a group of Indians and native-born Mexicans allied to wrest control of the country from its Spanish-born, upper-class leaders. A series of revolts and reprisals occurred over the next eleven years, and by 1820 the rebel forces were all but defeated. Changes in the Spanish regime, however, allowed the creation of an independent Mexico in 1821. Mexican rule initiated major changes in land ownership and management.[44]

Three acts passed by the Mexican government created the biggest change in California land holdings since the establishment of the mission system. The Mexican government actively encouraged colonization when it passed the Colonization Act of 1824 and the Supplemental Act of 1828. These laws allowed citizens (and individuals willing to become citizens and convert to Catholicism) to apply for up to eleven leagues, or about fifty thousand acres, of land. In order to apply for a grant, an individual submitted a petition and a diseño (a crudely drawn boundary map of the parcel) to the governor. A local government official investigated the claim, and if he verified the information, the parcel was granted. The approval of the Territorial Deputation (a local assembly) was also needed to validate the claim.[45]

Rancho owners had to meet four qualifications in order to gain title to their grants. First, they had to settle the land within one year. Second, they could not obstruct public roads, easements, or crossings (though they were allowed to fence their parcel). Third, the rights of Indians must be observed. Lastly, the boundaries of the rancho must be officially measured and defined by two cordeleros who were supervised by the local magistrate and adjoining property owners.[46] Many of the applicants were men who had served in the Mexican

44. Hackel, 130.

45. Ibid., 132. Most land grants were much smaller than the maximum size allowed.

46. Anna Coxe Toogood. *A Civil History of Golden Gate National Recreation Area and Point Reyes National Seashore* (Denver: National Park Service, 1980), 1: 29-30. Each cordelero held the end of a rope 137.5' long, and this rope was used to measure the property.

army in California, while others were merchants or traders who settled permanently in California. Before 1830, only thirty ranchos were granted. Most of these were south of San Francisco Bay, and many of these grantees never gained title to their land.[47]

Politicians and wealthy individuals who coveted the land, labor, and livestock of the missions pushed for distribution of mission lands. After the Mexican government passed the Secularization Act of 1833, mission lands became available to individuals, and grants were rapidly awarded. More than 700 ranchos, covering more than ten million acres of land, were granted between 1834 and 1846. Around a third of the grants were given to immigrants to Mexico.[48] Most of the ranchos included livestock that had formerly belonged to the missions. When the missions were secularized in 1834, the San Rafael mission distributed their 4,500 cattle, 500 horses, 3,500 sheep, and an unknown number of hogs as well as their extensive landholdings.[49]

Settlers who colonized California produced hides and tallow, which were traded for hard goods and other consumer products, to the American merchants who traveled along the California coast. The period 1828 to 1846 was a prosperous period for rancho owners, and they sold hundreds of thousands of hides and thousands of tons of tallow each year to Boston-based merchants. The meat was considered so worthless that a traveler in California was allowed to slaughter any cow for its meat as long as he left the hide. One historian estimated that between 1826 and 1848, the height of the trade, about 1.25 million hides and 62.5 million pounds of tallow were exported from California. Another calculated that over six million hides were exported throughout the nineteenth century.[50]

Hoping to capitalize on the grasslands around Tomales Bay, a handful of settlers raised cattle for the hide and tallow trade. Twenty-one men received

47. Hackel, 132.

48. Ibid, 132. Paul W. Gates, ed., *California Ranchos and Farms 1846-1862* (Madison: State Historical Society of Wisconsin, 1967), 3.

49. Paddison, 200.

50. Irvine Berdine Richman, *California under Spain and Mexico* (New York: Cooper Square Publishing, 1965), 292; Arthur Quinn, *The Broken Shore: The Marin Peninsula* (Layton, Utah: Peregrine Smith, 1981), 129; Gates, 4-5; Hackel, 132.

ranchos in Marin County before the U.S. takeover in 1846, and seven of these lay within the presentday boundaries of Point Reyes National Seashore and Golden Gate National Recreation Area. By 1843, most of Marin County, and all of the land bordering Tomales Bay, had been divided into grants.[51] While the Coast Miwok had utilized different parts of the Tomales Bay landscape seasonally, the Mexican land grant system required ownership, official boundaries, and material improvements.[52]

Located in the most remote reaches of Mexico's northernmost province, far from trade centers and regular transportation networks, Tomales Bay's ranchos attracted fewer settlers and produced fewer hides than their southern California counterparts. Tomales Bay and Marin County ranchos paled in comparison to the large estates in other parts of California. The largest ranchos were near Santa Barbara and Los Angeles, close to the trade centers along the southern California coast where American merchants sought hides and tallow.[53] Ranching near Tomales Bay may not have met early settlers' expectations, and thus, land changed hands frequently.

In March of 1836, John Richard Berry, an Irish-born Mexican citizen who had served as a colonel in the Mexican army, claimed 35,000 acres on the southwestern side of Tomales Bay. Berry, who received the parcel known as Rancho Punta de los Reyes in exchange for his military service, chose the area on the advice of the commandant of California. Rancho Punta de los Reyes included the Olema Valley as well as two leagues (five to six miles) up the west side of Tomales Bay. Berry stocked his rancho with cattle and built a home, north of Olema on the west bank of Olema Creek.[54]

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51. Coxe Toogood, 1: 33; Tanner,133. Unfortunately, there is no existing data that tells us specifically how many heads of livestock were owned by these ranchos.

52. Duncan, 259.

53. Richman, 292.

54. Douglas (Dewey) Livingston, *A Good Life: Dairy Farming in the Olema Valley: A History of the Dairy and Beef Ranches of the Olema Valley and Lagunitas Canyon, Golden Gate National Recreation Area and Point Reyes National Seashore, Marin County, California* (San Francisco: National Park Service, 1995), 18-19. His claim also included the future site of the town of Inverness.

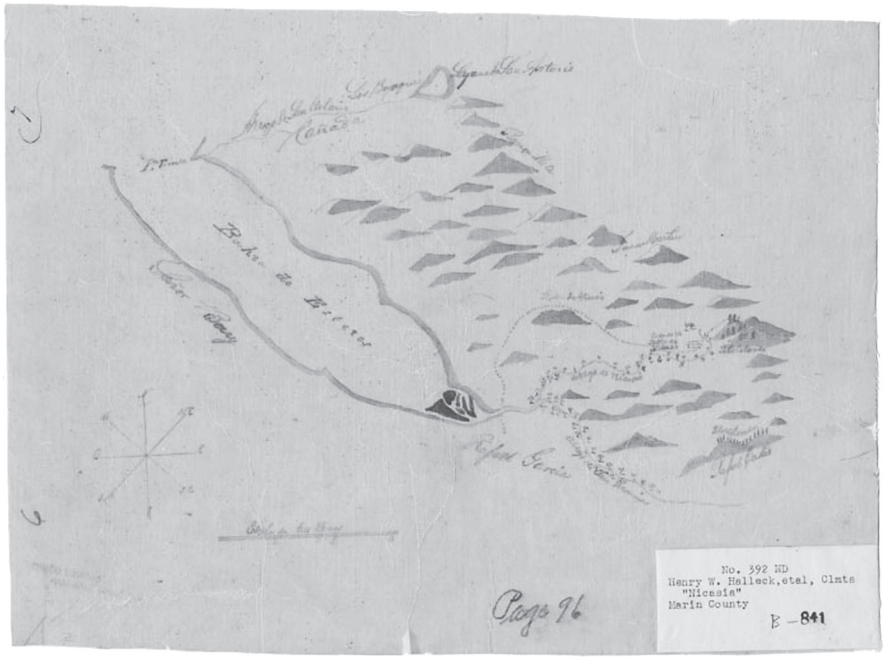


Fig 6. Rancho Nicasio stretched along Tomales Bay's eastern shore. Individuals submitted crudely drawn maps (diseños) such as this to the Mexican government in order to gain title to their land. Courtesy of the Bancroft Library, University of California, Berkeley.

In 1838, Berry illegally sold two leagues of his rancho along Tomales Bay to Joseph Snook, a Mexican citizen and a captain of two trading vessels that operated on the California coast. Snook stocked the parcel with fifty-six head of cattle. The conditions of Berry's grant forbade him from selling his property, so Snook engaged in some legal maneuvers in order to gain title to the property. In 1839, Snook successfully gained title to the 8,878 acres bordering Tomales Bay.[55] That same year Snook traded his land to Antonio Osio of Monterey for land in Southern California. Osio then applied for and was granted (in 1843) the rest of the Point Reyes Peninsula (Rancho Punta de los Reyes Sobrante). Osio

55. Douglas Livingston, *Ranching on the Point Reyes Peninsula: A History of the Dairy and Beef Ranches within Point Reyes National Seashore, 1834-1992* (Point Reyes Station, CA: National Park Service, 1994), 3. The Mexican government granted Berry the property based on his denouncement of the land, a legal maneuver that challenged ownership of the parcel based on the fact that Berry's property was not occupied, another condition of Berry's grant.

and his family moved to the rancho that year, but his positions as judge, court justice, and substitute congressman kept him away from the rancho. In 1844, Berry deeded the remaining parts of his rancho and cattle to Stephen Smith for a debt. Smith sold it to Bethuel Phillips, a cattle rancher, for $15,000 in 1848.[56]

Land along eastern Tomales Bay fell into the hands of four men, but only one of these remote parcels was ever occupied. Governor Pio Pico granted ten leagues of the 56,807 acre Rancho Nicasio parcel, the largest grant in Marin County, to Pablo de la Guerra for his "public service" and six leagues to Juan B.R. Cooper as repayment for a $4,000 debt owed by the Mexican government. Cooper had indicated that he intended to dedicate himself to "the business of agriculture," but neither man improved the land.[57] They hired Jasper O'Farrell, an Irish-born surveyor, to survey their tracts. O'Farrell divided the land into five parcels. Lots one through three occupied the southeastern side of Tomales Bay and were assigned to De la Guerra. Cooper obtained lots two and four, while O'Farrell received lot three for his services.[58] The government granted Rancho Bolsa de Tomales, a 21,340 acre grant that included the northeastern side of Tomales Bay, to Juan Padilla, the former mayor of Yerba Buena. He raised about a hundred head of cattle, as well as a number of horses, on the land. He sold the land in 1848, and the parcel changed hands a number of times before 1850.[59] Far from trade centers, these ranchos may simply have been too remote to be profitable.

Rafael Garcia, a corporal in the Mexican army, obtained land near Tomales Bay when he claimed Rancho Tomales y Baulines in March of 1836. He moved from the Bolinas area, where he had acquired land in 1835 in return for defending the San Rafael mission from Indians in 1824.[60] The parcel was bordered on the west by Olema Creek, the east by Bolinas Ridge, and on the north by Tomales Bay. After he obtained Tomales y Baulines in 1836, he moved north from Bolinas in 1837 with his cattle onto the upper Olema Valley near the southern end of

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56. Livingston, *A Good Life*, 21-22; Mason, Early Marin, 141.

57. Mason, *Early Marin*, 64.

58. J.P. Munro-Fraser, *History of Marin County, California,* (San Francisco: Alley, Bowen, and Co., 1880), 283.

59. Mason, *Early Marin*, 136.

60. Munro-Fraser, 277-78.

Tomales Bay so that his brother-in-law could occupy Rancho Los Baulines. He constructed a *palizada*, a wood and thatch house, sometime in the late 1830s or early 1840s. He eventually built a large adobe home, two adobe structures for his servants and a few wood buildings in Bear Valley. At its height, the ranch had 3,000 head of cattle and 400 horses as well as sheep and hogs.[61] Since Berry and Osio rarely occupied their ranchos along western Tomales Bay, Garcia's livestock probably grazed the entire area. Garcia's rancho was the largest in the Tomales Bay area, but like other area ranches, it was small compared to southern California estates.

To American observer Joseph Warren Revere, a naval officer working as an administrator in the new U.S. territory of California, rancho life near Tomales Bay seemed simple and unsophisticated. Revere visited Garcia's property as well as other northern California ranchos, and he noted, "About the homestead a rancho presents a singularly primitive and patriarchal appearance." While the area had abundant trees, Garcia chose to build his home in the traditional Mexican adobe style. Nor did he use wood to construct an enclosure around his garden. The rancho had a kitchen garden "rudely fenced with brush dumped around it without an excessive regard for quantity and symmetry. . . . The house is usually a rude edifice of adobes (sunburnt bricks) with the usual farm offices around it, patched on as may be most convenient, and it is invariably flanked by a 'corral' or several corrals." Garcia's "extensive herds of wild cattle" roamed free, as did his horses and sheep.[62] Revere noted that cattle increased rapidly in northern California and that an initial purchase of one hundred doubled after three years due to the "favorable climate, unequalled pasture [sic] and the state of nature in which the animal lives."[63]

Californians believed that they were surrounded by natural wealth, but the land did not provide all that they desired. Early West Marin resident Charles Lauff recalled, "We lived off the fruit of the land," however, Californians like Garcia and his family preferred to dine on cultivated, European species of plants and animals. Beef was a staple food, and ranchers raised basic items such as corn,

61. Joseph Warren Revere, *Naval Duty in California* (Oakland, Ca: Biobooks, 1947), 79-82.

62. Revere, 79-82.

63. Ibid., 77-88.

beans, and grain. There is no evidence the Californians took advantage of the abundant fish and shellfish of Tomales Bay, and in this way, their diet was more limited than the Coast Miwok. Despite the timber resources along the bay, there were few woodworkers in the region, so wood structures and crafted wood products were rarely constructed.[64] Instead, they utilized cattle hides for everything from carpet to fences. Mexicans traded hides and tallow for imported foods and hardgoods, and, as a result, they often found themselves deep in debt and dependent on New England traders to purchase desirable consumer goods.[65]

Despite the fact that Mexican settlers only sparsely populated the Tomales Bay area, cattle ranching probably intensified environmental changes that had begun during Spanish rule. The hide and tallow trade became more lucrative during the 1830s and 1840s, and increasing numbers of horses and cattle roamed freely throughout the area and furthered the spread of invasive species.[66] By the 1840s, overgrazing was evident in many places in Marin County. As livestock roamed the countryside, less palatable and less nourishing Mediterranean grasses increasingly replaced native perennial grasses. Wild oats, a non-native grain fed to cattle by Mexican ranchers, became common in the county at this time.[67] The lightly settled area, however, escaped much of the ecological damage that occurred in other parts of California.

The Tomales Bay vicinity abounded in wildlife, and ranchers hunted wild animals of the region for sustenance and sport. The region supported large herds of elk as well as grizzly bears, mountain lions, antelope, and coyotes. Elk hunting was a popular sport among rancho owners, who caught their prey by lasso from horseback. Ranch families ate elk meat at least occasionally, and elk tallow was considered a high quality cooking fat. Revere observed one hunter, who, after lassoing a buck, addressed the elk "by the familiar title of 'cuñado' (brother-in-law), and pleasantly assured him that he 'only wanted a little of his lard wherewithal to cook tortillas! [sic]'—a joke which the struggling victim was

64. Quinn, 95.

65. Hackel, 133.

66 . Zumwalt, 74.

67. Quinn, 50.



Fig 7. Elk were plentiful in the Tomales Bay area in the mid-nineteenth century, and rancho owners hunted them for sustenance and sport. Courtesy of PRNS Archives.

in no humor to relish." One hunt in the Tomales Bay area netted eight hundred pounds of tallow. Revere observed, "We passed by many places. . . where mouldering [sic] horns and bones attested to the wholesale slaughter which had been made in previous years by the rancheros of the neighborhood." Ranchers hunted Grizzlies for sport as well.[68] There is no evidence, however, to suggest that the small numbers of settlers in the area made a significant impact on wildlife populations.

Tomales Bay had been a center of Coast Miwok resource use, not a hinterland, but new political and economic systems meant that they could not return to their old ways of life along Tomales Bay after mission secularization. The Mexican government transformed Coast Miwok land into private property, and all of the land surrounding Tomales Bay had been granted to Mexican citizens. Most Indians were forced to participate in the Mexican economic system. Indians provided the majority of the labor on ranchos, performing many of

68. Revere, 66-68; Andrew Rolle and John S. Gaines, *The Golden State: California History and Government* (Arlington Heights, Ill.: Harlan Davidson, Inc, 1990), 60.

the same tasks they had performed at missions. As at missions, they were not compensated for their labor except with room and board. Indians skinned and butchered carcasses, melted fat for tallow, dried meat, tended orchards, and raised vegetables, skills they had learned in the missions.[69] Women worked as cooks and maids while men labored as vaqueros, loggers, and farm workers.[70]

Despite the private property restrictions surrounding the estuary, many Coast Miwok continued to utilize the resources of Tomales Bay. Some journeyed to the bay to procure sustenance items such as clams. Anecdotal evidence suggests that small groups lived in coves along the bay's shore, but documentation of their activities is scarce.[71] Nonetheless, the Coast Miwok did participate in California's economy. In the 1840s, Indians congregated with trade goods at Tom's Point near the mouth of Tomales Bay at the home of Tom Woods. Woods acted as an intermediary between the Indians and merchant trade vessels, and Tom's Point became a trading stop for European and American merchant vessels. Between 1844 and 1846, Lauff reported that it was not uncommon to see up to one thousand Indians at Tom's Point waiting with trade goods for a merchant ship. "They come overland with their supply of hides, tallow [sic] and skin and would wait weeks for the arrival of a vessel," Lauff observed. French and Spanish ships came for abalone shells.[72] The gatherings became a social event with singing and dancing, and Woods provided clams, game, wild cattle, and fish.[73] In this way, the Coast Miwok combined traditional hunting and gathering activities with participation in the capitalist economy. Despite these activities, the bay area remained less settled and utilized than it had been during the precontact period.

CALIFORNIA CHANGES HANDS

To American visitors, much of the California landscape was a valuable but untapped storehouse of commodities. Natural resources, such as otter pelts and

69. Quinn, 93.

70. Compas, 73.

71. Stephen Alan Dietz, "Echa-Tamal: A Study of Coast Miwok Acculturation" (MA Thesis, San Francisco State University, 1976), 33.

72. Compas, 72.

73. Dietz, 33.

hides, first brought American merchants to the region. By 1841, American settlers began seeking farmland in the region. Mexican rancho owners cultivated little land in California, and this clashed with the American vision of an agrarian nation as the ideal society.[74] The idea that Mexicans did not deserve the natural wealth of California helped to justify the U.S. takeover of California. As the interpreter on a merchant vessel that bartered for hides in California, Richard Henry Dana occupied a privileged position that enabled him to interact socially with rancho owners. He espoused common American attitudes toward California residents: "Californians are idle, thriftless people," he argued.

> The men are thriftless, proud [sic] and extravagant and very much given to gaming, and the women have but little education and a good deal of beauty, and their morality, of course, is not the best. . . Such are the people who inhabit a country embracing four or five hundred miles of sea coast, with several good harbors; with fine forests in the north; the waters filled with fish and the plains covered with thousands of herds of cattle, blessed with a climate than which there can be no better in the world; free from all manner of diseases, whether epidemic or endemic, and with a soil in which corn yields from seventy to eighty fold. In the hands of an enterprising people, what a country this might be![75]

Dana's work was widely read and proved influential to shaping American attitudes toward California.[76] The reports of other pro-American visitors to the region reinforced the stereotype of Californians as lazy and undeserving of the land. These documents are suffused with anti-Catholic and anti-Spanish sentiments and did much to push the American government toward war with Mexico.[77]

By 1846, almost seven thousand of California's fourteen thousand non-native residents were immigrants, predominantly from the United States and

74. Richard Henry Dana, *Two Years before the Mast* (New York: Dodd and Mead, 1946), 86.

75. Dana, 121.

76. Paddison, 202.

77. Hackel, 137.

Europe. As increasing numbers of Americans settled in California, they were more likely to ignore Mexican immigration regulations and laws. They often established communities isolated from Mexican population centers and lived in disregard for Mexican law.[78] U.S. President James Polk expressed interest in purchasing California from Mexico, and when the Mexican government rejected this idea, Polk proved willing to instigate rebellion among American settlers or even seize the territory in a war. The American navy captured Monterey in July of that year, and as the U.S. military took over Los Angeles and other parts of California, the Mexicans surrendered. Under the Treaty of Guadalupe Hidalgo in 1848, the United States received Alta California and the southwestern United States.[79]

The Tomales Bay area experienced relatively minor alterations compared to the sweeping environmental change missionaries, settlers, and fur traders wrought on other parts of California. The Spanish and the Mexicans virtually ignored the estuary. Russian fur traders had hunted marine mammals in Tomales Bay, but they too focused their efforts on more productive areas. It had become a hinterland for some European groups, but the area remained sparsely settled and lightly utilized due to its remote location on the northern edge of the Spanish and Mexican frontiers. The livestock ranching, crop farming, and game hunting by missionaries and rancho owners near Tomales Bay altered the native vegetation and wildlife populations of the area, but the effects of these activities would have been hard to see at first glance, and to the next generation of settlers, the area looked like virgin land. This scene did not hint at the changes about to come, as the discovery of gold in the Sierra foothills and the rise of a nearby metropolis dramatically transformed Tomales Bay and the surrounding landscape.

78 Doyce B. Nunis, Jr., "Alta California's Trojan Horse: Foreign Immigration," in *Contested Eden*, 322.

79. Rolle, 77. The annexation of Texas by the United States also served as a cause of the war.

CHAPTER THREE

The City and the Country: San Francisco and the Transformation of the Tomales Bay Landscape, 1848–1875

The Tomales Bay area underwent a radical transformation as San Francisco became a metropolitan center in the mid-nineteenth century. Urban appetites spurred the development of the countryside near San Francisco, and settlers flocked to the Tomales Bay area to raise marketable commodities such as potatoes, grain, livestock, and dairy products. These



Fig 8. The George Burbank farm near Tomales, with Estero San Antonio in the foreground. Burbank, who settled the 325 acre parcel in 1855, was one of the first settlers in Tomales Township, and he was one of eight plaintiffs in the Balsa de Tomales land grant case heard by the Supreme Court. The ranch remains in the Burbank family in 2006, and they still reside in the home built by Burbank in 1867. The property may be the oldest continuously owned ranch in Marin County. The owners sold an agricultural conservation easement to the Marin Agricultural Land Trust in 2000. Courtesy of the Bancroft Library, University of California, Berkeley.

newcomers valued the landscape for different reasons than had their Coast Miwok, Spanish, and Mexican predecessors. Corporate landowners saw Tomales Point as prime dairy ranching land, while enterprising farmers viewed the grassy east side of Tomales Bay as an ideal location to raise beef cattle and grow crops for the San Francisco market. Overland travel was time consuming and difficult, but Tomales Bay's navigable waters, protected coves, and proximity by water to San Francisco enabled area residents to transform the remote, isolated location on the edge of the frontier into an important hinterland connected to the city by water transportation routes. As they created a productive, profitable agricultural landscape on the hills surrounding Tomales Bay, the economic activities of area inhabitants profoundly altered the bay and its environment.

THE GOLD RUSH AND THE GROWTH OF THE SAN FRANCISCO MARKET

Americans and European settlers trickled into California throughout the 1840s, and by 1848, the non-native population of California was about 14,000.[80] Many early settlers were soldiers, who, after fighting in the Mexican War, stayed to establish farms, towns, or mills. Other Americans journeyed west after hearing glowing reports about farming and ranching in California by American pioneers and promoters.[81] Edward Kemble, a New England emigrant, Mexican War volunteer and editor of a weekly San Francisco paper, explained, "The hope of the country lay in the direction of agriculture, and every encouragement was given by merchants and through the country press to plant largely. American plows were breaking the virgin soil in all the choice farming localities along the bay and along the rivers." Promoters advertised the cattle and sheep grazing possibilities of the land as well.[82] Not until the discovery of gold in the Sierra foothills, however, did large-scale immigration to the region begin.

The three hundred thousand immigrants who flocked to California between 1848 and 1854 had a powerful and lasting impact on the economy and

80. Over half of the fourteen thousand residents were of Spanish descent, two thousand were American, while the remainder were of various European nationalities. 150,000 Indians remained in California in 1848. *U S. Bureau of the Census, Population Schedules of the Eighth Census of the United States, 1860* (Washington DC, 1967).

81. Paddison, *A World Transformed*, 259.

82. Edward Kemble, "Reminisces of Early California," in *A World Transformed*, 317-318.

environment of the entire San Francisco Bay area.[83] San Francisco grew from a town of eight hundred in 1848 to a city of fifty thousand in 1849. Correspondingly, the demand for food in the city rapidly transformed many nearby parts of California, including the Tomales Bay area, into an agricultural landscape. Land and livestock quickly became valuable commodities.[84] Many gold seekers gave up their search for mineral wealth and turned to farming and dairying, which were often the occupations that they had engaged in before immigrating. In 1850, almost sixty thousand California residents were miners, while only about two thousand engaged in agriculture. Ten years later, 35,792 Californians worked in agriculture, and by 1870, 47,683 were occupied in the industry. That same year, the value of California's agricultural products was greater than the value of the state's mined products.[85]

Prospective farmers needed land, and for over a decade after the U.S. takeover, battles over land ownership dominated the California court system. Many Americans were convinced that rancho residents did not actually own their land. Most also agreed that Mexican land grant recipients certainly did not deserve their grants, since they did not realize the full agricultural potential of the land. Despite laws that required surveys, official borders, and titles, rancho boundaries had often been informal or ignored during Mexican rule. Americans, in contrast, put emphasis on titles and legal property lines. Many ranchers sold parcels of land they had no clear title to, making the situation even more confusing.[86]

Hopeful American farmers pressured the government to sort out northern California land claims, since these were the closest to San Francisco and the mining camps and potentially the most profitable. In many cases, squatters, confident that undeveloped Mexican grants would be ruled illegal in the U.S., simply settled unoccupied land and began farming. Courts occasionally sided with the Mexican grantees, and the unlawful residents were evicted. Squatters,

83. Steve Wiegand, "The California Gold Rush: An Era Remembered," *Sacramento Bee*, Jan. 18, 1998. By 1850, 90,000 immigrants had journeyed to California. By 1854, that number rose to 300,000.

84. Quinn, *The Broken Shore*, 129.

85. Gates, *California Ranchos and Farms*, 62.

86. Toogood, 1:63.

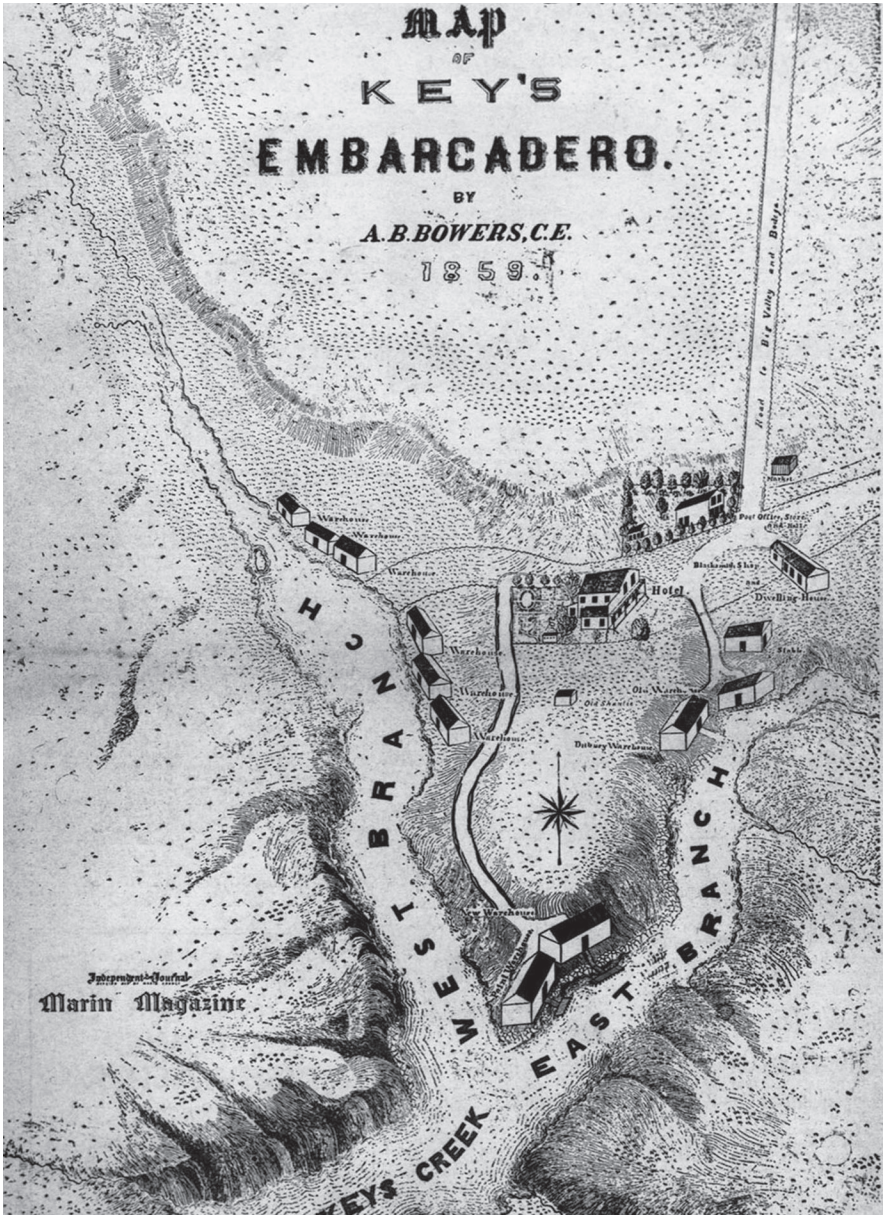


Figure 9. A sketch of John Keys' warehouses in Tomales in 1859. Ten years earlier, Irish immigrant John Keys, a miner turned potato farmer living near Bodega Bay, envisioned a bustling port on this Tomales Bay tributary. Keys and partner Alexander Noble staked claims, purchased a schooner and built a warehouse on the Keys Creek estuary in anticipation of entering into business transporting agricultural products to San Francisco. The venture proved successful, and the settlement evolved into the town of Tomales.

National Park Service

however, sometimes retaliated with physical violence and property destruction. In other cases, American lawyers used illegal and unethical practices to evict the legal, Mexican owners from their land. Many claimants went bankrupt during this process, which lasted an average of seventeen years. About one quarter of the 813 Mexican land owners in California lost their land when the California Land Commission declared their claims to be fraudulent or illegal. Rafael Garcia, whose 540 cattle, 40 horses, and 14 oxen still roamed the southern and western shores of Tomales Bay in 1853, lost his Rancho Tomales y Baulines after American prosecutors claimed that the Mexican government had never ratified the deed to the property.[87] After numerous legal battles, Garcia finally did obtain title to his land in 1866, a mere four months before he died. In Marin County, as well as Sonoma, Napa, and counties in the Sacramento Valley, many Mexican grants were divided into tracts of five hundred to five thousand acres and sold to prospective farmers.[88]

Tomales Bay's grassy shores, numerous sheltered coves, navigable tributaries, and proximity to San Francisco by water lured American farmers and entrepreneurs to the area in the early 1850s. Water routes were essential for the farmers who supplied San Francisco. Overland travel was difficult in the sparsely settled, undeveloped area. If roads existed, they were crudely built, rough, and impassible during the winter rains. Wagons, furthermore, had limited carrying capacity. Schooners, on the other hand, could transport relatively large amounts of goods.

Keys Creek, a navigable tributary on the northeastern side of the bay, proved particularly attractive to early settlers. In 1849, Irish immigrant John Keys, a miner turned potato farmer living near Bodega Bay, envisioned a bustling port on the creek. Keys and partner Alexander Noble staked claims, purchased a schooner, and built a warehouse on the Keys Creek estuary in anticipation of entering into business transporting agricultural products to San Francisco.[89] Using Indian labor, Keys and Noble raised potatoes and shipped their crop to

87. Toogood, 1:63-64; Marin Waterhouse Pepper, *Bolinas: A Narrative of the Days of the Dons* (New York: Vantage Press, 1965), 143; Jack Mason, *Point Reyes: The Solemn Land* (Inverness, Ca: North Shore Books, 1976), 43.

88. Gates, 13-14.

89. A. Bray Dickinson, *Tomales Township: A History* (Tomales, CA: Tomales Regional History Center, 1993), 42.

San Francisco on the schooner *Spray*. Warren Dutton, another former miner, realized the profits to be made by investing in a trading post on the creek.[90] Dutton and Keys became partners, and they built two warehouses on the promontory separating the west and east forks of Keys Creek.[91] The settlement attracted other farmers who hoped to capitalize on the agricultural possibilities of the area and the schooner service. The settlement eventually grew into the town of Tomales, and within the decade there were nine warehouses, a hotel, post office, store, blacksmith, and meeting hall. The *Spray* took potatoes, cattle, and sheep from Tomales area residents to San Francisco, and the schooner returned with supplies unobtainable in the area, such as bricks, lumber, and other hard goods. During the 1850s, other entrepreneurs launched schooner services to transport goods between Tomales Bay and San Francisco as well. The journey took between eight hours and three days, depending on the winds and fog.[92]

Farmers found that the land in the Tomales area provided certain natural advantages. The grasslands of the area were easily tilled, and farmers transformed them into potato and grain fields. While Midwestern farmers contended with hailstorms and heavy rains near harvest time in the fall, autumn near Tomales Bay proved consistently dry.[93] The eastern side of the bay benefited less from the heavy fogs than did the Point Reyes peninsula, but numerous perennial streams flowed through Tomales Township. Boosters credited the successful crop farming to the black, sandy loam soil that characterized the area.[94] Other necessary resources, such as timber, were less plentiful. The bay's southwestern side was forested, but settlers on the eastern portion of the estuary were forced to purchase lumber from sawmills at Bodega Bay or the Nicasio Valley. Some scavenged driftwood from ocean beaches, while others

90. Florence Donnelly, "Historical Documents Reveal North Marin Community's Past," *Marin Independent-Journal*, October 28, 1950.

91. Munro-Fraser, 404-407.

92. Ibid., 303; James Preston to his sister, 16 November 1861, Preston Family Correspondence, Bancroft Library, University of California, Berkeley.

93. Gates, 42-45.

94. *Marin County Journal*, October 1887; Munro-Fraser, 26.

made an annual trip north to the redwood forests near Freestone for firewood and fence posts.[95]

The high price of potatoes in San Francisco made potato farming a profitable business. By 1854, most farmers in Tomales Township raised potatoes and a small amount of grain. In 1855, for example, 37,594 bushels of potatoes were shipped from Tomales to San Francisco.[96] In 1860, about half of Marin County's farms raised potatoes, and Marin County ranked fourth in the state in potato production in 1862. Tomales area farms were particularly productive. Most growers grew Bodega Red potatoes, a local variety that gained fame for its flavor.[97]

Besides potatoes, area farmers grew oats, wheat, and some barley. Grain farming proved lucrative since it required little initial capital, and prospective farmers could enter the business with just a few horses or oxen. Heavy yields of grain such as barley could also be grown in less fertile soil. Locally grown wheat and barley were consumed locally as well as exported; despite the long voyage to the East Coast and Europe, both barley and the hard, dry wheat shipped well.[98] By planting these crops, farmers took a complex ecosystem, with a variety of native (and introduced) species, and reduced it into a monoculture that produced foodstuffs that would satisfy American appetites.

As the connection between San Francisco and Tomales Bay grew stronger and agriculture expanded near Tomales Bay's shores, entrepreneurs established wharves and warehouses on Tomales Bay to facilitate shipments to the city. Joseph Warren, a writer for a California agricultural journal, noted that the bay's geography facilitated this commerce. He described, "Numerous little bays or lagunas afford entrances to the schooners and other crafts, by which the products are shipped to San Francisco."[99] Preston's Point was one of the earliest

95. Dickinson, *Tomales Township*, 73.

96. Gates, 27.

97. Zumwalt, 76.

98. Gates, 51-53.

99. Joseph Quincy Adams Warren, "A Trip to Marin County," in *California Ranchos and Farms*, 198.

such shipping points on the bay. Robert J. Preston built a wharf and store on a point north of the mouth of Keys Creek in the early 1850s and Preston's Point became a busy shipping location for local agricultural products. Due to the nineteen to twenty-two foot deep water immediately off of the promontory, schooners could easily pick up and unload goods. James Preston, Robert's twenty-two year old son, described the point on his first visit in 1860. "The shape of it is much like that of a V, about one mile wide where you enter on the north end, and about one quarter mile wide at the south end, which extends out into the bay, it is bounded on the east by a creek (the San Antonio) and on the west by the bay." Contemporary sources describe the point as busy, with "quite a fleet of schooners loading" at any given time. Many Sonoma County farmers shipped their goods from Preston's eleven-foot wharf, despite the long drive over bad roads, since they could ship their products more quickly via Tomales Bay than they could by wagon road to Petaluma (and then by water to San Francisco). Preston charged vessels one dollar to dock as well as twenty-five cents to load a cow or horse, five cents for a hog or sheep, and an exorbitant ten dollars for a wagon drawn by four horses.[100]

Increasing numbers of farmers utilized the facility, and Preston's Point grew into a small settlement. The elder Preston built an eleven room house on the point about fifty yards from the bay, and he constructed a warehouse and storehouse about 100 yards east of the house. Preston employed eight to ten employees in addition to two female housekeepers. The employees lived at Preston's Point along with James, Robert, and a business partner named Berthelon. Robert was also "compelled to keep a sort of public house," according to his son, since almost every day brought either business guests or acquaintances. He charged his guests two dollars per day or ten per week for accommodations. Preston eventually operated a store and saloon on the point as well.[101]

Shipping facilities appeared at numerous other points along the bay's shores to capitalize on the growing number of farmers who wanted to export products

100. Preston to his sister, 16 Nov. 1861; Jack Mason, *Earthquake Bay: A History of Tomales Bay, California* (Inverness, Ca.: North Shore Books, 1976), 24; United States Coast Survey, Preliminary Chart, Tomales Bay, California, 1861.

101. Preston also operated a farm on the point, but little is known about this endeavor. Preston to his sister, 16 Nov. 1861.

to San Francisco. On the eastern side, Irish immigrants Alexander, James, Hugh, and Samuel Marshall settled on a 1,125 acre ranch three miles southeast of Tomales. They built a wharf and warehouse on the bay's shore, and their site became a shipping point for nearby farmers. By the early 1870s, the small town of Marshall included a store, hotel, and a post office. Saddlemaker Jeremiah Blake built a wharf south of Preston's Point. Ralph Smith also established a wharf and a few small buildings at a site called Smith's Landing along eastern Tomales Bay. Wharves also sprang up along the bay's western side—at Laird's Landing, Sacramento Landing, and Pierce's wharf—to serve the ranches on Tomales Point. Schooners stopped along Lagunitas (then called Papermill) Creek at Samuel Taylor's warehouse, two miles downstream from Olema, to load agricultural products from the Olema Valley as well as paper from Taylor's Lagunitas Creek paper mill. The vessels also carried passengers between Tomales Bay and San Francisco, since the journey was much less arduous than an overland trip by horseback or stagecoach. By 1860, Tomales residents had successfully lobbied the county for roads to Petaluma and Bodega so that area farmers could more easily reach Tomales Bay ports.[102]

The Spanish had noted the difficulties of entering and exiting the bay in their ships, and merchant schooners, too, often had trouble crossing the bar at the bay's narrow mouth. Three merchant vessels wrecked in Tomales Bay between 1849 and 1868, and a Coast Survey boat commanded by James Lawson and charged with mapping the topography of Tomales Bay wrecked on the bar in 1854.[103] Schooners, however, still provided the best form of transportation to San Francisco, and the water route was vital to farmers' economic success.

Cattle ranching became a lucrative and popular enterprise across California as entrepreneurs sought to make their fortunes supplying hides and beef to San Francisco and the surrounding mining towns. The Gold Rush brought an immediate increase in cattle prices, and animals that had been worth two to three dollars for their hide were now worth twenty-five to fifty-two dollars

102. Dickinson, *Tomales Township*, 44.

103. Mason, *Earthquake Bay*, 26; George Davidson, 1854, 33rd Cong., 1st Session, House of Representatives Executive Documents, Vol. 6, 20, 213.

for their meat alone. By 1854, nearly all of the ranches in northern California slaughtered their cattle for beef, and enterprising ranchers from Texas and the Midwest drove large herds to California. In 1852, between 50,000 and 90,000 heads of cattle were driven west. Americans considered their cattle superior to the scruffy, lean Mexican longhorns that roamed California, and American cattle commanded $100 to $150 per head.[104] San Francisco was vital to the cattle trade. Beef was sold in retail markets and purchased by wholesalers and merchants who shipped it up the Sacramento River to the mining towns of the Sierra Nevada.

Settlers transformed the landscape east of Tomales Bay from wildlife range into ranchland. During the 1850s, they took advantage of the area's grasslands and freshwater resources as they concentrated their efforts on raising beef cattle. James Black stocked his eastern Tomales Bay ranch—the parcel of Rancho Nicasio previously owned by surveyor Jasper O'Farrell—with two thousand head of cattle in 1849. Black made his fortune by cattle ranching in Sonoma County and then driving and selling the animals to merchants in towns near the gold fields in 1848, and he likely moved to Tomales Bay to be in closer proximity to the San Francisco market. He rented some of his land to tenant farmers who raised beef cattle.[105] George Burbank settled a 325 acre portion of the Bolsa de Tomales grant in 1855, and his ranch, with its elegant Victorian home, gardens, and fenced pastures full of cattle and horses, soon became a showpiece in Tomales Township.[106]

Other farmers also raised beef cattle on the bay's eastern side. By 1851, Benjamin Buckalew grazed beef cattle on part of the Nicasio land grant that he purchased from Juan Cooper. The next year he sold his land to William Reynolds and Daniel Frink, but by 1857, Frink was the sole owner of the ranch. Frink raised beef cattle as well as horses. When he sold his Tomales Bay frontage to James Miller in 1857, he included in the sale one thousand one hundred cattle, one hundred twenty-five horses as well as a number of hogs. Miller, who owned a successful cattle ranch in southern Marin County and sought to

104. Gates, 18.

105. Munro-Fraser, 285.

106. Ibid., 290; E.S. Moore, et al, "Laguna Rancho, Residence of Geo. W. Burbank," Map, Bancroft Library, University of California, Berkeley.

expand his enterprise, also bought a square league of the Nicasio land grant (along the bay's southeastern shore) from James Black.[107] The Marshall Brothers drove a herd of cattle from Kentucky to their eastern Tomales Bay ranch in 1853 and 1854. By 1860, two-thirds of the cattle owned by ranchers in Tomales Township, to the north of Marshall, were beef cattle.[108] The first fences were built during this time as ranchers sought to keep their purebred cattle from interbreeding with the supposedly inferior Mexican cattle that many squatters allowed to roam free. Some of these ranchers also owned flocks of sheep. During the gold rush, sheep became a valuable commodity for both their wool and their meat. While a sheep in the midwestern U.S. might be worth one dollar, the animals were worth twenty dollars in mining communities.[109] Cattle and sheep ranching remained profitable enterprises throughout the mid-1850s, when beef and mutton prices dropped as the gold rush ended.[110]

Encouraged by the schooner service to San Francisco and the agricultural possibilities of the area, prospective farmers and ranchers continued to stream to the hills east of Tomales Bay throughout the 1860s and 1870s. Most of the immigrants to the area settled in the vicinity of Keys Creek on northeastern Tomales Bay, near the town of Tomales. By 1860, 634 people lived in Tomales Township, more than in any other part of Marin County. In comparison, only ninety-six people lived in Point Reyes Township, which lay west and south of the bay at this time. By 1870, 1,111 people lived in the Tomales Township, while 253 resided in Point Reyes. Only San Rafael Township, in the southern part of the county, had more residents in 1870.[111] These settlers arrived from the midwestern and eastern United States as well as northern and western Europe (especially Ireland), Canada, and Australia. The vast majority of those who listed occupations on the census register were farmers and laborers.[112]

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107. Mason, *Early Marin*, 68.

108. U. S. Bureau of the Census, "Products of Industry," *Eighth Census of the United States, California, 1860* (Washington, DC, 1967).

109. Gates 17-33.

110. Mason, *Earthquake Bay*, 21.

111. *U. S. Bureau of the Census, Ninth Census of the United States, California: Marin County, 1870* (Washington, DC, 1965).

112. *U. S. Bureau of the Census, Population Schedules of the Eighth Census of the United States*. In 1860, of the 312 men and women who did list occupations, 133 men described their occupation as farmer, while 123 identified as laborers.

Settlers had quickly established farms and businesses in the Tomales area in the early 1850s, but the land belonged to Mexican citizens who had purchased the Bolsa de Tomales grant after it was sold by Juan Padilla. In 1852, these men filed a claim with the California lands commission to retain ownership of the grant. The district attorney, nonetheless, argued that Padilla had never lived on the grant, thus making it invalid although witnesses had testified that Padilla did in fact erect a dwelling. The commission validated the claim in 1854, much to the chagrin of farmers who were squatting on the land. New hearings the following year yielded the same results. Area settlers, covetous of the land and still convinced that Padilla failed to meet the requirements needed to keep his grant, formed an organization known as the Settlers' League, and took his case to the U. S. Supreme Court. In 1863, a Supreme Court decision declared the Bolsa de Tomales land grant fraudulent, opening the area to sale.[113]

The editor of the *California Farmer* applauded the court decision, and he described the Tomales area as "one of the richest in California, fertile in soil, salubrious and equitable in climate, abounding in natural beauty and scenery, and. . . one of the finest and healthiest portions of our state." He depicted area farmers as hard working, honest men who had suffered by the courts' earlier refusals to distribute the land, and he was certain that once the grant had been portioned and sold to Americans, tidy, prosperous farms would replace the ramshackle houses and carelessly plowed fields that dominated the landscape. Tomales area residents marked "the triumph of Truth and Justice over Fraud and Falsehood" and the acquisition of what boosters called "25,000 acres of the finest agricultural lands in the state" with a huge celebration. Local leaders invited thousands of Marin and Sonoma County residents to a barbeque (featuring roasted pig, sheep, ox and clam chowder) complete with a brass band, patriotic speeches, and the presentation of a banner, a gift from the citizens of Petaluma, depicting a bald eagle, a sack of potatoes and an assortment of farming tools. Some saw the warm temperatures and cloudless skies as an omen. "Nature herself," wrote the *California Farmer* editor, "harmonized with the occasion and determined to unite in rendering all things favorable."[114] In 1863,

113. A. B. Dickinson, "Tomales is 100 Years Old September 1950," Tomales Clipping File, n.d., California Room, Marin County Free Library, San Rafael, CA.

114. *The California Farmer*, "The Barbeque at Tomales Bay," April 17, 1863, 52.

government surveyors partitioned the land, and settlers paid fourteen dollars an acre for a title. By 1867, over one hundred land patents were signed.

In many ways, Jeremiah Blake represents the typical Tomales Bay farmer and entrepreneur of this time. After unsuccessfully seeking work in saddle making in San Francisco, the nineteen-year old New Hampshire-born Blake found employment cutting wood in Sonoma County. He became familiar with the area east of Tomales Bay by hunting game, and seeing the economic possibilities of the area, he moved to an unoccupied parcel of land along the estuary's northeastern shore in 1854. After building a small home from salvaged driftwood and fencing 125 acres, he planted forty acres of potatoes and grain. He lived on game until he began profiting from his farming and saddle making enterprises. His first crop was small, but subsequent yields encouraged his endeavor. In 1856, Blake planted fifty-seven fruit trees, and by 1873 he had planted over a hundred more, though the experiment proved unsuccessful in the bay's damp, coastal climate. He began a dairy in 1866, and his attention turned from saddle making and orcharding to raising dairy cows, potatoes, and grain. He established a wharf at his land on the bay that became known as Blake's Landing.

Blake also planted hundreds of blue gum eucalyptus trees, as did a number of other Californians in the late nineteenth century.[115]Abijah Woodsworth had introduced to Tomales area residents the idea of raising these Australian imports after he moved to the township in 1858. Woodsworth planted sixteen thousand of these trees initially for aesthetic reasons, since, like many Californians, he thought that trees would improve the grassy landscapes. He soon discovered, however, that he could earn over $2,000 per year by trimming limbs off of the trees for firewood. This endeavor proved particularly lucrative on the untimbered eastern side of the bay, and the trees seeded so quickly that he gave many saplings away, for both beautification and for timber and firewood.[116] Blake may have obtained his trees from Woodsworth, and he almost certainly used eucalyptus limbs for firewood.

115. Ian Tyrrell, *True Gardens of the Gods: Californian-Australian Environmental Reform, 1860-1930* (Berkeley: University of California Press, 1999).

116. H.P. Bostick, "Tomales," *Marin County Journal*, March 1909.

Blake and other area farmers established farms in the area in order to make a profit, but they also saw the settlement of the countryside and the development of their state as an important mission. A portion of a poem written by Blake for the school district's Fourth of July celebration captures this sentiment well.

> Let us resolve most faithfully our duties to fulfill,
> To serve our God and country, and the fertile soil
> to till,
> And let us, too, strive earnestly the foundation to lay
> Of this our State, which shall be great at no far
> distant day.
> Rich in its native wealth and in its productive soil,
> Which yields us most abundantly with proper care
> and toil;
> Blessed with a balmy air and a healthy clime,
> We may hope that other blessings will come along
> in time.[117]

If Blake typified the Tomales Bay settler, Henry Halleck, another prominent resident during this time, proved uncharacteristic. Most residents were drawn to the area for its agricultural potential. Halleck, owner of the part of the Nicasio grant that stretched from Keys Creek in the north to a point about halfway down the bay, moved to the area for a strikingly different reason. Halleck, a California secretary of state under Governor Mason as well as an army captain and engineer, lawyer, and author, thought that Tomales Bay would make a good hunting and fishing retreat. He built a house along Halleck Creek, and, unlike his neighbors, he showed no interest in profiting from the urban demand for beef and other foodstuffs. He did lease part of his Tomales Bay frontage to a tenant farmer named Pierce, though details of his activities are unknown. When Halleck was called to military duty during the Civil War, his lawyer sold off his ranch in parcels, and he allowed buyers to purchase the land by paying in installments. Jeremiah Blake, John Hamlet, and Samuel Marshall all bought parcels from Halleck.[118] (Halleck later became chief of the Union Army during the Civil War.)

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117. Munro-Fraser, 415.

118. Mason, *Early Marin*, 69.

No endeavor, however, had more of an impact on the Tomales Bay area than the dairy industry. Beef and mutton prices had fallen as the population of mining camps and towns in the Sierra Nevada dropped, but the demand for butter and cheese in San Francisco continued unabated, and many ranchers in the Tomales Bay area turned to dairy farming. Farmers established the first dairies in the San Francisco Bay area in Sonoma County in the mid-1850s, but these farms could not keep up with the urban demand. By 1860, San Francisco had become the nation's fourteenth largest city with 56,802 people, and by 1870, nearly 150,000 people inhabited the city. To meet the demands of the city's residents, tons of butter and cheese were imported from the eastern United States and Chile. In one year between 1855 and 1856, 88,302 pounds of butter and 126,166 pounds of cheese were shipped to San Francisco from outside of California. By the time butter reached the West Coast, however, it had often turned rancid.[119]

Farm boosters encouraged California farmers to diversify their products to include the manufacture of dairy products, and many failed miners turned to this more lucrative occupation. By 1860, a dairy industry had begun to develop in the six San Francisco Bay Area counties with easy water access to the city. While there were only 4,280 dairy cows and 253,599 beef cattle in the state in 1850, there were 205,407 and 1,088,022, respectively, by 1860.[120] Despite the growth of the dairy industry, 5,300,000 pounds of butter were imported in 1860, probably due to the low quality of much of the California product. James Warren, editor of the periodical The *California Farmer,* bemoaned the inferiority of butter made in the state. He complained that there were too many farmers "engaged in dairying, who had better be wood-chopping or coal heaving. They do not know the first principles of the business." Many Californians saw dairy ranching as a get rich quick industry, and they took poor care of their livestock and produced a low-grade product.[121]

Dairying in western Marin County began in 1857 when the Steele Brothers seized the opportunity to fill a niche and established a dairy farm on the Point Reyes peninsula. Within four years, their 600 cows produced 640 pounds of cheese and 75 pounds of butter per day. San Francisco merchants and

119. Toogood, 1:94-95.

120. Gates, 27-28.

121. Ibid., 29-31.

consumers provided a ready market for the products.[122] The Steeles showed that dairying could be a profitable business in the area, and other settlers began to establish dairies in the Tomales Bay area.

To potential dairy farmers, the grasslands surrounding the bay were pasture, a resource they could transform into marketable commodities in the form of dairy products. Farmers established twenty dairies in Tomales Township by 1860.[123] Despite the slow invasion of exotic plant species from Spanish, Mexican, and American beef ranchers' cattle, the grasslands above Tomales Bay remained in good condition in 1860. Many perennial grasses still shared the hills surrounding the bay with encroaching annuals. Visitor Joseph Warren described the area as "partly root grass, which does not depend upon the seed, and yearly grasses, which are produced by seed." He noted that the grass stayed green "more or less" year round due to the coastal fogs.[124] Other sources describe the grass as green from January or February to early fall.[125] Even as late as 1880, in some parts, observers noticed the long growing season of the grasses, suggesting that native grasses in some areas survived the first few decades of settlement.[126]

Dairies became common in all parts of West Marin County, including Tomales, Marshall, the Olema Valley, Point Reyes, and the Chileno Valley during the 1860s, as farmers sought to capitalize on the desire for dairy products in San Francisco. Tomales Bay and Point Reyes area farmers primarily produced butter and cheese since milk spoiled before it reached market. Butter could be made more quickly and commanded a higher price than cheese so by the early 1860s, most dairy operators chose to make butter. While farmers in sunnier, drier areas of California planted orchard trees and wine grapes, the foggy coastal climate of Point Reyes and western Tomales Bay provided nearly year-round forage for dairy cows. Some ranchers raised hay, oats, or barley to feed

122. Ibid., 199.

123. *U. S. Bureau of the Census, Population Schedules of the Eighth Census of the United States*.

124 .Gates, 200.

125. Toogood, 1:132.

126. Munro-Fraser, 406.

their cows during the late fall and early winter months when forage was scarce, but many others relied only on the grasses.[127]

The area's proximity to San Francisco via Tomales Bay gave it an advantage over other California locations without access to water transportation routes. Butter produced on ranches near Tomales Bay reached San Francisco within a week. Marin and Sonoma County farmers produced the most butter in California by 1860, while Contra Costa and Santa Clara County farmers produced the largest amounts of cheese. By 1862, Marin County led California in butter production. That year, Marin County dairy ranchers, most of whom were located in the Point Reyes and Tomales Bay areas, produced 200,000 pounds of butter. Four years later, these ranchers produced 1,337,500 pounds of butter—almost a million pounds more than the second place county. This number represented about three-quarters of California's total butter production. In 1872, county ranchers remained the most productive in the state as they produced 4,387,500 pounds of butter. In 1865, Marin produced 450,000 pounds of cheese as well, almost twice as much as second place Santa Cruz County. As the dairy business boomed, so did cow populations. In 1857, there were only 3,402 dairy cows in the county. Ten years later there were 13,747 dairy cows, and in 1871, Marin County boasted 19,140, more than any other county in the state.[128]

Corporate enterprises dominated the post-Gold Rush California economy, and most of the land west of Tomales Bay was owned by a group of San Francisco law partners led by Oscar Shafter, James McMillan Shafter, and Charles Webb Howard. These investors hoped to capitalize on the abundant grasslands and close proximity to urban markets of the Point Reyes area, and they purchased 50,000 acres—including Tomales Point—in 1858. The partners hoped to establish a system of prosperous, profitable dairy ranches that would supply San Franciscans with butter and cheese. The landowners furnished tenants with buildings, tools, and livestock (between 150 and 170 cows for each ranch) in exchange for a share of the profits, and they employed a steamer to pick up dairy products from various points along the shores of Tomales Bay and the Pacific Coast. The dairies, which were huge compared to many of the small

127. Ibid., 201.

128. Toogood, 1:131-32.

family farms that were common in New England, impressed visitors with their size and efficiency.[129]

While there were more than twice as many dairies in Tomales Township than there were in Point Reyes Township, Point Reyes dairies gained more fame due to their size and their well-known, San Francisco-based owners.[130] Much of the success of the Point Reyes dairies can be attributed to the corporate landowners, whose financial investments in their dairies' livestock and infrastructure enabled tenant farmers to begin their endeavor with large herds and ample facilities. The partnership even began their own ranch in order to breed high-quality dairy cows for their tenants. The Shafter-Howard dairies received a significant amount of publicity as admiring visitors toured them and reported their findings in newspapers and agricultural journals.

Tomales Point provided an abundant environment for the first dairy farmers on the bay's western shore. George and Charles Laird leased about 3,000 acres on Tomales Point from the Shafters beginning in 1858. The Laird Brothers, who operated one of the largest dairies in California at the time, raised 200 cows and produced 35 tons of cheese per year by the early 1860s for the San Francisco market.[131] Visitor Joseph Warren was impressed by the prospects for dairy ranching in the area. "This ranch is. . . situated between Tomales Bay and the Ocean, and occupies an extensive and fertile tract of land, all enclosed by fence. The grass is good year round, being fresh and green in the sloughs, where the clover is found, later, after the grass on the hills is gone. . . . It will be seen that excellent facilities are afforded for the prosecution of the dairy business in this section." The Lairds had two homes, a dairy house and a store house, plus a large barn and other outbuildings, and they shipped their products from Laird's Landing. The Young Brothers, who occupied 1,000 acres on Tomales Point, shipped their goods from Sacramento (then called Young's) Landing. They raised 130 cows and produced 11,000 to 12,000 pounds of butter per year.[132] The ranch buildings were located at the top of a ravine that drained

129 Ibid., 1:138.

130. In Point Reyes Township in 1860, fourteen men worked as dairy farmers. In 1870, 21 residents identified as dairymen, and 117 men worked as dairy laborers.

131. Toogood, 1:138.

132. Gates, 204-205.

into Tomales Bay, and the Youngs had two additional buildings, possibly including a storehouse for their products, at their wharf.[133]

The largest dairy in the area occupied the northern end of Tomales Point. In 1858, after unsuccessfully trying his luck in the gold fields, Vermont native Solomon Pierce bought about 2,200 acres of land at the north end of Tomales Point from Shafter and Company, the only such parcel sold by the law partners. He built his home on the north shore of White Gulch on Tomales Bay. Pierce cleared 400 acres of land and stocked the parcel with thirty-seven milk cows, forty head of beef cattle, and twenty-four hogs as well as horses and oxen. In its first year, the ranch produced 4,000 pounds of butter, but Pierce found that demand for local butter remained strong enough for him to expand. By 1870, he milked 250 dairy cows and owned an additional 220 head of cattle. The Pierce Ranch was the most successful dairy in the area by 1870, producing almost twice as much butter—47,500 pounds—as the second largest dairy. By 1880, demand continued unabated, and the ranch produced 61,000 pounds of butter. Pierce engaged in other agricultural operations as well. He grew seventy-five tons of hay in addition to 1,000 bushels of potatoes. The ranch produced other agricultural products for the San Francisco market as well. Ranch chickens laid an average of fifty-four dozen eggs per week, and hogs, fed the byproducts of the butter making process, were shipped to San Francisco butchers. Contemporary sources described the ranch as a showpiece, and it was held up as the embodiment of a successful, modern dairy operation.[134]

By 1870, dairy ranches replaced beef as the primary endeavor of farmers east of Tomales Bay. The Marshall Brothers operated a dairy, and they also raised horses and grew potatoes and wheat. Ralph Smith ran a dairy on Tomales Bay along with his wharf at Smith's Landing, as did Jeremiah Blake (who also raised ducks) at Blake's Landing. N.J. Prince moved from Tomales to a 360 acre dairy ranch bordering the bay in 1862. To the south, in Nicasio Township, cattlemen James Miller (who owned a significant amount of land on the bay's

133. Livingston, *Ranching on the Point Reyes Peninsula*, 305.

134. Richard A. Borjes and Gordon Chappell, "*There is No More Extensive Dairy in the Township": The History and Architecture of the Upper Pierce Point Ranch, 1856-1985* (San Francisco: National Park Service, 1986), 12-13.

southeastern shore) and James Black leased their former beef ranches near the bay to tenant dairy farmers.[135]

In Tomales Township, farm operations were small, family or individually owned and undercapitalized compared to the Point Reyes ranches. Point Reyes dairies garnered more attention, but more than twice as many men in Tomales Township (forty-nine) identified as dairymen in 1870 than in Point Reyes Township. These smaller ranches in Tomales, however, employed fewer dairy laborers (sixty-eight). Most of these ranchers ran diversified operations. They often raised field crops and potatoes as well as dairy cows, cattle, hogs, and chickens as they tried to capitalize on different demands of the urban market.[136]

Not everyone profited from the transformation of the Tomales Bay area's natural resources into commodities. Some ethnic groups, such as the Chinese, were excluded from participating in the agricultural market except as laborers. Both the corporate and individually owned ranches needed workers, and Chinese immigrants provided much of the manual labor in the Tomales Bay area. They were one of the first immigrant groups to settle in Marin County, and almost every large ranch employed Chinese workers. Many of these immigrants, fleeing a series of wars and natural disasters in China, arrived in California during the Gold Rush. Like most miners, they turned to other types of labor when the gold fields failed to meet their expectations. Between the 1860s and the 1880s in California, the group was an important labor force in railroad, road and town building as well as agriculture (most Chinese immigrants came from agricultural areas). By 1880, they were the largest immigrant group in the state, and they were the second largest group, making up sixteen percent of the total population in Marin County by that year.[137]

Most Chinese immigrants were employed as farm laborers, often as butter makers on dairy ranches. About 500 Chinese workers labored in the potato

135. James Alexander Marshall , interview by Carla Ehat and Anne Kent, 1975, California Room, Marin County Civic Center Library; Dickinson, 44.

136. *U. S. Bureau of the Census, Population Schedules of the Ninth Census of the United States, California, 1870*.

137. L. Eve Armentrout Ma, "Chinese in Marin County, 1850-1980," in *Chinese America: History and Perspectives* (San Francisco: Chinese Historical Society of America, 1991), 29-31.

fields in the Tomales Bay and Olema Valley areas by 1878.[138] A few worked as domestic servants or launderers near Tomales Bay as well. As they were in other parts of California, the Chinese in Marin County were the target of violence from white residents who feared the economic competition. The group was hindered by racist laws and a lack of capital, and unlike European immigrant groups, they were not able to purchase their own ranches and farms and thus rise up the socio-economic ladder.[139] As noted later, however, they did briefly find a niche exploiting the bay's marine resources.

Western European immigrant groups had more economic success during this time. Many Irish arrived, either from their homeland or from the eastern United States during the Gold Rush, and they became the largest foreign-born group in the Tomales Bay area in the mid-nineteenth century. Many initially worked as manual laborers on area ranches, but a number of Irish also began crop farming, dairying, or beef ranching on vacant tracts of land before the California lands commission settled the area's land claims. Unlike the Chinese, the Irish were able to acquire capital and purchase their own ranches and businesses. A number of towns in the region, such as Tomales, Marshall, Fallon, and Dillon Beach, were founded by Irish immigrants in the 1850s and 1860s.

ENVIRONMENTAL CHANGE ON TOMALES BAY

Ironically, the more land that Tomales Bay area farmers cultivated, the harder it became to ship their products. Farmers depended on a navigable water route to San Francisco to transport their products to market, but poor farming practices created environmental problems that made the bay difficult for schooners to navigate. Intensive potato and field crop farming near Tomales created massive amounts of silt, which washed down Keys Creek and into the bay. Many farmers, hoping to make money quickly, disregarded good land stewardship practices as they established farms on land that they often did not own. Native vegetation had prevented erosion by binding soil with its roots and by protecting soil from the impact of rain and runoff. When the vegetation cover was

138. Ibid.

139. Ma, 31; *U. S. Bureau of the Census, Ninth Census of the United States, California, 1870*. There were 106 Chinese men and women living in Tomales and Point Reyes Townships.

disturbed for crop farming, soil became vulnerable to erosion, especially on the steep hillsides that characterized the area. Heavy winter rains easily washed the soil from plowed fields and reduced the agricultural potential of the land.[140]

Agricultural experts criticized these practices but with little effect:

> The farmers generally are anxious to make as much money as possible," one visitor described, "and as soon as possible, without regard to the future value of the land. Some of them are not permanent residents of the state, and intend to leave it as soon as they can get a certain number of dollars together; others are farming land the title of which is in dispute, and, as they feel uncertain about its ownership, they are indifferent to its exhaustion. [141]

One California agricultural journal lamented the "rude and imperfect agriculture" where "slovenly and careless farmers" used destructive plowing techniques and did not rotate crops or amend soil. After visiting Tomales Bay, a contemporary writer warned, "The estuary is fast filling up" with soil from the surrounding hills.[142]

The geology of the area exacerbated farmers' poor agricultural practices. The bay's eastern side is underlain by the Franciscan formation—a combination of dense clay, fragmented shale, and sandstone that is especially prone to erosion, debris flows, and landslides. Within a relatively short time, over two miles of the Keys Creek channel was filled with silt. Between 1852 and 1902, an average of 2,000 tons of soil per square mile washed into the creek each year. The silt formed a mile-wide delta at the mouth of the creek, three miles downstream from the schooner landing at Tomales.[143] Ranchers on the west side of the bay did not experience these same problems. The well-drained soils, forested slopes, and granite bedrock on the western side meant that significant erosion and landslides only occurred with major flooding. These ranchers also

140. Zumwalt, 67.

141. Gates, 58.

142. Munro-Fraser, 408.

143. Zumwalt, 76. Before this erosion, the creek was 200 feet wide and five feet deep.

concentrated their efforts on dairy farming, rather than potato or crop farming, further reducing the risk of erosion.[144]

As parts of the bay filled with silt and became unnavigable, wharves and warehouses were abandoned or moved. The increasingly shallow bay began to pose difficulties for the vessels that carried the area's products to San Francisco. As Keys Creek became shallower, John Keys unsuccessfully tried to dredge the waterway that was crucial to Tomales area farmers. In 1872, Warren Dutton built a wharf in deeper water at the confluence of Keys and Walker Creeks, but the next year he was forced to move again, to 324 acres on Tomales Bay that he purchased from John Hamlet. Dutton named the new spot Ocean Roar. Even at this location, lighters (flat-bottomed boats and barges) had to be used to transport goods to schooners waiting offshore.[145] Robert Preston experienced similar difficulties at Preston's Point. When he established his facilities on the northern edge of the mouth of Keys Creek, schooners could pull close to shore to load and unload goods. By 1861, due to increased siltation in the bay, vessels had difficulty accessing the point even during high tide. To keep his settlement in business, Preston began constructing a long wharf at the cost of $2,500.[146] By 1880, vessels were no longer able to access even the wharf, and Preston abandoned his efforts.

Siltation began to hinder navigation at the bay's southern end as well. In 1860, Tomales Bay tributary Lagunitas (then called Papermill) Creek was navigable to steamships and sailing vessels. The creek's natural levee, to the north, separated the main channel from a marsh and a maze of smaller channels. After heavy rains, silt was deposited on the marsh, rather than in the bay. In 1855, Samuel Taylor built a paper mill upstream from Tomales Bay on Lagunitas Creek. He transported his product by ox cart to a warehouse and schooner landing on the creek near the south end of Tomales Bay (at the present location of Point Reyes Station), and schooners carried the paper up the bay to San Francisco. The mill, which employed one hundred workers, supplied paper to San Francisco's newspapers during the 1850s. Within a decade, Taylor had deforested

144. Clyde Wahrhaftig and J. Ross Wagner, "Geologic Setting," *Tomales Bay Environmental Study: Compendium of Reports*, 68-70.

145. Mason, *Earthquake Bay*, 72.

146. Preston to his sister, 16 Nov. 1861.

so much of the area along the creek that he was forced to buy additional forest land in the nearby Nicasio Valley to meet his mill's demand. The deforestation increased sedimentation in the creek, which deposited large amounts of silt throughout the southern end of the bay.[147] By the end of the nineteenth century, one author described the bay as "shallow and comparatively of no importance to commerce."[148] By 1918, the marsh at the bay's southern end migrated north, toward the ocean, by a kilometer due to siltation.[149]

The lush green native grasslands had lured dairy farmers to the area, but overgrazing was already evident about twenty years after American ranchers began stocking the landscape with cows. Many farmers allowed their animals to roam free on lands of uncertain ownership before the government settled Mexican land claims. With little incentive to practice good pasture management, their livestock overgrazed parcels of land. Just as agricultural boosters had criticized farmers for destructive farming practices, so too did local promoters chastise ranchers who allowed their cows to overgraze. In 1875, the editor of the county paper described the area's grasslands as "fine natural pasture clear from evil growth, and, where the tenants have been true to their contracts, it is covered with a perfect carpet of rich grasses."[150] Farmers, however, ignored sound pasture management principles in many areas. Cattle and horses grazed native grasses too closely to the ground, damaging their capability to develop healthy root systems. Without extensive root systems, the perennial plants created little new growth, paving the way for invasive species to establish themselves.

Besides eating perennial grasses into ruin, livestock spread the seeds of exotic plants that replaced native grasses. Invasive species probably began to colonize the Tomales Bay area during the Spanish and Mexican periods, but it was American livestock that transformed much of the remaining native, perennial grasslands into a landscape of exotic, annual grasses. Stock consumed hay

147. Philip Williams and Associates, Ltd., "An Evaluation of the Feasibility of Wetland Restoration on the Giacomini Ranch, Marin County," 1993, Point Reyes National Seashore Archives, Point Reyes Station, CA.

148. Theodore H. Hittell, *History of California*, 2 (San Francisco: Pacific Press, 1885), 91.

149. Tina M. Niemi and N. Timothy Hall, "Historical Changes in the Tidal Marsh of Tomales Bay and Olema Creek, Marin County, California," *Journal of Coastal Research*, 12 (Winter 1966): 98.

150. Gates, 17-19.

and grain aboard ships or on cattle drives, and their manure contained seeds of exotic plants which thrived in the Mediterranean-like climate of northern California. Grasses introduced in the mid to late nineteenth century included slender wild oats from southern Europe, soft chess from Europe via New England, Australian chess, and ripgut from Mediterranean Europe. Herbaceous plants such as redstem filaree, broadleaf filaree, and bur clover—all European natives—also encroached upon natives. These grasses remained dominant throughout the twentieth century.[151]

As grazing pressures increased and perennial grasses were replaced by exotic annuals, the landscape near Tomales Bay remained green for a shorter time each year. Native perennial grasses had stayed green almost year round since they continued to grow leaves and stems from nutrients stored in their roots. Their growth stopped only temporarily during the fall dry season, while winter rains spurred their regrowth. Annual grasses, on the other hand, have a short lifespan since they put most of their energy into producing seed. Livestock found the exotic grasses palatable and nutritious, but since the annual grasses only remained green for part of the year, farmers increasingly relied on hay and grain.[152] Where farmers had stocked the land with too many head of livestock, overgrazing resulted in the spread of invasive sorrel, which the ranchers attempted to counter by sowing the more nutritious, yet also exotic, Australian rye grass.[153]

Invasive plants spread in other ways as well. James Marshall introduced a type of broom which had been commonly used in Ireland for hedgerows. In the mild Marin climate and with so much open range, the plant spread quickly and became a problem to farmers since it was not a valuable forage plant.[154] As farmers abandoned potato and crop farming due to topsoil loss, non-native annual grasses colonized former fields. Grain and even potatoes spread outside of their fields. Furthermore, exotic plants such as wild oats, wild clover, and mustard—whose seeds lived throughout California's mild winters—partly colonized grain fields. Since it was impossible to separate these grains from wheat,

151. Zumwalt, 75-76.

152. Ibid.

153. Livingston, *Ranching on the Point Reyes Peninsula* 53.

154. Marshall, Ehat, and Kent.

they were harvested and processed together, giving grain milled in California an inferior quality.[155]

Ranchers became trapped in a paradoxical cycle. Overgrazing resulted in the invasion of annual grasses, and this led to still more erosion. Whereas native perennial grasses blanketed the soil with a layer of organic matter and held soil together through entangled roots, exposed soil was pounded by rain and exposed to evaporation. Soil became less productive as topsoil washed away, and the remaining compacted soil absorbed less moisture. On overstocked ranches, stock had to roam farther to find adequate forage, further degrading soil quality and paving the way for more exotic species.[156]

Although formerly valued for their meat and hides, American settlers did not see a place for native wildlife in their agricultural economy. Settlers significantly diminished wildlife populations as they sought to protect the profitability of their farms and ranches. While hunting had been a popular sport among Mexican rancho owners, these early settlers had little impact on Tomales Bay wildlife populations. As Americans colonized the area, however, they eliminated predators, such as bears and mountain lions, that preyed upon their economically valuable livestock. Elk and antelope that ate garden vegetables and crops were hunted until they were nearly extinct in the area. By 1862, observers reported that elk had disappeared from the Tomales Bay area, and the last grizzly bear in Marin County was killed in 1884.[157]

THE CHINESE AND THE FIRST COMMERCIAL FISHERIES ON THE BAY

Despite the flurry of activity that surrounded the bay, American settlers ignored the estuary's marine resources. There was no demand for Tomales Bay fish, since city residents purchased fish from the fishermen who took advantage of the rich and thriving fishery in San Francisco Bay in the mid-nineteenth century. The Coast Miwok sold clams and oysters to local

155. Gates, 45.

156. Zumwalt, 76-77.

157. Jules Evans, "The Hunted," *Under the Gables*, 4, n.d., Jack Mason Museum Archives, Inverness, CA, 4; Mason, *Earthquake Bay*, 27.

residents on a small scale during this time, but Chinese immigrants were the first to exploit the shellfish resources of Tomales Bay for the global market. Hundreds of Chinese fishermen lived and worked on San Francisco and San Pablo Bays as well as the ocean off the Marin Coast. As part of an effort to elude San Francisco authorities who enforced a statewide tax on Chinese fishermen—one of many anti-Chinese laws passed in the nineteenth century—increasing numbers of these workers moved to Marin County after 1860. One fishing village, established in the early 1860s near San Rafael in Marin County, operated for almost eighty years.[158]

The Chinese pioneered the bay shrimp industry in California after they discovered large amounts of the crustaceans near their San Rafael village. They soon found another shrimp bed in Tomales Bay, and Chinese fishermen journeyed to the bay to take advantage of this fishery. Chinese wholesalers in ocean-going junks plied the waters around Marin County and purchased shrimp and other shellfish from these fishermen. Few Americans ate shrimp at that time, and most of the catch (about eighty percent) was dried and shipped to China or to Chinese communities in California and Hawaii. The rest was sold to San Francisco restaurants and residents. The shells were separated and sold as fertilizer in China.[159]

Along with shrimp, the Chinese were the first to exploit the bay's abundant abalone resources. By 1877, they had established a small settlement on the bay just to gather the mollusks. Other Chinese fishermen, based near San Rafael or other parts of Marin County, sailed to Tomales Bay in redwood junks to collect abalone.[160] Gathering abalone could be difficult work, since they can cling tightly to rocks, but Chinese fishermen invented a hook that made their extraction easier. They cleaned, dried, and salted the abalone for sale in Chinese communities around the western United States.[161] Some of the product

158. Ma, 34.

159. Ibid. It is unclear how many tons of shrimp the fishermen caught each year from Tomales Bay. An average catch in the large beds near San Rafael consisted of twenty to thirty tons of shrimp per week during the six month season, and the Tomales Bay beds were considered medium to small.

160. Ibid., 34-35.

161. Katie Bates, interview by Gregory Giesios, June 25, 1985, Point Reyes National Seashore Archives, Point Reyes Station, CA.

was shipped to Chinese merchants in Hawaii and British Columbia. After 1875, abalone shells became a popular jewelry item, and the endeavor became more widespread and profitable. Chinese fishermen sold the shells to American merchants who marketed the product in the eastern United States, China, and Europe. Some Chinese shellfishermen also gathered clams to sell to Chinese railroad workers and local residents as well as San Francisco restaurants.[162]

The Chinese were still the only group exploiting the fisheries of the bay, however, they were increasingly the target of mob violence, discriminatory laws, and police brutality. Their numbers and their presence in the shellfish industry in Tomales Bay, as throughout California, dropped dramatically after 1880, and the Chinese never regained their prominence in the industry on Tomales Bay.[163] The commercial fishery in San Francisco Bay continued to provide the urban center with seafood, and commercial fishermen of European descent did not begin to take advantage of Tomales Bay's fisheries until the late nineteenth century.

THE COAST MIWOK

The Treaty of Guadalupe Hidalgo guaranteed certain rights to California Indians, but the Coast Miwok were increasingly marginalized under American rule. The United States negotiated treaties with eighteen California Indian groups in the early 1850s, but the government did not establish any agreements with the Coast Miwok. No reservation was set aside for the group, probably due to the small number of survivors. By 1852, only 218 Coast Miwok were living in Marin County. The 1860 census lists only eleven Indians in Tomales Township and none in Point Reyes Township. In 1870, there were thirty-two Indians living in Point Reyes and Tomales Townships, as well as seven who identified as half Indian.[164]

American settlers denied the Coast Miwok access to traditional settlement sites, but many Coast Miwok were able to procure some native foods while incorporating themselves into the region's new economy. They had been able

162. Ma, 34-35.

163. Ibid., 41.

164. Emberson and Theodoratus, "Point Reyes National Seashore Cultural Affiliation Report," 50.

to establish homes on the coves and procure resources from the land around Tomales Bay after the secularization of missions in 1832, due to the sparsely settled character of the area. Nonetheless, after American settlers purchased land along the bay, the Coast Miwok's access was cut off. The coves that had provided a sheltered base for utilizing the resources of the bay also proved attractive to new farmers and entrepreneurs who established shipping locations for agricultural products, thus limiting Coast Miwok home sites. A number of Coast Miwok families settled on the bay near Marshall and Marconi Cove. Anecdotal evidence suggests that families continued to occupy other coves along the bay as well.[165]

The Coast Miwok continued to look to the natural world for sustenance throughout the mid to late nineteenth century, but they also began to integrate themselves into the emerging market economy. They still gathered wild foods, though their foraging was limited by private property restrictions. They also began to incorporate new foods, such as beef and grain, into their diet, although they continued to rely on the marine resources of Tomales Bay. All of the land surrounding the bay was privately owned, but the tidelands resources were not, and the Miwok continued to collect shellfish from the bay's shores. Women and children collected clams and oysters that were sold to merchants on the east side of the bay and sent to San Francisco consumers. Men hunted, fished, and trapped deer and rabbit for both sale and subsistence. These activities, however, became more difficult as wildlife populations decreased and ecosystems were taken over by exotic plants due to American settlers' activities. While Indian men worked as laborers on nearby ranches, many Indian women worked as domestic help.[166]

Fueled by the desire to profit from San Francisco's appetite for meat, dairy products, grain, and vegetables, American settlers profoundly altered the Tomales Bay area. As they sought to reshape the land into a productive agricultural landscape, ranchers assigned values to native plants and animals based on the market. They replaced commercially worthless wild animals with domesticated livestock and native grasses with marketable commodities like grain

165. Compas, 81-84.

166. Ibid.

and vegetables. Some of these actions, nevertheless, had unintended consequences—such as the siltation of the bay and erosion of topsoil—that hindered settlers' ability to supply the nearby urban core. Tomales Bay farmers were dependent on this market, however, and area residents would seek solutions to these problems in order to continue their role as San Francisco's hinterland.

CHAPTER FOUR

The Railroad and the Reshaping of Tomales Bay, 1875–1933

While settlers reordered the natural landscape around Tomales Bay as they produced goods for San Francisco consumers during and after the Gold Rush, the completion of the railroad in 1874 spurred additional growth and natural resource development as it tightened the connection between the hinterland and the city. The train brought supplies, mail, and the first tourists to the bay, while carrying agricultural products, fish, timber, and shellfish quickly to San Francisco. The advent of train transportation inspired new ideas about the bay's economic value. While ranchers and farmers continued to capitalize on the grasslands of the surrounding landscape, other area residents began to commodify the bay's marine resources on a large scale. Investors and entrepreneurs envisioned large numbers of vacationers on the warm, calm waters of Tomales Bay, and they built and promoted resorts and summer home colonies near railroad stops. These multiple uses and interests in the area often conflicted with each other, however, and farmers, ranchers, loggers, oyster growers, and fishermen found themselves at odds. Tomales Bay area residents had high hopes for converting the region's natural resources into marketable commodities, and they worked to create bustling agricultural, fishing, and tourist landscapes on and along the bay.

BUILDING THE RAILROAD, RESHAPING THE BAY

Across the West, railroads reordered concepts of time and space as they brought rural hinterlands within easy reach of the city. New rail lines transformed landscapes throughout the western United States, since they were key to the growth and development of both urban areas and their hinterlands. As historian William Cronon writes, the railroad "touched all facets of American life in the second half of the nineteenth century, insinuating itself into virtually every aspect of the national landscape."[167] Across the nation, waterways

167. Cronon, *Nature's Metropolis*, 73-80.

(whether natural routes or human-made canals) had been crucial to the movement of goods, but railroads freed people and products from geography. Farmers could now expect to sell their products more swiftly and easily than ever before. Schooners had taken between eight hours and three days to reach San Francisco, but the train could transport Tomales Bay butter, grain, and potatoes to San Francisco Bay in a matter of hours. The railroad, too, could circumvent the problem of a bay that was becoming less and less conducive to shipping. Human activities had ruined the transportation corridor provided by nature, but settlers could build a new, better route to San Francisco.

Tomales Bay area residents pinned their hopes for a prosperous future on the railroad. Railroad directors planned a line from Sausalito (connected to San Francisco by ferry) to the redwood forests and sawmills of the Russian River area, north of Tomales Bay. Every community in the area supported the railroad, and when executives promised higher land values, Marin County residents voted overwhelmingly to provide public financial support to the train. The county granted free rights of way as well. Point Reyes landowners and North Coast Railroad investors James McMillan Shafter and Charles Howard convinced railroad directors to route the tracks along Tomales Bay so that the line would run close to their Point Reyes ranches. The town of Tomales, the second most populous and wealthy in the county, was especially enthusiastic. The Marshall Brothers and James Miller, who owned property along the bay's eastern shore, offered a $10,000 subsidy to encourage the train to stop at their settlements.[168]

The geography and weather patterns of the Tomales Bay area posed particular challenges to railroad engineers and construction crews. Railroad directors believed that the Marin County terrain was too rugged for anything but a narrow gauge line, so a three-foot wide track (instead of the more often used four feet eight inches) was laid along a ten-foot (instead of fifteen) wide bed. Building materials were shipped by schooner from San Francisco to Ocean Roar, near the bay's mouth, and hauled by oxen to the construction site. Heavy winter rains pummeled the steep, overgrazed hillsides, and landslides covered the

168. A. Bray Dickinson and Roy Graves, *Narrow Gauge to the Redwoods; The Story of the North Pacific Coast Railroad and San Francisco Bay Paddle-Wheel Ferries* (Los Angeles: Trans-Anglo Books, 1967), 30-32.



Figure 10. The town of Tomales in 1898. The grassy hills, perennial streams and mild climate of eastern Tomales Bay attracted crop farmers and dairy and beef ranchers beginning in the mid-nineteenth century, when the California gold rush created new markets for agricultural products. As San Francisco grew, urban appetites continued to spur the development of the Tomales Bay area. The activities of these immigrants had a powerful and lasting impact on the Tomales Bay environment as they transformed the area into an agricultural landscape.

unfinished rail bed along the bay. In two locations along the bay, crews were forced to build overhead sluices to carry mud and rock debris from the eroding slopes over the rail bed into the bay. After the line's completion, torrential rains continued to cause landslides over the tracks in the Tomales area. These conditions eventually forced railroad engineers to replace many of the wooden trestles along Tomales Bay with steel trestles that could better withstand the area's seasonal downpours and landslides.[169]

Railroad construction changed the geography of the bay. Engineers favored the shortest, most efficient route so they plotted a course that did not follow the contours of the shore. Instead, the route ran in a relatively straight line up

169. Ibid., 30 and 102.

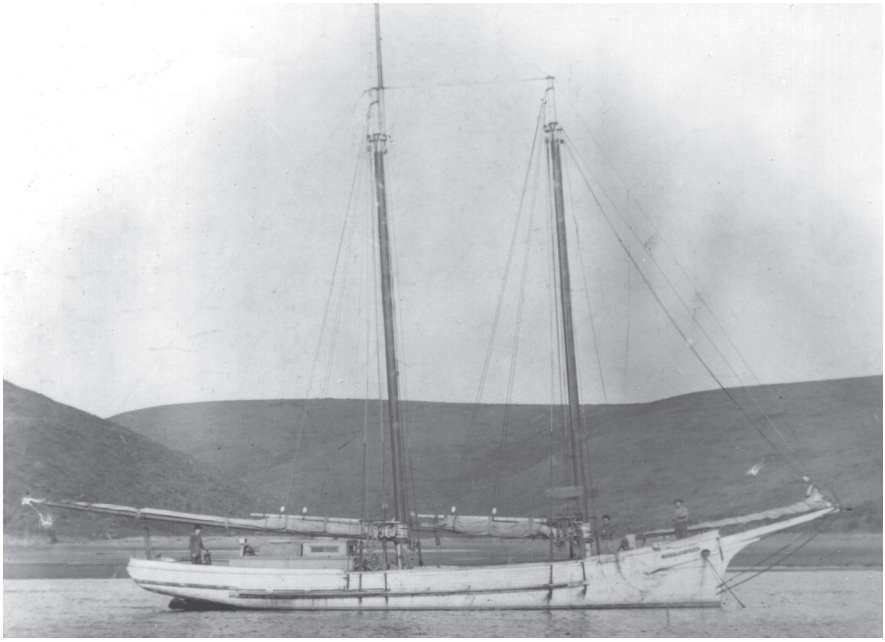


Figure 11. The schooner *Nettie Low*, which transported goods from Tomales Point ranches to railroad stops across the bay, ca. 1900. Schooners continued to serve ranches on the Point after siltation rendered water transportation between San Francisco and Tomales Bay impracticable. Courtesy of the Tomales Regional History Center.

the jagged eastern side of the bay, and crews constructed a twelve-mile rail bed upon fill, levees, and trestles. Along the bay, the rails were built largely on fill just above the high water mark. Stone quarried from the Tomales area was used to protect the rail bed from storm and tidal activities. A number of trestles were built over wetlands and small coves, including a particularly long trestle across the mouth of Keys Creek.[170] Workers constructed levees across salt marshes on the bay's eastern edge, cutting off salt water circulation from the bay and impounding fresh water from runoff and tributaries. The levees created freshwater marshes that eventually became an important habitat for more than 150 species of shorebirds and waterfowl.[171]

170. Ibid., 63 and 31.

171. Michael S. Lighthiser and Gian Marco-Pizzo, *Sedimentation and Tidal Inundation of a Marsh on Tomales Bay, California: Physical Constraints on the Evolution and Management of a Coastal System*, Water Resources Center Archives, University of California, Berkeley, 1998, 2.



Figure 12. A train makes its way north along Tomales Bay's eastern shore ca. 1898. Human activities such as farming made water transportation increasingly difficult in the late nineteenth century as the bay filled with silt. After the inauguration of railroad service between San Francisco Bay and towns along Tomales Bay in 1874, however, area farmers were able to move their goods quickly and easily to market. Roy Graves Photo Collection, courtesy of the Bancroft Library, University of California, Berkeley.

After the railroad was completed, agricultural shipments were no longer subject to the weather or tides. Farmers shipped their goods from regular stops at Millerton, Marshall, Hamlet, and Tomales and from flag stops such as McDonald to markets in San Francisco. Despite Tomales' silted waterway, the railroad enabled the town to continue its position as an important transshipment point for the surrounding countryside. Schooner traffic practically ceased on the bay as farmers instead chose to ship their products on the railroad. At Tomales, the railroad financed a warehouse and storage barn for agricultural products, a roundhouse to service engines, and a corral and water tank for cows. A number of railroad workers moved to Tomales as well.[172]

The railroad both physically and conceptually opened doors for area residents. Soon after service began, one Tomales resident wrote that he was "astonished at the changes that these few weeks have wrought. . . there is more activity in farming and interest manifest here now than there has been for say five years past. We have lived in a semi-stupor so long in Tomales that to be stirred up so suddenly by the shrill whistle of the great equalizer and civilizer leaves us in a condition of bewilderment." [173]

The railroad allowed for the expansion of existing industries and the emergence of others, and it intensified the connection between San Francisco and Tomales Bay. Butter remained the area's primary export, but farmers exported potatoes, grain, and cheese to the city as well. For the first time, fresh fish was shipped to San Francisco markets. The train carried potatoes from Tomales (the first train carried 3,000 sacks of potatoes from the area), clams and oysters from Marshall and Bivalve, herring from Hamlet, and hay, grain, and milk from the entire area to merchants, wholesalers, and consumers in San Francisco. Every Tuesday, Thursday, and Saturday, a freight train with one passenger car left Sausalito for Tomales at 6:30 a.m. The same train left Tomales, fifty-five

172. A.B. Dickinson, "Tomales Town is Quiet Today," Tomales File, California Room, Marin County Civic Center Library.

173. *Marin Journal*, March 4, 1875, Railroad file, California Room, Marin County Civic Center Library.



Figure 13. Logs (along the bay's edge in the background) served to stabilize the shore and prevent erosion from damaging the railbed along Tomales Bay near Bivalve, ca. 1905. Roy Graves Photo Collection, courtesy of the Bancroft Library, University of California, Berkeley.

miles from Sausalito, at 1:30 P.M. on the same days for the three and a half hour journey back.[174]

Enterprising settlers, hoping to capitalize on their community's new, closer relationship to San Francisco, built railroad stops. These shipping points became vital to area farmers, whose hopes for economic prosperity depended on the railroad's ability to transport their goods quickly and inexpensively to the city. Hamlet had been a home site for decades, and it became an important railroad stop for many of the area's dairy and chicken farmers and fishermen. The site of Hamlet, on the southern edge of the Keys Creek estuary, was originally part of the Rancho Nicasio land grant. Hamlet changed hands a number of

174. Fred A. Stindt, *Trains to the Russian River* (Pacific Coast Chapter of the Railway & Locomotive Historical Society, 1974), 22.

times before Warren Dutton, owner of the former schooner landing at Ocean Roar and a railroad supporter, purchased the property in 1873. Dutton built a wharf, railroad shipping facilities, and a post office. Abram Huff, who purchased Hamlet from Dutton in 1877, opened a general store and improved the barn, fences, and home. By 1890, the site had a slaughter house and freight storage house that held grain and fish. Huff operated a dairy as well.[175] In 1907, Huff sold Hamlet to Hans Jensen, a Danish immigrant who had been leasing a dairy ranch near Tomales. Jensen continued to operate the railroad stop and the dairy. Roads connected the stop to various points along the eastern shore. Hamlet's location across from Tomales Point made the railroad stop especially appealing to ranchers at Pierce Point Ranch, who shipped their merchandise across the bay to the railroad. Ranch hands transported dairy products one-half mile to their pier at White Gulch, where a boatman loaded the goods onto a boat and rowed across the bay to meet the four P.M. train at Hamlet.[176] These ranchers also rowed to Marshall for supplies and mail, which were brought from San Francisco by train.

Other shipping points sprang up along the railroad route on the eastern side of the bay. By 1880, the settlement of Marshall included a depot, two stores, a hotel, a blacksmith shop, and a post office. James Miller planned to build a town called Menlo Park south of Marshall on Millerton Point, but he only built a wharf and a dairy. Other depots, such as McDonald, were only flag stops, but they allowed area ranchers to negotiate as few miles as possible on bay area roads on their way to a railroad stop.[177]

THE AGRICULTURAL LANDSCAPES OF TOMALES BAY

As they did for many western communities, boosters claimed that the Tomales Bay area held certain natural advantages that ensured that farmers would be able to turn natural resources into marketable commodities. Historian David Wrobel describes boosters as "optimistic fortunetellers who told present and

175. Douglas Livingston, *Hamlet, 1844-1988: A History of Jensen's Oyster Beds, Golden Gate National Recreation Area* (Point Reyes, CA: National Park Service, 1989), 9-11.

176. Ibid., 41.

177. Munro-Fraser, 414; Livingston, *Hamlet*, 45.



Figure 14. The town of Marshall, a commercial and shipping center for the eastern side of the bay, in the early twentieth century. Area farmers brought their goods to Marshall, where they were transported on the railroad to the San Francisco area. Courtesy of the Tomales Regional History Center.

prospective residents what they wanted and needed to hear about western places."[178] Through their descriptions, promoters tried to will such places into existence. Some boosters were speculators who hoped to profit from new settlement, while others were existing residents who hoped to create the landscape of their imagination. Railroad promoters, too, published booster literature, since the railroad needed farmers just as much as farmers relied on the railroad. Trains were an investment designed to make money, and with high operating expenses, railroad executives needed to transport as many goods as they could in order to reap a profit. During the late nineteenth and early twentieth centuries, booster literature became prevalent across the West.

Boosters described Tomales Bay as an agricultural paradise. These promoters, hoping to attract new settlers, claimed that the area afforded good soil, unexcelled grazing lands, and almost certain success in the dairy industry. One publication, designed to attract emigrants to California, characterized the Tomales area as the state's "best body of farming land. . . It is potato country

178. David M. Wrobel, *Promised Lands: Promotion, Memory, and the Creation of the American West* (Lawrence: University Press of Kansas, 2002), 3-5.

par excellence." The author attributed farmers' successes to the moist sea air and productive soil, neglecting the fact that erosion was rapidly denuding the landscape of topsoil. "Whoever wants a good farm and a cheap one should seek this locality," the book advised.[179] One newspaper editor portrayed the bay as an idyllic landscape for ranching. "One of (Tomales Bay's) advantages is its being perfectly landlocked and sheltered from all wind. . . its safety and beauty of the surrounding scenery makes it a sort of miniature copy of the bay of San Francisco, but shoaler [sic] water. The lands around the beautiful little bay are high, but gently undulating in outline, the hills being covered with grass and wild oats affords much pasturage of large flocks and herds."[180] Another writer promised that ranches were watered by an abundance of "pure, cold spring water." "No section of the country could be better irrigated," boasted yet another author. One publication clearly stretched the truth when it promised "inexhaustible" soil and an abundance of every possible crop, including orchard fruit. The writer even suggested that "vast deposits of oil" lay underneath the surface, merely waiting for some enterprising settler to tap their potential. Boosters promised that the railroad offered inexpensive and efficient service, allowing farmers to reap profits once the train carried their goods into the city.[181]

According to booster literature, these natural advantages translated into a prosperous and healthy citizenry. One booster described Tomales as the most "populous and wealthy settlement in the county." Another characterized the town's residents as intelligent, hard working and prosperous. Unlike California's agricultural Central Valley, the Tomales area boasted a climate that was "very conducive to energy and good health."[182] The scenic Tomales Bay landscape, church-going residents and attractive buildings in the town of Tomales

179. George W. Gift, *Something about California: Being a Description of Its Climate, Health, Wealth and Resources . . . and Paragraphs Describing the Sanatarium* [Sic] of San Rafael (San Rafael, CA: San Rafael Herald, 1875), 16.

180. *Marin County Journal*, October 1887, Tomales File, California Room, Marin County Civic Center Library.

181. Bostick, "Tomales."

182. Ibid.

were also offered as inducements to settlers.[183] It is hard to assess the impact of such boosterism, but perhaps lured by descriptions such as these, increasing numbers of farmers did move to the area.

The growing San Francisco population continued to provide a ready market for locally made butter, and dairying remained the most important industry in Marin County throughout the late nineteenth century. As Point Reyes landowners and railroad investors Charles Howard and James McMillan Shafter anticipated, the train enabled fresh dairy products from the area to reach San Francisco consumers quickly and inexpensively. Most ranchers produced butter, due to the high prices the product commanded in San Francisco, while a few produced cheese (a less profitable product due to the length of time of the aging process). Dairies west of the bay on the Point Reyes peninsula achieved a measure of fame for their butter. On the bay's eastern side, where settlers had high hopes for crop farming, dairying also became the most profitable agricultural endeavor during this time.[184] In some cases, butter produced on the Point Reyes Peninsula commanded higher prices than butter produced in other parts of the Tomales Bay area. Point Reyes butter had earned a reputation for superior freshness and quality in San Francisco, and by the 1880s, the Shafter and Howard ranches began to stamp their product with a trademark to discourage counterfeiters who sold butter under the Point Reyes name. Some dairymen in Tomales, Marshall, and Olema disputed the superiority of butter produced on the peninsula and claimed that their product brought similar prices in San Francisco.[185] By the end of the century, the county contained twenty-five creameries, more than any other California county except for Humboldt. Ten of these creameries, most of which were small, family-run businesses, were located on Point Reyes, while eight operated in the eastern Tomales Bay area. Four were also located in the Olema Valley.[186]

183. Munro-Fraser, 401.

184. David Burgess Burbank, interview by Carla Ehat and Anne Kent, September 26, 1974, California Room, Marin County Civic Center Library, 4.

185. Livingston, *Ranching on the Point Reyes Peninsula*, 64.

186. A.J. Johnston, *First Report of the State Dairy Bureau to the Governor of the State of California: May 1, 1895 to October 1, 1896* (Sacramento: State Printing, 1896), 13.

One Tomales Bay creamery did produce high-quality cheese, a rare commodity in nineteenth-century California. Into the early twentieth century, the majority of California's cheeses were still imported, and those that were produced in the state were often poorer in quality. Since they wanted to rush their cheese to market and thus maximize profits, most California cheesemakers did not adequately age their product. The state dairy bureau urged farmers to produce less butter and more high-quality cheese using the cheddar process, which required six months of aging, but few creameries did so. One exception was the creamery in Fallon, near Tomales, which used local milk to produce cheese using the cheddar process. The Fallon creamery was one of only two in California to make cheese in this way.[187]

Dairy ranches bordered Tomales Bay on all sides. J and K ranches, the most northerly of Oscar Shafter's holdings, both utilized Laird's Landing to ferry their products (primarily butter) across the bay to the railroad stop at Marshall. Roads connected the ranches to the landing that was a small, protected cove along the bay's western shore. J Ranch stretched from the bay to the ocean on the midsection of Tomales Point. A succession of tenants occupied the ranch until James Kehoe, a cheesemaker in Point Reyes Station, arrived in 1922. Kehoe raised dairy cattle, hogs, and field crops, and the Kehoe family occupied the ranch for the rest of the twentieth century. A number of tenant farmers occupied K ranch, just to the south of J Ranch on Tomales Bay. L Ranch, to the south of K Ranch and also bordered by the bay, was also leased by a number of tenants. Roads led from L Ranch to Sacramento Landing, another sheltered cove to the south of Laird's, where ranchers likely shipped their goods to Marshall. These ranches raised between 100 and 250 dairy cows as well as hogs and field crops. Some of the agricultural wastes drained into Tomales Bay, but there is no evidence that this posed a threat to the bay's health at this time.[188]

Pierce Point Ranch, the only farm on the western side of the bay not owned by any of the San Francisco law partners, was the most productive in the area. The ranch, owned by the Pierce family but leased to Claus Moltzen in the early

187. Ibid.

188. For more information on Tomales Point ranches, see Livingston, *Ranching on the Point Reyes Peninsula*.



Figure 15. Looking east from the Pierce Point Ranch pier at White Culch on Tomales Point, ca 1900. Courtesy of PRNS Archives.

1890s, produced butter and hogs for the San Francisco market. The Moltzen family raised chickens, vegetables, and potatoes for themselves as well. They shipped the butter and butchered hogs from the wharf at White Gulch, one-half mile down a dirt track from the ranch complex. The ranch maintained a pier with a hand cranked derrick, as well as a boathouse and a few boats that could be rowed or sailed to Hamlet, where the products were taken by rail to Sausalito, and then by ferry to San Francisco. The two-and-one-quarter mile bay crossing took eleven minutes. The ranch was sold in 1917, and new owner John Rapp also leased the ranch to tenants.[189]

The Irish and the Chinese had provided much of the farm labor in the first few decades after American settlement, and by the late nineteenth and early twentieth centuries, more and more of the workers who produced the foodstuffs sold in the urban market were immigrants. Over 20,000 Italian-speaking immigrants from the politically unstable and poverty stricken Swiss canton of Ticino

189. For more information on Pierce Point Ranch, see Richard A. Borjes and Gordon Chappell, *"There is No More Extensive Dairy in the Township": The History and Architecture of the Upper Pierce Point Ranch, 1856-1985* (San Francisco: National Park Service, 1986).

journeyed to California between 1850 and 1930.[190] Some came during the gold rush, and like many other unsuccessful miners, they turned to more familiar occupations when they failed to find mineral wealth. Many journeyed to West Marin to work on dairy farms, since most had dairying skills. As these immigrants established themselves in the area, they provided assistance to other Swiss-Italians who wanted to make the journey to California. The Codoni family, a Swiss-Italian immigrant family who lived east of Tomales Bay, acted as unofficial consul by finding jobs for potential immigrants with local ranchers.[191] Immigrants from the Azores, a chain of islands off the Portuguese coast, similarly fled poverty and overpopulation and settled at various places around West Marin County. By 1888, many of the tenant ranchers on the Shafter and Howard ranches were either Swiss-Italian or Portuguese. These ranchers often hired immigrant farmhands from their native region who would work for low wages. As newer immigrants learned English and familiarized themselves with dairy ranching in California, many were able to purchase their own ranches.[192]

Other European immigrant groups also found economic success producing foods for the San Francisco table. Many Irish immigrants continued to arrive in the area, lured by the established Irish community who provided jobs and economic assistance for their voyage. The Irish made up the majority of the workers on the Tomales Point ranches (J, K, L, and Pierce), and the town of Tomales was, in large part, an Irish community.[193] Small numbers of Croatians, fleeing political instability and lack of economic opportunity, also began arriving in the early twentieth century. Local lore often credits the group with pioneering the commercial fishing industry on the bay, despite the fact that Chinese fishermen had worked on Tomales Bay twenty years earlier.[194]

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190. David Rolland, "One Emigration Shaped Two Regions," *Point Reyes Light, Special Issue,* Summer 1995.

191. Earl Dolcini, interview by Carla Ehat and Genevieve Martinelli, August 9, 1974, California Room, Marin County Civic Center Library.

192. David Rolland, "The Azores to West Marin," Point Reyes Light, http://www.ptreyeslight.com/azores1/azores.html (accessed December 21, 2004).

193. David Rolland, "Ireland to West Marin," Point Reyes Light, http://www.ptreyeslight.com/irish1/irelandlead.html (accessed on December 21, 2004).

194. David Rolland, "Croats Made Tomales Bay a Fishing Center," Point Reyes Light, http://www.ptreyeslight.com/swiss/fish.html (accessed December 21, 2004).

Marin County led the state in dairy production until 1910, when a number of factors conspired to bring about the decline of dairying in the Tomales Bay area. With the demise of schooner travel, area residents no longer enjoyed the advantage they held from their proximity by water to San Francisco. The railroad provided a ready link to the city, but by the turn of the twentieth century, railroads routes had developed throughout California. Thus, Tomales Bay area dairy ranchers faced increasing competition from dairies in other parts of the state. By 1896, 203 creameries in the state produced butter.[195] Mechanization, such as milk separators, invented in the 1890s, allowed ranchers to increase production, and prices dropped significantly. New health regulations such as concrete floors in milking barns (to reduce the chance that dirt would coat the cow's udder) also increased costs for ranchers. The invention of refrigerated transportation, the rise of trucking, and the construction of better roads and new rail lines allowed dairy farmers in California's interior to compete with areas closer to urban markets.[196]

Changing environmental conditions, too, played a role in the decline. The grasslands near Tomales Bay had provided ample fodder for livestock, but decades of grazing had taken a toll on the area's pastures. The grasslands now remained brown for the majority of the year, forcing farmers to buy or grow feed for their cows. An agricultural extension agent began working with farmers in the 1920s to remedy overstocked pastures by using pasture rotation and introducing a new species of grass to the area, but the grasslands continued to be dominated by short-lived annuals that remained brown much of the year.[197] Meanwhile, Central Valley farmers discovered that alfalfa, which thrived with irrigation in hot climates, was particularly nutritious and easy to grow for their cows. By 1920, Marin County no longer ranked on a list of the top ten butter producing counties in the state. Later in that decade, descendents of the Shafter and Howard families began to liquidate their increasingly unprofitable dairy assets. The O.L. Shafter Estate Company sold off its Point Reyes and Tomales Point ranches in 1939.[198]

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195. Johnston, 13.

196. Toogood, 1:196.

197. Univ. of Calif. Cooperative Extension, "Final Report," 8.

198. Toogood, 1:196.

Many area farmers pinned their hopes for economic prosperity on grain, but environmental factors spelled the demise of this industry as well. Grain farming became briefly important in the area in the mid to late nineteenth century, when global demand surged and the railroad offered easy transportation to a large port. At this time, grain farming boomed throughout California due to high global prices and initial soil fertility. Farmers shipped about 200,000 sacks of oats and 400,000 sacks of wheat from Tomales each year throughout this decade. Non-native, introduced plant species, however, lessened the quality of the grain. Exotics such as wild oats, wild clover, and mustard, whose seeds lived throughout California's mild winters, partly colonized grain fields. It was impossible to separate these grains from wheat so they were harvested and processed together, giving grain milled in California an inferior quality.[199]

Potato farmers enjoyed more success. From the mid nineteenth through the early twentieth centuries, the eastern Tomales Bay area was the major supplier of potatoes to San Francisco area consumers. By 1880, almost every farm in the east Tomales Bay area, from Millerton to Fallon, grew at least twenty-five acres of potatoes. Potatoes grew particularly well in the area since they thrived without irrigation or summer rains, and the soil retained enough moisture from coastal fogs. Farmers mainly grew the British Queen variety, a baking potato popular with consumers. Potato farmers had eagerly anticipated the opening of the railroad, and they began hauling their crop to newly built warehouses in Tomales before the line was even completed. The first train from Tomales to Sausalito carried potatoes, and throughout the late nineteenth century, about 300,000 sacks of potatoes per year were shipped from the area.[200]

Although Tomales Bay's potato industry was briefly successful, environmental factors and better transportation options for central California farmers spelled its demise. Topsoil continued to wash into the bay with winter rains each year, and soil exhaustion meant that farmers needed large amounts of fertilizers to grow their crops. Varieties of potatoes that grew well near Tomales fell out of favor with consumers. Tomales Bay area residents, dependent on the San Francisco market, also had to contend with increased competition from other

199. Dickinson and Graves, *Narrow Gauge to the Redwoods*, 149.

200. Gates, 45.

California farmers as well as fluctuations in the global market. Central Valley farmers who took advantage of new roads and rail lines glutted the market with potatoes, thus lowering prices. By the 1920s, some farmers still grew potatoes, though mostly as seed for Central Valley farms.[201]

FISHING ON THE BAY

The railroad facilitated the development of the commercial fishing industry on Tomales Bay. The length of the journey by schooner to San Francisco had discouraged commercial fishermen from working on the estuary, but the trains that hauled redwoods south along the bay also stopped to pick up fish bound for San Francisco markets.[202] Previously, in the mid to late nineteenth centuries, the abundance of fish in San Francisco Bay allowed city merchants to buy fish easily and inexpensively from local fishermen. The commercial fishing industry in the San Francisco Bay area expanded greatly after 1864, when the first California salmon cannery opened. California led the nation in salmon catch, and most of these were sold canned.[203] San Francisco Bay also enjoyed a thriving herring fishery, and the catch was sold fresh locally as well as salted and shipped to Asia. By the late nineteenth century, however, fish became scarce in San Francisco Bay due to overfishing as well as habitat and water quality degradation from mining operations and sewage. Commercial fishermen, wholesalers, and canners sought new sources of fish in northern California, and many turned their attention to Tomales Bay. The state fish and game commission worried that the industry on the estuary might begin to experience the same problems as did San Francisco Bay. As early as 1878, one commissioner worried: "As the supply in San Francisco Bay has become limited the scene of wholesale destruction is now shifted to Tomales Bay whence a very large proportion of our fish is now brought."[204]

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201. University of California Cooperative Extension, "Final Report," 9.

202. William Launce Scofield, "California Fishing Ports," *Fish Bulletin #96* (1899; repr., Sacramento: California Fish Commission, 1954), 49.

203. Ibid., 17.

204. Anna L. Suer, *The Herring of San Francisco and Tomales Bays* (San Francisco: The Institute, 1987), 30.



Figure 16. The herring fleet at Marshall in the early twentieth century. The herring fishery on the bay thrived during this time. Local fishermen supplied Tomales Bay herring not only to European immigrants in San Francisco, but to markets in Europe and Asia as well. Courtesy of the Tomales Regional History Center.

By the late nineteenth century, twenty fishermen and six fishing boats used Marshall as their base, while twelve commercial fishermen and six boats were based in Inverness, on the bay's southwestern shore. Other fishermen were based in Nick's Cove, Hamlet, and White Gulch.[205] Fishermen offloaded their catch at eastern Tomales Bay railroad stops such as Hamlet and Marshall, where it was loaded onto trains to Sausalito and then ferried to wholesalers in San Francisco. They fished early in the morning, packed the fish with wet cloths in wood boxes, and shipped their catch on the daily morning train. Despite the short railroad journey, the fish sometimes spoiled before they could reach

205. Mason, *Earthquake Bay*, 46-47; Kay Wing, "Tomales Bay Pioneers," Tomales File, California Room, Marin County Free Library, San Rafael, CA. Croatian immigrants and commercial fishermen Nickola Vilicich and Nickola Cosmi leased land at White Gulch from the Pierce family. They built a four bedroom home and based their fishing business out of the cove. In 1909, Cosmi married and moved to the cove north of White Gulch while Vilicich stayed in the home and raised chickens and turkeys. In 1927, this home burned down, and he moved to Marshall. Cosmi lost his home to fire as well in 1921.



Figure 17. Fishermen at White House Pool, on Lagunitas Creek near the head of Tomales Bay, date unknown. Besides hunters, fishermen were the other large group of recreationists to journey to the bay from their San Francisco area homes. Courtesy of PRNS Archives.

market, since fishermen rarely used ice and middlemen often were careless when handling fish.[206]

Beginning in the late nineteenth century, the herring fishery brought large numbers of commercial fishermen to Tomales Bay. Herring had been a staple of the European diet for thousands of years, and the vast influx of European immigrants to the San Francisco area provided a ready market for the fish. The flesh was eaten fresh, dried, salted, and smoked, while the carcasses were processed into meal, oil, and fertilizer. Since herring spawn in shallow waters lined with eelgrass or surfgrass, and about 75 percent of the estuary's bottom is covered with these grasses, the bay provided a perfect habitat for herring. Two herring runs, each lasting two months, entered the bay every year. Herring fishermen most commonly used beach seines and gill nets. Tomales Bay fish rode the railroad to Sausalito, where they were then shipped to dealers or to

206. Scofield, "California Fishing Ports," 50-51.

the cannery at Pittsburg on the Sacramento River delta. Some of the catch was processed into chicken feed in Petaluma.[207]

Local fishermen supplied Tomales Bay herring not only to San Francisco but to Europe and Asia as well. The herring fishery on Tomales Bay grew slowly until the beginning of World War I, when disruptions in the North Sea fishery led to an increased demand for the fish in Europe. Herring was a popular, inexpensive source of protein in many European countries, and canned Pacific Coast herring was suddenly in high demand. California fishermen prized Tomales Bay herring for their large size. Most of the state's harvest in 1918, about 4,000 tons, came from Tomales Bay. Most was exported to Europe and Asia, while the rest were consumed locally.[208] Some commercial fishermen also supplied urban consumers with smelt, sea bass, black cod, perch, shrimp, halibut, and salmon during this time as well.[209]

The F.E. Booth Canning Company, which had established its first California cannery in 1909 at Pittsburg, constructed a herring cannery at Hamlet in 1917. A 1,050 foot wharf with a conveyor belt enabled fishermen to unload fish even during low tide in the shallow, silted bay. The company built a packing building as well as three cabins. Fish were not actually canned at the site but instead packed for shipment by rail to Sausalito, then barged for canning and reduction into meal and oil at Booth's Pittsburg Cannery. The company contracted with local fishermen for their catch, which boosted the local economy.[210]

Worldwide market forces and new environmental regulations after the war, however, led to the decline of the Tomales Bay herring fishery. In 1919, in an effort to prevent overfishing, the state legislature passed a law prohibiting the reduction of herring for oil or meal. The end of World War I and the resumption of fishing in the North Sea also reduced demand overseas. This decreased the herring harvest to small amounts, and California fishermen caught less than

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207. Suer, 25-26; James E. Hardwick, "Biomass Estimates of Spawning Herring, Culpea herenguspallasi, Herring Eggs, and Associated Vegetation in Tomales Bay," *California Fish and Game 59* (1973), 38. 208. Suer, 29-31.

208. Suer, 29-31.

209. Mason, *Earthquake Bay*, 46.

210. Scofield, 48-49.



Figure 18. The 1,150 foot pier at the Booth Canning Company, 1921. The long pier enabled fishermen to unload their catch—herring—even during low tide in the shallow, silted bay. The Booth Canning Company packed the Tomales Bay herring for shipment by rail to their cannery on the San Joaquin River Delta. Courtesy of PRNS Archives.

half a million pounds per year until after World War II. The number of canneries in California dropped from fifty-seven in 1919 to thirty-four in 1923.[211] Some herring were smoked and exported to China, but fewer American consumers purchased the fish. Marketing efforts by canners failed to spur the public's appetite for canned herring, and catch levels remained low throughout the 1920s and 1930s. Nonetheless, herring from Tomales Bay made a particularly good smoked and salted product due to its large size, and in the 1930s, smoked herring was produced at Nick's Cove and at Consolidated Fisheries' Blake's Landing plant.[212] These were small-scale efforts, however, and commercial fishing harvest levels in Tomales Bay never again matched their pre-World War I totals.

While the railroad dispatched Tomales Bay fish to San Francisco markets, the train also brought increasing numbers of sport fishermen from the metropolis

211. Maxwell B. Eldridge and W. Michael Kaill, "San Francisco Bay Area's Herring Resource: A Colorful Past and a Controversial Future," *Marine Fisheries Review* 25, no. 11 (1973), 26.

212. "Monthly Activity Report," Natural Resources Administration Director, November 1934, California State Archives, Sacramento; Livingston, 33.

to the estuary. Railroad brochures—designed to boost passenger business—encouraged fishermen to travel to Tomales Bay. Payne Shafter's Bear Valley Country Club attracted wealthy, urban fishermen who fished for trout, salmon, and bass in Tomales Bay tributaries. Olema Creek drew fishermen from all over the county who sought salmon, steelhead, and trout. Chartered trains brought sport fishermen to Lagunitas Creek to fish for these same species. Halleck, Walker and Nicasio Creeks attracted salmon fishermen. At Walker Creek in the early twentieth century, residents claimed there were so many salmon it was difficult to drive a horse and cart across the creek at certain times of the year. In addition, the fish were so profuse that local ranchers used salmon as fertilizer. Since the additional protein was thought to increase chickens' egg production, farmers also bought inexpensive local fish to feed their fowl. [213]

As fishing pressures grew, so did disputes over the resource. Some area residents resented the Italian fishermen who fished for salmon with nets on tributaries such as Olema Creek. Residents complained to the local judge about the "vandals," but no laws had been broken.[214] In 1897, the Board of Fish Commissioners noted that Lagunitas Creek was probably the most fished stream in the state. The commission urged fishermen to practice restraint when fishing on Lagunitas Creek, but without limits and regulations, fish populations began to decline.[215]

Agricultural operations also affected fish in Tomales Bay and its tributaries. Farmers constructed small dams on creeks to create ponds for their livestock, but these dams blocked migrating fish. One state fish commissioner removed a dam on Lagunitas Creek in the late nineteenth century, thereby unblocking the passage for waiting salmon who "quickly took advantage of the opening."[216] In the 1920s, Olema Creek between the town of Olema and the confluence with

213. Mason, *Earthquake Bay*, 61; Boyd Stewart, interview by Dewey Livingston, Point Reyes National Seashore Archives; Anne West, "Pioneering his Place in Marin County Soil," *Marin Independent-Journal*, March 1, 1976; and Marshall, Ehat, and Kent, 26.

214. Jack Mason, "The Trout Hatchery," *Point Reyes Historian 8*, no. 3 (1983), 822.

215. Mason, *Earthquake Bay*, 60.

216. State Board of Fish Commissioners, 1894, "Other Marine Activities" file, Jack Mason Museum Archives, Inverness, CA.

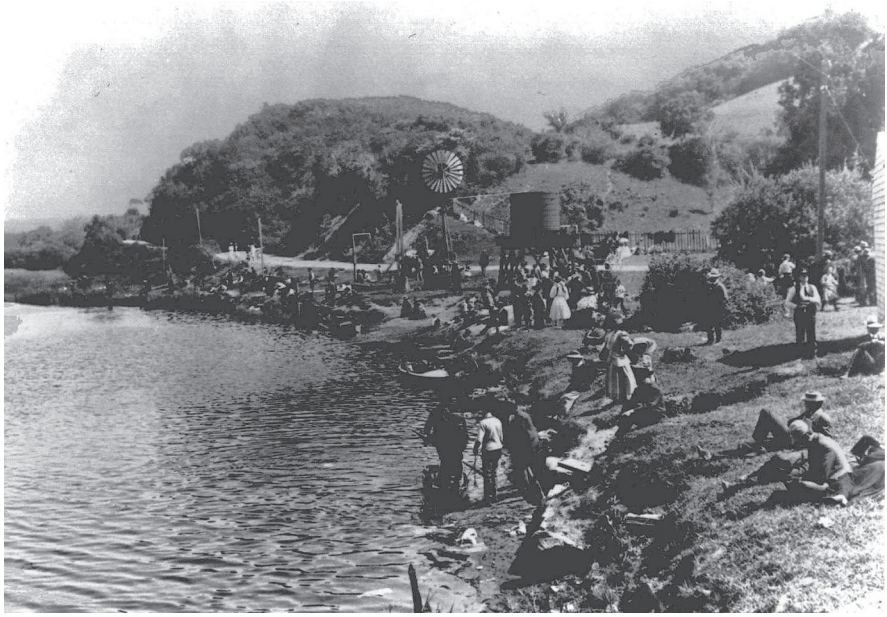


Figure 19. The California Anglers' Association's Annual Outing at White House Pool in the early twentieth century. Trains were costly to run, and as freight travel decreased after 1900, railroad executives advertised West Marin County to hunters, fishermen and tourists in an attempt to earn a profit from rail trips to the area. Railroad employees (as well as the Anglers' Association) even stocked Lagunitas Creek with trout and salmon in an attempt to lure San Francisco Bay area fishermen to Tomales Bay and its tributaries. Courtesy of PRNS Archives.

Lagunitas Creek was remade into a three mile long canal that drained adjacent land for agriculture. Farmers raised field crops and vegetables in the reclaimed land.[217] Wetlands, however, provide valuable habitat for young fish, and their destruction likely affected the creek's fish populations.

Firewood and lumber were in high demand in San Francisco when the railroad opened, and entrepreneurs again turned to the Tomales Bay area to provide these natural resources for the urban market. Along Tomales Bay tributaries Olema and Lagunitas Creeks, the forests were thick with redwoods and bishop pines. Up to 200 cords of wood per week were cut from the Olema Valley, filling as many as ten railroad cars at a time. Logging near streams

217. Tomales Bay Watershed Council, "Tomales Bay Watershed Stewardship Plan," July 2003, http://www.tomalesbaywatershed.org/stewardship_framework.pdf, 40.



Figure 20. Wharves reached far out into shallow, silted Tomales Bay at Inverness in the early twentieth century. Farming activities and logging in the Tomales Bay watershed washed tons of silt into the bay, impeding navigation. As a result, business and home owners extended their piers far out into the bay, where the water was deep enough to allow boat access. Courtesy of PRNS Archives.

raised water temperatures and filled streambeds with debris, making creeks less hospitable for trout and salmon. Logging near streams raised water temperatures and filled streambeds with debris, making creeks less hospitable for trout and salmon.[218]

Beginning in the late nineteenth century, government agencies and sport fishermen's groups sought to "improve" Tomales Bay and its tributaries by introducing high-priced species of fish. Native fish included steelhead, chub, and chum salmon, but fishermen prized brook trout, striped bass, and king salmon more.[219] The state fish commission, established in 1870, worked to restore and preserve native runs of commercial and sport fish as well as to stock area waterways with non-native sport fish popular with transplanted easterners.[220]

218. Susannah Jacob, "From Pio Pico to Parks: A History of Land Use in West Marin," in *Tomales Bay Environmental Study* (Washington D.C.: Conservation Foundation, 1972), 14.

219. N.B. Scofield, *California Fish Commission*, 1899, 54.

220. B. B. Redding, S.R. Throckmorton, and J.D. Farwell, "Report of the Commissioners of Fisheries of the State of California for the years 1870 and1871," (January 1, 1902), 14.



Figure 21. Henry Jensen's home, ca. 1921. The building, which was set directly over the water, was typical of homes on the Tomales Bay shore. Courtesy of PRNS Archives.

As early as 1873, the commission began to stock San Francisco area waters with sport fish such as striped bass imported from the east coast.[221] The commission built a hatchery to raise Eastern brook trout at Bear Valley, south of Tomales Bay, in 1891. In 1898, the facility began growing king salmon, and two million of these fish were released into Tomales Bay tributaries, including Lagunitas, Olema, and Nicasio Creeks. While king salmon had been plentiful in the Sacramento and Russian river systems before habitat degradation and overfishing, they were not native to Tomales Bay or its tributaries. Fish commissioners chose Tomales Bay creeks for the program because they believed that the short journey through the bay to the ocean would ensure the success of the new runs. Bay fishermen were delighted to catch large numbers of the young salmon after their release. [222]

221. Edme Seaton, *San Francisco Chronicle*, April 14, 1974.

222. Mason, "The Trout Hatchery," 820.

In 1907, the California Angler's Association began regularly stocking Olema and Lagunitas Creeks with large numbers of steelhead, rainbow and cutthroat trout, and King salmon. The North Shore Railroad also stocked Lagunitas and Salmon Creeks with cutthroat trout. Beginning in 1909, fishermen could also choose to fish at the trout farm, near the bay's southern end, where large concrete pools held one million fishes.[223] These measures encouraged sport fishermen from around the San Francisco area to travel to Tomales Bay and its tributaries. Ranchers, farmers, and loggers had altered the natural environment of Tomales Bay and its tributaries for economic gain, but the introduction of non-native fish valuable to sport fishermen represented the first attempts to refashion the waters for recreational purposes.

THE BEGINNING OF OYSTER FARMING ON THE BAY

Oysters were a popular staple on the East Coast, where they were plentiful and cheap during the nineteenth century. San Francisco residents, however, did not find the dark, coppery tasting native oyster palatable.[224] Additionally, the small size and limited breeding and feeding capacity of the native oyster found in San Francisco and Tomales Bays made them vulnerable to changes such as water quality degradation and siltation. Native oysters from Tomales Bay were sold on a small scale in San Francisco in the nineteenth century, but with limited success.[225]

As early as the 1850s, a few individuals experimented with bringing Olympia oysters from Washington State to consumers in San Francisco. The oysters were the same species as those found in San Francisco Bay, but the imported oysters were larger and milder and thus more popular with consumers. In 1853, the Morgan Oyster Company began importing oysters from Shoalwater (now Willipa) Bay, on the coast of Washington Territory. Each year, the company, along with at least two others, imported about 35,000 baskets of oysters

223. "California Trout Farm to be Restocked," *Baywood Press*, 15 December 1949.

224. Ralph Eshelman, "Oyster Fisheries of the United States: A Part of the Maritime Heritage of the United States, National Landmark Theme Study," (Washington, D.C.: National Park Service, 2001), 13.

225. Elinor Barrett, *The California Oyster Industry*, Fish Bulletin #123, (Sacramento: Dept. of Fish and Game, 1963) 22.

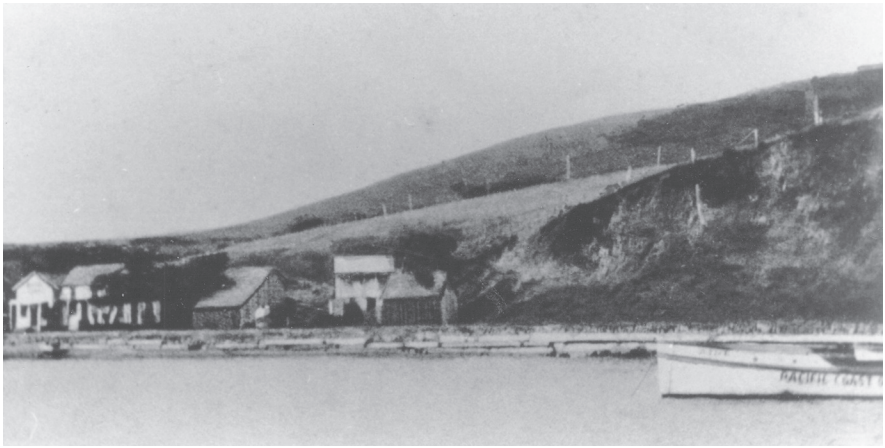


Figure 22. Pacific Coast Oyster Company in the early twentieth century. The first attempts at oystering on the bay began in the late nineteenth century, but the industry remained small until pollution in San Francisco Bay forced growers to find another estuary with clean water and good transportation connections to the metropolitan area. Courtesy of the Tomales Regional History Center.

purchased from coastal Indians. Throughout the 1860s, companies expanded their operations to other coastal areas in Oregon and Washington. After their six day voyage from the Pacific Northwest, the oysters were stored in San Francisco Bay until they were sold. By 1870, oyster pens lined San Francisco Bay's western and southern shores.[226]

The more familiar eastern oyster ultimately proved to be the most popular with consumers. After the transcontinental railroad was completed in 1869, Chicago-based A. Booth and Company began importing eastern oysters from New York. The first shipments were live oysters, but growers soon began importing seed oysters that were planted in beds in San Francisco Bay. Seed oysters were less expensive to ship cross country, and their mortality rates proved lower than mature oysters (though about a quarter of the seed oysters routinely died on the eighteen day journey). Since eastern oysters cannot spawn in waters colder than sixty-six degrees, growers continually imported seed oysters to plant in the bay's chilly waters. About one hundred train carloads of seed oysters were shipped each year until the end of the 1800s.[227]

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226. Barrett, 21-24.

227. Ibid., 25-27.

The relative scarcity of oysters kept prices high, and the bivalves—cheap and ubiquitous on the East Coast—were considered a luxury item in California. Prices dropped as production increased in the 1880s, but oysters still cost twice as much as on the East Coast. By 1889, a million pounds of oyster meat per year was produced in California. Ten years later, 2.7 million pounds of oyster meat was produced, making the industry one of the most valuable fisheries in the state. Oyster growers, nonetheless, had to stay one step ahead of the increasing pollution in San Francisco Bay. Thousands of tons of silt from mining operations had washed down the Sacramento River into the bay by 1870 and buried many oyster beds. Growers were forced to move their operations to cleaner waters on the bay's southwestern shore.[228]

By the early twentieth century, young oysters were dying in the bay's increasingly polluted waters. Pollution comes in various forms and affects shellfish a number of ways. Certain pollutants can poison oysters. For example, coliform bacteria from raw sewage can contaminate the shellfish and induce illness in people, and sludge and sediments can smother oyster beds. Growers began to notice that their oysters were not growing properly, thus indicating that they were not attaining enough nutrients in the polluted waters.[229] A late-nineteenth-century typhoid outbreak linked to oyster consumption increased public fears of eating shellfish from the bay.[230] Due to pollution and concerns about contaminated oysters, oyster production in the bay dropped fifty percent between 1889 and 1904. The rising cost of tidelands (up to $100 per acre in some locations) also made the search for cleaner waters more expensive. Growers began to search for new oyster bed locations. Some entrepreneurs shipped eastern oysters to Washington's Willipa Bay, but the additional cost of shipping the mature oysters to San Francisco proved prohibitive.[231]

At least one entrepreneur planted oysters in Tomales Bay during the late nineteenth century. The first oyster beds were sowed near Millerton in 1875, possibly

228. Ibid., 91 and 19.

229. Ibid., 19.

230. Jerry Emory, "Tilling Tides," *California Farmer*, 1998, Oysters file, California Room, Marin County Civic Center Library.

231. Barrett, 39.

by Samuel Taylor, owner of the paper mill on Lagunitas Creek.[232] By the next year, oysters were shipped for sale to San Francisco. Despite initially enthusiastic reports from Marin and Sonoma County newspapers, the enterprise ended within a year.[233] The estuary's oyster industry did not begin on a large scale until pollution in San Francisco Bay forced growers to look elsewhere.

Unpolluted Tomales Bay, well-connected to the city by railroad, was the logical alternative for oyster growers. In 1907, Eli Gordon's Pacific Coast Oyster Company planted 450 acres of oysters at Bivalve, a railroad stop opened exclusively for the company on the bay's southeastern shore. The company angered local fishermen when it fenced much of the bay near its beds, and county officials forced the company to remove the impediments. Once the oysters grew to marketable size, the company began daily shipments to San Francisco. The company grew oysters at the beds at Bivalve until the 1930s or 1940s. In 1913, the Tomales Bay Oyster Company established additional beds south of Millerton. Hans Jensen began oyster growing at Hamlet around 1915. The Consolidated Oyster Company, which operated a short-lived oyster business at Blake's Landing, bought the Hamlet beds sometime before 1926.[234]

Tomales Bay provided both natural advantages and obstacles to oyster growing. The estuary offered clean waters and a number of suitable sites for oyster beds. Growers, however, were forced to import seed oysters from eastern states, since the bay's fifty-five to sixty-six degree temperatures were too low for spawning. Growers in California used the "clutch" method of oyster culture. They found a large, flat area in the intertidal zone onto which they spread crushed oyster shells. Growers next broadcast seed oysters onto this area, and the seeds would fasten to the broken shells. The oysters were gathered with large tongs or rakes after eighteen to thirty-six months of growth.[235]

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232. There are conflicting accounts of who planted these first oysters in Tomales Bay. One source identifies Terry and Weinard as the entrepreneurs, while another identifies the investor as a San Francisco wholesaler.

233. Bertha Stedman Rothwell, *Pioneering in Marin County: A Historical Recording*, 200, Unpublished Manuscript, California Room, Marin County Civic Center Library.

234. Barrett, 37.

235. Emory, "Tilling Tides."

The estuary did not appeal to all oyster growers. San Francisco's largest oyster business, the Morgan Oyster Company, moved its facilities to Humboldt Bay, and many others remained in San Francisco Bay despite the water quality decline. A major study of the bay's water quality quelled public fears about contaminated oysters, and San Francisco Bay remained the state's primary source of oysters until about 1920. In 1915, 93.9 percent of California's oysters were grown in San Francisco Bay, while the remaining 6.1 percent came from Tomales Bay. By 1919, Tomales Bay oyster growers claimed 24.1 percent of the California market.[236]

With Tomales Bay's increased profile and market share came more attention from state and federal governments. In the 1920s, the State Division of Fish and Game hired Stanford University's Harold Heath to determine if a large scale oyster industry could be developed in the estuary. Heath was somewhat optimistic, but he urged further study by oyster experts. Heath's conclusions prompted the state to lobby the federal government for additional expertise, but not until 1930 were experts from the U.S Bureau of Fisheries assigned to the question.[237]

Federal fisheries biologists H.C. McMillin and Paul Bonnet were less confident about Tomales Bay's potential for oyster culture. In their view, natural conditions as well as human activities hindered the bay's ability to provide good oyster habitat. The scientists noted that there were relatively few suitable areas for oyster growing due to a lack of fresh water influx in the summer and heavy winter storms that deposited tons of sediment into the bay. They also found the bay heavily infested with the non-native Atlantic oyster drill, a mollusk that is one of the oysters' most voracious predators. The drill was unintentionally introduced along with the first eastern oyster seed shipments into Tomales Bay. Growers also tried to defend their beds from bat rays, a shellfish predator that measured three to four feet wide, by erecting redwood stakes. Oyster growers believed that the bat rays, which could penetrate bivalve shells with their teeth, consumed large amounts of oysters. Research conducted in both Tomales and Humboldt Bays in the late twentieth century, however, suggests that bat rays

236. Barrett, 37 and 58.

237. Ibid., 42.

rarely consume oysters and that red rock crabs were responsible for most oyster predation. Ironically, growers may have increased their losses by excluding bat rays, which prey on the crabs, from oyster beds.[238] After surveying much of the California coast, McMillin and Bonnet named nearby Drake's Estero as one of the few suitable locations in the state to raise oysters. Despite the experts' conclusions, the percentage of oysters grown in Tomales Bay continued to rise. By 1930, the year that the railroad ceased operations, the estuary produced thirty percent of California's oyster crop.[239]

State officials and oyster growers began to experiment with a fast growing, pest resistant type of oyster in the late 1920s. In 1928, a joint trial between the Tomales Bay Oyster Company and the California Division of Fish and Game introduced Pacific oysters into the bay. These oysters were hardier and faster growing than their eastern counterparts, and their large, heavy shells of the mature Pacific oyster were harder for predators to penetrate. Like their eastern relatives, Pacific oysters found the bay's waters too cold to spawn, and growers had to import seed from Japan. The experiment was repeated a number of times in the 1930s, and the Tomales Bay Oyster Company harvested the first significant crop of Pacific oysters in 1935. Four years later, Henry Jensen planted Pacific oysters at Hamlet. Consumers, however, favored the smaller, milder eastern oyster over the strong tasting Pacific variety until after World War II, when marketing campaigns and a growing familiarity convinced consumers of their desirability.[240]

Though it remained free of industrial pollution, Tomales Bay was hardly a risk-free environment, and degradation of the upper watershed affected oyster beds in the estuary. Increased siltation forced oyster growers to move or cease operations. Logging and development in the Lagunitas Creek watershed washed tons of silt into the southern end of the bay, and watershed residents' use of the creek for their water supply diminished the stream's capacity to distribute silt

238. Ann E. Grey, Timothy J. Mulligan, and Robert W. Hannah, "Food Habits, Occurrence, and Population Structure of the Bat Ray, Myliobatis Californica, in Humboldt Bay, California," *Environmental Biology of Fishes 49*, no. 2 (June 1997): 234-237. Many oyster growers continue to believe that bat rays prey heavily upon oyster populations.

239. Barrett, 42-43.

240. Ibid., 49 and 97.

far out into the bay. While the oyster growing area south of Millerton Point had three to five feet of water at low tide in the 1920s, by 1963, the water stood only a foot deep. The Tomales Bay Oyster Company abandoned its beds south of Millerton Point altogether in the 1940s when water became too shallow.[241]

There is some evidence that other, small scale shellfishing enterprises operated on the bay. Some local fishermen, like White Gulch residents Nickola Vilicich and Nickola Cosmi, gathered clams and oysters to sell when the weather was too rough to fish.[242] Indians collected clams and sold them to local merchants and train passengers. The native clams were considered particularly tasty, but they were small and difficult to dig, making commercial clamming an unprofitable venture. Some local residents also gathered abalone along the bay's shores.[243] Oystering, however, remained the primary shellfish industry on the bay.

THE TOURIST LANDSCAPES OF TOMALES BAY

The railroad was a powerful incentive for opening up the Tomales Bay area to tourism, and it coincided with American desires to "get back to nature." Middle and upper-class city dwellers in the early twentieth century believed that visits to pastoral landscapes were a necessary, healthy part of life, and boosters and entrepreneurs hoped that the railroad would bring hordes of tourists to Tomales Bay. After all, the railroad would make it easy for San Francisco residents to travel to Marin County for weekends and vacations. Tourists began visiting the county in the early 1870s, after the inauguration of ferry service from San Francisco, and the railroad allowed larger numbers of people to travel to destinations throughout the area.

Newly built railroad lines spurred the suburbanization of southern Marin County, bringing more people into proximity of the area's natural attractions.[244] Mt. Tamalpais, in the southern part of the county, proved a popular

241. Cooper, 108; Scofield, 51.

242. Wing, "Tomales Bay Pioneers."

243. Douglas Livingston, Harry McDonald Oral Interview, June 22, 1988, Point Reyes National Seashore Archives, Point Reyes Station, CA.

244. Dickinson and Graves, *Narrow Gauge to the Redwoods*, 71.



Figure 23. Railroad tracks (in the foreground) along Tomales Bay, ca. 1898. Courtesy of PRNS Archives.



Figure 24. Goods were transported to and from San Francisco via the railroad, then ferried across Tomales Bay via schooner to Tomales Point ranches. Roy Graves Photo Collection, courtesy of the Bancroft Library, University of California, Berkeley.



Figure 25. "A" Street in Point Reyes Station in 1907. The train enabled tourist travel to the Tomales Bay area. Here, the Inverness Stage is waiting to take railroad passengers to the resort community of Inverness, on the bay's western shore. Courtesy of PRNS Archives.

destination during this time, as did Camp Taylor, Samuel Taylor's resort along Lagunitas Creek, and Charles Howard's Bear Valley property.[245] San Francisco area population had grown to over 420,000 by 1880, and tourists began using the new railroad to visit Marin County almost immediately. By 1910, the Bay Area contained 800,000 people, and an outdoor recreation industry grew in Marin County to meet the demands of urban tourists. Hiking clubs and conservation groups formed to enjoy and promote the use of natural spaces. Tourist services such as hotels and restaurants also sprang up.[246]

Financial necessity drove railroad executives to promote Marin County to San Francisco area tourists. Railroad costs ran high, and by the turn of the century, freight traffic had decreased due to the scarcity of redwoods in the Russian River area. Railroads across North America promoted rail travel to tourists in order to earn a profit, and the Northwestern Pacific, too, employed this strategy.

245. Toogood, 2:2.

246. Matthew Paul Gerhart, "Growth Versus Green: A History of Citizen Land Conservation in Marin County California" (MA thesis, University of California, 2002), 30.



Figure 26. The "Hunter's Special" train shuttled hunters and their dogs from the San Francisco area to Tomales Bay via Point Reyes Station ca. 1900. Hunters, particularly wildfowl hunters, were some of the first tourists to visit the bay. Roy Graves Photo Collection, courtesy of the Bancroft Library, University of California, Berkeley.

The railroad promoted the county's hiking, camping, and resorts, and boasted that the area's climate allowed year-round outdoor activities. The campaign to draw tourists to other parts of Marin County proved successful, and between 1892 and 1901 there was a 39 percent increase in passenger travel.[247]

Railroad marketers tried to draw tourists specifically to Tomales Bay. They tried to lure city-dwelling visitors to "the beautiful inland sea" with descriptions of the scenic estuary as well as the surrounding pastoral landscape. Promoters promised a train ride of "blue waters rippling up under the very car windows, the summer breezes ruffling its smooth waters, and a panorama of variegated verdure unrolling along the opposite shore."[248] The county paper also began to promote the beaches, campgrounds, and hotels on the remote bay at this time. One writer called Hamlet "one of the most inviting places on the bay for aquatic sports," with "pleasant and safe boats for sailing

247. Dickinson and Graves, *Narrow Gauge to the Redwoods*, 91.

248. North Coast Pacific Railroad, Hamlet, 1880, pamphlet from Guy Dunscomb Collection, National Park Service Archives, Oakland, CA; Northwestern Pacific Railroad, Vacation 1907 Hamlet File, Point Reyes National Seashore Archives, Point Reyes Station, CA

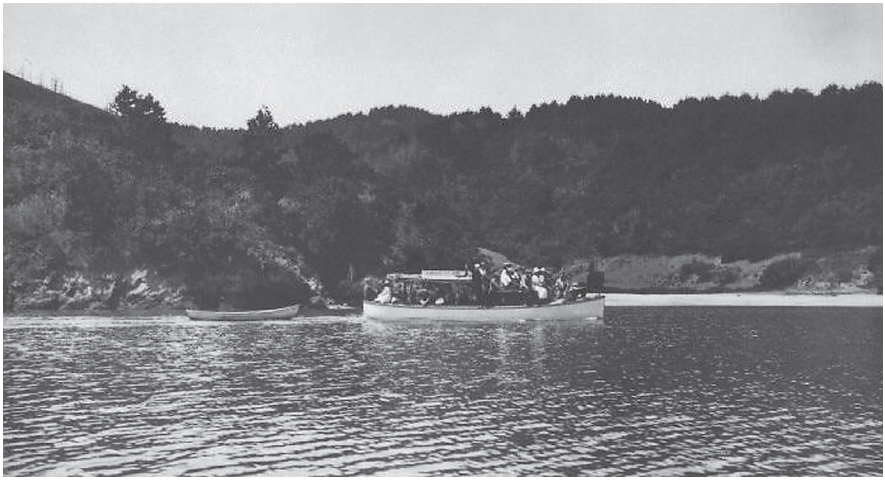


Fig. 27. A tourist excursion on Tomales Bay, ca. 1900. Inverness residents and vacationers hired boats to ferry them to scenic, secluded spots along the bay's shore, such as Heart's Desire and Shell Beaches. Courtesy of PRNS Archives.

and rowing parties."[249] Relatively few tourists, however, journeyed to remote Tomales Bay, at the northwestern edge of the county, preferring instead the attractions of southern Marin.

Hunters and fishermen from the San Francisco Bay area were the first groups willing to make the journey to the bay for recreation and pleasure. The railroad had targeted sportsmen by describing the estuary as "covered with wild fowl and filled with fish," and small-scale tourist developments began to attract fishermen and hunters to the east side of the bay by the late nineteenth century. The sparsely settled landscape allowed good hunting, and hunters sought quail in the canyons and waterfowl on the bay. One writer called the area "the happy hunting ground of the metropolitan sportsman."[250] The Northwestern Pacific promoted a number of hotels, resorts, and campgrounds on Tomales Bay, such as the United States Hotel in Tomales and the North Shore Hotel in Marshall, to fishermen and hunters.[251] Fishermen could rent boats from Abrum Huff at

249. Bostick, "Tomales."

250. Ibid., 149.

251. Northwestern Pacific Railroad, "Vacation 1907."



Fig 28. Picnicking at Heart's Desire Beach, ca. 1900. Courtesy of PRNS Archives.

Hamlet. Henry Jensen discontinued the boat rentals when he bought Hamlet in 1907, but he leased his waterfront land to urbanites who built weekend cabins on pilings on the bay. For example, San Francisco residents Julius Spiegel and Harold Ladd erected a cabin that they used for weekend duck hunting and shellfish gathering trips.[252] A cluster of cabins at Cypress Grove, built in the 1880s and called Cypress Grove Villas by 1907, probably catered to sportsmen, too.[253] Duck hunters and fishermen also frequented the beaches of Hog Island in the early twentieth century.[254]

Hunting clubs attracted wealthy San Francisco clients to the bay. Beginning in 1904, the Tomales Point Gun Club leased a two story home and three outbuildings south of the Pierce Ranch wharf at White Gulch. Club members journeyed to Hamlet by rail and then boated across the bay to the gulch where they hunted game birds such as quail, pheasant, and ducks. The club rented the buildings from 1904 until ranch owner John McClure cancelled their lease

252 . Livingston, *Hamlet*, 8-15.

253. Northwestern Pacific Railroad, "Vacation 1907."

254. Mason, *Earthquake Bay*, 49.

in 1941. Jim Black's Hunt Club leased land on Inverness Ridge between 1915 and 1925 so that members could hunt deer and quail. Gamekeepers, employed by the club, assisted their urban clients with hunting and butchering.[255] Although many owned automobiles in the first two decades of the twentieth century, West Marin's poor roads were often impassible in winter, and hunters and fishermen continued to arrive by train.

A handful of tourist facilities along the bay's shores offered swimming, boating, fishing, and hunting beginning in the early twentieth century. The hotel and cottages at Camp Pistolesi, established in 1902 south of Tomales on Keys Creek, hosted families in the summer and hunters and fishermen in the winter. In 1928, the facility changed its name to Camp Tomales, but it continued to offer rental cabins. The camp even boasted its own flagstop on the railroad.[256] Paradise Grove Camp, near Inverness Park on the west side of the bay, enticed urbanites with its descriptions of "endless outdoor pastimes." The camp offered apartments, cottages, and campsites, but assured potential patrons that they provided a civilized establishment that included a social hall, dancing and daily mail service.[257] Guibbuni Camp offered camping on ten acres of land near Inverness.[258] Still, these facilities paled in comparison to the beach resorts, scenic railway, and other tourist amenities of southern Marin County.

The largest and most ambitious vacation development on Tomales Bay was the town of Inverness. James McMillan Shafter, in an effort to make up for his financial losses in the unprofitable railroad, turned 640 acres of his western Tomales Bay property into small lots in 1889. Shafter hoped to sell the parcels to city dwellers seeking vacation homes, and he promised potential buyers that they would be able to travel from San Francisco to Inverness quickly and easily. Shafter envisioned that residents would take the train to Millerton, on the bay's eastern shore, where they would board a boat that would ferry them to the village across the bay. Promotional maps of Inverness made the area look

255. Jack Mason, *Point Reyes Historian* 6, Vol. 2, (Fall 1981), 606.

256. Livingston, *Hamlet*, 42.

257. Pamphlet, Inverness Park File, Jack Mason Museum Archives, Inverness, CA.

258. Northwestern Pacific Railroad, "Vacation 1907."



Fig 29. Rowers on Tomales Bay during Inverness's Fourth of July celebration, early twentieth century. Courtesy of PRNS Archives.

relatively close to San Francisco, and it was advertised as a convenient retreat from the city. Shafter hoped the village of Inverness would become a major waterfront resort with a hotel as well as vacation residences.[259]

Despite Shafter's efforts, few buyers purchased land in the remote village. He spoke to church congregations and invited groups to camp on the property (in the summer of 1892, over 1,000 people camped at Inverness), but few bought lots. Shafter died later that same year. Alexander Baily bought 25 acres in probate court in 1894, and he built the area's first substantial home. He also subdivided much of his property into lots, and some San Francisco area bankers, judges, doctors, and professors bought parcels in Baily's Addition.[260]

Shafter's daughter, Julia Shafter, tried to pay off her father's debts by selling lots carved from his Point Reyes ranches in 1893, but there were no buyers during this time of economic depression. She also tried to sell his timber lands in the Olema Valley, but with no success. Buyers were not attracted by the natural resource possibilities of the area, so Julia Shafter enlarged upon her father's original plans for tourism. In 1905, she subdivided Inverness Ridge into 10,000

259. Inverness Map, Jack Mason Museum, Inverness, CA.

260. Jack Mason, *Summer Town: The History of Inverness, California* (Inverness, CA: North Shore Books, 1974), 10-12.



Figure 30. Inverness around 1915. The town never developed into the large resort community envisioned by its founders due to its remote location, but it did attract a small number of San Francisco Bay area residents who sought relaxation and recreation. Courtesy of the Bancroft Library, University of California, Berkeley.



Figure 31. Due to publicity campaigns by railroad executives and Inverness developer Julia Shafter, Tomales Bay began to garner a reputation as a relaxing vacation spot during the early twentieth century. Courtesy of PRNS Archives.



Fig. 32 Local residents built small cabins and changing houses on the western shore of Tomales Bay in the early twentieth century. Brock Schreiber's boathouse and pier are in the background.

lots and extracted tentative promises from railroad executives to build an electric rail line from Fairfax, in southern Marin County, to Inverness.[261]

To attract buyers, Julia began promoting the community as an ideal summer home locale. She believed that Inverness and its surroundings were "some of the choicest lands in California," and she emphasized the natural beauty and favorable climate of the area to prospective buyers. Promotional campaigns optimistically referred to the village as the "Brighton of the Pacific Coast" after the famed English seaside resort. The Northwestern Pacific Railroad, too, promoted Inverness in an attempt to boost passenger business. Brochures appealed to San Francisco area residents' need for relaxation and recreation as they boasted of Inverness' fine boating, bathing, hunting, and fishing. Boosters portrayed the area as pristine, even "primeval," with "wild woodland walks, undeveloped hill and dale and virgin forest."[262] Promotional literature further promised calm, safe waters, perfect for swimming, and they promoted the town

261. Ibid., 18.

262. C.M. Wooster Co., "Inverness the Beautiful," Promotional Brochure, Inverness File, California Room, Marin County Free Library, San Rafael, CA.



Figure 33. Brock Schreiber's boathouse. Besides boat rental, Schreiber offered ferry service to tourists and local residents to various points along the bay. Courtesy of PRNS Archives.

as a refuge from summer heat.[263] About forty buyers per year purchased lots in Baily's Addition and Julia Shafter's Inverness. In addition to San Francisco Bay area professionals, widows, retirees, and residents of Sacramento and other Central Valley towns also purchased lots. Two modest lodges and one small hotel served tourists. Visitors first took the train to Point Reyes Station and then hired a stagecoach to the village. The journey from San Francisco took nearly a day.[264]

This idyll was not meant for everyone, however. Promoters boasted that the community was "fully restricted," meaning it was only open to white, Christian buyers. At least before 1906, the community did not even allow excursions

263. Northwestern Pacific Railroad, Vacation 1907.

264. Mason, *Summer Town*, 18-19.



Figure 34. Inverness suffered severe damage during the 1906 earthquake. Throughout the village, homes and businesses were shaken off their foundations, water mains broke, and a landslide covered the main road with debris. Baily's Pier, which served Inverness residents, moved twenty-five feet north due to the quake. The seismic event dashed Julia Shafters' dreams of growth and prosperity in the village. Courtesy of PRNS Archives.



Figure 35. Damaged home near Inverness after the 1906 earthquake. Courtesy of PRNS Archives.

to the village by those who were not residents or guests.[265] Local residents did enjoy the bay near Inverness. White House Pool, a swimming and fishing hole along Lagunitas Creek named for the nearby large white home, became a particularly popular spot. The grassy lawn, shade trees, and bath houses drew crowds daily in good weather. Boathouses, used by summer residents of Inverness, lined the creek.[266]

The earthquake of 1906 dashed Julia Shafter's hopes of turning Inverness into a well-known resort community, and it damaged the fledgling tourism industry on the bay. Tomales Bay lies along the San Andreas Fault, and the earthquake's epicenter lay just south of the bay. The Point Reyes peninsula, west of the bay, moved northward seventeen feet. At Inverness, houses and stores were shaken off their foundations, water mains broke, and a landslide covered the road with debris. Baily's Pier, which served residents of his development, moved twenty-five feet north. The road from Point Reyes Station to Inverness that crossed the head of the bay was offset by twenty feet. Julia despaired at the situation. "So many repairs are needed and lumber is so high that my heart sinks within me. It is nothing but pay out money all the time. Nothing to show for it until I am sick at heart, frightened and worried."[267]

Damage was even worse on the more developed eastern side of the bay. In Tomales, the temblor destroyed the store and stone Catholic church. Marshall's North Coast Hotel slid into the bay. There were three fatalities, which occurred when Alexander Marshall's stone home collapsed and killed his three children. The cabins at Cypress Grove were damaged, forcing owner George Covert to sell the property to recover his losses. Rebuilding was slow due to the scarcity and high cost of lumber. Built on fill along the bay, the railroad tracks shifted. Levees broke, and trestles fell. The rail bed north of Hamlet sank two feet. At Hamlet itself, the railroad station slid into the bay, and a landslide covered both the tracks and the county road. The railroad had just added new trains as well

265. Wooster Co., "Inverness the Beautiful."

266. Suzanne Vedy, Helen Smith Oral Interview, October 8, 1987, Point Reyes National Seashore Collection.

267. Mason, *Summer Town*, 42.

as two new stops per day at Point Reyes Station, but service was curtailed until the tracks were repaired.[268]

The earthquake only temporarily modified the bay's landscape. Landslides occurred on ridges above the bay. The tidal mud liquefied and formed wave like formations on the mudflats near the bay's end, but these disappeared due to tidal action within the year. Favorite clamming spots were buried in silt. Locals observed that stream channels shifted and springs dried up or increased in flow. Nonetheless, geologists concluded that the earthquake did not cause any major changes to the bay itself.[269]

Other vacation developments on the bay were similarly unsuccessful, and they became neighborhoods of local workers rather than exclusive summer home communities. Isaac Freeman created the subdivision of Inverness Park in 1909 after Julia Shafter Hamilton gave him 500 acres for payment of her father's debt. Like Shafter, Freeman promised potential buyers that new roads and ferries would speed their journey from the city. He never instigated ferry service, and the narrow, slippery and steep roads of the development made transportation difficult. Furthermore, Inverness Park lacked the creeks and the beach access of Inverness. These disadvantages, along with the small size of the lots, turned potential vacationers away, and Freeman was forced to sell the home sites to local workers. One local attorney described Inverness Park as a place where "some raise chickens, some raise fruit, some chop wood and some have hayfields." Freeman attempted to lure vacationers to another subdivision north of Inverness Park, which he intended to turn into a "grand country club." Inverness Villas also failed to attract buyers, and most of the lots instead were sold to Swiss-Italian immigrants. Residents in both subdivisions provided labor to Inverness residents and area ranchers. Many sold local produce and wild foods such as berries and mushrooms to village residents and tourists.[270]

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268. Andrew C. Lawson, The California Earthquake of April 18, 1906 (Washington D.C: Carnegie Institution, 1908), 71-80; Mason, Earthquake Bay, 110-112.

269. Lawson, 71-80.

270. Mason, *Earthquake Bay*, 123.

Though the development never lived up to its founders' expectations, Inverness did develop into a village during this time. By 1910, the town had a grocery store, a post office, a candy store, and a garage and warehouse. The Inverness Yacht Club served as a social center by 1914. Some San Francisco area residents vacationed in Inverness. Hotel owners James and Mary Reeves repaired the earthquake damage and finished building the hotel addition that expanded their facility to twenty-three rooms. Brock Schreiber's boat *Kemah* carried tourists to Shell, Indian, and other west Tomales Bay beaches for a one dollar fare. As an added incentive, Schreiber promised customers a freshly caught crab lunch. He sometimes picked up visitors at the Millerton train station, since the water journey was more comfortable than the trip by stage from Point Reyes Station. He also built and rented small sailboats and fishing gear.[271]

After World War I, the town became a haven for Berkeley academics, and many faculty and their families spent weekends and summers at the Tomales Bay community. John Gibson, son of Inverness resident and University of California chemistry professor George Ernest Gibson, believed that Berkeley families were attracted to Inverness by the "spiritual nourishment" they found in nature. In contrast to many other San Francisco area vacationers, these families did not seek out grand resorts or developments. The area's "mysterious and untouched beauty" as well as its relaxed atmosphere provided a welcome contrast to the weekday life of the academics. Residents named their homes with monikers such as Brookside, Grizzly Lodge, Pinecroft, Quail Point, Sunnyside, Tanglewood, and Aldersyde that reflected inhabitants' ideas about their place in nature. The Gibson family, like many others from Berkeley, journeyed to their Inverness homes by car on Fridays and returned to their jobs by Monday morning. They considered the Inverness school inferior to those in Berkeley and thus never allowed their children to attend.[272]

Shafter's idea of a grand resort on Tomales Bay never materialized, and Inverness did not see the kind of development in the late nineteenth and early twentieth centuries as did the towns of Bolinas and Stinson Beach.[273] Roads

271. Mason, *Summer Town*, 30-36.

272. Ibid., 76.

273. Toogood, 2:8.

from southern Marin County to those beachfront towns carried substantially more traffic than did roads to Point Reyes Station, Inverness, and Tomales.[274] The onset of the Great Depression worsened the situation, and many local businesses closed during the 1930s. After the stock market crash of 1929, the bank foreclosed on most of Julia's property. Paradise Grove Camp went out of business due to the economic crisis. A number of boat houses along the bay were abandoned during the 1930s as well, as fewer hunters and fishermen traveled to the area. The Reeves first mortgaged and then sold their hotel due to a lack of customers in 1930. The new owners made improvements and renamed the hotel Drake's Inn, but they, too, failed to attract tourists. Brock Schrieber described his boat rental business as a "hopeless struggle" during this time. The yacht club, plagued with financial problems from the beginning, was foreclosed upon in 1940. The boathouses at White House Pool, as well as the namesake house, fell into disrepair and became a target for vandals. The cessation of railroad service in 1933 destroyed what little tourist business still came to the bay, and Tomales Bay remained largely unvisited by vacationers.[275]

THE COAST MIWOK IN THE TWENTIETH CENTURY

Although the most obvious changes to Tomales Bay resulted from settlers' activities, Tomales Bay remained an abundant landscape for the Coast Miwok that remained in Marin County. A number of families continued to inhabit coves on both sides of the bay, where their waterfront homes gave them easy access to marine resources. In the early twentieth century, there were two Indian villages on the east shore of Tomales Bay—one at Marconi Cove called Fishermen's by locals and another near Tomales. According to census records, there were few Coast Miwok left in Marin County. By 1908, there were only eleven Coast Miwok left, and by 1920, only five remained.[276] There were certainly many people, nonetheless, that identified as Coast Miwok due to

274. California Department of Public Works, "Highway Transportation Survey of 1934," California State Archives, Sacramento, CA.

275. Mason, *Summer Town*, 31.

276. Emberson and Theodoratus, "Point Reyes National Seashore Cultural Affiliation Report," 59.

ancestral ties, even if both parents were not Coast Miwok. Most of the families that lived along the bay, like the Felixes and the Campiglis who lived at Laird's Landing, were descended from both the Coast Miwok and European immigrant groups.

While continuing to look to the natural world for sustenance and healing, the Coast Miwok incorporated themselves into the local economy. Many traditional resources were still plentiful. Most of the land around Tomales Bay was privately owned, but the sparsely settled character of the area allowed them to procure wild plants, berries, and nuts.[277] Men fished, hunted and trapped for both subsistence and for the market. Women and children collected clams and other shellfish and sold them both to merchants along the bay and passengers on the railroad.[278] Most Indians worked as laborers on farms and ranches in the nineteenth century. The majority of the milkers on the Kehoe Ranch on Tomales Point, for example, were local Indians. Rancher Kenneth Kehoe recalled that an Indian family seemingly lived on every cove on the bay, and that most of the men worked as ranch hands.[279] Most families owned boats, and they ferried both visitors and goods across the bay. Sacramento Ouse, who lived at Sacramento Landing in the late nineteenth and early twentieth centuries, transported produce, grain, butter, milk and eggs from ranches on his barges to railroad stops across the bay.[280] Some worked as hunting and fishing guides for sportsmen, while others found employment at the herring cannery.[281]

The Felix family (of Coast Miwok and Filipino descent) occupied Laird's Landing, a cove on the bay's western side, in the early twentieth century. The site offered a number of natural advantages to the family. An alluvial flat on the bay provided a large, level space for dwellings and a garden, while gently terraced slopes above the bay provided space for a larger potato field. The

277. Compas, 83.

278. Dickinson and Graves, *Narrow Gauge to the Redwoods*, 62.

279. Kenneth Kehoe, interview by Carla Ehat and Anne Kent, 1979, California Room, Marin County Civic Center Library.

280. Dolores McGill Oral History.

281. Livingston, *Hamlet*, 30.



Figure 36. Fishermen's, a settlement of Coast Miwok descendents, in the late 1910s. A number of Coast Miwok descendents lived at various other points along the bay as well. Most worked as fishermen or laborers for area farmers. The Marconi Wireless Company is in the background. Courtesy of the Tomales Regional History Center.

waterfront location allowed access to the bay's resources and to the services on the eastern side of the bay, and the beach at Laird's Landing allowed residents to pull boats easily ashore. The location was owned by San Francisco businessman (and owner of a number of dairy ranches on Point Reyes and Tomales Point) Oscar Shafter, who charged families living on his land along the bay one dollar per year for rent. Shafter always returned the dollar. This ritual allowed families legal access to the land, and it provided the nearby ranches with laborers. Since members of the family worked on the Shafter ranches, this arrangement made financial sense to the landowner.[282]

Boating remained the primary means of transportation for families of Coast Miwok descent throughout this time. Although nearby ranches built or

282. Douglas Livingston, Elizabeth Harlan Oral Interview, September 30, 1996, Point Reyes National Seashore Archives, Point Reyes Station, CA.

maintained wharves, the Campigli family (composed of Bertha Felix, her husband of Swiss-Italian descent Arnold Campigli, and their daughter Elizabeth), simply pulled their skiff up on the beach. Navigating the bay was not always easy. The Campigli family, who occupied Laird's Landing after the death of the Felixes, picked up their mail and shopped in Marshall, preferably before 10:00 a.m., when the wind often picked up. The bay was "a rough place to be during a north wind," Elizabeth remembered. They sometimes rowed across the bay two to three times per day to do errands. Because of the poor quality of roads to the Landing, especially during the winter, the site was difficult to access by automobile. Arnold tried to pave the road to their home with rocks, but they simply sank in the soft ground, leaving the road impassible during winter rains. Eventually the family acquired a boat with an outboard motor.

The Campigli family sustained itself on both native and introduced species. They kept a cow and a pig as well as chickens, ducks, and rabbits. They made their own butter and grew their own produce. Arnold plowed their huge garden, which produced beans and vegetables, with horses borrowed from the McClure's ranch. They also grew potatoes in a field on the hillside. The family collected and used local herbs and plants such as eucalyptus leaves to treat various ailments. They fished for salmon, smelt, and perch with lines in the bay. They collected clams and oysters, which they fried or incorporated into soup, from nearby beaches, while abalone was gathered from Pierce Point. Arnold hunted quail and deer. Although Elizabeth described the family as poor, the Campiglis and their relatives never went hungry. They had no electricity (light came from oil lamps) or phone, and their home was heated by a wood stove that burned wood cut from the hills surrounding the landing. Water came from a well, which was either built or improved by her father. There was no indoor plumbing, and the family utilized an outhouse.

Many people of Coast Miwok ancestry made a nominal living on the bay, but the group had no reservation of their own. In 1920, the Lipps-Michaels Survey of Landless Indians, a congressional study, concluded that Indians in Marin and Sonoma Counties deserved their own reservation. John Terrell, a Bureau of Indian Affairs inspector, was dispatched to purchase land for the group. He discovered that the cost of coastal land was prohibitive, and he found that property owners were unwilling to sell land for an Indian reservation. He purchased a fifteen and a half acre parcel near Graton in Sonoma County, far from Tomales Bay and traditional Coast Miwok sites. A number of Coast Miwok



Figure 37. Another view of Fishermen's at Marconi Cove. Railroad passengers often purchased clams through train windows from village residents when the train stopped in Marconi. Courtesy of the Tomales Regional History Center.

Indians from Marshall, Bodega, Tomales, as well as Southern Pomo Indians from Sonoma County, moved to the site. The small size of the parcel, the steep terrain, the lack of water, and the lack of government funds for housing meant that few Indians were able to build homes on the reservation. Instead, they kept the land as a center of community while pursuing work elsewhere.[283]

Tomales Bay residents in the first few decades of the twentieth century inhabited a different landscape than had their nineteenth-century counterparts. What had once been an isolated region boasted new towns, settlements, and railroad stops. Redwood stakes delineated oyster beds, while commercial fishing vessels plied the bay's waters. Trains rattled alongside the bay's shores on man-made levees that reshaped the borders of the estuary. The golden brown fields provided evidence that exotic plant species dominated the landscape, while the increased amount of mudflats indicated the extent of erosion from the surrounding hills.

283. "Federated Indians of Graton Rancheria Online Resource," http://www.gratonrancheria.com, accessed March 1, 2007.

ancestral ties, even if both parents were not Coast Miwok. Most of the families that lived along the bay, like the Felixes and the Campiglis who lived at Laird's Landing, were descended from both the Coast Miwok and European immigrant groups.

While continuing to look to the natural world for sustenance and healing, the Coast Miwok incorporated themselves into the local economy. Many traditional resources were still plentiful. Most of the land around Tomales Bay was privately owned, but the sparsely settled character of the area allowed them to procure wild plants, berries, and nuts.[277] Men fished, hunted and trapped for both subsistence and for the market. Women and children collected clams and other shellfish and sold them both to merchants along the bay and passengers on the railroad.[278] Most Indians worked as laborers on farms and ranches in the nineteenth century. The majority of the milkers on the Kehoe Ranch on Tomales Point, for example, were local Indians. Rancher Kenneth Kehoe recalled that an Indian family seemingly lived on every cove on the bay, and that most of the men worked as ranch hands.[279] Most families owned boats, and they ferried both visitors and goods across the bay. Sacramento Ouse, who lived at Sacramento Landing in the late nineteenth and early twentieth centuries, transported produce, grain, butter, milk and eggs from ranches on his barges to railroad stops across the bay.[280] Some worked as hunting and fishing guides for sportsmen, while others found employment at the herring cannery.[281]

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277. Compas, 83.

278. Dickinson and Graves, *Narrow Gauge to the Redwoods*, 62.

279. Kenneth Kehoe, interview by Carla Ehat and Anne Kent, 1979, California Room, Marin County Civic Center Lib.

280. Dolores McGill Oral History.

281. Livingston, *Hamlet*, 30.

on cross-country trips, Americans simply preferred to drive.[284] The commercial fishing industry on the bay prospered for a short time, but bay fishermen were helpless in the face of fluctuating demand worldwide. Though Tomales Bay oystermen claimed an increasingly large share of the San Francisco market, this alone could not sustain the area's economy. The area remained rural and agricultural, but Tomales Bay products were no longer vital to the urban core. In the early twentieth century, many Californians had never even heard of Tomales Bay.

284. Hal Rothman, *Devil's Bargains: Tourism in the Twentieth-Century American West* (Lawrence: University of Kansas Press, 1998), 145.

CHAPTER FIVE

The Reinvention of Tomales Bay, 1933-1972

Until after World War II, the Tomales Bay area remained a relatively quiet, sparsely settled space, an agricultural landscape punctuated by summer homes. After the opening of the Golden Gate Bridge in 1937, however, San Francisco residents could reach Marin County by car in a matter of minutes. With the metropolitan area's tremendous growth during the post-war period, suburban sprawl spread toward agricultural West Marin County, and the future of the area became uncertain. No longer did newcomers imagine the profits to be made raising potatoes, grain, and livestock since the area had lost its place as a primary provider of agricultural products to San Francisco. Some ranchers continued to view the area as prime dairy ranching country, but other farmers were tired of falling dairy prices and planned to sell out to developers. While some Marin County inhabitants began to see the rural Tomales Bay landscape as a place for recreation and relaxation, developers viewed its shores as a lucrative location for homes, motels, and malls. County planners envisioned a large city on the bay's east side, connected to southern Marin County by a busy freeway. The NPS believed that Tomales Point and Point Reyes were worthy of federal protection, but the agency and its supporters met with opposition from many local residents and business owners. Throughout the mid-twentieth century, it was unclear if the Tomales Bay landscape would remain agricultural or if it would become a suburb, a resort community, or a national park. By the 1970s, a new, dominant vision of what the Tomales Bay landscape should look like—and how the land and water should be used—emerged.

TOMALES BAY AS A STRATEGIC DEFENSE

During World War II, the San Francisco Bay area became a center of military activities for a nation concerned with a Japanese invasion of the West Coast. The military established coastal forts, radar centers, lookout stations, searchlights, and anti-aircraft guns around the San Francisco area in an attempt to

protect the city from Japanese attack. Tomales Bay, too, became a center of military operations. The U.S. Army, Navy, and Coast Guard all stationed troops on Tomales Bay. The white house at White House Pool (the swimming hole on Lagunitas Creek near its mouth on Tomales Bay) became an army communications center. Thousands of men were stationed at Camp Hydle, a training station near Marshall. The Coast Guard posted troops at Cypress Grove and Pierce Point Ranch.[285]

The Navy used the bay itself for target practice during and after the war, one of three areas north of San Francisco utilized for this purpose. In 1941, the Navy established a restricted area, near Hamlet, on which they constructed a circular target, 750 yards in radius. They used two types of non-explosive practice bombs. The first was a miniature bomb with "a marker charge similar to a shotgun shell" and the other was a metal shell filled with water. The Navy believed that the soft mud on the bottom of the bay snared the bombs and prevented duds from exploding and posing a threat to boaters.[286] They used the ocean west of Tomales Point for bombing exercises as well.

Sometimes the bombers missed their targets and dropped the bombs on the eastern bay ranches. Margaret Matteri, who ran the dairy at Hamlet along with her husband, recalled being terrified by the exercises. "They used to go by and let bombs fall. . . I used to say I wish I never moved here."[287] After the early 1950s, the military abandoned these exercises on the bay, ending this short, unique chapter in Tomales Bay history.[288]

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285. Mason, *Earthquake Bay*, 124. The house later fell into disrepair and was demolished.

286. P.E. Seufer, Deputy District Works Public Officer to the Chief, Bureau of Yards and Docks, January 28, 1955. Abbot's Lagoon and Petaluma were the other two bombing areas.

287. Douglas Livingston, Margaret Matteri Oral Interview, August 22, 1988, Point Reyes National Seashore Archives.

288. L.P. Springmeyer, District Public Works Officer to the District Engineer, San Francisco District Corps of Engineer, August 12, 1952; Madison Nichols, Public Works Officer, Memo to the Commandant, Twelfth Naval District, March 22, 1946.



Figure 39. Pierce Point Ranch in 1951. Tomales Bay area dairy ranchers survived the Great Depression, but the industry declined precipitously after World War II due to low milk prices and competition from larger, Central California dairies. The McClure family, who owned Pierce Point Ranch, began growing hay and raising beef cattle in an effort to remain viable. Courtesy of PRNS Archives.

AGRICULTURE AND NATURAL RESOURCE USE IN AND AROUND THE BAY

During the first few decades of the century, the Tomales Bay area had lost its status as an important hinterland for San Francisco. Bay farmers, ranchers, fishermen, and oyster growers, however, worked throughout the mid-twentieth century to regain their positions as important suppliers of foods to the urban market. These groups occasionally found themselves at odds with one another. Environmental degradation and new ideas about the value of their environment also made cooperation more difficult, and agriculture, fishing, and oystering faced uncertain futures on the bay.

Dairy farmers near Tomales Bay managed to survive the Great Depression, but farmers struggled against low milk prices and competition from large corporate enterprises in other parts of the state. Olema Valley rancher Boyd Stewart remembers that times were difficult, but that banks did not want ranch

land and thus avoided foreclosing on dairy farms by extending credit.[289] The industry declined precipitously around the bay after World War II. Ranchers invested in refrigeration in an attempt to capitalize on the fresh milk market in San Francisco and thus regain their position as premier suppliers to the urban area. The bay's proximity to the urban center, however, no longer gave it a distinct advantage, since large Central Valley operations—which used water from federally subsidized irrigation projects—could produce milk more cheaply than could small bay area family farmers. New environmental regulations, higher taxes, and declining milk prices also hurt small dairy ranches relative to their larger counterparts. In 1950, there were 200 dairies in Marin County. Ten years later, there were 150, and by 1972, there were less than 100. Most of these were located in western Marin County. Thirteen dairies and one sheep ranch surrounded the bay in 1951.[290]

Descendents of the Shafter and Howard families liquidated their increasingly unprofitable dairy assets in the 1920s and 1930s. The O.L. Shafter Estate Company sold off their Point Reyes and Tomales Point ranches in 1939. Some ranchers, such as the tenants on I and J ranches, eagerly snatched up the opportunity to escape tenant farming by purchasing the land. James Kehoe, tenant on J ranch, bought the farm's property and livestock for $42,000. Most of Oscar Shafter's land was sold to Leonard David, who sold parcels to various different buyers. He sold L Ranch, on Tomales Point, to Ernest Ghisletta, while Roberts Dairy, based in San Rafael, bought K ranch.

All of these ranchers improved their facilities and became Grade A dairies in order to compete for a larger share of the San Francisco market. This designation meant that they operated with higher sanitary standards and produced milk and cream for table consumption, rather than for butter.[291] Kehoe, who owned about 350 cows, improved J Ranch by tearing down old buildings and

289. Boyd Stewart, interview by Carla Ehat and Anne Kent, September 1974, California Room, Marin County Civic Center Library.

290. Bureau of Sanitary Engineering, "Tomales Bay Survey," 1951, Water Resources Center Archives, University of California, Berkeley, CA.

291 . Livingston, *Ranching on the Point Reyes Peninsula*, 71-72.

constructing a modern, functional ranch complex in the 1950s.[292] L ranch was initially rented to dairy tenants by owner Ernie Ghisletta, but he sold the ranch in 1960 to nearby ranchers, who continued dairy operations.[293] A new road from Pierce Point to Inverness helped these dairies move their products to market. By 1960, milk made up eighty percent of the agricultural output of Marin County.

Milking machines were introduced in the 1930s, but the dairy business still demanded almost ceaseless work. At Hamlet, the Matteri family owned between forty and seventy cows on land leased from Henry Jensen. They raised hay in two fields, one near the bay and one along the ridge top. The family only hired outside help during the hay harvest. "It was a terrible lot of work," Margaret Matteri recalled gravely. She arose at three a.m. to milk the cows before the milk truck from Tomales came at seven. After washing the equipment, she made breakfast and got the children ready for school. Besides tending the dairy cows, the family had to plant, tend, harvest, and store hay, oats, and potatoes. The Matteris moved to a ranch near Marshall in 1952 after dairy inspectors condemned the dairy at Hamlet.[294] Despite the staggering amount of work and low profits, some dairy farms managed to remain viable throughout this time. The Marshall family continued to raise dairy cows on their east Tomales Bay ranch founded by the four Marshall Brothers in the early 1850s. By the 1970s, the fifth generation of the Marshall family ran the ranch. Bill Straus established his dairy, which is still operational as of 2005, along the bay's northeastern shores in 1941.[295]

Despite ranchers' modernization efforts, the dairy industry proved increasingly unprofitable, and ranchers turned to other means of support. A few area ranchers abandoned dairying altogether in favor of beef ranching, which required less labor. After World War II, the McClures, for example, who owned Pierce Point Ranch, began raising beef cattle and growing hay instead

292. Ibid., 287.

293. Ibid., 308-309.

294. Margaret Matteri, interview by Livingston.

295. Marshall, Ehat, and Kent.

of producing dairy products. The Marshall family began to raise beef cattle and sheep in the 1970s.[296]

Other dairy owners began to see the value of subdividing their ranches for home sites. Proximity to San Francisco had once enabled the success of West Marin's dairy farms, but now it meant encroaching urban landscapes and rising land values. Throughout the 1950s and 1960s, according to rancher Ralph Grossi, "Everybody was talking about how many houses their ranch would accommodate and where in the state they were going to go buy their next dairy." By the 1960s, many ranchers believed that agriculture in West Marin County was doomed, since urbanization would surely transform the Point Reyes and Tomales Bay area into another Malibu.[297] The grasslands that sustained dairy cows for over one hundred years were now more valuable as home sites with jaw-dropping views.

By mid-century, other local industries also struggled in the face of increased competition and declining environmental quality. Tomales Bay oyster production briefly increased to between ninety and ninety-eight percent of California's crop after the last oyster farm abandoned San Francisco Bay in the late 1930s, but bay growers were not able to sustain such a large market share. The largest harvest was 240,150 pounds from 1940 to 1941. During World War II, seed oysters from Japan became unavailable, and the California oyster industry suffered as a result. Only 19,300 pounds were harvested from Tomales Bay in 1945. Seeking to capitalize on the growing San Francisco area's appetite for the bivalves, growers began planting large numbers of oysters in Morro Bay in the 1940s and Humboldt Bay in the 1950s. These endeavors proved successful. Growers in Humboldt Bay, a large body of water ideal for oyster culture, produced the vast majority of California's crop by the early 1950s, while Drake's Estero and Morro Bay also had more oyster farms than Tomales Bay.[298] Again, improved transportation routes expanded markets and increased competition for local growers. Since California was now laced with good highways, Tomales

296. Boyd Stewart, interview by Ehat and Kent.

297. John Hart, *Farming on the Edge: Saving Family Farming in Marin County, California* (Berkeley: University of California Press, 1991), 14.

298. Barrett, 54-56

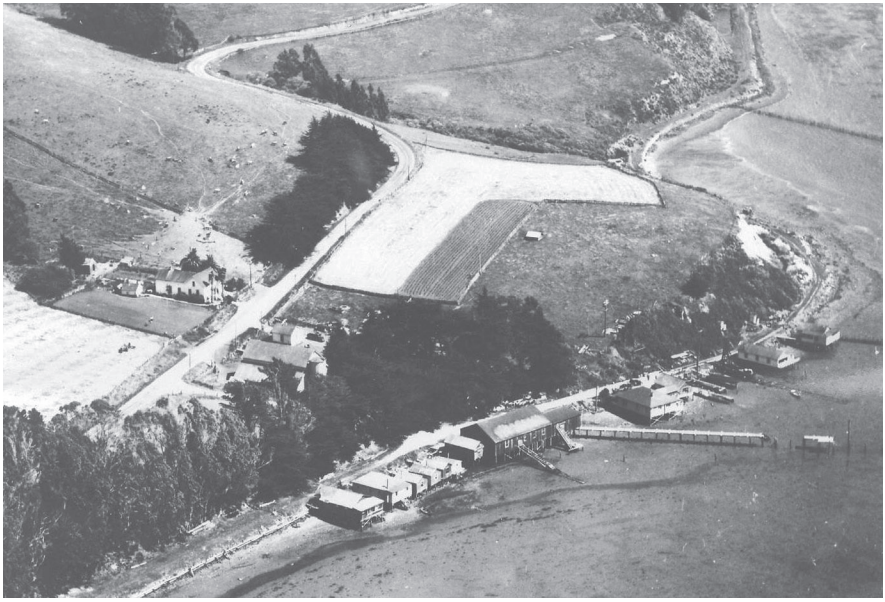


Figure 40. Jensen's Oyster Beds in 1946. Jensen operated Jensen's Oyster Beds, an oyster growing operation with a restaurant, dairy, and tourist cabins, at Hamlet. Courtesy of PRNS Archives.

Bay oyster growers were no longer able to capitalize on their proximity to the urban center. In addition, predators remained a problem, and siltation rendered some of the bay unusable for oyster culture.[299] One fisheries expert in the mid-1950s characterized Tomales Bay's oyster industry as "declining," yet with potential. In 1959, Tomales Bay produced only 0.6 percent of California's oyster crop.[300]

Local growers did enjoy a degree of success. Henry Jensen first planted oysters at Hamlet sometime in the 1920s or 1930s, and the business grew in the following decades. Since most consumers preferred shucked oysters in jars, Jensen opened a small bar and built an oyster processing area. His small staff planted Pacific seed oysters from Humboldt and Willipa Bays as well as Japan. The business closed during World War II, but their product became popular

299. "Marin Oyster Farmer Battles, Nature, Man," *Marin Independent-Journal*, August 25, 1956.

300. Barrett, 56.

with tourists as well as restaurants after the war when the public gained a taste for the previously unpopular Pacific oyster. Albert Speigel recalled the experience of buying oysters at Hamlet. "You drove into a beautiful grove of cypress trees, it was a wind block and you could put almost fifty cars in there, and on a Sunday, why that parking lot would be loaded while the people came into buy oysters."[301]

Jensen sold forty acres of land along the bay to his son Henry Jr. and his wife Virginia in 1955. The couple expanded the operation by opening a restaurant and bar and enlarging the parking area. They also staked off a growing area and simply spread Pacific oyster seed on the bay's muddy bottom. The oysters were ready for harvest eighteen to thirty-six months later (depending on the desired size). Virginia worked long days tending the oyster beds as well as shucking oysters and running the restaurant while Henry worked as a commercial fisherman on the bay. Even though Henry Jensen Jr. drowned while fishing in the bay in 1971, Virginia and the couple's children continued the operation.[302]

While Tomales Bay oyster farmers produced only a small percentage of the California crop, local oyster farms drew tourists from around the San Francisco area. The Jensens and The Tomales Bay Oyster Company both sold their oysters directly to customers, though they did also sell some oysters wholesale to local restaurants and merchants. One writer observed, "People from all parts of the San Francisco Bay area drive many miles over a narrow, winding road to buy oysters from the beds. Weekend tourists and sportsmen are also customers. The strong consumer desire for absolutely fresh shellfish is the principal explanation for the success of this marketing arrangement." This stood in contrast to the oyster farms of Humboldt Bay, who sold mainly to wholesalers that distributed the product around the country.[303] The Spenger family also grew oysters on Tomales Bay, but their operation proved unique as it grew shellfish exclusively for the family's restaurant. Frank "Buddy" Spenger Jr. grew

301. Douglas Livingston, Alfred Speigel Oral Interview, Point Reyes National Seashore Archives, Point Reyes Station, CA.

302. Livingston, *Hamlet*, 36-38.

303. Barrett, 92.

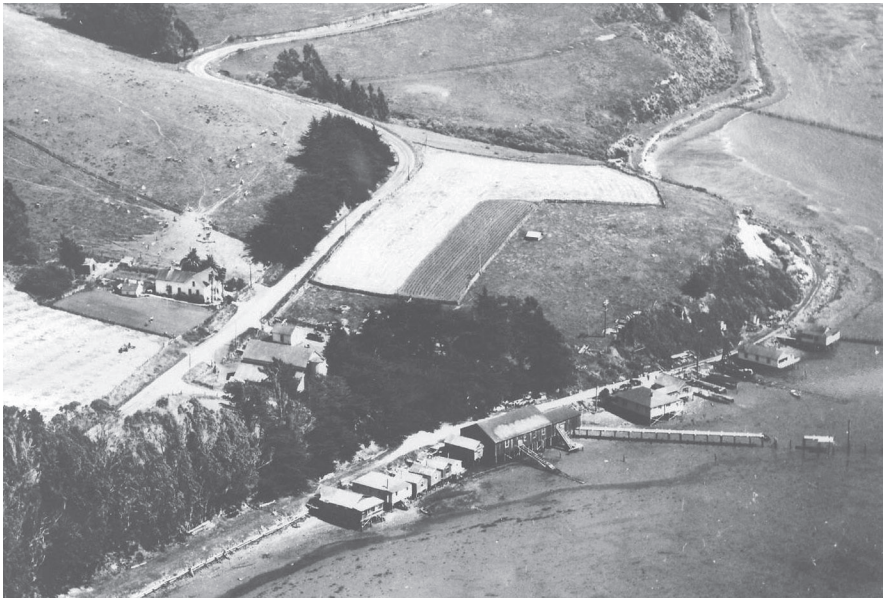


Figure 41. The restaurant at Hamlet. Consumers came from all over the San Francisco Bay area to sample the fresh Tomales Bay oysters. Courtesy of PRNS Archives.

oysters, mussels, and clams for his Berkeley seafood restaurant.[304] Some local enterprises thrived, but Tomales Bay's oyster farming remained a very small percentage of the California industry at this time.

Worldwide demand boosted the local fishing industry after World War II, but this proved a temporary phenomenon. Commercial fishermen caught large quantities of herring in the bay (and throughout California), which was canned for export to a war-ravaged Europe. Some herring was also processed into fish meal and oil for domestic use. By the early 1950s, commercial fishing vessels from as far away as Monterey traveled to the bay for herring. California lawmakers denied canners and commercial fishermen's requests to allow greater numbers of herring to be reduced into meal and oil, so the fishery remained relatively small. In 1952, nine commercial vessels fished in the bay

304. Larken Bradley, "Weekender Spenger, 88, Ran Famous Fish Grotto," *Point Reyes Light*, August 28, 2003.

for herring. The market fell in the mid-1950s as the European fishing industry regained strength.[305]

Fishermen sought other species of fish as well as herring. Between 1934 and 1954, the average commercial catch in the bay was 550,000 pounds per year. Most fishermen used either beach seines or gill nets during this time, but after 1950, the increased use of lampara nets (which allowed for the catch of small bait fish) and purse seines allowed for bigger catches. Tomales Bay fishermen caught two million pounds of fish in 1951.[306] Fishermen caught small fish such as anchovies and small herring by using beach seines on the bay's western side and near Marshall, where beaches rapidly gave way to deeper water. Some commercial fishermen sought rockfish and lingcod near White Gulch, in the deepest part of the bay.[307] In the 1950s, halibut, herring, shrimp, and rock crab were also commercially harvested in Tomales Bay. Most of the towns along the bay developed an infrastructure, such as wharves, hoists, and conveyors, to service the fishing industry.[308]

As the overall catch rose, environmental changes gradually undermined fish populations in Tomales Bay and its tributaries. Siltation caused by farming in the Tomales Bay watershed had long been a problem for residents who sought to use the bay for transportation and commerce. By the mid-twentieth century, however, dam, road, and home construction in the watershed were the biggest sources of water quality degradation. These construction activities, which greatly accelerated after World War II, had an enormous effect on the fish populations in the Tomales Bay watershed.

Take, for example, the history of Lagunitas Creek. It rises on the northern slopes of Mt. Tamalpais and has long been a source of water for Marin residents. Since the late nineteenth century, water companies and ranchers continuously manipulated the creek to serve an increasing population. Between 1873 and 1913, about two dozen water companies diverted water from the creek

305. Hardwick, "Biomass Estimates of Spawning Herring," 36-39.

306. Peter Worsley, "The Commercial and Sport Fishery of Tomales Bay," 5, California Room, Marin County Civic Center Library.

307. Worsley, 7.

308. Scofield, "California Fishing Ports," 50.



Figure 42. Walker Creek in the mid-twentieth century. Navigable in the mid-nineteenth century, erosion on the hillsides due to agricultural activities made the creek too silted for boat travel by the mid-1870s. Courtesy of PRNS Archives.

and from springs in the creek's watershed to serve Marin citizens. Between 1912 and 1982, the Marin Municipal Water District built five dams along Lagunitas Creek. The North Marin Water District, established in 1970, also diverted water from Lagunitas Creek to serve residents of northwestern Marin County. In addition, some ranch owners built small diversion dams for their livestock.[309] Dam construction and operation proved particularly damaging to fish populations. Salmon lay their eggs in gravel in swift moving water, which carries away waste products and carbon dioxide while providing enough oxygen. Slow, shallow stream flows result in higher egg mortality.[310] In the 1950s, the Marin Municipal Water District built Kent and Nicasio Dams to serve the growing

309. San Francisco Water Resources Control Board, "Lagunitas Creek Order WR 95-17," 1996, Marin County Civic Center Library.

310. D.W. Kelley, "The Possibility of Restoring Salmon and Steelhead in Walker Creek," (Sacramento: D.W. Kelley, 1976), 1-2.

population. During dam construction, tons of sediment washed down the creek into Tomales Bay. The dams themselves reduced water flow and prevented water from flushing sediments out of the creeks. Fishermen, along with Inverness residents, protested when huge amounts of mud and silt washed into the bay during dam construction. Boaters became stuck by the mud near the mouth of Lagunitas Creek, while swimming holes in Samuel Taylor State Park filled with silt. [311]

When the two dams were completed, ninety percent of the creek's salmon spawning habitat had been destroyed. Runs numbering five to ten thousand fish suddenly disappeared. The populations of introduced species such as striped bass and red tailed perch similarly declined due to the dams. Former Marin County game warden Al Giddings recalled, "Within a year or two after the dams went in, the fish runs literally stopped." Fishermen complained that Lagunitas Creek was "ruined," and they battled the Marin Municipal Water District in order to force the agency to release enough water from dams in the summer to sustain fish populations. Giddings lamented that the loss of fish habitat was "a tremendous loss to the people, especially the fishermen—an irreplaceable, beautiful fishery and it's gone."[312]

Although the damage caused by fish dams was obvious, fish populations plunged even on creeks without such large projects. In Walker Creek, which drains into the northeastern side of the bay, small diversion dams for livestock blocked fish passage and reduced stream flow. Cattle caused streambank erosion that washed away riparian vegetation, raised stream temperatures, and filled pools with sediment. Ranchers often washed manure from their barns into creeks, filling streams with waste. Silver salmon and steelhead populations had decreased by the 1950s, and since 1959, Walker Creek has had at least one month per year without surface flow.[313] A dam was built upstream at Arroyo

311. "Stream Pollution from Dam Protested," *Baywood Press*, May 7, 1953, Jack Mason Museum Archives, Inverness, CA.

312. Douglas Livingston, Transcript of Interview with Al Giddings, Willis Even and Bob Chamberlain, Point Reyes National Seashore Coho Salmon Project, Point Reyes National Seashore Archives.

313. Kelley, 1-2. Locals recalled that in the 1920s and 1930s, stream flow diminished but never stopped altogether during summer months.

Sausal in 1968, reducing habitat for the few fish that still spawned in the creek. By the mid 1970s, few fish returned to Walker Creek.[314]

One rancher's activities at the mouth of Lagunitas Creek proved particularly damaging to fish habitat. After Waldo Giacomini bought the ranch at the bay's southern end in 1942, he began to build levees to reclaim the tidal marsh for pasture. While silt that washed down Lagunitas Creek had been distributed in the large marsh at the south end of the bay before the 1940s, these new levees forced the sediment through a single channel and into the bay's already shallow end. Giacomini also built his first summer dam, a structure one hundred-feet long, ten-feet high, and sixty-feet wide, on Lagunitas Creek in 1947. Winter rains washed out the dam, and every subsequent summer Giacomini built another. Besides providing water for stock, the dam prevented saltwater from intruding on the wells that Point Reyes Station residents depended on. In 1964, the Army Corps of Engineers granted the rancher a permit to dredge and widen the creek's mouth, and 18,000 cubic yards of soil were dumped on the nearby wetlands.[315] Some believed that the seasonal dam harmed the bay's fisheries. The dam interrupted the gradual transition from salt to fresh water that is normally present in estuaries, which affected the neomysid shrimp population, the primary food source for salmon. The dam also delayed the migration of salmon to the sea and created water quality conditions (such as extreme changes in water temperature above and below the dam) which are harmful to young salmon.[316] Others, such as game warden Al Giddings, believed that the pond created good fish habitat, since its deep water protected young salmon from predators like blue herons.[317]

During the postwar period, farmers and ranchers relied heavily on pesticides, and this affected fish populations as well. In 1951, at ranchers' requests, the California Department of Agriculture sprayed Rotenone in West Marin County

314. Ibid., 21.

315. Sonoma State University Anthropological Study Center, "A Cultural Resources Study of Giacomini Wetlands Restoration Project," Point Reyes National Seashore Archives, Point Reyes Station, CA, 14.

316. Ibid., 99.

317. Douglas Livingston, Point Reyes Coho Salmon Project, Al Giddings Oral Interview, Part II, 1997, 57.

to eliminate the ox warble, an insect that stung cattle. It was also used along Olema, Nicasio, and Lagunitas Creeks, where it washed into watercourses and killed fish. Rotenone collected on the hooves of sprayed cattle, and the poison was tracked into streams near which pesticides had not been used, thus killing fish even in unsprayed areas. As part of a mosquito abatement program, Marin County also sprayed the insecticide Malathian near Lagunitas Creek, and this too destroyed fish populations. The county water district also used copper sulfate to control algae in reservoirs, but the agency sometimes used too much and as a result, killed fish.[318]

In the mid-twentieth century, other serious threats to the bay's water quality emerged. There were seven mercury mines in the watershed at this time, and the mine on Gambonini Ranch, east of the bay, proved especially destructive. Between 1964 and 1970, 300 tons of mercury was extracted from the open pit mine near the confluence of Walker and Salmon Creeks. Sewage outflow, too, began to attract the attention of state officials in the early 1950s. The first complaints about sewage in the bay began in 1917, when waste from a cheese factory flowed into San Geronimo Creek. In the early 1950s in the town of Tomales alone, seventeen different waste discharges emptied into Keys Creek. Raw sewage from area towns, homes, and businesses poured straight into the bay. In Inverness, five sewers emptied raw sewage near a popular swimming beach, while sewage from homes and businesses in Point Reyes Station flowed into a ditch which emptied into the bay. Most homes along the bay's eastern side rested on pilings directly over the estuary, and some flushed sewage right into the bay. Some homes did have septic systems, but many of these were of questionable efficiency.[319] Though some Inverness inhabitants and local fishermen protested the water quality degradation, many area residents expressed little concern.

Human activities throughout the Tomales Bay watershed noticeably affected the bay's geography. Besides dam building, logging along Olema and Lagunitas Creeks and home and road construction throughout the watershed carried

318. Ibid.

319. Bureau of Sanitary Engineering, "Tomales Bay Survey."



Figure 43. Local author A. Bray Dickenson at the former site of Key's Embarcadero in Tomales. Schooners called at the foot of the hill in the background in the mid-nineteenth century, but siltation had filled in the waterway by the turn of the twentieth century. Roy Graves photo collection, courtesy of the Bancroft Library, University of California, Berkeley.

significant amounts of silt into the streams.[320] By 1965, siltation from these creeks had caused the marsh at the head of the bay to migrate about 1000 feet north of its position one hundred years earlier. In 1861, at low tide, water reached across the bay from Inverness to the opposite shore. By 1931, only one-third of this width contained between one and two feet of water. In 1961, only one-half inch of water covered one-third of the area.[321] The Walker Creek delta, near the bay's mouth, extended 500 feet farther than it did in the 1860s. While the waters off the delta were twenty-five feet deep in 1861, that depth had been reduced to merely five feet a century later.[322]

320. George S. Nolte, *Master Drainage and Sediment Control Plan, Lagunitas and Walker Creek Watersheds*, (Palo Alto: Nolte and Associates, 1965), 5.

321. R.C.Cooper, "Tomales Bay Environmental Health," *Tomales Bay Environmental Study: Compendium of Reports* (Washington D.C: Conservation Foundation, 1972), 104.

322. Nolte, 6.

Fishing, oystering, and dairy ranching had sustained generations of Tomales Bay residents, but market forces, habitat degradation, and competition from larger operations in other parts of the state put these local industries at a disadvantage. Furthermore, new ideas about the value of the Tomales Bay landscape began to emerge, and it was unclear what, if any, place these industries had in that vision. By 1960, the future of the area's agricultural and natural resource-based industries was in doubt.

A NEW LAND ETHIC: CONSERVATION AND RECREATION ON TOMALES BAY

Since the late nineteenth century, Marin County had been a popular destination for residents of San Francisco Bay area cities. Travel to natural areas across the nation increased as the United States became more industrial and urban, and day trippers and vacationers sought relaxation and recreation among the undeveloped landscapes of the easily accessible southern part of the county in particular. The editor of the county's newspaper depicted the area as "a sparsely settled playground, beloved of hikers, a godsend to city people anxious to escape quickly and completely into rural and mountain loveliness."[323] As the county became increasingly accessible to automobiles, however, some worried that increasing numbers of visitors and new residents would destroy this idyllic scene.

The first auto trip by ferry to Marin County had been in 1902, but cars were not initially viewed as a desirable addition to county roads. In 1903, some Marin residents campaigned to ban automobiles due to the "danger, annoyance and anxiety" that they caused. As a result, motorists were restricted from using many roads. Even as automobiles became more popular throughout the early twentieth century, most residents and visitors continued to rely on trains for transportation. Winter rains left roads impassable, and even when maintained, graveled highways remained problematic during the rainy season.[324]

323. Editor, *Marin Independent-Journal*, January 4, 1934.

324. Contract File, 1917-18, Highway Engineer's Office, California State Archives, Sacramento, CA.

As automobile ownership skyrocketed in the 1920s, vacationers began to use cars, not trains, to reach the Tomales Bay area. In 1922, the Golden Gate Ferry Company began shuttling cars across the bay to Marin County, and soon after, a ferry operated by the railroad also provided transportation for auto tourists.[325] By 1930, there were more cars—461,800—registered in the San Francisco Bay area than there were households.[326]

Autos gave tourists the freedom to explore at will, and improved roads allowed them to travel safely and quickly to new destinations. Throughout the country between the two world wars, more and more Americans spent their leisure time in nature, and they increasingly traveled there in their cars. A study on social trends commissioned by President Herbert Hoover concluded that "with the improvement of means of travel, people are finding it possible to go even further afield in their search for recreation and readily travel long distances during week-ends and vacations to places of scenic interest where their favorite forms of outdoor recreation may be enjoyed."[327] Local travel, in particular, surged as automobile ownership rose, and these auto tourists sought recreational opportunities in greater numbers than had railroad tourists.[328] The completion of Sir Francis Drake Boulevard in 1930 provided travelers with easier access to West Marin County. After the Golden Gate Bridge opened in 1937, San Francisco residents could drive to Marin County quickly and easily. War industries and the postwar housing boom brought over a million new residents to the San Francisco Bay area. Between 1940 and 1950, the metropolitan area population rose 55 percent to about 2.7 million.[329] Millions of people now lived within a two hours drive of West Marin County and Tomales Bay.

As early as the 1930s, some Marin citizens, concerned about their future as a San Francisco suburb, worried that development threatened the county's

325. Toogood, 2: 34.

326. "Growth in Bay Area Vehicle Ownership, 1930-2010," http://www.mtc.ca.gov/maps_and_data/datamart/forecast/ao/table10.htm (accessed Jan. 2005).

327. Paul Sutter, *Driven Wild: How the Fight Against Automobiles Launched the Modern Wilderness Movement* (Seattle: University of Washington Press, 2002), 19.

328. Rothman, *Devil's Bargains*, 147.

329. Toogood, 2:34-38.

bucolic scenery. A newspaper editorial addressed the issue in 1934 when it opined, "Our picnic spots are nearly gone. 'No trespassing' signs are posted all over. We must act if we believe in building for the future. Papermill (Lagunitas) Creek, inviting bay beaches. . . must be saved. No community on earth is more favored than Marin with the wealth and beauty of potential playgrounds."[330]

Between 1900 and 1930, there had been efforts to preserve the county's grand natural features such as Muir Woods and Mt. Tamalpais. However, there were no established preservation groups based in the county, nor any widespread efforts to protect the county's natural resources. Caroline Livermore, a wealthy and influential Marin citizen who would devote much of her adult life to preserving land in Marin County, first became involved in environmental issues as she watched billboards rise along Marin's roads. Livermore's campaign to prohibit billboards, part of a long trend of roadside improvement campaigns across the nation, led to the creation county's most powerful environmental group, one that would play a large role in Tomales Bay's future.

Livermore, along with fellow members of the Marin Art and Garden Club, namely Sepha Evers, Helen van Pelt (one of the first female landscape architects in the U.S.) and Portia Forbes, saw zoning changes as their best chance to preserve Marin County's scenic landscapes. The group worried about potential overdevelopment in the area once the Golden Gate Bridge was completed, since development that was intended to serve new residents, vacationers and day trippers might mar the rural county's pastoral landscape. In 1935, the women organized the Marin Planning Survey Committee to gather data for the county's first zoning ordinances. Working independently of the county, the women raised $2,500 from wealthy Marinites to fund a planning study that would mesh with their environmental objectives of preserving aesthetically pleasing landscapes and preventing overdevelopment. Additionally funded in part by the State Emergency Relief Administration, a New Deal program begun

330. Editor, *Marin Independent Journal*, January 4, 1934.

the year before, the study produced the county's first planning documents and maps to guide future growth and development.[331]

The planners worried that auto tourism would degrade the beauty of West Marin County and Tomales Bay. They warned that while Marin County had long been a playground for San Francisco area residents, "the Golden Gate Bridge will greatly accentuate this use, adding to it in volume and somewhat changing its character as it becomes easier for large masses of people to reach the areas of recreation potentiality in Marin County." The study emphasized the preservation of open space and designated recreation areas, though the authors valued some landscapes more than others. The report called the entire west shore of Tomales Bay a "public reserve eminently worthy of park status. The intimate beauty of the series of small beaches along this section is one of the most interesting recreation potentialities in California." In contrast, the study called Point Reyes beaches "bleak."[332]

The investigators felt that planning for auto tourism and channeling its growth provided the best protection against the rampant tourist and vacation development. They did not want to discourage urban visitors, but they also did not want these visitors to camp on private property, start illegal fires, and leave mounds of litter, as auto tourists across the West were doing.[333] The planners recommended that the county build a scenic parkway along Lagunitas Creek in order to guide visitors to western Marin County, and they encouraged the county to establish carefully planned sites, specifically along Tomales, San Francisco, and San Pedro Bays, with "ample access for auto parking and incidental recreation such as picnicking and athletics." Few area citizens imagined that growth could threaten Tomales Bay at this time, but the study predicted that highways and parking lots might one day ruin the bay's "peculiar charm and intimacy."[334]

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331. Marin Planning Survey Committee, "A County Planning Program for Marin County, California, 1935," California Room, Marin County Civic Center Library; Mary Summers, "Marin Conservation League: A Brief History," Marin Conservation League Clipping File, California Room, Marin County Civic Center Library.

332. Marin Planning Survey Committee.

333. Sutter, 43.

334. Marin Planning Survey Committee.

Livermore, Evers, van Pelt, and Forbes organized as the Marin Conservation League, and they took up the task of furthering the goals that the study outlined for the next thirty years. They presented the finished study to the county board of supervisors, who approved the plans and thus enacted Marin's first zoning ordinances. This initial success encouraged the women to plan larger goals.[335] The League's mission became "to preserve and protect the natural assets of Marin County for all people," and as suburban development increased, so did their preservation efforts.[336] The League saw the county's rural landscapes as "irreplaceable lands whose natural features are the very essence of Marin County's character." Rancher Boyd Stewart remembers that though Livermore and Evers lived in southern Marin towns, they "liked the kind of country (West Marin) was—a rural country, with dairy and beef ranches. . . there were no large towns."[337] Most land conservationists in the late nineteenth and early twentieth centuries had focused on protecting grand natural features, but the League saw rural landscapes, free from suburban sprawl, as equally valuable.

In 1940, the league began a five year effort to create a public park from land once owned by Samuel Taylor along Lagunitas Creek. State as well as county politicians at first rejected the property as undesirable for a park, since they believed it was too often cloaked in coastal fogs. Nonetheless, the league convinced legislators of the site's value through persistent campaigning and meticulous record-keeping. Evers began making weekly trips to Sacramento to lobby for the purchase of the land, and she began a children's day camp on the property to demonstrate the educational and recreational value of the parcel. Evers also kept a detailed weather log that proved to dubious politicians the fairness of the park's climate. The League convinced the county to forgive the back taxes on the property, and they negotiated the purchase between the state

335. Mary Summers, "Marin Conservation League: A Brief History, " 2.

336. Nancy Wise, *Marin's Natural Assets* (San Rafael, CA: Marin Conservation League, 1985), 7.

337. "Boyd Stewart Oral Interview," in *Saving Point Reyes National Seashore, 1969-1970: An Oral History of Citizen Action in Conservation*, Bancroft Library, University of California, Berkeley, 231-2.

and Taylor's widow.[338] Emboldened by this success, the League next turned to beachfront property on Tomales Bay.

The Marin Conservation League was the first group to work toward land preservation on Tomales Bay. Though a few tourists, as well as hunters and fishermen, visited Tomales Bay before World War II, there were no efforts to establish parks along the bay until this time. Most San Francisco area residents knew little about the estuary. Between 1941 and 1943, the League worked to convince the county government and its residents that a 190 acre parcel on Tomales Bay that included Shell Beach should be purchased for a public park. Livermore privately negotiated a deal with the beach's owner before she received a commitment from the county. She wrote letters, illustrated with pictures of the natural beauty and recreational opportunities of the area, on behalf of the Tomales Bay Beaches Committee, in order to raise $15,000 of the $30,000 asking price. She described Shell Beach's "quiet, warm waters" as perfect for swimming, boating, and fishing, and she promoted the hiking and picnicking opportunities in the bishop pine forests above the beach. "This heritage must be protected," she pleaded with potential donors.[339] The county agreed to contribute matching funds, and in 1943, Shell Beach became a county park.

San Francisco area residents had virtually ignored the bay in favor of destinations in southern Marin County, but the League, hoping that more visitors would increase support for their effort to establish a state park, now promoted the bay in order to attract local tourists and day trippers to its shores. Tomales Bay was prominently featured in a booklet the group published in 1941 detailing the recreation opportunities of Marin County. They described the bay as a wonderful vacation spot only known by local residents. They emphasized the fishing, swimming, clamming, and beachcombing along the "secret" beaches. The group depicted the bishop pine forests, wildflowers, and "primitive" nature as an ideal spot for relaxation.[340]

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338. Summers, 2.

339. Caroline Livermore Letter, Tomales Bay Clipping File, California Room, Marin County Civic Center Library.

340. Marin Conservation League, *Exploring Marin, Vol. I: Sir Francis Drake Highway* (San Anselmo, Ca: Marin Conservation League, 1941).

Club member and Inverness resident Bruce Johnstone asked state park commissioners to consider buying and expanding Shell Beach for a state park in the mid-1940s. California law at the time allowed the state to purchase park lands if they received half the money in cash or in property worthy of state park quality. He invited the commissioners to visit the site and arranged for a Coast Guard vessel to ferry them around Tomales Bay. There was a sense of urgency about the endeavor, since a developer had announced plans to build a hotel and golf course on 1,000 acres of land north of Inverness, part of which included land the League hoped would become a state park.[341] The tactic proved successful, and the commissioners agreed that Indian and Shell Beaches should become part of the state park system.[342] The League convinced the county to turn over Stinson and Shell Beaches as well as $16,000 to the state, and the League donated an additional $10,000. The state was then able to legally purchase 840 acres of beachfront and forest just north of Shell Beach for $150,000. In 1951, Tomales Bay State Park, with two miles of waterfront, five sandy beaches, and hundreds of acres of native bishop pine forest, was formed.[343]

The county paper lauded the group's accomplishment. While previous mentions of the bay might have only noted its hunting or fishing opportunities, now the bay was depicted as a pristine paradise. The writer described Indian Beach as "unspoiled stretch of sand and woodlands," while Shell Beach had "charm and seclusion." The forests were "a botanical paradise." Tomales Bay "has everything we could want for recreation," boasted the writer.[344] Throughout the 1950s and 1960s, local newspapers continued to promote the scenic beauty and natural features of Tomales Bay. One reporter called the state park "a wilderness which is most accessible and unspoiled."[345] The new state park became a resource for Californians even beyond the San Francisco Bay area.

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341. "Lavish Million Dollar Private Resort on Tomales Bay Plans Disclosed," Inverness Clipping File, California Room, Marin County Civic Center Library.

342. Wise, 15.

343. Summers, 3.

344. Charles Eischen, "Saved for Posterity: New State Park on Tomales Bay Shore will preserve area's Native Wilderness," *Marin Independent-Journal*, Tomales Bay State Park Clipping File, California Room, Marin County Civic Center Library.

345. "Way Out West," *Marin Independent-Journal* Magazine, July 5, 1958.

While people from the nearby metropolis could easily drive to the park for picnicking, hiking, and swimming, the park also provided a place for residents of Sacramento and other inland cities to escape the summer heat.

This idea of the bay sometimes clashed with the views of local residents, since not everyone saw the bay as a calm, beneficent place for recreation. Rancher Kenneth Kehoe recalled that few ranching families used the bay for recreation. "Everybody was brought up when they were smaller to be afraid of the water and there isn't a person I know of on this point. . . that knows how to swim," Kehoe recalled. "There's been an awful lot of families and a lot of people drowned at the mouth of the bay."[346]

Many credit the League's early success to the prominence and persuasiveness of its founding members. Livermore, for example, had long been active in fundraising for charitable causes. Others believed that male politicians were unable to say no to these female lobbyists. As Livermore's son George recalled, "They were not used to having housewives argue with them. . . she was always a lady. And, of course, that's pretty disarming. . . you don't usually have ladies in supervisors' meetings and I think that helped an awful lot." Their actions, however, were not entirely unprecedented. Though the American conservation movement of the early twentieth century had been dominated by men, California women had been active in conservation groups since the early twentieth century. Women had formed the Save the Redwoods League to preserve Humboldt County's redwoods, and women were involved in campaigns to protect Marin County redwoods as well.[347]

Livermore and her colleagues used "persistence and persuasion, not confrontation," to overcome the apathy and passivity they faced from government agencies and the League's board of directors. Interesting a reluctant county board of supervisors in land preservation proved frustrating. "They were afraid to get involved," she recalled. Livermore, in particular, also believed that polarizing groups such as developers versus conservationists would be

346. Kehoe, Ehat, and Kent.

347. Cameron Binkley, "No Better Heritage than Living Trees; Women's Clubs and Early Conservation in Humboldt County," *Western Historical Quarterly* 33, no. 2, 181.

an unsuccessful strategy.[348] Livermore often put up her own money until the League could raise enough to buy rights to a property. Their methods proved successful. Besides Samuel Taylor and Tomales Bay State Parks, the League was also responsible for the expansion of Muir Woods and the preservation of Bolinas Lagoon. The League also helped enforce Marin's zoning ordinances by patrolling and reporting violators.[349]

Not everyone saw the League as working for the public good. Evers remembers that "conservationists, in our day, were labeled as do-gooders, idle rich taking jobs away from the poor." League officials were not able to preserve as much land along the bay as they had hoped, since their goals sometimes conflicted with the area's dairy ranchers. A county recreation plan adopted in 1943 recommended that the county purchase and preserve the western shoreline of the bay north of Inverness to Tomales Point. Though the League continued to promote this plan, dairy ranchers and developers convinced county officials to reject the idea.[350]

Few outside the Marin Conservation League considered the bay threatened by development in the 1950s. One state agency believed that the area was immune from suburban sprawl and growth due to the "natural mountain barrier" of Bolinas Ridge. Little population growth occurred in western Marin County during this time, and to many, it was inconceivable that pop-ulation pressures would reach Tomales Bay—the rural area was simply too far from San Francisco to be desirable.[351]

There were signs, however, that development threats could spread even as far as the estuary. Inverness had remained quiet throughout the Depression. In 1939, after the bank foreclosed on Bertha Shafter's Inverness properties (those that remained from her mother Julia's estate), a number of buyers were able to purchase lots for relatively little money. During World War II, a San Francisco

348. Wise, 37-39; George Livermore, interview by Carla Ehat and Anne Kent, October 21, 1980, California Room, Marin County Civic Center Library.

349. Wise, 37-38.

350. Ibid., 38-39.

351. Bureau of Sanitary Engineering, "Tomales Bay Survey."

Bay area housing shortage brought a number of Marinship (a wartime shipyard located in Sausalito, in southern Marin County) workers to Inverness, where they occupied summer homes. A makeshift school was set up in the yacht club to accommodate all of the newcomers. A Greyhound bus provided service to San Francisco beginning in 1942 for workers who were employed in other defense industries.[352] After the war, Inverness real estate sales began to climb. Developers built the Seahaven subdivision in 1950, Paradise Estates two years later, and Silver Hills, south of White House Pool, in 1966.[353]

While the League sought to encourage day trippers and vacationers to visit West Marin in order to draw attention to their conservation programs, other institutions wanted to attract tourists for economic reasons. Some saw the development of highways as crucial to this endeavor. The county paper and local politicians lobbied for a four to six lane highway in West Marin. U.S. Highway 1, which ran along Tomales Bay, was prone to washouts and rockslides. Large stretches passed through unfenced ranchland, and cattle ranged freely across the road. Furthermore, loose gravel, few guardrails and steep drop-offs meant that the road could be dangerous to drive at night or in poor weather. In slide prone areas, signs warned drivers to use the highway at their own risk. In some places, farmers were forced to spread hay across the road to avoid becoming stuck in potholes. According to the county paper, the "veritable paradise" that was West Marin County suffered from one of the worst roads in the state. Assemblyman A.W. Way lobbied for a new road, but projects in more populated parts of the county took precedence. Though the state transportation department eventually improved the highway, it remained two lanes wide, narrower than tourism boosters had wanted.[354]

Increasing numbers of hikers and picnickers journeyed to the bay, but most visitors still came to fish. Sport fishing was so popular in California that by 1954, the sport fishing catch exceeded that of commercial fishermen. Tomales Bay fishermen caught silver salmon and steelhead in the fall, jacksmelt and surfperch in the winter, halibut in the summer, and flounder and the occasional

352. Mason, *Summer Town*,47.

353. Mason, *Earthquake Bay*,131.

354. "Hazard with a Heavenly View," *Marin Independent-Journal*, March 5, 1949.

striped bass all year long. Small boats were available for rent at several places, such as at Hamlet, where the Jensens also rented cabins. The county operated a public boat launch at Millerton, and others fished from piers. By the late 1960s, the bay was the third most popular place to fish in the San Francisco Bay Area, after San Francisco and San Pablo Bays. Many sport fishermen fished just inside the treacherous mouth of the bay, despite the fog, tidal currents, sandbar, winds, and breaking waves. They fished from powerboats for the flatfish (such as sole, starry flounder, and halibut), lingcod, perch, and salmon that came to feed on smaller fish in the shallow, turbulent waters of this part of the bay. Just outside the bay's mouth, fishermen were drawn to the silver and king salmon, most of which were hatchery raised.[355]

Sport fishing was extremely popular on Tomales Bay tributaries, such as Olema, Walker, and Lagunitas Creeks, as it had been earlier in the century. Since the area was more easily accessed by car than it had been by train, greater numbers of fishermen flocked to the area. Fish and Game officer Al Giddings counted as many as 500 fishermen on Lagunitas Creek during a single Saturday in the 1950s before the Kent and Nicasio Dams were built.[356]

Many fishermen and hunters were more interested in "improving" the bay than preserving its current state. Waterfowl hunters constructed permanent blinds on the bay in order to better surprise their prey.[357] Fishermen sought to reduce competition for valuable fish species by eliminating predators. Commercial fishermen shot seals that interfered with their nets. In an attempt to rid the bay of "undesirable" species that took bait from fishermen's hooks, several rod and gun clubs hosted an annual shark and stingray derby. The two day event, based at Marconi Cove, drew crowds of fishermen to the bay. Prizes were awarded for the biggest specimens. In 1970, 30,000 pounds of shark and stingray (twice the sport catch of all other species in the bay combined) were caught and turned to fertilizer.[358] Other events targeted particular species for no logical

355. Worsley, 3.

356. Al Giddings Oral Interview.

357. Bureau of Sanitary Engineering, "Tomales Bay Survey."

358. Worsley, 7.

reason. The annual "coot shoot" drew hunters who killed and abandoned the small, harmless waterbirds.[359]

One sportsman quite literally sought to reshape Tomales Bay into a hunting and fishing paradise. In 1948, Robert Roy, a businessman and a member of the Marin Rod and Gun Club, proposed a development on the south end of the bay to create new hunting and fishing opportunities. Well-placed dams and levees would create specific areas for fly fishing and duck hunting. Four small ponds, including a children's fishing pool, would be built along the bay's edges for trout fishing. Roy envisioned a dam between Inverness and the east side of the bay in order to create deeper waters "safe for swimming and boating" in the marshy end of the bay. Fish ladders would have allowed for fish passage, and a road would allow automobile travel across the dam. He designated sections of the bay for speed boats and for fishermen. His plans also included a landing field on the freshwater marsh as well as bridle trails on the bay's levees. Roy even imagined a golf course west of the mouth of Lagunitas Creek, while fairgrounds and stables would be built south of the bay. The ambitious plan was discussed by the county board of supervisors, but ultimately no action was taken.[360]

Federal Protection of Point Reyes and Tomales Point

The Marin Conservation League had succeeded in preserving part of the Tomales Bay shore, but most of the bay remained unprotected and open to development. In the 1930s, NPS investigators examined the feasibility of a national seashore at Point Reyes as part of a national study of potential coastal recreation sites. The surveyors recommended that land along western Tomales Bay be preserved by the federal government. Unlike the county planners, however, federal investigators treated the bay as an afterthought, less important than preserving the scenic qualities and recreational possibilities of the Point Reyes peninsula. In a NPS survey of potential new recreation areas during the

359. Martin Griffin, *Saving the Marin-Sonoma Coast: The Battles for Audubon Canyon Ranch, Point Reyes, and California's Russian River* (Sweetwater Springs Press, 1998) 10.

360. *Marin Independent-Journal*, January 12, 1948.

1930s, Emerson Knight urged the creation of Point Reyes National Seashore. He recommended that the federal government include Tomales Point in the seashore, thus protecting the west shore of Tomales Bay. His report, however, practically ignored the estuary, which he viewed primarily as the domain of fishermen and hunters.[361] In 1935, Conrad Wirth, NPS Assistant Director of Planning, submitted his report on the feasibility of a national seashore recreation area at Point Reyes. Wirth had little to say about the estuary except that it would provide "splendid" boating and was well known for its fish and waterfowl.[362] Wirth recommended that 53,000 acres be set aside, and like Knight, he included Tomales Point. The federal government, occupied with the economic crisis of the Great Depression and then World War II, took no action on either of these proposals.

By the mid-1950s, popular support for new national parks and recreation areas had grown significantly. Across the nation during the postwar period, a rising awareness of environmental issues, as well as the "affluence and idealism" in American society, spurred citizens to join environmental groups and lobby for land preservation. Environmental groups were particularly concerned with preserving grand natural features, protecting scenic and ecologically rich areas from man-made disaster, and with establishing spaces for outdoor recreation. The Sierra Club campaign to keep dams out of the Grand Canyon and Dinosaur National Monument made wilderness preservation a national issue. An oil well disaster off the Santa Barbara coast alerted Californians, in particular, to the fragility of their coastline. Membership of organizations such as the San Francisco-based Sierra Club and the Wilderness Society grew tremendously during this time.[363]

The growing population demanded not only preservation of scenic lands, but spaces that could be used for recreation as well. In the 1950s, advocates linked a number of social issues, such as juvenile delinquency, to the lack of

361. Emerson Knight, "Study of a National Recreation Area-Point Reyes Peninsula, California," Studies for a National Seashore Recreation Area, Bancroft Library.

362. Conrad Wirth, "Study of a National Seashore Recreation Area, Point Reyes Peninsula, California," 1935, Point Reyes National Seashore Archives .

363. Samuel Hays, *Beauty, Health and Permanence: Environmental Politics in the United States 1955-1985* (Cambridge: Cambridge University Press, 1989), 18.

recreational opportunities. The Sierra Club identified "an overwhelming, unmet existing need" for recreational resources due to a rapidly expanding population, an increase in leisure time and a rise in disposable income.[364] Laurence Rockefeller's "Outdoor Recreation for America," a report to the president and Congress, emphasized the urgent need for outdoor recreation resources such as "shoreline, green acres, open space and unpolluted waters" especially near urban and shoreline areas.[365] Americans in urban areas were the strongest supporters of the new environmentalism.[366]

This new environmental movement was also a response to the rapidly developing countryside on the fringes of urban areas across the nation. Suburban development characterized postwar America, and new housing tracts sprawled into the countryside. Each year, developers transformed almost a million acres of farmland, forest and wetlands into housing developments.[367] The percentage of land classified by the Census Bureau as urban or suburban increased from 5.9 percent in 1950 to 10.9 percent in 1970. Furthermore, developers were now able to develop previously unbuildable land, such as steep slopes and wetlands, due to new building equipment, and this left few green or open spaces in the metropolis. Critics of this growth that included not only environmental groups but urban planners, magazine writers, and the nation's president, grew increasingly vocal. "Cities themselves reach out into the countryside," President Lyndon Johnson noted in 1965, "destroying streams and trees and meadows as they go."[368]

Californians, in particular, championed environmental causes during the postwar period, and state and local government agencies enacted a number of groundbreaking environmental policies—such as pollution controls and land management practices—during this time. Between 1950 and 1960, the San

364. Sierra Club, "The Recreation Gap," Sierra Club Records, Bancroft Library.

365. Larry M. Dilsaver, *America's National Park System: The Critical Documents* (Lanham, MD: Rowland and Littlefield, 1994), 224.

366. Hays, 3.

367. Adam Rome, *The Bulldozer in the Countryside: Suburban Sprawl and the Rise of American Environmentalism* (Cambridge: Cambridge University Press, 2001), 6.

368. Ibid., 120-140.

Francisco metropolitan area grew by about one million people. There was an abundance of literature written during the postwar period dedicated to the impending environmental destruction of California.[369] Suburban sprawl destroyed thousands of acres of productive farmland each year in the state. Rapidly developing coastal beaches had become a special area of concern among state residents. The demand for coastal vacation homes and the increase in proposed ocean-side power plants and blight along scenic beaches led many Californians to lobby for increased coastal protection.[370]

The Marin Conservation League, worried about the effects of suburbanization after the opening of the Golden Gate Bridge, had sought to preserve scenic and recreational landscapes in West Marin County, and after World War II these sentiments enjoyed a broad base of support. Marin County alone expanded from 50,000 residents in 1940 to 150,000 in 1960, and it became the second most rapidly growing county in California during the 1960s. Most of these residents were white, middle and upper class residents, a group that provided a broad base of support for environmental concerns, and they worried about the rapidly disappearing open space in their county.[371]

The combined threats of coastal development, suburban sprawl, and natural resource extraction galvanized public support for land preservation on the Point Reyes peninsula. The Marin Conservation League attracted public backing for their Point Reyes preservation efforts after they publicized logging on Inverness Ridge by the Sweet Timber Company. Similarly, many Marin County residents were alarmed at developers' plans to build a massive golf, commercial, and home development on Drake's Bay. Conservation groups such as the Isaak Walton League and the Audubon Society supported studies that assessed the Point Reyes coastline for preservation.[372] In 1957, the National Park Service again studied a number of potential recreation areas on the Pacific Coast, and the agency named Point Reyes as a place of particular interest. The National

369. Gerhart, 47.

370. Rome, 123 and 227-229.

371. Gerhart, 47.

372. George Collins, "The Art of Park Planning and Preservation, 1920-1979," 236, George L. Collins Collection, Bancroft Library.

Parks Advisory Board, along with the California State Parks Commission, the Marin County Planning Commission, and the Marin Conservation League, urged the federal government to continue to consider the area for a national park or recreation area.[373]

In 1959, a number of Bay Area citizens, supported by diverse groups such as the Marin Labor Council, the American Forestry Association, and the Wilderness Society, formed the Point Reyes National Seashore Foundation to push for federal protection of the Point Reyes area. Other urban interests, such as the San Francisco Board of Supervisors, expressed support for the seashore. To these groups, the Point Reyes area could serve as a type of recreational hinterland for the urban core. That same year, two congressional bills proposed that 35,000 acres in the area be set aside. Later that year, park supporters expanded their proposal to 55,000 acres in order to prevent development on the fringes of the seashore. A number of state and county officials and politicians also began to lobby for the seashore. These groups valued the land for its scenic landscapes and its recreational possibilities.

Many local residents, who believed that land's highest value remained in natural resource uses such as ranching, opposed the park. Others fought federal protection of the area since it would hinder development and remove land from tax rolls. These opponents formed the West Marin Property Owners Association in the hopes that the land would remain open to resource use and development.[374] The Marin Chamber of Commerce, Marin County Soil Conservation District, and the Marin County Board of Supervisors also formally opposed the seashore. The supervisors later declared themselves neutral, though they did ask Congress to limit the proposal to 20,000 acres.[375]

Many park proponents emphasized only the scenery and recreational opportunities of the seashore, but others, such as the Marin Conservation League, believed that the area's dairy ranches also constituted an important part of the

373. Toogood, 2:194-195.

374. Ibid., 194-196.

375. Barbara Eastman, *History of the Proposal to Establish a Point Reyes National Seashore* (Berkeley: Bureau of Public Administration, 1961), 2-3.

area's history and landscape. While dairy ranchers feared that land preservation spelled the demise of the dairy industry in Marin County, an agreement between the NPS and the ranch owners allowed many to continue dairy operations. The proposed seashore included a "pastoral zone" that encompassed about one-third of the park. While the NPS would act as landlord, ranching families would be given the option of signing long term leases in order to continue their operations. Some ranchers saw this as the only way to keep their businesses alive, and this compromise inspired some ranchers to support the proposed park. Other ranchers vehemently opposed the plan that would leave them tenants on ranches they had owned.[376]

Park proponents treated Tomales Bay as an afterthought in their campaign to establish a national seashore. While they extolled the scenic, historic, and recreational value of Point Reyes, they rarely mentioned the estuary. Most park proposals included land on the western side of Tomales Bay, and a few park supporters did point out the recreational potential of the bay's swimming beaches. Descriptions of the ecological or cultural significance of the estuary, however, are nearly absent from supporters' arguments. Park proponents may have believed the bay was less scenic and less threatened by development than the Point Reyes coast.

In 1960, Secretary of the Interior Fred Seaton recommended that Congress approve legislation establishing a national seashore that included areas for both recreation and ranching.[377] The next year, bills were introduced into Congress that reflected the expanded size, and in 1962, despite continued opposition by many locals, President John F. Kennedy established the seashore. The Marin Conservation League's Caroline Livermore played a part in the seashore's land acquisition as she convinced some of the reticent landowners to sell land to the NPS at a fair price.[378]

Adequate money had not been appropriated to purchase all of the land that would make up the park, and about 29,000 acres remained privately owned.

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376. John Hart, *San Francisco's Wilderness Next Door* (San Rafael, CA: Presidio Press, 1979), 44-48.

377. Eastman, 6-9.

378. Livermore, Ehat, and Kent.

Logging continued on Inverness Ridge, developers bought lots for subdivisions, and land prices in the area soared. Land along Tomales Bay shore remained vulnerable to development, since little Tomales Bay shoreline was acquired in the 1960s. The coves of western Tomales Bay that had once been so attractive to the Coast Miwok were now lucrative sites for vacation home developments. Duck Cove, a subdivision on about eighteen acres of land south of Sacramento Landing, was incorporated in 1958, before the seashore was established. Duck Cove, Inc. built a few homes before Congress established the seashore, and after 1965, when the seashore's land acquisition funds ran out, other landowners who owned parcels within the seashore boundaries elected to build homes on their lots.[379]

In 1967, Las Vegas contractor Richard Chase received county approval to subdivide twelve acres of land at Sacramento Landing, four and a half miles north of Inverness, into four parcels. Chase purchased the land in 1953 with plans to build a retreat from the Las Vegas heat for himself, and then sell the remaining land. In 1965, the NPS, which could not afford to purchase Chase's parcel, offered the landowner a chance to trade his Tomales Bay property for other federal land in California, but Chase did not take advantage of the offer. He subdivided the parcel into lots ranging in size from 1.8 acres to 9.3 acres. Alarmed county supervisors imposed a ninety day emergency ban on Tomales Bay development, but Chase's permits had already been granted.[380] The NPS believed that Laird's Landing would also be developed unless they quickly came up with acquisition funds.[381]

The county supervisors also expressed hope that the federal government would appropriate money for land acquisition as soon as possible so that future developments would be limited, but by 1967, only thirty-seven percent of the seashore had been acquired. Upon learning of the construction at Sacramento Landing, Secretary of the Interior Stewart Udall expressed his alarm at

379. Letter from G. Ray Arnett to Ellis J. Alden, 9 February 1984, Point Reyes National Seashore Land Files.

380. *San Francisco Chronicle*, "Point Reyes Subdivision Upsets Udall," August 12, 1967.

381. Letter from Thomas Kornelis, Realty Officer to Hon. Harvey Dickerson, Attorney General, State of Nevada, 4 February, 1965, PRNS Land Files; Appraisal Report, "The Richards Property," January 21, 1971, Point Reyes National Seashore Land Files.

this development within the seashore boundaries. The county pointed out that as long as private property owners held land in the proposed seashore, they were forced to allow the construction of vacation homes on the parcels.[382] By 1970, Sacramento Landing and Duck Cove encompassed twenty-two separate tracts and eighteen residences, with fifteen property owners. Development threats such as these prompted seashore supporters to push for adequate funds to complete land acquisition. In 1969, the Sierra Club and San Francisco area citizens formed Save Our Seashore to lobby Congress and President Nixon to purchase the remaining land within seashore boundaries. The campaign was successful, and in 1972, the 64,000 acre seashore was officially established.

Landowners at Duck Cove and Sacramento Landing protested the federal government's decision to include their land in the seashore. They pointed out that other groups, such as RCA and the Vedanta Society, were allowed to keep their land that now fell within seashore boundaries, as were residents of the town of Inverness. The landowners were unhappy with the terms of their leases as well. They claimed that initial conversations with the federal government left their subdivision outside of park boundaries, and many felt they had been tricked into supporting the park in this way. They insisted that few, if any, park visitors would utilize Duck Cove.[383] The NPS remained unconvinced. The seashore allowed landholders in the seashore whose homes had been built before September 1959 to acquire a fifty-year lease, and five elected to do so. Owners of homes built after that date signed leases ranging from ten to forty years. Eleven of the Duck Cove owners signed forty year leases and one signed a fifty year lease.[384] Some leaseholders fought to extend their tenancy when their contracts expired, a move which groups such as the Inverness Association, the Tomales Bay Association, the Marin Conservation League, and People for a Golden Gate National Recreation Area vocally opposed. These groups advocated for

382. Letter from Thomas Storer, Chairman of the Marin County Board of Supervisors to Stewart Udall, Secretary of the Interior, 14 August 1967, PRNS Land Files.

383. Letter from John Ward to George B. Hartzog, Jr., Director, National Park Service, 30 June, 1964, PRNS Land Files.

384. Letter from Ralph Mihan, Field Soliciter, to Regional Director, National Park Service, 16 January 1984, PRNS Land Files.



Figure 44. Sacramento Landing, on the bay's western shore, in the mid-twentieth century. One of number of inhabited coves on the western shore of the bay, Sacramento Landing was home to a number of Coast Miwok descendents. By the mid-twentieth century, a number of vacation homes had been built there as well. Courtesy of PRNS Archives.

public access to the bay's shoreline, and extending leases, in their view, privileged wealthy private landowners over public interests.[385]

THE FIGHT FOR CHICKEN RANCH BEACH

The establishment of Point Reyes National Seashore attracted widespread attention to the scenic beauty and recreational opportunities of western Marin County. As Tomales Bay became an increasingly desirable place for tourist and summer home development, some local residents feared that their favorite fishing, swimming, and picnic spots would become inaccessible. The battle over Chicken Ranch Beach, which set a statewide legal precedent, illustrates changing ethics about the need for public lands and recreational spaces.

385. Letter from The Inverness Association, Tomales Bay Association, Marin Conservation League and Friends of Point Reyes National Seashore to Chairman Boerger et al., Dec. 1983, PRNS Land Files.

Chicken Ranch Beach had been a popular swimming spot for Inverness residents for decades. Frank De la Rosa owned the tidelands of the beach, while Elizabeth Whitney, Oscar Shafter's granddaughter, owned the shoreline. Both owners allowed the public to use the area, and it was one of the most popular swimming spots on Tomales Bay due to its easy auto access and clean, sheltered waters. De la Rosa indicated that he intended to leave his tidelands to the public as a memorial to his nephew who had been killed in World War II, but when he died in 1954, he left no will. Some Inverness residents tried to buy the beach for a park, but it was sold to Larry Marks Jr. The new owner offered to rent or sell the tidelands to the town, but for unknown reasons, the parties could not agree on a deal.[386]

Developers had established a few new tourist facilities (such as a motel) near Inverness, and these actions worried local residents. Alarmed citizens, who formed the Committee to Save the Inverness Waterfront, saw the beginnings of commercial development on the Tomales Bay shore as the portent of "truck traffic (and) neon signs. . . Certainly the average family would never again get near the bay for a quiet swim or picnic." Citizens pressured their lawmakers to preserve Chicken Ranch Beach as public property. Marks, who made plans to build a marina, fenced the property with barbed wire and filed suit against the county in an attempt to forestall zoning regulations that might limit his property's development. The county commissioners and state fish and game department approved the marina over the protests of the Inverness Improvement Association, who believed their town was on the fast track to becoming yet another tourist-oriented town on the California coast. Most Inverness residents in the mid-twentieth century wanted their village to remain quiet and undeveloped, but 117 citizen petitioners, as well three Inverness Improvement Association directors and the Baywood Press, the local paper, supported Marks' plan.[387]

By 1969, after fifteen years of public interest in the parcel, the tide turned in favor of public ownership. If Marks was allowed to fill and develop his tidelands,

386. Griffin, 134.

387. Mason, *Summer Town*, 56-57.



Figure 45. Chicken Ranch Beach, a popular swimming spot for local residents near Inverness that became the site of a major legal battle over public beach access in the 1960s, in the mid-twentieth century. Courtesy of PRNS Archives.

it would set a precedent for tideland development across California. Marks won his initial court battles, but the case went to the state supreme court. In order to prevent further litigation, Marks agreed to sell most of his tidelands to the county. In 1971, the state supreme court, citing the growing population of the state and the need for recreational spaces, ruled that all tidelands were open to public use. In the court's opinion, the conservative Marshall F. McComb stated that "There is growing public recognition that one of the more important uses of the tidelands. . . is the preservation of these lands in the natural state so that they may serve as ecological units for scientific study, as open space and as environments which provide food and habitats for birds and marine life and which favorably affect the scenery and climate of the area."[388]

388. Griffin, 134.

The court's decision illustrated the growing awareness not only of the need for recreational spaces, but also of the tremendous concern Californians exhibited for their coastal resources. In 1970, Marin County enacted the Tidal Waterways Ordinance to control excavation, filling, and construction of tidelands. In passing the ordinance, the county recognized that tidelands were "vital natural resources" for "scenic views, open space, recreational activities and wildlife habitat."[389] In 1972, voters established the California Coastal Commission to limit development along the state's shores. The ballot initiative passed despite the fact that developers and business interests spent 55 million dollars to defeat the proposal. This measure represented the most sweeping shoreline protection measures in the nation.[390]

"TYING UP THE BAY FOR THE BIRDS": THE CAMPAIGN FOR PRESERVATION ALONG EASTERN TOMALES BAY

By the mid-1960s, Point Reyes National Seashore had been established, and though acquisition was not completed until 1972, land along western Tomales Bay was slated for preservation. The shoreline along the eastern bay, dotted with restaurants, oyster farms, and summer cabins and paralleled by Highway 1, remained ignored by both developers and conservationists. Most conservationists saw this area as less than pristine, compared to the sparsely populated shores of Point Reyes and western Tomales Bay, and developers favored ocean front parcels for vacation homes and other tourist developments.

As the population of Marin County and the San Francisco Bay area continued to increase, however, the eastern shores of Tomales Bay began to look more attractive to both developers and tourists. County politicians, seeking to accommodate a growing populace, saw the rural area as a logical place to site new homes, business, and recreational facilities. In 1966, the county supervisors approved the West Marin General Plan of 1967, co-written by former county supervisor Mary Summers, a study that located a city of 125,000 along Tomales

389. Jacobs, 20.

390. Richard W. Judd and Christopher S. Beach, *Natural States: The Environmental Imagination in Maine, Oregon and the Nation* (Washington D.C: Resources for the Future, 2003), 99; Rome, 229.

Bay's shores. The plan included shopping centers, schools, homes, businesses, and tourist and recreation facilities on the southern and eastern shores of the bay. Summers' goal was to "retain the unique environment of West Marin County through the preservation of its natural physical assets and through enhancement by the works of man" such as shopping centers, schools, parks, and a golf course. Roads were key to the general plan, which advocated improving transportation networks for commuting and for "leisurely motoring" through natural wonders. Summers and her colleagues envisioned a multi-lane freeway paralleling the bay's eastern shoreline, while housing developments, shopping centers, and office parks would cover the hills. The Tomales Bay area lacked enough fresh water to supply such a population, so she proposed an aqueduct that would supply the area with water from the Russian River. Developers, county politicians, and business people threw their support behind this plan.[391]

The plan authors also proposed modifying the bay itself, so that citizens could enjoy additional recreational opportunities. They supported the idea of turning the bay's upper end, near the Lagunitas Creek delta, into an area designated for water sports. Dredging would deepen the water in this area, and the excess dirt could be used to create small islands for fishing and picnicking. They also proposed dredging the entire bay to facilitate pleasure boat traffic, and even recommended that the county commission the Army Corps of Engineers to remove the sandbar at the bay's mouth. The entrance to the estuary had always been a dangerous spot for boaters, and in 1962, thirteen people drowned there. Removing the sandbar, they reasoned, would make the bay safer and bring tourist dollars to the new facilities planned on the bay.[392]

Audubon Canyon Ranch (ACR), a local environmental group founded in 1962 to prevent the development of Bolinas Lagoon, saw the area differently. To this group, the "pristine" bay provided rich wildlife habitat and "stark, windswept beauty." Winter bird counts were some of the highest in the nation. Founder Dr. Martin Griffin recalled that many area residents did not care about development on the bay at that time. The western shore was earmarked for preservation, and few thought that the entire estuary was worthy of protection. The

391. Griffin, 98-100.

392. Summers, 189.

ACR turned its attention to Tomales Bay in 1967 after preventing a hotel and condominium development on Bolinas Lagoon, about fifteen miles south of the estuary. Tomales Bay was ten times as big as the lagoon with many more property owners, since almost the entire eastern shore was privately owned in the mid-1960s. Worried about overfishing and the preservation of "one of the most productive and varied wildlife habitats on the Pacific Flyway," the group lobbied for the preservation of bay resources. County supervisors ignored these concerns as they squabbled over minutiae of the development plans.[393]

Unlike earlier preservation battles, the ACR's campaign for Tomales Bay occurred in the marketplace rather than in Congress or other government offices. The group set their sights on protecting all of the shoreline on the eastern side of the estuary, but rather than lobby for federal or state preservation, as earlier groups did, the ranch preferred to simply buy parcels for protection as wildlife refuges. Also unlike earlier conservation groups, they did not view the bay primarily as a place for recreation—they were more interested in buying properties that offered scientific value and shorebird habitat. The idea of preserving ecosystems was increasingly important among environmental groups of this time, and these new efforts at land preservation along the bay reflected this trend.[394]

Further catalyst to the ACR's land preservation efforts were the actions of Land Investors Research (LIR), a development group that spent the late 1960s acquiring parcels of land from ranchers along the eastern bay. LIR planned to subdivide and develop the eleven ranches they had optioned or purchased, and by 1970, surveyors' markers could be seen on thousands of acres of hillsides above the bay. At Cypress Grove, the company planned 1,800 homes on 1,026 acres. LIR also purchased 700 acres of the southeastern shore as well as two parcels along the western shore (including the Pierce Point Ranch shoreline, within Seashore boundaries but not yet purchased by the park service). When the county rejected plans for the Cypress Grove subdivision in 1971, citing inadequate roads, water lines, and sewers, Audubon Canyon Ranch saw their chance to disable the projects. ACR first purchased thirty-two acres

393. Ibid., 98-102.

394. Rome, 9.

of tidelands that stretched four miles along the bay's shore from oysterman Oscar Johannson, a move that blocked the subdivision's shoreline access. ACR helped stymie other development threats as well, such as a luxury resort north of Cypress Grove and a 316-acre subdivision at Laird's Landing.[395]

Private land acquisition continued to be an essential land preservation strategy. In 1972, ACR convinced Clifford Conly to donate his ten acre Cypress Grove property to the group. Conly was particularly worried about development on the bay, and he described his property as "an island surrounded by alligators." His donation caused alarm among the county's pro-growth proponents, who saw the bay as valuable for vacation homes, not wildlife habitat. One writer accused the ACR of "tying up the bay for the birds." Undeterred, the group began to buy available parcels that were threatened by development along the bay's eastern side. They even purchased a parcel adjacent to Cypress Grove from a cash-strapped Land Investors Research, though the developers required an easement to the bay. Between 1968 and 1985, the group purchased 432 acres on the bay's eastern shore. The group also played a key role in helping to establish Tomales Bay Ecological Reserve, a state-owned parcel near the old railroad stop of Bivalve that was set aside to preserve shorebird habitat.[396]

While ACR fought development in the marketplace, the Marin Conservation League utilized more traditional means in its fight against the West Marin General Plan and urban development along Tomales Bay's shores. In particular, the group sought to replace pro-growth county supervisors with those sympathetic to preservation concerns. Ernest Kettenhofen, a pro-development supervisor up for reelection in 1969, had made enemies of many of Marin's politically powerful, wealthy and conservation-minded families due to his support of the West Marin General Plan. The League, financially backed by these families, began a highly effective advertising campaign that increased public awareness about development in the Marin countryside. In newspaper advertisements, they presented sketches of what the predominantly rural county would look like with multi-lane freeways, shopping centers, and housing developments replacing farms and forests. A planned city of 18,000 residents on the Marin

395. Griffin, 118.

396. Ibid., 124.

Headlands called Marincello also galvanized public opposition to large-scale developments in the county. Marin citizens decided that they valued rural landscapes and recreational spaces more highly than additional development. They elected former Fairfax mayor Peter Arragoni to Kettenhofen's seat, giving conservationists a majority on the board of supervisors. In 1971, the supervisors revoked their support of the West Marin General Plan, and they convinced the state to abandon its plans to build a freeway along the bay. That same year, voters overwhelmingly defeated the plan to pipe Russian River water to eastern Tomales Bay development projects.[397]

The bay began to attract the attention of nationwide environmental groups at this time. The Sierra Club, which had been active in efforts to establish the national seashore, began a campaign to establish new public lands along Tomales Bay. The club's interest was predicated on the idea that the bay remained free from the industrial pollution and the development that plagued other California harbors, and they saw the area as valuable wildlife and shorebird habitat. The group called the estuary "one of the last unpolluted bays" on the California coast as they appealed for donations to help the Point Reyes Bird Observatory, a bird conservation group, buy "critical habitat" threatened by development on Inverness Ridge. They envisioned "a classic forest park and wildlife preserve" along the ridge, from the head of the bay to the state park.[398]

Despite the massive increase in public lands along the bay and the repeal of the Marin General Plan of 1967, many areas around the bay remained vulnerable to urban development. Selling land to developers remained a lucrative proposition for area ranchers tired of falling milk prices and tough competition. Farmland preservation presented one solution to the problem. Marin County citizens sought to preserve agricultural land for a number of reasons. Some ranchers wanted to maintain an agricultural community for economic purposes. Others believed that protecting ranching landscapes preserved West Marin history and culture. One supporter explained, "Something vital and gritty and engaging would be lost to the county and the region if ranching culture died."

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397. Ibid., 106-107.

398. Sierra Club Foundation, Fundraising Letter, 13 November 1972, Tomales Bay file, California Room, Marin County Civic Center Library.

Some simply feared the effects of encroaching urbanization and believed that the preservation of scenic pastoral landscapes provided their best chance to curtail this growth.[399]

The roots of these efforts to protect farmland lay in Americans' romanticization of rural landscapes and anxieties about suburbanization. Advocates promoted the idea that city dwellers needed pastoral landscapes. More than ten million people moved from farms to towns and cities in the 1950s, and as developers turned agricultural lands into housing developments, many worried that Americans would forget "the 'agrarian' values that made the nation great." Furthermore, the anti-urban sentiment that had always been prevalent in American society was particularly strong in the postwar period. During the 1970s, conservationists throughout the nation battled to protect pastoral landscapes, especially those that represented a regional identity, such as West Marin's dairy farms.[400]

In 1972, county supervisors, supported by groups such as the Marin Conservation League, adopted a controversial zoning measure in many parts of West Marin County, including much of eastern Tomales Bay. While many had wanted the minimum parcel size set at 100 or 200 acres, county supervisors worried that these limits would not stand up in court. Instead, the county adopted "A-60" zoning, which limited development to one home on every sixty acres in certain areas. Within three months of the zoning changes, three ranches north of Marshall were sold from developers, who could no longer build on the parcels, back to ranchers.[401]

Across the country, farmers and ranchers routinely opposed environmental policies that privileged preservation over economic interests, and the response in Marin County proved no different. The zoning infuriated many ranchers who saw it as yet another government land grab. Many ranchers had hoped to profit by selling their increasingly unprofitable ranches to developers. "There are some selfish interests on the other side," rancher Earl Dolcini stated, referring to citizens of the county's urban areas, "and they would like to see us

399. Griffin, 120.

400. Judd and Beach, 99; Rome, 123-124.

401. Griffin, 122-124.

remain as ranches so when they take their Sunday drive we're the picture in the middle of their imaginary frame." The county kept the zoning in place over the objections of the agricultural community.[402]

A few ranchers, who saw urbanization as the biggest threat to the demise of the agricultural industry in Marin County, did support the zoning. The Strauses, who ranched on northeastern Tomales Bay, saw the measure as essential to the continuation of the dairy industry in West Marin. Urbanization threatened farmers' livelihoods, since most agreed that residential and agricultural uses of the land were incompatible. Without a certain concentration of farms and ranches, suppliers would leave the area, increasing the prices of basic goods. Tomales Point rancher Kenneth Kehoe also believed that exposing city dwellers to agricultural landscapes would connect them to the history of the area. "People can come and see the way the country was before because it's been left the same way in the last forty years, it hasn't changed," he explained.[403]

In 1973, the Marin County Planning Department adopted a new plan that addressed concerns of rapid population growth, sprawl, and other environmental concerns. In contrast to the 1967 plan, the new report was based on "designing with nature."[404] Gary Giacomini, elected to the Marin County Board of Supervisors in 1973 as a supporter of agricultural and coastal preservation, served for twenty-four years, an indication of public support for preservation policies. Changes in zoning between 1972 and 1975 reduced the number of building sites in the watershed from 1.2 million to 3,000.[405] While the zoning did allow for some small concentrations of tourist infrastructure along the eastern bay, these measures effectively killed most development plans for the Tomales Bay area. Two-thirds of the land in the Tomales Bay watershed is currently zoned A-60.[406]

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402. Judd and Beach, 100; Dolcini, Ehat, and Martinelli.

403. Kehoe, Ehat, and Kent.

404. Griffin, 110.

405. Tomales Bay Watershed Council, "Tomales Bay Watershed Stewardship Plan: A Framework for Action," http://www.tomalesbaywatershed.org/stewardship.pdf (accessed Jan. 8, 2005).

406. Hart, 33-37.

Statewide conservation sentiments also impacted development on the Tomales Bay shore. In 1972, California voters had established the California Coastal Commission, an agency with sweeping authority to regulate development in coastal areas. The 1973 Marin County Plan allowed for some tourist development along the bay's edge, such as a large waterfront hotel near Marshall. The commission, which had final authority over lands within one-half mile of California's shoreline, rejected the project. There were no other serious attempts to establish resorts or other large tourist developments along the bay.[407]

The federal government also took an interest in land preservation along eastern Tomales Bay in the early 1970s. In 1972, Congress established Golden Gate National Recreation Area. The recreation area began as a grassroots movement in which a coalition of local groups, known as People for Golden Gate National Recreation Area, worked during the 1960s to preserve open space and the former military forts of San Francisco. The group had "tenacious, skilled leadership" and they gained a key supporter when Congressman Philip Burton, best known for his support of labor issues, threw his weight behind the project. Preservation politics in the area had typically pitted working-class ranchers against elite local conservationists, but the congressman believed that preservation was a labor issue. Burton reasoned that while the rich could enjoy their private vacation homes, workers needed public recreation areas close to their homes, and he introduced the national recreation area proposal into Congress in June 1971. Opponents criticized his proposal as too large and unfeasible. They specifically objected to the fact that it would seal Marin County's future for public land and suburban, rather than commercial, development. Though there were problems obtaining acquisition funds and land, the park was established in 1972. The original bill included the Marin Headlands, Angel Island, and numerous San Francisco tracts totaling 34,000 acres, but activists worked quickly to try to expand the park to include properties near Tomales Bay.[408]

Just as they had opposed the seashore, many ranchers and residents of West Marin overwhelmingly opposed proposals to expand the recreation area into the Olema Valley and the south end of Tomales Bay. Developers opposed the

407. Ibid., 41.

408. Rothman, *The New Urban Park*, 34.

preservation of land, and local citizens feared government control and loss of tax revenue. In 1976, the bill was withdrawn from Congress, but supporters did not give up. They emphasized development threats to the area as they repackaged the idea, and they sought more local input in order to win the support of area residents. The Olema Valley, Haggerty Gulch near Inverness, and property along Lagunitas Creek were added to the recreation area as part of the National Parks and Recreation Act of 1978.[409] Between 1983 and 1986, 1,636.37 acres were added to the park, including Jensen's Oyster Beds, Martinelli Ranch, and ranches near Lagunitas Creek.[410] With these purchases, the majority of the Tomales Bay shore was protected by federal, state, county, or non-profit agencies. These campaigns increased Tomales Bay's visibility among San Francisco area citizens, and they attracted larger numbers of visitors to the area than ever before.

By the early 1970s, environmentalists and other park advocates had succeeded in their efforts to preserve most of the land on Tomales Bay. Few had heard of the bay when the Golden Gate Bridge opened in 1937, but now, tens of thousands of tourists and day trippers journeyed by car to the bay to swim, fish, birdwatch, hike, and picnic. Once Marin County had supplied San Francisco with dairy products, fish, and timber, but by the mid-twentieth century, the relationship between the city and its former hinterland had changed, and the Tomales Bay area now supplied city dwellers with recreational offerings and scenic beauty. A number of the area's dairy ranches and oyster farms remained, but Tomales Bay was now best known as a place for recreation and leisure—a place that needed protection from unbridled natural resource use. While activists had succeeded in preventing large scale development on the bay, however, conflicts over resource use and concerns about water quality, fish and bird habitat, and the impact of human activities remained.

409. Hal Rothman, *The Park That Makes its Own Weather: An Administrative History of Golden Gate National Recreation Area* (San Francisco: National Park Service, 2002), 50-52.

410. Ibid., 55.

CHAPTER SIX

A Contested Landscape: Tomales Bay Preservation and Management, 1972-Present

Many Tomales Bay preservationists believed that the hardest battles had already been fought and won with the establishment of Point Reyes National Seashore and Golden Gate National Recreation Area. The consequences of 120 years of resource use in the watershed, however, became evident in the declining water quality of the bay during the late twentieth century. All of the historical uses of the bay, such as fishing, oystering, and dairy ranching, either contributed to, or were affected by, declining water quality, and various constituencies grappled with different ways to resolve conflicts over water quality, natural resource use, and recreation.

More than 2.5 million people per year visited West Marin County by 2001, and many of these visitors enjoyed hiking, swimming, boating, and fishing on Tomales Bay. Despite the fact that many viewed the bay as a pristine retreat and a playground, the estuary continued to be a working landscape, and it became an increasingly contested space for natural resource users. Many groups claimed a stake in the health of Tomales Bay, and the site became a focus of scientific research. Various groups began restoration projects that would ultimately seek to restore the bay's native plant and fish species and wetlands, but these projects sometimes met with resistance from local resource users. By the 1970s, West Marin had become a new kind of hinterland for the seven million residents of the San Francisco Bay area—one that provided scenery and recreation rather than agricultural products, but even recreational visitors clashed over the best way to use the bay. A variety of groups now claimed to advocate for the once-ignored bay, and debates about the bay's management raged into the twenty-first century.

"SAN FRANCISCO'S WILDERNESS NEXT DOOR"

By 1980, many San Francisco area citizens thought of Tomales Bay as part of their "wilderness next door," and they enjoyed a variety of recreational

activities at the federally managed units that surround much of the bay.[411] Most of Tomales Point was protected by Point Reyes National Seashore by 1972. Golden Gate National Recreation Area continued to acquire properties along the bay throughout the 1980s and 1990s in an effort to prevent development and protect scenic landscapes, shoreline ecosystems, water quality and public access to the water. In 1980, the park's boundaries were extended eight miles north along Tomales Bay, and about 3,000 acres came under federal jurisdiction. By 1983, the recreation area had acquired additional land consisting of four ranches, fourteen parcels between one and ten acres, and forty-five tracts of land less than one acre along the bay's southern and eastern shores. By the mid-1980s, the National Park Service demonstrated continued interest in property along the bay's shores, and these parcels dominated the federal government's acquisition priority list.[412] In 2004, Golden Gate National Recreation Area included over 23,000 acres in the Tomales Bay watershed.

State, county, local, and non-profit organizations also managed land along Tomales Bay's shores in the late twentieth century. Tomales Bay State Park encompassed about 2,400 acres along the bay's southwestern shores, and about 125,000 visitors per year visited the park by the beginning of the twenty-first century. The state owned Tomales Bay Ecological Reserve, administered by the California Department of Fish and Game, included a mile of shoreline and 500 acres of marsh lands south of Millerton Point. Marin County administered six properties encompassing 700 acres along the bay, including White House Pool (23.5 acres south of Inverness Park), Chicken Ranch Beach (four acres north of Inverness), and Miller Park (six acres and 730 feet of shoreline near Nick's Cove). Properties owned by the town of Inverness included Dana Marsh (one acre just north of the town) and Martinelli Park, which encompassed slightly more than seven acres (half of which are underwater) near the Inverness Store. By 2005, Audubon Canyon Ranch had acquired twelve properties totaling 370 acres on the east shore of Tomales Bay. Cypress Grove, which the ACR currently operates as a wildlife sanctuary, contains 139 acres. The rest of the acreage includes the Walker Creek delta, Tom's Point, Olema Marsh, Livermore Marsh

411. Hart, *San Francisco's Wilderness Next Door*, [illegible]

412. National Park Service, Land Protection Plan, Draft, Golden Gate National Recreation Area (National Park Service, 1983), 26-33.



Figure 46. Cypress Grove, an Audubon Canyon Ranch research center along the bay's eastern shore. Developers planned a 1,800 home subdivision on the thousand acres surrounding the site in the 1960s, but activists defeated the plan while working to preserve the Tomales Bay shore. Courtesy of the California Coastal Records Project.



Figure 47. Zimmerman Ranch above the eastern Tomales Bay shore in 2002. As ranching declined in profitability and Tomales Bay became a popular vacation destination, many worried that ranches would give way to vacation home developments. The owners sold an agricultural conservation easement to the Marin Agricultural Land Trust in 2003, which ensured that these hillsides will remain undeveloped. Courtesy of the California Coastal Records Project.



Fig 48. Kayakers on Tomales Bay. By the late twentieth century, Tomales Bay had become better known as a playground for San Francisco Bay area residents than for its natural resources. Courtesy of PRNS Archives, Don Gunn Collection.

as well as several other parcels. The ACR gave Hog Island, which they had acquired by donation in 1972, to Point Reyes National Seashore in the 1990s.[413]

Besides the Audubon Canyon Ranch, Tomales Bay attracted the attention of another group that used a market-based approach to land preservation. In 1993, the Trust for Public Land, a non-profit land conservation group, initiated a campaign to preserve land along the estuary. Within six years, the group raised $3.19 million to purchase eight parcels, totaling 233 acres, on the bay. The Trust chose these parcels based on their development threats, wildlife habitat, importance to water quality, and agricultural as well as scenic values. The group donated the land to the state as additions to Tomales Bay State Park.[414]

While many preservationists had focused on preserving the land surrounding the estuary, more groups began to concentrate on the estuary's water by the late twentieth century. Tomales Bay's waters came under federal jurisdiction

413. Griffin, 97.

414. Lizette Wilson, "53 Acres added to Tomales Bay State Park," *Marin Independent-Journal*, March 5, 1999.

during this time. The Gulf of the Farallones National Marine Sanctuary, established in 1981 to protect the ecosystems of the waters off the Marin County coast, includes Tomales Bay. The bay is also part of the Golden Gate Biosphere Reserve, a two million acre area of California designated by the United Nations. Tomales Bay was named a Wetland of International Importance in 2002 by the federal government, one of twenty-two such wetlands in the United States. The bay qualified for this designation due to its biological diversity, habitat for vulnerable and threatened species, its representative characteristics of the region, and its importance as habitat for many fish and shorebird species.

Tomales Bay had become a playground for millions of San Francisco Bay area residents by the late twentieth century. By 2005, eleven kayaking companies operated on the bay, and paddlers camped by permit along Marshall and Tomales beaches. Charter fishing vessels allowed sport fishermen to fish the bay's waters, while public boat ramps facilitated private boaters' access to the estuary. Hunters continued to pursue ducks and other waterfowl in the bay's wetlands, especially near the mouths of Walker and Lagunitas Creeks, as they had done for over a century. Hikers walked along trails constructed by state and federal agencies along the bay, while swimmers enjoyed the beaches at the state park. Birdwatchers journeyed to the estuary to spot some of the hundreds of species of birds that have been sighted in the area.

These recreational visitors affected the bay's environment. Heavy use increased erosion and destroyed riparian vegetation along the most popular shoreline areas. The boaters and kayakers who thronged the bay on weekends sometimes disposed of human waste into the water, and commercial kayak outfitters, recreational kayakers, and boaters all accused each other of ignoring regulations. Environmentalists and scientists blamed some groups for disturbing wildlife. Harbor seals occupied some of Tomales Bay's beaches and mudflats, and they have proved sensitive to disturbances from clam diggers, boaters, and fishermen. These areas provide critical habitat, and disturbances affect their reproductive success. The mortality rates of harbor seals are higher in Tomales Bay than on the less accessible shores of Point Reyes.[415]

415. Sarah G. Allen, "Tomales Bay Harbor Seals: A Colony at Risk?" Third Biennial State of Tomales Bay Conference, 1992, available online at http://ucce.ucdavis.edu/files/filelibrary/1410/1383.doc.



Figure 49. Tomales at the turn of the twenty-first century. The town changed little in the previous hundred years. Courtesy of PRNS Archives.

Environmental groups increasingly supported limiting human access to some areas, while growing numbers of visitors demanded more spaces for recreation. The Golden Gate National Recreation Area Act of 1972 stated that the park should be managed "in a manner which will provide for recreation and educational opportunities consistent with sound principles of land use planning and management. . . 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." Certain types of motorized recreation proved one point of contention. Jet skiers increasingly enjoyed using the bay during the 1990s, but those who believed that the estuary should be used for quieter pursuits objected to their presence. Golden Gate National Recreation Area banned jet skis in 1998, and the Gulf of the Farallones National Marine Sanctuary followed suit the next year. Public comments ran nine to one in favor of the ban.[416]

416. Environmental Action Committee News, December 1998, Point Reyes National Seashore Archives.

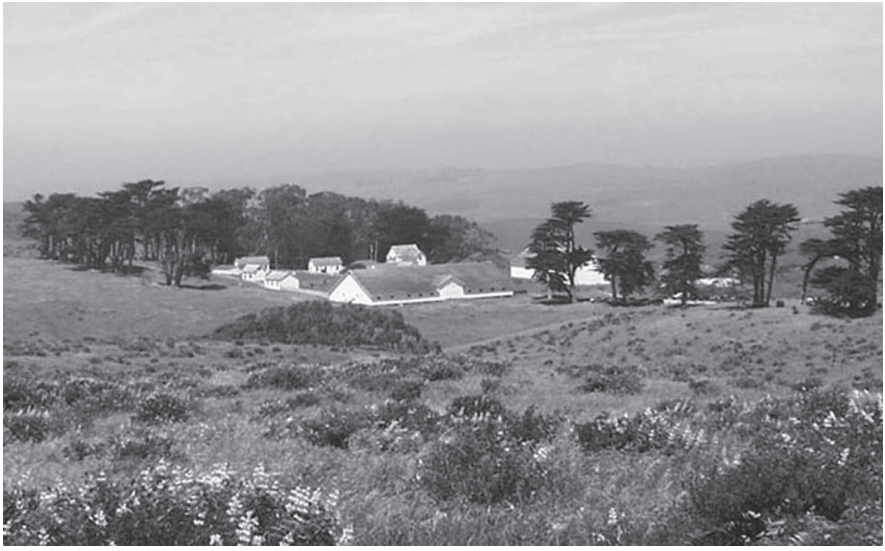


Figure 50. Pierce Point Ranch, on Tomales Point, was a showpiece dairy ranch in the nineteenth and early twentieth centuries, but it was sold to the National Park Service after the creation of Point Reyes National Seashore. It now serves as an interpretive site. Courtesy of PRNS Archives.

Conservationists and environmentalists applied a variety of different—and sometimes conflicting—approaches as they sought to protect certain landscapes in and around the bay. Some constituencies envisioned the bay primarily as bird and wildlife habitat, while others saw the area as perfect for more active pursuits. The Marin County chapter of the Sierra Club, for example, objected to the proposed construction of trailheads, boat ramps, a picnic area, and a campground in Tomales Bay State Park, on the grounds that these areas should remain "natural."[417] Windsurfers, kayakers, boaters, hikers, mountain bikers, recreational clammers, and fishermen all vied for space on the increasingly crowded bay and its shores. These conflicts will inevitably continue as California's population increases.

While many San Francisco Bay area residents had fought to preserve Tomales Bay for its recreational opportunities, scenic beauty, and wildlife habitat,

417. Marin Chapter, Sierra Club, Letter to Bob Hare, http://sanfranciscobay.sierraclub.org/Marin/DOC/Issue_TBSP_GenPlan_Comment_040312.pdf (accessed March 12, 2004).



Figure 51. A Tomales Bay oyster farm in 2004. The bay's oysters remain locally renowned, and visitors come from all over the San Francisco Bay area to feast on the bivalves. Courtesy of the California Coastal Records Project.

some local conservationists worked to protect agricultural landscapes on the urban border. Though they often found themselves on opposite sides of land use issues, as they had during the creation of Point Reyes National Seashore, environmentalists and farmers in the U.S. sometimes allied over common concerns about urban development.[418] A-60 zoning forbid the subdivision of ranches, but the zoning regulations could be overturned at any time by county supervisors who held pro-growth sentiments. Those who wanted to preserve West Marin's agricultural industry sought new solutions, and in 1980, environmentalist Phyllis Faber and rancher Ellen Straus turned to the Trust for Public Land for advice about land conservancy. Two years later, along with rancher Ralph Grossi, they founded the Marin Agricultural Land Trust (MALT), the first trust in the nation to dedicate itself to protecting farm lands. Some land conservancy organizations purchased land outright, while other groups simply

418. Samuel Hays, *Beauty, Health and Permanence: Environmental Politics in the United States, 1955-1985* (New York: Cambridge University Press, 1987), 296.



Figure 52. Calm, sheltered Tomales Bay is a popular destination for boaters. Courtesy of the California Coastal Records Project.

bought development rights from owners. MALT protected farmland by purchasing development rights, thus allowing the rancher to retain ownership of the property.[419] There were about thirty of these types of conservation efforts nationwide in 2004, though only two of these (including MALT) are private organizations.[420]

Both ranchers and environmentalists expressed doubt about the new organization's ability to protect agricultural landscapes, but Ralph Grossi convinced many reticent farmers that selling development rights offered a way to remain financially sound while protecting the area's agricultural community. Between 1980 and 2004, MALT permanently protected 32,000 acres of land through the acquisition of fifty-three easements, a number which represented about thirty percent of the county's private agricultural land. A number of ranchers along Tomales Bay or on the east side of the bay, such as the Straus, Giacomini, and

419. Richard Brewer, *Conservancy: The Land Trust Movement in America* (Hanover, N.H: University Press of New England, 2003), 13.

420. Ryan Kim, "Squeezing out Marin's Dairy Farms," *San Francisco Chronicle*, 13 February 2000.

Barboni Ranches, all near Marshall, sold development rights to the trust. While public spaces for recreation and wildlife habitat line the bay's shores, many of the hills surrounding the bay were preserved as agricultural landscapes. Some ranchers continued to oppose any efforts that would prevent them from subdividing their property, but MALT's approach to preserving ranch lands proved successful from the perspective of conservationists.

Pristine or Impaired? Agriculture, Oystering and Water Quality

For all its protection, however, the bay faced serious environmental problems. Some scientists had been aware of water quality issues in the bay since the early 1950s, but most area residents and visitors continued to view Tomales Bay as a pristine estuary. In a 1971 report, researchers from the University of the Pacific concluded that Tomales Bay was "probably the last unpolluted bay in California." The study, nonetheless, warned that water quality threats to the bay threatened this status. Dams on tributaries reduced freshwater inflow, exacerbating the lack of tidal flushing. Sedimentation remained an issue as urban development continued in the far reaches of the watershed. This development—along with sewage, gasoline, and waste from boaters, and dairy runoff—posed "excessive biological consequences" to the bay, especially the southern end, since tidal action failed to flush the bay of polluted waters. The study warned that pollution and other disturbances could have significant impacts on fish, bird, and marine mammal populations. These scientists proposed that the government establish a Tomales Bay Scientific Reserve for scientific study and for habitat preservation, and they recommended that government agencies ban motor boating while mandating reductions in development, grazing, and sewage outfall.[421] Many of these suggestions were ignored, but this study was one of the first to publicize water quality problems in a bay that many believed was pristine. A number of the consequences the study predicted were realized in the following decades.

421. Ralph G. Johnson et al, "Biological Characteristics of Tomales Bay," *Environmental Study of Tomales Bay, Vol. 4*, Pacific Marine Station Research Report, no. 11, 1971; Edmund Smith and Ralph Johnson, "Environmental State of Tomales Bay," *Environmental Study of Tomales Bay, Vol. 1*, Pacific Marine Station Research Report, no. 8, 1971.



Figure 53. Marshall in 2002. Many homes and businesses along the bay's eastern shore were built on pilings, and these structures often dumped sewage directly into the bay until late twentieth century regulations forced owners to stop the practice. Courtesy of the California Coastal Records Project.

Disagreements about water quality, and how to best mitigate the effects of resource use, dominated discussions of Tomales Bay management after 1970. These various constituencies characterized the bay's water quality as pristine or impaired, depending on their motivations. Oyster growers, some environmentalists and local business owners sought to market the bay as unpolluted, yet they also wanted to call attention to the need to improve the bay's water quality. The California State Coastal Conservancy characterized Tomales Bay as "the largest unspoiled coastal embayment on the coast of California" in the mid-1980s, yet the state has classified the bay as "impaired" since 1996.[422] The issue proved especially contentious among dairy ranchers and oyster growers, two groups who sought to continue making their living in and around the bay.

Despite the establishment of agricultural zoning and conservation easements, many ranchers wondered if the dairy industry would survive in West Marin

422. California State Coastal Conservancy, *A Program for Restoring the Environment of Tomales Bay* (Oakland, CA: The Conservancy, 1984).

County. The area had been renowned for dairy ranching since the mid-nineteenth century, but most Californians best knew the Tomales Bay area for its parks and recreational opportunities by the late twentieth century. Dairy numbers continued to drop in this period. While there were sixty-three dairies in the county in 1981, there were only thirty-seven by 2000. Cow populations, however, did not decline as much, indicating that the surviving ranches tended to be larger operations (which meant higher profits). In Marin County, the average ranch at this time had 600 cows, while a generation earlier, most farmers raised about 300. These numbers were still small compared to Central Valley operations, where the average dairy held 2,000 cows.

Previous generations of ranchers had dealt with invasive species, transportation, and falling prices, but dairy waste management became one of the most problematic issues for ranchers in the late twentieth century. Dairy farmers had typically sought properties with creeks that would provide water for their stock, but these same creeks carried animal wastes into the bay. When manure washed into the estuary, the high levels of ammonia present in the waste poisoned fish and posed threats to human health. In rainy weather, sewage ponds overflowed, and waste washed into nearby waterways. The 10,254 dairy cows and beef cattle in the watershed produced 1,066,574 pounds of manure per day in 2000. Cattle also increased erosion as they trampled streambanks, causing silt to wash into the bay.[423]

Awareness of the problem grew after 1969. The first laws regulating dairy wastes in California were passed that year, but coliform bacteria counts remained high along the bay's eastern shore, where runoff from area ranches flowed into the bay. Some ranchers disputed the assertion that manure had a detrimental effect on the bay. Furthermore, few ranchers could afford to fence the creeks or improve the waste disposal systems on their property, and they warned that placing so much of the burden on ranchers would cripple the area's dairy industry.[424]

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423. California Regional Water Quality Control Board, San Francisco Bay Region, "Controlling Pathogens in Tomales Bay," June 30, 2000.

424. Don Schinske, "Tomales Bay Panel Disputes Pollution Report," *Point Reyes Light*, April 22, 1999.

A number of agencies assisted ranchers in the quest to reduce levels of coliform bacteria in the bay. In the mid-1970s, with help from the county and the Soil Conservation Service, about seventy-five percent of the county's dairies installed waste holding ponds. The Marin County Resource Conservation District, a non-regulatory branch of state government with an elected board of directors, also began to help landowners control soil erosion and maintain water quality. The District sought to reduce sediment loads in Lagunitas Creek, Walker Creek, and Tomales Bay. The Natural Resources Conservation Service (formerly the Soil Conservation Service) and the Sonoma/Marin Animal Waste Committee, part of the county farm bureau, worked to help ranchers manage animal wastes.[425]

By the 1990s, waste systems often included a manure separator, manure ponds, and pipe systems that dispensed liquid manure over a large area. Solid waste was dried, composted, and sold as garden manure or used to fertilize ranch lands. Straus Ranch, for example, contained their waste in a series of ponds. They separated liquids from solids and pumped the liquids up the hill, away from the bay. Then, beneficial bacteria that reduced the ammonia that poisons fish was added to the mixture, and the remaining solid waste was composted. Both the State Department of Fish and Game and the Water Quality Control Board strictly monitored dairy runoff in the bay by the late twentieth century. Despite the assistance they received, these environmental restrictions still came at a high cost to ranchers. Central Valley operations spent far less on waste disposal, since their dry climate made the endeavor easier.[426]

As it had for over a hundred years, erosion also remained a problem. 48,000 tons of sediment reached the bay every year during the late 1900s. Area ranchers, in conjunction with government agencies, began to experiment with different grasses in order to stabilize soil in the Walker Creek watershed. In order to prevent the erosion that washes silt into the bay, the Consolidated Farm Services Agency (formerly the Agricultural Stabilization and Conservation

425. University of California Cooperative Extension, "Final Report of the Marin Coastal Watershed Enhancement Project," (Novato, CA: Univ. of Calif. Coop. Extension, 1995), 34.

426. "Straus Family Creamery, A Model of Sustainability," *Navigator*, September 28, 1996.

Service) assisted ranchers by subsidizing efforts to fence creeks and improve rangeland. Some ranchers started to confine their stock to loafing barns in the winter, when muddy soils are easily damaged.[427]

Despite problems with dairy wastes, erosion, and invasive species, local ranchers still believed that the area provided certain natural advantages. Cattle had grazed the hillsides above the bay since the early nineteenth century, but scientists characterized the pastures east of Tomales Bay as in fair to good condition. The grass season lasted between two and a half and five months, depending on rainfall, and while pastures had stayed green almost year round in the mid-nineteenth century, area ranchers still feel fortunate.[428] Some attribute their ability to compete with large Central Valley operations to the fact that their cows can graze for between one-quarter and one-third of the year, thus saving money on feed. Earl Dolcini explained, "Marin County is a utopian area for cattle. We have excellent quality of grass, the natural grass. We have air conditioning provided by fog and we don't have cold winters. The climate is perfect for cattle."[429] In 2004 there were ten dairies in the watershed. Marin County's twenty-nine dairies and 10,300 producing dairy cows provide twenty percent of the San Francisco area's milk supply at this time.[430]

Nonetheless, twenty-first-century farmers had to work to maintain the grasslands (which constitutes ninety-nine percent of the agricultural lands in Marin County) by fertilizing with manure, aerating the soil, and rotating pastures.[431] Ranchers also sought out new species of forage plants to improve their pastures. They introduced burr clover, which both stabilized the soil and provided livestock with nutritious, palatable forage. To spread the clover, ranchers fed clover hay to their animals; the livestock spread the seed around

427. Betty Dietz, "Grant Okayed to Fight Siltation in Tomales Bay," *Marin Independent Journal*, June 25, 1986.

428. Zumwalt, 78.

429. Dolcini, Ehat, and Martinelli.

430. Marin County Department of Agriculture, "Annual Crop Report for 2004," California Room, Marin County Civic Center Library.

431. Hart, 17.

the range through their manure.[432] While ranchers favored some exotic species, others posed problems. Thistles and other invasive plants, some of which are poisonous to livestock, colonized pastures in the bay area. Many ranchers used pesticides to control the weeds, even after some local residents claimed they became sick after ranchers sprayed the pesticide 2,4-D.[433]

Many ranchers turned to beef and sheep raising, which proved more profitable than dairying at the turn of the twenty-first century. Though actual numbers of dairy cows and beef cattle were roughly equivalent by 2003, twice as many ranchers raised beef cattle in West Marin as dairy cows, and more land was devoted to beef and sheep ranching than to dairying. While 25 percent of area ranches produced milk, 53 percent produce beef, and 21 percent raised sheep. County ranchers owned 10,000 mature beef cattle and about 7,800 sheep at this time.[434]

Diversification of operations and marketing specialty products were key to ranchers' continued success. After Alice Waters opened her Berkeley restaurant Chez Panisse in the early 1970s, interest in seasonal, local, and organic foods increased dramatically in the San Francisco Bay area. The movement, dubbed "the delicious revolution," inspired many area consumers and restaurateurs to demand high quality, locally grown produce, meat, and dairy products. Tomales Bay area producers capitalized on this trend, which remained strong into the twenty-first century. Ranchers began to produce organic milk, hormone-free beef, and specialty cheeses as well as wine grapes, olives, and other produce. Local companies made a number of artisanal cheeses. The Giacomini family's Point Reyes Farmstead Blue Cheese, which advertised that its cows graze the hillsides above Tomales Bay, won national acclaim. Cowgirl Creamery, located in Point Reyes Station, produced award-winning cheeses crafted from Straus Ranch organic milk. The Straus Family Creamery produced organic milk, cheeses, yogurt, ice cream and butter. Before her death

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432. Ibid., 113.

433. Gary Beall, "West Marin Ranchers and Parks Battle Thistles," *Point Reyes Light*, Dec. 7, 1989; Heidi Siegmund, "Alternatives Sought as 2,4-D Worries Grow," *Point Reyes Light*, February 14, 1989.

434. Marin County Department of Agriculture, "Annual Crop Report for 2004."

in 2002, Ellen Straus grew shitake mushrooms in her barn for the market as well.[435] These products were sold nationwide as well as directly to San Francisco area residents at farmers' markets and upscale shopping areas like the Ferry Plaza Marketplace. The region no longer served as the type of hinterland that it did during the nineteenth century, but these niche markets allowed the small, family-owned Tomales Bay area ranches to stay economically viable as they supplied consumers in San Francisco and around the nation.

Like the dairy industry, the future of Tomales Bay's oyster industry seemed uncertain by the second half of the twentieth century. As scientists began to produce studies that showed declining water quality, growers became increasingly concerned about human and animal wastes from sewage and dairy runoff in the bay. This proved dangerous to their operations. As filter feeders, oysters ingest organic matter from the water. By doing so, they concentrate pollutants. The bivalves will purify themselves, but this can take up to a week after ingesting contaminated sediments. Large, freshwater holding tanks proved too expensive a solution to the problem. Oyster growers and dairy ranchers grew confrontational in the late twentieth century, leading to questions about whose use of the bay should take priority. Other non-point pollution sources such as fuel and waste from boats posed a threat to water quality as well.[436]

Human waste, as well as dairy runoff, also posed a threat to oyster growers. In the mid-1970s, forty percent of Tomales' homes and businesses discharged raw sewage into Keys Creek. Coliform bacteria—a large group of organisms usually present in the gut of warm-blooded animals—poses a threat to human health when people eat shellfish grown in the bay. Coliform counts remained high year round in the 1970s and 1980s. By the early twenty-first century, there were still 398 septic systems within a hundred feet of the bay or a creek along the shores of Tomales Bay, as well as over 900 additional septic systems in the Lagunitas and Walker Creek watersheds. Furthermore, nine sewage treatment facilities operate in the watershed, all near streams which run into the bay.

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435. Ivan Gale, "West Marin Ranchers Increasingly Diversify," *Point Reyes Light*, April 10, 2003.

436. California Department of Health Services, "Management Plan for Commercial Shellfishing in Tomales Bay, 2002," Point Reyes National Seashore Archives, Point Reyes Station, CA; Hart, 75.

Sedimentation and a lack of freshwater inflow due to dams on Tomales Bay tributaries kept the bay from ever flushing out completely, and oyster growers struggled with water quality issues throughout the late twentieth century.[437]

Jensen's Oyster Beds was one business that both contributed to, and was affected by, water quality degradation. Virginia Jensen labored to maintain the property after her husband Henry's death in 1971, but sewage and wastewater from the Jensen's operation drained directly into the bay near the oyster beds. As a result, the county issued numerous health code violations. The state eventually deemed the oyster beds a potential source of Hepatitis A, and they fined Jensen and temporarily closed the oyster beds. Siltation from Walker Creek remained a problem as well. Large amounts of sediment had washed down the creek into the bay since the earliest days of American settlement, and more than half of the Jensen's original allotment had been rendered unusable by 1980. A powerful storm, with subsequent flooding and landslides, hit the area in January of 1982, and Jensen's Oyster beds were buried under tons of silt that washed down the creek. By the next year, Jensen's Oyster Beds had closed. The National Park Service purchased the site for Golden Gate National Recreation Area in 1987.[438]

By the late twentieth century, Tomales Bay exceeded federal limits on fecal coliform more than ninety days each year. Public awareness of the problem increased after contaminated Tomales Bay oysters made headlines in May of 1998. At that time, 171 people were sickened with the Norwalk Virus, which originates in human waste, after eating Tomales Bay oysters. The virus could have originated with a failing septic system or improper disposal of waste from boaters or campers. This incident occurred despite strict monitoring by government agencies. The state forced growers to close when the area received more than one-half inch of rain in twenty four hours, since dairy waste holding ponds often overflow and septic systems can fail during storms. These closures

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437. North Marin Water District, *The Tomales Wastewater Project, Project Report and Draft EIR*, 1974, Marin County Civic Center Library; Robert C. Cooper, "The Environmental Health of Tomales Bay," *Tomales Bay Environmental Study* (Washington D.C: Conservation Foundation, 1972), 109; Tomales Bay Watershed Council, "Tomales Bay Watershed Stewardship Plan: A Framework for Action," http://www.tomalesbaywatershed.org/stewardship.pdf (accessed January 8, 2005).

438 . Livingston, *Hamlet*, 38.

become routine in winter. In December of 2003, the oyster growers were closed for thirty days, while the following January, they were closed for twenty days.[439] These closures had a huge economic impact on oyster growers. In 1994, the San Francisco Regional Water Quality Board formed the Tomales Bay Shellfish Advisory Committee in order to monitor, study, and potentially solve these problems.

Still, oysters remained in demand with San Francisco Bay area consumers, and Tomales Bay growers persevered despite these issues. Tomales Bay was one of only four locations in California certified for oystering by the state in 2004, and five operators leased a total of 2,751 acres from the state (though not all of these tidelands were planted with oysters). Tomales Bay Oyster Company remained in continuous operation since 1909, and Hog Island Oyster Company opened its own restaurant in San Francisco's Ferry Plaza Marketplace. Almost three million dollars worth of oysters, mussels, and clams were produced in Tomales Bay in 2004. The bay's oyster industry, however, was still a relatively small operation, and it produced less than 5 percent of California's oysters in the early twenty-first century. Both Humboldt Bay and Drake's Estero continued to produce more oysters than Tomales Bay throughout the late twentieth century. The bay's oysters, however, found their niche with San Francisco Bay area consumers.[440]

Fishermen, who had been some of the first and most loyal visitors to Tomales Bay, were also affected by the bay's declining water quality. Commercial fishermen targeted halibut (catching about 7,500 tons per year by the mid 1990s), herring, perch, and live bait, such as anchovies and sardines. Sport fishermen pursued halibut, Dungeness and rock crabs, perch, sole, jacksmelt, sturgeon, rays, and sharks. Salmon and steelhead drew large number of fishermen to the area in previous decades, but by the late twentieth century, those species were no longer abundant due to loss of habitat and declining water quality.

In addition to dairy wastes and human sewage, the waters of Tomales Bay have also had to absorb excessive amounts of mercury—one of the most toxic of

439. Donna Horowitz, "Pollution Stifles Work of Oyster Farmers," *Los Angeles Times*, January 1, 2004.

440. State of California, Department of Fish and Game, Registered Marine Aquaculture Facilities, 2004.



Figure 54. Duck Cove in 2002. This parcel of land was originally included inside Point Reyes National Seashore boundaries, but a developer built twelve vacation homes before land acquisitions were completed. The NPS now owns the properties. Courtesy of the California Coastal Records Project.

metals. Mercury mining occurred at seven places in the watershed during the mid-twentieth century. In 1965, the Marin Conservation League saw an aerial photograph of a recently opened mercury mine on the Gambonini Ranch, six miles upstream from Tomales Bay in the Walker Creek watershed. "The hill was completely cut in two. A bomb couldn't have done a more complete job," described the League's Grace Wellman. The mine supplied mercury for dental fillings, thermometers, and florescent lights. Wellman staffed a booth that year at the Marin County Fair to increase public awareness of the environmental consequences of mining in the watershed. Butte Gas and Oil had put 300 cubic meters of mercury-laden waste on eleven acres near the confluence of Walker and Salmon Creeks, prompting the league to sue the company for dumping debris and silt into creeks that led into Tomales Bay. The group then convinced the county to create an ordinance that banned strip mining. Butte shut down the mine due to falling mercury prices, but the dam they built to keep the tailings in place failed during heavy storms in the winter of 1981 and 1982.[441]

441. Wise, 18.



Figure 55. The Lagunitas Creek delta, at the bay's southern end, with the pastures of Giacomini Ranch in the background. Courtesy of the California Coastal Records Project.

During storms in the winter of 1997 and 1998, 1,300 tons of mercury-rich sediment washed down Walker Creek into the bay. By the late twentieth century, the state began issuing public health warnings about high concentrations of mercury in Tomales Bay fish.

The Environmental Protection Agency and the San Francisco Regional Water Quality Control Board worked to contain the waste by capping the site in 2000, but mercury continues to pose a threat to fishermen who consume their catch.[442] Studies showed that large amounts of mercury had washed from the mine into the bay, and mercury levels in the bay's fish were similar to fish in San Francisco Bay. By 2005, the Marin County Department of Human and Health Services recommended that citizens limit their consumption of halibut, jacksmelt, perch, and rock crab from the bay. Pregnant women and children are especially vulnerable to mercury, since it affects developing brains and nervous systems, and the county recommended that both groups avoid eating

442. Tomales Bay Watershed Stewardship Plan, 41.



Figure 56. The mouth of Walker Creek in 2002. In the mid-nineteenth century, a deeper, wider channel served schooners bound for the town of Tomales, three miles upstream. Courtesy of the California Coastal Records Project.

many types of fish from the bay altogether. Elevated levels of mercury were also found in the bay's oysters, clams, and mussels.[443] Despite monitoring and clean-up efforts, the agency estimated that high mercury levels would remain in the bay for many years. The bay's high mercury levels surprised area residents and visitors, many of whom continued to think of the bay as unpolluted.[444]

The lack of fresh water inflow into the bay also hurt some fisheries. Fewer herring eggs hatch when the water is too saline, and the lack of freshwater influx after Tomales Bay tributaries were dammed diminished herring numbers. Overharvesting threatened the bay's herring as well. The herring fishery once again became a lucrative operation in the early 1970s, when Japanese demand for herring roe spurred new commercial fishing interest in Tomales Bay. Catch totals soared from nearly nothing in the 1960s to 1,027 tons in

443. California Environmental Protection Agency, "Public Health Advisory for Tomales Bay," http://www.co.marin.ca.us/depts/hh/main/hs/PublicHealth/Fish/pdf/TomBay-Adv100404.pdf (accessed March 31, 2005).

444. Mark Prado, "The Poisoning of Tomales Bay," *Marin Independent-Journal*, Jan. 21, 2001.

1973.[445] Fishermen caught 871 tons in 1987, a number that spurred the California Department of Fish and Game to close the fishery for three subsequent years (though this number pales compared to the thousands of tons caught earlier in the century). The state conducted spawning estimates every year and based quota levels on these predictions. The state set the 2004 quota at 400 tons, far less than in previous decades due to low spawning numbers. Scientists were unclear if these lower numbers represent a trend or an aberration.[446]

New efforts focused on improving habitat so that the native species, such as Coho salmon and steelhead, rebound from their low numbers, and a number of agencies and non-profit groups began to work to restore fish populations in the watershed. In 1983, environmentalists won a battle against the Marin Municipal Water District for "excessive use" of Lagunitas Creek. Courts then forced the district to obey a court-approved plan for stream flows on the creek.[447] Trout Unlimited sought to mitigate the effects of the poor spawning habitat on Lagunitas Creek due to dams on Coho salmon and steelhead populations by capturing the fish in creeks, spawning them, and raising the young fish in hatcheries until they were large enough to survive in the wild. The NPS began the Coho Salmon and Steelhead Trout Restoration Program in some Tomales Bay tributaries in order to survey and restore these fish populations. The Tomales Bay Association and the Salmon Protection and Watershed Network also started monitoring and restoration activities on tributary creeks as well.

New conflicts erupted between fishermen, environmentalists, and dairy ranchers over fish habitat during the 1980s. The Giacomini Ranch, located at the southern end of the bay, had for decades constructed an earthen dam each summer on Lagunitas Creek. In the mid-1980s, environmental groups began to lobby the Army Corps of Engineers to revoke the permit on the basis that it degraded fish habitat. A group of fishermen, too, protested that the Giacominis did not follow regulations that allowed fish to pass by the dam. The

445. *San Francisco Chronicle*, February 13, 1974, Tomales Bay Clipping File, California Room, Marin County Civic Center Library.

446. California Department of Fish and Game, "Tomales Bay Herring Fishery Information," http://www.dfg.ca.gov/mrd/herring/tomales.html (accessed April 21, 2005).

447. "Controversy with Marin Municipal Water District Ends Successfully for Bay," *The Press of Inverness* 1, No. 11, June 9, 1983, Jack Mason Museum Archives, Inverness, CA.

issue grew contentious at public meetings. While the Tomales Bay Sportsman's Association, the Marin County Farm Bureau, and most Tomales Bay area ranchers supported the Giacominis, fishermen collected 1,285 signatures from people opposed to the dam. The Army Corps of Engineers stopped issuing permits for the Giacominis' summer dam in 1997 due to concerns about fish habitat, a decision that influenced the rancher's decision to sell their property to the NPS in 2000. Many ranchers believed that this incident proved that agriculture and the new emphasis on ecological restoration and environmental protections were incompatible.[448]

In 2005, the San Francisco Regional Water Quality Board (SFRWQB) categorized Tomales Bay as both "impaired" and "threatened" because of its high incidence of shellfish bed closures due to bacteriological contamination. The board ordered the county to eliminate seventy-five percent of the E.coli in the bay by 2007. This required expensive upgrades to the sewage and waste disposal systems of many of the bay's homes, businesses, and ranches, and many residents objected to the new requirements. The NPS managed one-quarter of the lands within the Tomales Bay watershed in 2005, and the agency continued to work with the SFRWQB to improve water quality. They planned to do this by increasing boat patrols to enforce existing standards regarding discharge, limiting the number of campers along the bay's beaches, expanding existing agricultural water quality protection measures, monitoring water quality, and managing sewage disposal systems more efficiently.[449] Recent studies conducted by researchers from California Polytechnic University in Morro Bay, on the central California coast, however, have concluded that one important E.coli source is shorebird droppings that have extremely high concentrations of bacteria. Morro and Tomales Bays share a number of similarities, and these unexpected findings added a new dimension to debates about improving the bay's water quality.[450]

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448. Untitled Article, "Fish" file, Nov. 24, 1981, Tomales Regional History Center, Tomales, CA.

449. Don Neubacher to Farhad Ghodrati, San Francisco Regional Water Quality Board, 24 June 2003, Point Reyes National Seashore Archives, Point Reyes Station, CA.

450. Mansour Samadpour, et al., "Identifying the Sources of Escherichia Coli Contamination in the Shellfish Growing Areas of Morro Bay, California," *California and the World Ocean 02: Revisiting and Revising California's Ocean Agenda* (Reston, VA: American Society of Civil Engineers, 2002).

SCIENCE AND ECOLOGICAL RESTORATION ON TOMALES BAY

When mid-twentieth-century conservationists fought for land preservation along Tomales Bay, they usually based their arguments on the need to preserve scenic landscapes and expand recreational opportunities for the millions of San Francisco Bay area citizens. As scientists' understanding of ecosystems grew in the late twentieth century and the tactics of environmental groups became more sophisticated, ecological preservation and restoration became an important part of bay management. In the late twentieth century, the National Park Service and other state, local and non-profit agencies sought to combat exotic species and to restore wetlands and wildlife populations in an attempt to mitigate some of the unwanted outcomes of human activities along Tomales Bay.

Some of these projects became highly controversial. Point Reyes National Seashore's plan to restore wetlands at Giacomini Ranch, at the bay's southern end, was one such issue. The seashore purchased the ranch in 2000, and the agency began planning to re-establish the wetlands in 2007. Waldo Giacomini had begun diking the area in the mid-1940s, converting 535 acres of tidelands to pasture. His actions reduced the bay's length by about ten percent. While the Giacomini Dairy prospered, the loss of wetlands adversely affected water quality and some fish species. Wetlands serve as nurseries for fish and other species, and they help absorb flood waters. These wetlands had also helped to filter pollutants that were washed down Lagunitas Creek into the bay, and they had prevented saltwater intrusion into the wells used as water supply by Point Reyes Station.[451] Environmentalists not only supported the park's proposal to restore the wetlands, but they encouraged the park to restrict human access to the parcel, which would provide important shorebird and wildlife habitat once restored.[452] In response to these plans, ranching advocates protested the

451. Michael Newland, "A Cultural Resources Study for the Giacomini Wetland Restoration Project," prepared for the Point Reyes National Seashore, 2002; "Final Report, North Marin Water District, Lagunitas Creek Salinity Intrusion Study," Point Reyes Service Area, December 1997, 19.

452. National Park Service, *Summary of Scoping Comments, Giacomini Wetlands Restoration Project*, Point Reyes National Seashore Archives.

loss of one of the area's most successful dairies. Many saw this intervention as evidence that the NPS, park visitors from urban areas, and environmentalists valued wildlife habitat and ecological restoration more than the area's agricultural industry.

In some cases, the NPS also favored the reintroduction of native mammals over the dairy industry. On Tomales Point, much of Pierce Point Ranch was designated as wilderness in 1976, and the park service evicted the ranch's tenants in an effort to replace dairy cattle with Tule elk. The park service reintroduced the animals onto Tomales Point in 1978. The NPS has sought to avoid conflicts with ranchers over this reintroduction. To address the concerns of ranchers who feared the animals would spread disease to their cattle, the seashore built a three mile fence across the point, demarcating the division of ranch land from wilderness. Park management expressed commitment to mitigating any property or crop damage caused by the elk as well.[453]

There was also an effort to restore the once-despised native oyster to Tomales Bay. Native oyster reefs serve to improve water clarity and increase the amount of eelgrass beds, which in turn provides critical habitat for bottom dwellers. Thus, the reintroduction of these oysters could facilitate the reintroduction of other native species and prove beneficial to the bay's overall health. The National Atmospheric and Oceanic Administration (NOAA) began a project in 2002 to construct shell mounds in an attempt to attract native oysters. Though the experiment proved unsuccessful, San Francisco Bay area environmental groups continued to express interest in restoring the native oyster to Tomales Bay.[454]

Exotic plant species had plagued the hillsides surrounding the bay since the nineteenth century, and invasive species began to colonize the bay's waters during the late twentieth century. Spartina alterniflora, a grass native to the

453. National Park Service, *Tule Elk Management Plan and Environmental Assessment*, 1998, Point Reyes National Seashore Archives.

454. National Atmospheric and Oceanic Administration, Southwest Region, Native Oyster Habitat Briefing Document, Accessed online on August 23, 2005; Christine Cognetti, "UC Research Project Working to Restore Native Oyster to Tomales Bay," University of California News and Information Outreach, Agriculture and Natural Resources, September 17, 2002.

eastern United States, was introduced into San Francisco Bay by the Army Corps of Engineers in the 1970s for erosion control and marsh restoration. The exotic, aggressively spreading grass, whose seeds travel by wind, water, and/or birds, began invading Tomales Bay shortly thereafter. Spartina alterniflora modifies the hydrology of the bay by trapping sediment and crowding out S. floriosa and other native plants that provide bird habitat. Furthermore, the grass restricts access to open water, confines fish into channels, disrupts tidal action, and reduces the food that waterfowl depend on.[455] The grass covered almost 500 acres of the estuary in 2002. Biologists worked to remove the plant, but eradication—a labor-intensive endeavor which requires mowing, digging, and applying pesticides—was difficult. Furthermore, the grass began to hybridize, and the hybrid Spartina grew and spread even faster than the original plants.[456] Removal remained an ongoing effort for several years.

By 2005, there were over forty agencies and groups managing and studying Tomales Bay and its surroundings. Fifteen different institutions were conducting studies on the bay. The bay fell under the jurisdiction of the NOAA, which operated the Gulf of the Farallones National Marine Sanctuary, and the National Park Service, which administered Point Reyes National Seashore and Golden Gate National Recreation Area. A number of federal and state agencies, such as the Environmental Protection Agency, the San Francisco Regional Water Quality Control Board, and the California Department of Fish and Game, had jurisdiction over water quality in Tomales Bay. The State Department of Health Services monitored water quality as part of the agency's commercial oyster lease regulation. A number of non-profit agencies conducted studies on the bay as well. A variety of non-profit and environmental groups, such as the Point Reyes Bird Observatory and Audubon Canyon Ranch, continued to focus research on the bay's bird and plant life.

Scientists and special interest groups defined the variety of interests in the bay. In 1999, a number of government agencies, private citizens, and local business owners organized as the Tomales Bay Watershed Council (TBWC) with the goal of improving the bay's water quality and to "restore the environmental

455. Jack Mason, Point Reyes Historian 6, Vol. 2, (Fall 1981), 606.

456. Ivan Gale, "Spartina Invades Tomales Bay," Point Reyes Light, November 7, 2000.





Figures 57, 58. Railroad engineers designed a route that ran in a relatively straight line up the jagged eastern side of the bay, and freshwater marshes developed where the railroad levee separated coves from the bay. These marshes now serve as valuable shorebird habitat. Photos by the author.

integrity of the entire watershed in a manner which promotes the harmonious relationship of man to nature." The TBWC developed a watershed management plan to further these goals. The Tomales Bay Agricultural Group, an alliance of eighteen ranchers, formed in 2000 with the goal of improving agricultural practices that affect the bay. The Tomales Bay Biodiversity Partnership (TBBP), a group of environmentalists, scientists and government agencies, began working to promote a better understanding of the bay's resources. The TBBP began an all taxa biological inventory in 2002 to identify species and habitats in the bay. By the end of 2004, more than 2,000 species had been identified. This information will be used to direct future study and preservation efforts. The Tomales Bay Technical Advisory Committee was formed in response to the closures of oyster beds related to water quality. The committee began to work with dairy ranchers to help them mitigate the impacts of dairy waste. The Marin Coastal Watershed Enhancement Project, initiated by the University of California Cooperative Extension, sought to address problems of non-point pollution by working with landowners to help them comply with water quality regulations. The bay has also been the subject of dozens of studies by scientists, university students, and other researchers.

Besides natural resources, the fate of cultural resources such as potentially historic buildings owned by the NPS became a topic of public debate during the late twentieth century. While many local residents wanted the agency to restore the buildings at Hamlet, the site of the former Jensen's Oyster Company, the agency razed the buildings due to their dilapidated condition. A similar battle loomed over the fate of Laird's Landing, which many area residents considered to be an historic site.[457] Local lore often dates the buildings to the 1830s, although they were almost certainly built in the late nineteenth and early to mid-twentieth centuries. Some considered the buildings unique examples of Coast Miwok wood frame dwellings, despite the fact that the structures were built by Joe Felix, who had both Miwok and Filipino ancestry, and Arnold Campigli, son of Swiss-Italian immigrants.

Different constituencies envisioned different plans for the scenic cove. Many local residents sought to turn the site into an arts center in order to honor the memory of artist and former resident Clayton Lewis, who had lived at the

457. See Appendix A for more information about Laird's Landing.

site from 1964 until his death in 1995.[458] Supporters of preserving the existing buildings accused the NPS of seeking to erase all evidence of human history on the bay, and they pressed the agency to nominate the buildings to the National Register of Historic Places.[459] Other constituencies believed that the site should serve as a natural area. After Lewis' death, environmentalists called for the removal of the buildings at Laird's Landing.[460] A few local residents urged the park service to preserve the site by removing Clayton Lewis' alterations and restoring the original buildings.[461] By 2005, the National Park Service had not yet decided the fate of the structures.

THE COAST MIWOK AND THE FIGHT FOR FEDERAL RECOGNITION

Development plans along Tomales Bay spurred a number of Coast Miwok descendents to lobby the federal government for recognition as a tribe, a designation that Congress had taken from them in 1958. The group became interested in tribal status after a developer, along with a group of Cloverdale Pomo Indians, announced plans to build a resort complex on the bay's shores near Marshall in the early 1990s. The developer and the Pomo hoped that the Bureau of Indian Affairs would deem the land an Indian reservation, an action that would facilitate the project, and this galvanized Coast Miwok descendents into forming a cohesive group to fight the proposal on what had been Coast Miwok territory. The developer went bankrupt, but the group continued to push for federal recognition.[462]

458. Dan Fost, "Friends Preserve Artist's Legacy," 10 December 1995, Point Reyes National Seashore Archives.

459. Ivan Gale, "Public Worries about Fate of Laird's Landing," *Point Reyes Light*, February 12, 2004.

460. Bill Rudolph, "Clayton Lewis: Picasso of the Pacific Coast," *Alaska Fisherman's Journal* 19, no. 5, May 1996, 40.

461. Letter from Virginia Norris to the Golden Gate National Recreation Area and Point Reyes National Seashore Citizens Advisory Commission, 12 October 1996, Point Reyes National Seashore Archives, Point Reyes Station, CA.

462. Jennifer Sokolove, Sally K. Fairfax, and Breena Holland, "Managing Place and Identity: The Marin Coast Miwok Experience," *Geographical Review* 92, no. 1, (2002), 33-39.

Congress studied the issue and recommended in 1997 that the group be granted official status. Nearly forty years after the government terminated their status as a federally recognized tribe, the Omnibus Indian Advancement Act of 2000 reinstated federal recognition to the Federated Indians of Graton Rancheria, which now includes about 1,000 members of Coast Miwok and Southern Pomo descent. The Coast Miwok would have preferred to be recognized in their own right, but Congress accepted the Graton Rancheria designation placed upon the groups in the 1920s. The group remained landless at the turn of the twenty-first century.

Anthropologists once considered the Coast Miwok extinct, but Miwok descendents, like nearly all American Indians, were integrated into American society as a whole. By the early twenty-first century, members of the group worked to collect and disseminate information about their history and culture. The Miwok Archaeological Preserve of Marin, founded in 1970, acted in collaboration with the Federated Indians of Graton Rancheria to spread knowledge of Miwok culture among Point Reyes visitors by protecting archaeological sites and by conducting classes that teach the general public about the history of the Coast Miwok. These efforts sometimes led to conflicts as Point Reyes National Seashore interpreters, interested community members, and Miwok descendents sparred over the best way to present information about Coast Miwok culture and history to park visitors. In some cases, the parties did not even agree on what, exactly, constituted Coast Miwok history and culture. These efforts, however, increased visibility of the group among Marin County residents and park visitors, and they reminded society that, in the words of Coast Miwok chairman Greg Sarris, "We are still here."[463]

463. Sokolove, Fairfax, and Holland, 40-41; "Federated Indians of Graton Rancheria website," http://www.gratonrancheria.com (accessed April 15, 2005).

Epilogue

The Future of Tomales Bay

The quiet, peaceful landscape and historic architecture of Tomales Bay mask the conflicts about its control and use. An Audubon Canyon Ranch publication reads, "It seems remarkable indeed to find a place with such an extraordinary feeling of remoteness and great natural beauty so close to metropolitan millions, only an hour or less away" from the city.[464] The hundreds of thousands of visitors who make Tomales Bay a destination each year would certainly agree with that statement as would the tourists who visit the bay as part of a journey to Point Reyes or a drive along Highway 1 up the California coast.

Most of these visitors are unaware of how public perceptions and uses of the bay have changed over time. The landscape today appears remarkably untouched compared to the urban metropolis to the south, though in fact, the bay area's natural resources were vital to San Francisco's growth and development. To Euro-American settlers seeking economic opportunities, remoteness and great natural beauty were not sought-after qualities in the landscape. Throughout much of the nineteenth and twentieth centuries, the remote bay received few visitors, and area residents pinned their hopes on agricultural and natural resource based industries and the new forms of transportation that would allow them to access the urban market. Some of these industries have survived, but the bay is now best known for its recreational opportunities and scenic beauty.

The Tomales Bay area landscape yields clues about its past. The ranches, golden brown hillsides, railroad levees, roads, summer homes, and the shallow, silted waters are tangible evidence of the social, ecological, and economic changes that have occurred as various groups of people occupied the bay. Twenty-first century residents, visitors, scientists, and land managers, whose

464. Audubon Canyon Ranch, Brochure, California Room, Marin County Civic Center Library.



Figure 59. Rmk_jcq @_wgl 0..6* _drcp rfc jctcc _r rfc dmp kcp Eg_am kglg P_laf u_q `pc_afcb. Nfmrm amsprcqw md Pm`cpr A_kn`cjj.

values are as culturally constructed as those of previous groups, will also leave their mark on the landscape. As increasing numbers of people lay claim to the bay and its resources, the debates that have dominated the late twentieth and early twenty-first centuries will undoubtedly continue. Understanding the connections between these cultural values and the natural environment, nonetheless, can help inform decisions about the future of Tomales Bay.

APPENDIX A:

Laird's Landing

The fate of four structures at Laird's Landing, a cove on the western side of Tomales Bay, became the subject of debate in the 1990s. Some area residents contended that the buildings should be preserved as evidence of Coast Miwok life on the bay. These supporters often insisted that the structures were built in the 1830s, though they were actually built sometime between the late nineteenth and mid-twentieth centuries. Others wanted the buildings protected to honor the memory of local artist Clayton Lewis, who lived at the site between 1964 and 1995. A group of environmentalists, on the other hand, has called for the removal of the structures. The debate poignantly reflected the differing ideas held by various constituencies about the best use of Tomales Bay.

Elizabeth Campigli Harlan was born in 1925 and was raised at Laird's Landing. Harlan's great-grandparents, Filipino immigrant Domingo Felix and his Coast Miwok wife Euphrasia, probably moved to Laird's Landing around 1861.[465] Domingo worked as a fisherman, and Laird's Landing, with its sheltered location and no-bank waterfront, undoubtedly proved a good home base. Their son, Joseph Felix, who had moved away to Nicasio, east of the bay in Marin County, married Paula Valensuela, a woman of unknown descent, sometime before 1881. The family, including Harlan's mother Bertha, moved to Tomales Bay around 1899. Elizabeth believes that her grandparents first moved to Marshall Beach, a cove to the north, before settling at Laird's Landing. The half-Filipino, half-Coast Miwok Joseph Felix probably built the house and outbuildings at Laird's Landing as well as structures at Marshall Beach. The Felix children attended school at Pierce Ranch, three miles from the Landing. Joseph Felix

465. Their son Joseph Felix placed the date in the early 1860s. Great-grandson Victor Sousa maintained that Euphrasia settled at Laird's in the early 1840s, but there is no evidence to support this claim. Furthermore, records show that Euphrasia bore a son in San Francisco in 1854. Euphrasia's maiden name was Valencia.

lived at the site until 1919, when at age 65, he drowned in the bay. Euphrasia Felix died four years later at Laird's Landing at the age of 98.[466]

Harlan's parents moved to Laird's Landing after they were married. The cove occupied part of K Ranch, but the ranch owners traditionally leased the site to the family for a nominal fee. Her mother Bertha worked as a cook on Tomales Point ranches, such as McClure's ranch. Elizabeth's father was Arnold Campigli, a son of Swiss-Italian immigrants; he was Bertha's fourth husband. He married his wife over the objections of his family, who disapproved of his union with a woman of Indian ancestry. Campigli worked on the local ranches as a carpenter and "jack of all trades," but this work provided only modest income. Fishermen and some tourists hired family members to row them around the bay, for which they earned five dollars per day. When they became old enough, Harlan's seven half-siblings found work at area ranches as well.

The Campigli family also modified the structures built by Joseph Felix at Laird's Landing. Arnold Campigli, along with Harlan's aunt, added on to the original home. Campigli built a number of additional outbuildings, including a one stall cow barn, a garage, three sheds, a chicken house, a building on the beach, and a cabin behind the house. The chicken coop, sheds, and barn were likely built between 1925 and 1955. He also fenced twelve acres of the site. The family used lumber salvaged from ship cargo that had washed up on Kehoe Beach, on the western side of Tomales Point.

Other families of mixed European and Coast Miwok ancestry also lived along Tomales Bay. Elizabeth Campigli Harlan's aunt lived at Laird's Landing. Another aunt and four cousins lived at Marshall Beach with their grandmother Tia. A number of Harlan's relatives lived across Tomales Bay near Marshall as well. Other family members lived at Sacramento Landing, as did the part Coast Miwok, part Swiss-Italian Pensotti family. Many of these bay residents, such as the Felix family, identified as Indian or were identified by other bay residents as Indian, despite their Filipino or European heritage. Racism was a defining feature of American life during the late nineteenth and early twentieth centuries,

466. Elizabeth Harlan, interview by Dewey Livingston, 30 September 1996, Point Reyes National Seashore Archives.

and any amount of Indian ancestry was enough to earn the disdain of the white population. Elizabeth Campigli Harlan, the daughter of a Swiss-Italian father and Filipino-Indian mother, often got into fights with ranchers' children at school who belittled her Coast Miwok heritage. Ranchers' children provoked fights simply by calling Elizabeth or her cousins "Indian." European-Americans who grew up in the area lived in proximity to families of Coast Miwok descent, but Indians were not part of the social structure of the area.

Elizabeth moved from Laird's Landing in 1942, when she was seventeen, to marry John Harlan. The Campiglis continued to live at the cove. After her mother Bertha's death of tuberculosis in 1949, her father Arnold Campigli and her half brother Victor Sousa (Bertha's child from a previous marriage) continued to live at the site. By this time, K Ranch was owned by San Rafael-based Roberts Dairy, and after Bertha's death the landowners evicted Campigli and Sousa.[467] Sousa initiated a suit, arguing that the family had occupied the site since the 1830s, an assertion that is almost certainly incorrect. With no title or tax receipts, however, they had no evidence of their claim to the property, and Arnold and Victor lost the case in 1955. The county zoned the parcel A-2, which meant that it could be developed into lots of 7,500 square feet for single family homes (though a developer would have to construct a costly access route and sewage system). In the late 1950s, the 109 acre Laird's Landing site was sold, but the land remained vacant.[468]

In 1963, on a visit to Tomales Bay, artist Clayton Lewis saw the ramshackle structures at Laird's Landing that had housed the Campigli family. He was immediately drawn to the site and he arranged with the owner, Murray Richards, to act as caretaker for the property. Lewis moved to the cove in 1964 along with his partner Judy Perlman and her young son. The contract between Lewis and Richards stipulated that the Richards family retained the use of the cabin at the cove, but it allowed Lewis to utilize the house, barn, and boat house. Richards agreed to pay for the cost of any improvements that Lewis made on the property, and he paid the artist five dollars per hour for his work. Richards specified

467. Elizabeth Harlan Oral Interview

468. Elizabeth Harlan Oral Interview.

that Lewis protect the property from trespassers, since the unoccupied site made an appealing target for campers, squatters, and vandals.[469] The National Park Service purchased the property in 1972, but they allowed Lewis to remain on the property until his death in 1995.

While previous cove residents lived at the site because it offered a good base for fishing, or due to its proximity to Tomales Point ranches, Clayton Lewis found artistic inspiration at Laird's Landing. Lewis, who was born in 1915 in Snoqualmie, Washington and attended art school in Seattle and San Francisco, began his artistic career after neighbors admired his homemade furniture in the early 1940s. Within a year he enjoyed a thriving business designing and producing furniture. After working for others in the furniture design industry in California, he opened his own studio in Sausalito.[470] By the mid 1960s, when Lewis came to Laird's Landing, his focus had shifted to jewelry-making with his partner Judy Pearlman. Their pieces are now contained in the collections of the Metropolitan Museum of Art and the Los Angeles County Museum of Art. Lewis took his inspiration for the pieces, constructed from silver, gold and gemstones, from the Tomales Bay landscape. In the mid 1970s, he began to concentrate on sculpture, painting, and etching. Between 1980 and 1987, he decorated the envelopes of his frequent letters to his mother with watercolor paintings; these illustrations often depicted scenes of life on Tomales Bay. Lewis gained some fame in the 1980s, when some of these 500 envelopes were shown in Paris and San Francisco. Lewis' artistic output declined after 1985 due to declining eyesight.[471]

Four structures existed at the time that Lewis arrived at Laird's Landing, and he greatly modified these buildings during his tenure. The house was located on the beach on the cove's west side, while a cabin occupied the hill above. A barn was positioned several hundred yards from the water, south of the main house, and a boathouse occupied an area near the house. Lewis, Pearlman, and

469. Letter from Richard Murray to Clayton Lewis, 14 November 1966, Point Reyes National Seashore Archives.

470. Dan Fost, "Friends Preserve Artist's Legacy," *Marin Independent-Journal*, December 10 1995.

471. Jessica Windrem, "A History of Laird's Landing," Point Reyes National Seashore Archives.



Fig. 60. Laird's Landing ca. 1963. The house is on the left; the structure in the foreground has been removed. Courtesy of PRNS Archives.

her son took up residence in the main house on the beach. In 1964 and 1965, Lewis stabilized and altered the structures to "increase their livability." He added roller roofing, linoleum, a bathroom, and a shower to the cabin. In 1972 and 1973, he built a sculpture and painting studio with a loft near the barn site. Pearlman and her son left Laird's Landing in 1975, and Lewis moved to the loft. In 1982 and 1983, he added living space and a bathroom to the studio and began residing there. Sometime between 1983 and 1985, Lewis installed solar panels for electricity. In 1987, Lewis added a tower to the cabin, and he spent the next two years adding a bedroom on to the studio living quarters. The boathouse received a plywood floor and decorative windows as well as redwood siding, though the floor plan of this building was not altered to the extent that the others were. Although Richards originally reserved the small cabin for his own use, he eventually gave Lewis the right to utilize that building as well. Lewis expanded on to the cabin by adding a deck as well as a space for a stove. He improved the roof and added decorative windows as well as a tower.[472] Some call his modifications an example of "woodbutcher's art." This style, which

472. Windrem, "A History of Laird's Landing."

emerged in the 1960s, was "improvisational, environmentally conscious, (and) freeform." The cabin was featured in Art Boericke and Barry Shapiro's *Handmade Houses: A Woodbutcher's Art*.[473]

Lewis believed living at Laird's Landing placed him closer to nature, and he utilized the natural resources of the bay both to sustain himself and to sell at markets in San Francisco. He fished using a beach seine, a net about 300 feet long which traps fish between the semi- circular net and the beach. This technique involves a great deal of physical labor as the fisherman pulls the net in by hand, and he was one of the last fishermen on the bay to use a beach seine.[474] He sold most of his catch (usually to Chinatown merchants) in order to provide income for basic necessities such as fuel, but he did not consider himself a commercial fisherman. About his work, he stated, "I'm not a fisherman, but I do love to pull them up to the beach in the net—the color! The fascination of these creatures living together—it's just something else! I get so excited-it's like going to a good Shakespeare play." Lewis also grew a large vegetable garden. He buried his garbage on the site, behind the jewelry studio.[475]

As his tenure at Laird's Landing lengthened, Lewis hoped to share his ways of thinking about Tomales Bay. He insisted that he was living in harmony with nature at Laird's Landing, but he thought that tourists who did not respect the estuary posed a threat to the bay. To Lewis, the bay was a world of its own, in ecological balance but in danger of being upset by too much use. He disparaged many of the bay's visitors who, in his eyes, did not properly respect the estuary. His ultimate goal was to keep the general public from "loving (the bay) to death," since he believed the bay was "overused" by its visitors.[476] In particular, he wanted to control access to the bay by banning boats and instituting ferry service. "I think we have an extraordinarily wonderful theater" he mused,

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473. Art Boericke and Barry Shapiro, *Handmade Houses: A Guide to the Woodbutcher's Art*, (A&W Visual Library, 1973).

474. Dan Fost, "Friends Preserve Artist's Legacy."

475. Richard Plant, Interview with Clayton Lewis, Jerymy Fishersmith and Katherine Lewis, 9 September 1995, Point Reyes National Seashore Archives.

476. Brooks Townes, "Beach Seine with Art," *National Fisherman*, Point Reyes National Seashore Archives.



Fig. 61. The shed/boathouse (center) ca. 1963. The structure may have been a warehouse for K Ranch; Clayton Lewis later used it as a boathouse. Courtesy of PRNS Archives.

"enclosed by a landscape that keeps the wind and the waves down most of the time. A lot of the good stuff comes in over the bar—most of the bad stuff stays outside." He attempted to conduct educational boat tours, but government regulations disallowed the project. He once hosted a school group at the site. Lewis showed the children how the beach seine worked in order to "enlighten" the group and show them that "there is a population that's below the surface of the water that's part of you. It is you."[477]

To Lewis and like-minded environmentalists, the bay was not a playground—it was a beautiful and fragile natural feature that should be protected from humans. People not only represented a threat to the bay's environmental health, according to Lewis, but to its beauty as well. The lack of aesthetic sensibility on the part of tourists clearly upset him. "The worst are those plastic kayaks," he complained. When a friend pointed out that these kayaks have enabled many to get out on the bay, Lewis responded, "I don't think that's as important as that they're ugly." He disparaged recreational fishermen as well. While many earlier supporters of land preservation on Tomales Bay had emphasized the

477. Fost, "Friends Preserve Artist's Legacy.".

recreational values of the land and water, Lewis supported the idea of managing the bay's ecosystem and limiting access to the water, except his own.[478] Lewis never addressed the fact that the cove had become a social hub where he and his friends enjoyed art, poetry and music together. In fact, his gatherings drew hundreds to Laird's Landing.[479]

The relationship between Lewis and the National Park Service was often strained. Lewis constructed an outhouse on the beach that the NPS subsequently ordered him to remove. His son Peter Lewis once discovered a human skull while burying garbage. Instead of contacting park staff, they gave the skull to Judy Pearlman's father, an archaeologist at the University of California. The NPS warned Lewis not to collect artifacts or disturb archaeological sites.[480]

In 1996, NPS staff evaluated the remaining structures at the Landing. The 257 square foot boat house was deemed structurally sound, though there was insect damage on the windows, door, and roof. The original house was also sound, except for Lewis' additions of the bathroom and shower room. The cabin, however, suffered from a number of problems. The floor was rotting or infested, and the roof was leaking. The studio experienced many of the same issues, such as a leaky roof and deteriorating wood. Overall, the architects noted a general lack of quality in the materials and construction of the additions.[481]

The boathouse and the main house have been determined eligible for the National Register by the State Historic Preservation Office in California as "rare examples of historic Indian frame houses built during the time of American settlement." National Park Service historical architects Ric Borjes and Robbyn Jackson, nonetheless, both note that due to Lewis' modifications the structures lack integrity. "Laird's Landing today is definitely Clayton Lewis' creation,"

478. Interview with Clayton Lewis, Jeremy Fishersmith and Katherine Lewis, 9 September 1995.

479. Jessica Windrom, Peter Lewis Oral Interview, 30 July 1997, Point Reyes National Seashore Archives.

480. Peter Lewis Oral Interview.

481. Memo from Robbyn Jackson, Pacific Great Basin Suppor Office, to Team Leader, Cultural Resources, 6 August 1996, Point Reyes National Seashore Archives.

declared Jackson. She recommended that only the boathouse be stabilized, while the other buildings should be dismantled. "These structures were only marginal when constructed and do not merit the resources it would take to bring them up to code, preserve and maintain them," Jackson concluded. The boathouse was the least altered of all the buildings, and could possibly be used for site interpretation. She summed up the dilemma well when she stated, "Laird's Landing is a special place that a number of people have grown attached to, and it would be nice to preserve this idyllic site." Due to the structures' lack of integrity, poor condition, lack of code compliance, as well as limited available funds, she concluded, it would be unwise to preserve the structures. Dewey Livingston's 1995 report similarly concluded that the historic significance of the site had been compromised by Lewis' additions.[482]

When shown pictures of the buildings taken during Lewis' tenure, former resident Elizabeth Harlan did not even recognize them. "They've made a lot of changes," she observed. Her sister, who visited the site in person during Lewis' occupancy, was so upset by the changes she refused to visit the cove again.[483]

Clayton's son Peter Lewis, who visited Lewis at the cove during his tenancy, disagreed with these assessments. Like his father, Peter believes that the structures were built by "the Miwok Indians." He argued in 1997 that the buildings remained in their "original condition," despite his father's additions and alterations. Peter defends Lewis' modifications by explaining, "He basically took old abandoned Indian cottages, restored them to their original splendor and then added some sculptural addition. . . like the windows. . . that's all he did. (The structures) were basically left alone." When Peter described the barn at Laird's Landing, he claimed it was built not by Coast Miwok, but by "relatives of the Indians," presumably since, in his view, Coast Miwok families would not have owned livestock. Lewis believed that his father was particularly respectful of the ecology and history of the site. "In relationship to his knowledge of the importance of the surroundings and the environment and the history of the

482. Jackson to Team Leader; Dewey Livingston, "Laird's Landing Structures," December 5, 1995, Point Reyes National Seashore Archives.

483. Elizabeth Harlan Oral Interview.

Miwok Indians. . . he was extremely respectful. He did not go in here and do a remodel. He could have rebuilt all three of these buildings up to code in an instant. . . he was very respectful of the buildings."[484] Others not only argued that Lewis preserved historic Coast Miwok homes, but they invoked stereotypes about American Indians as they described his lifestyle at the site. One reporter noted that Clayton Lewis "tried to stay true to the Indian heritage of the site, sharing it with the seals, herons, hawks and ravens."[485] Lewis himself called Laird's Landing "a natural Indian reservation." Paradoxically, however, he expressed fear that descendents of the Felix family would want to "take over" the site for their own use.[486]

A number of people in the local and artistic community argued that the buildings are Lewis' creations, but that they are significant and should be preserved. Slim Van der Ryn, architect and former president of the Ecological Design Institute, contended, "The buildings as Clayton modified them are significant examples of creative, ecologically conscious adaptive building using recycled and found objects that were the hallmark of the artistic, low impact handmade houses of the late '60s and '70s back to the land movement." The curator of architecture and design at the San Francisco Museum of Modern Art, Aaron Betsky, agreed that Lewis' work at Laird's Landing was a significant representation of this style. Art critics and curators are divided on the subject of the significance of Lewis' art. The art critic for the *San Francisco Chronicle*, Kenneth Baker, had never heard of Lewis when asked in 1997. Tyson Underwood, the organizer of the Sausalito Art Festival and expert on Marin County artists, was similarly unaware of Lewis' work. Lewis, however, was well-known in West Marin, and his work has been recognized in renowned art venues in France and the U.S.[487]

After Lewis' death in 1995, friends and family members formed the Clayton Lewis Institute for Arts and Ecology. They sought to preserve the artist's legacy

484. Peter Lewis Oral Interview.

485. Fost, "Friends Preserve Artist's Legacy."

486. Richard Plant, Interview with Clayton Lewis, Jerymy Fishersmith and Katherine Lewis, 9 September 1995.

487. Windrem, "A History of Laird's Landing."



Fig. 62. The small house at Laird's Landing in the late twentieth century. The structure is the most altered, due to Clayton Lewis' embellishments, at the site. Courtesy of PRNS Archives, Don Gunn Collection.



Fig. 63. Laird's Landing the late twentieth century. Courtesy of PRNS Archives, Don Gunn Collection.

by conducting educational programs on the bay. The group also envisioned that an artist in residence would inhabit the buildings at Laird's Landing.[488] The Inverness Association unanimously supported the idea of establishing the Clayton Lewis Institute at the site, as did a number of other West Marin citizens and Marin Heritage, a local historic preservation group. Letters written to the NPS reveal support for using the structures to preserve the legacy of Clayton Lewis and educate the public about Tomales Bay's ecosystem.[489] In order to convert the buildings into structures that could be used for some type of public operation, such as an environmental center, the facility needed a better access road, a larger water system, and sewage facilities. The buildings would have to be renovated to meet fire, building, and safety codes as well as accessibility standards. National Park Service investigators concluded that it would be less expensive to demolish the buildings and construct a new facility.[490]

488. Fost, "Friends Preserve Artist's Legacy."

489.. Laird's Landing File, Point Reyes National Seashore Archives.

490. Memo from Pacific Great Basin Support Office to Facility Management Team Leader, Pacific Great Basin Support Office, 11 November 1995, Point Reyes National Seashore Archives.

Some area residents opposed any plan to increase visitation at the site, while others urged the park service to restore the original buildings by removing Lewis' additions. Local environmentalists believed that the site should serve as a natural area, and they called for the removal of the buildings at Laird's Landing. These conflicts between different constituencies over the best use of the bay mirror the debates that have centered on Tomales Bay since the mid-twentieth century. As of 2007, the NPS has not decided the fate of the structures.

APPENDIX B:

Summary of Historic Themes and Properties along Tomales Bay

The following is a summary of historic themes and associated properties along Tomales Bay. Many of these properties are not owned by the National Park Service yet are associated with the historic theme.

MARITIME HISTORY

The Tomales Bay area was an important supplier of agricultural products to the booming city of San Francisco in the mid-nineteenth century. This endeavor was made possible by the schooners that plied the water route from Tomales Bay to the city between the early 1850s and 1874. The trade reached its peak in the late 1850s and 1860s and virtually halted after the coming of the railroad in 1874. Beginning in the early 1850s, these vessels traveled through northern Tomales Bay and then up Keys Creek, a tributary of the bay, to access warehouses and wharves near the town of Tomales. Schooners also picked up agricultural products from area farmers at shipping points along the eastern side of the bay such as Preston's Point, Hamlet, Ocean Roar, and Marshall. Ranchers on Tomales Point shipped products by boat from White Gulch, Sacramento Landing and Laird's Landing, properties now owned by the NPS. Even after most schooner travel ceased on the bay after, Tomales Point ranchers continued to ship their goods across the bay to railroad stops. Shipping points were typically coves that allowed safe docking for vessels, with wharves, warehouses, and associated buildings connected to outlying farms and settlements by roads. There are no known existing vessels or buildings associated with this theme, but a number of sites associated with the bay's maritime history remain, such as Marshall, Sacramento Landing, Laird's Landing, Preston's Point, White Gulch, and Hamlet.

AGRICULTURE

The first dairy in the area began in 1857, and the dairy industry remained significant around Tomales Bay into the 1950s. While these industries declined during the second half of the twentieth century, dairy ranch landscapes still dominate the area surrounding the bay. Ranches are characterized by structures such as domestic dwellings, dairies, barns, other farm buildings, and storage and manufacturing facilities, as well as roads, pastures, fences, windbreaks, and animal facilities. In *Ranching on the Point Reyes Peninsula*, Dewey Livingston makes recommendations for preserving I, J, K and L ranches or ranch sites on Tomales Point. The NPS also owns former and current ranch lands on the east side of the bay that are historically significant for the same reasons as ranches in the Olema Valley and on the Point Reyes peninsula. These ranches have significance, under the guidelines of the National Register of Historic Places, in the following categories: Agriculture, Architecture, Commerce, Exploration/Settlement, and Industry.

OYSTERING

The first oysters were planted in the bay as an experiment in the late nineteenth century, and Tomales Bay oysters remain a regionally well-known product in the early twenty-first century. The first commercial oyster company on the bay was founded in 1907, and the industry reached a peak in production (as measured by percentage of California's oyster crop) in the late 1930s. Oyster businesses on the bay continued to thrive throughout the mid-twentieth and into the early twenty-first century. Oyster growing operations are characterized by mudflats, redwood stakes, and processing and sales facilities. The NPS owns the former site of Jensen's Oyster Beds, a thriving business during the mid-twentieth century, though most of the associated buildings have been removed. Evidence of abandoned oyster beds exists at various points around the bay. A number of oyster companies currently operate in the bay on tidelands leased from the state.

COMMERCIAL FISHING

The commercial fishing industry began in the 1870s when Chinese fishermen flocked to the bay to take advantage of the bay's shrimp fishery. European immigrants in the late nineteenth and early twentieth centuries fished

commercially for herring and, to a lesser extent, other fish species, and the trade spiked during World War I, World War II, and the early 1970s. The Booth Canning Company established a herring cannery at Hamlet in 1917 (this plant was destroyed in a 1949 storm); smoked herring were produced at Blake's Landing and Nick's Cove in the 1930s. Fishermen based themselves out of a number of locations along the bay, such as Inverness, Marshall, Nick's Cove, and White Gulch, during the early and mid-twentieth century. Some associated properties, such as the seventy year old Marshall Boat Works, still operate on the bay. Wharves, vessels, boathouses, and other associated structures would be associated with this theme, but it is unknown if these structures remain.

TWENTIETH CENTURY RECREATION/TOURISM

Tourism and recreation have been significant on Tomales Bay from the late 1880s to the present. The kinds of properties associated with this historic theme would be vacation houses and developments, rental cottages, hotels, and campgrounds. Many of the first recreational visitors to Tomales Bay were sport fishermen in the late nineteenth and early twentieth century, and sport fishing continued to be a popular recreational activity on the bay into the twenty-first century. Fishermen (and the first tourists) often rented cabins and hotel rooms along the bay, and some of these structures still exist. The cottages at Cypress Grove are still standing; they were built in the 1880's, damaged in the 1906 earthquake, and renovated in recent years by Audubon Canyon Ranch. The cabins at Nick's Cove (these structures were primarily long-term rentals, but they received some use by fishermen and hunters), also remain, though they are in the process of major renovations as part of a redevelopment effort on the site. Some dilapidated cabins remain at Ocean Roar.

A number of structures are associated with tourism in the twentieth century. The town of Inverness, which hosted some of the earliest vacationers to Tomales Bay, was founded as a vacation community in the late nineteenth century; thus, a number of the village's homes and buildings are associated with tourism in this time period. The main house at Camp Pistolesi, which was probably built in the 1920's to serve vacationers, still exists; this may provide an example of the type of small-scale resort that became popular in Marin County in the early twentieth century. Increasing numbers of visitors journeyed to the bay after World War II, and a number of vacation homes were built during this time. During the early 1960s, developments such as Duck Cove and

Sacramento Landing were built to accommodate the growing number of people who sought vacation homes along the bay. These two developments are now NPS properties. A number of vacation homes were also built along the bay's eastern shore during the latter half of the twentieth century, many of which are now owned by the NPS.

AMERICAN INDIAN HERITAGE

Coast Miwok Indian groups established a number of settlements along Tomales Bay before contact, especially near freshwater creeks and on the bay's protected coves. Throughout the late nineteenth and early twentieth centuries, a number of families and individuals with Coast Miwok heritage established homes along the bay in places such as Laird's Landing, Sacramento Landing, Marshall Beach (all owned by the NPS), and Marconi Cove. The kinds of properties associated with this theme might include dwellings, boat houses, and wharves.

Laird's Landing contains structures that were built by persons of Coast Miwok descent. One 650 square foot home, built in the late nineteenth century by Joseph Felix (of both Filipino and Coast Miwok heritage), has been determined eligible to the National Register of Historic Places by the State Historic Preservation Office (SHPO). This building was modified by a later tenant. A 257 square foot boathouse, also determined eligible to the National Register by the SHPO, may have been built by Felix. It is also possible, however, that the structure was built by K Ranch as a warehouse during the late nineteenth century. This building, too, was later modified, though it retains its original floor plan.

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