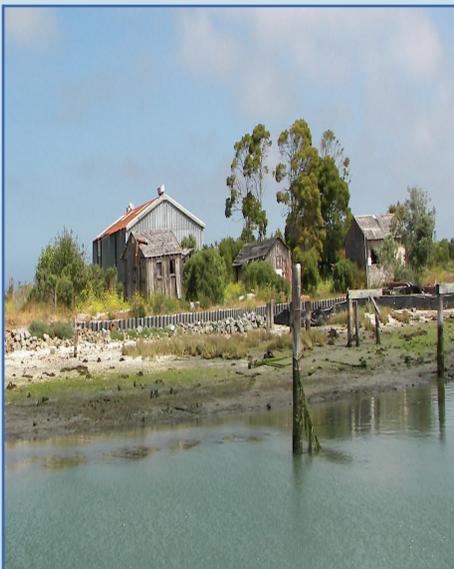


HUMBOLDT BAY HISTORIC & CULTURAL RESOURCE CHARACTERIZATION & ROUNDTABLE



Cover photos by Susan Ornelas

HUMBOLDT BAY

HISTORIC & CULTURAL RESOURCE

CHARACTERIZATION & ROUNDTABLE

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PLANWEST 
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&

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Table of Contents

INTRODUCTION.....	1
HUMBOLDT BAY DESCRIPTION.....	4
HUMBOLDT BAY ETHNOGEOGRAPHY AND HISTORY	10
Introduction	10
Ethnogeography	11
Ethnography	14
History	17
CURRENT CULTURAL RESOURCES.....	76
Methodology.....	76
Interview Narratives.....	82
HUMAN DIMENSIONS REGIONAL ROUNDTABLE	122
RESEARCH OPPORTUNITIES.....	133
LIST OF PREPARERS	135
REFERENCES	136
APPENDIX A	147
APPENDIX B	163

List of Figures

Figure 1 Humboldt Bay	8
Figure 2 Humboldt Bay Ecosystem Program Zones	9
Figure 3 Arcata Mill Sites.....	73
Figure 4 Eureka Mill Sites	74
Figure 5 National Register Sites	75
Figure 6 Humboldt Bay User Groups Bay Access Points	121

INTRODUCTION

Humboldt Bay supported small indigenous Native American populations that lived in balance with their surroundings for generations. In 1850 whites settled into the area and quickly established bayside communities, sawmills and shipping channels. Historically, Humboldt Bay has supported a variety of uses and cultures, and that tradition lives on today.

Humboldt Bay Harbor Recreation and Conservation District (HBHRCD) is responsible for managing the diverse uses of the bay and for, “the promotion of commerce, navigation, fisheries, recreation, and the protection of natural resources, and to acquire, construct, maintain, operate, develop, and regulate harbor works,” (HBHRCD, 2007:19). Maintaining ecological integrity and promoting human well-being in this context requires new approaches and arrangements to management. In May of 2007, the HBHRCD released the Humboldt Bay Management Plan, which adopts an Ecosystem Based Management (EBM) policy approach to guide the management of the conflicting bay uses the district is charged with promoting.

Ecosystem Based Management is “an integrated approach to management that considers the entire ecosystem, including humans,” (Scientific Consensus Statement on Marine Ecosystem-Based Management, March 2005). Furthermore, it is a framework for integrating social, economic and ecological concerns into the management and decision making process. Ecosystem Based Management considers the cumulative impacts on different aspects of an ecosystem, as opposed to the typical approach that focuses on a single species, activity or concern.

The Ecosystem Based Management Tools Network (<http://www.ebmtools.org/>) outlines EBM as an approach that:

- Integrates ecological, social, and economic goals and recognizes humans as key components of the ecosystem;
- Considers ecological - not just political - boundaries;
- Addresses the complexity of natural processes and social systems and uses an adaptive management approach in the face of resulting uncertainties;
- Engages multiple stakeholders in a collaborative process to define problems and find solutions;
- Incorporates understanding of ecosystem processes and how ecosystems respond to environmental perturbations; and
- Is concerned with the ecological integrity of coastal-marine systems and the sustainability of both human and ecological system.

While the central focus of EBM remains natural resource management, EBM also links to broader policy, planning, and decision-making concerned with building and maintaining healthy communities, such as education, health, income, transportation, equity, economic development, and diversification.

Underlying EBM is an understanding that we live among, and are connected to the natural environment. In addition, many environmental problems (nonpoint source pollution, vehicle emissions, and urban sprawl) are a result of human activities and the infrastructure created to support human communities. EBM is a new approach to managing environmental problems with an understanding that healthy ecosystems contribute to healthy communities and in turn, healthy communities are more likely to be involved in sustaining healthy ecosystems, cultures, environmental amenities and economies.

The Humboldt Bay Ecosystem Program (HBEP) began in November 2006 with funding from the State Coastal Conservancy. The goal of HBEP is to “protect and improve the health and well-being of the community and natural resources valued by all who live and visit the region,” (Schlosser, et al, April 2008:6). The mission of HBEP is as follows (Schlosser, et al, April 2008:7):

To increase our scientific understanding of the Humboldt Bay Ecosystem and to create an integrated framework for resource management and collaboration that links the needs of people, habitats and species to ensure a healthy future for Humboldt Bay’s natural and human communities.

The HBEP team is comprised of an eight member Core Team that serves as the project steering committee and a 31 member Advisory Team to assist with launching the HBEP program. The HBEP team is also composed of six subcommittees, which identified major issues and priority concept topics to develop into project proposals or an EBM framework. The HBEP team developed five draft proposal concepts, which were weaved into a unified proposal to pursue and develop the following areas: Conceptual Model; Ecosystem Indicators; Sediment Circulation and Dynamics; Socioeconomic Analysis and Model; and Implementation.

In September of 2007, the Coastal Services Center (CSC), a division of the National Oceanic and Atmospheric Administration (NOAA), contracted with Planwest Partners and the Cultural Resources Facility, Center for Indian Community Development (CICD) at Humboldt State University to complete a Historic and Cultural Resources Characterization and Human Dimensions Regional Roundtable for Humboldt Bay. The CSC funded the study primarily to gain a better understanding of the social, economic, and cultural factors that influence community support for coastal conservation. In addition, the information gained as a result of the Historic and Cultural Resources Characterization and Human Dimensions Roundtable will be integrated with the development of the HBEP framework to support the development of

a proposal focused on the cultural and social component of EBM and collaborative conservation.

An awareness of Humboldt Bay's historic and cultural resources and historic bay uses can assist the HBEP with the following:

- An understanding of the previous conditions of the environment and the changes over time, which have occurred within that environment to adequately understand the situations currently observed; and
- An understanding of the ecosystem's history, which provides insights into the current cultural practices, residents sense of place and opinion regarding "acceptable bay uses."

An awareness of cultural resources and current bay uses can assist the HBEP program with the following:

- An understanding of present day bay uses (i.e., frequency of use and where the use occurs) to assist with an assessment of management decisions and policy directive impacts;
- An understanding of what drives larger community's resource stewardship;
- Established communication channels for relevant stakeholder groups;
- Provide potential volunteers for citizen science programs via an engaged public;
- Assist in the framing of an issue in order to create buy-in from larger public on management decisions and/or ecosystem restoration efforts; and
- An understanding of the "trade-offs" that user groups are willing to make.

As stated above, EBM considers the social and human components of an ecosystem, as well as the natural processes. EBM by definition is also a collaborative process that seeks to engage a wide array of stakeholders, which includes the public. Given the various uses of Humboldt Bay, a successful EBM program will match management plans with socio-economic plans to generate income, enhance the health of cultures and communities, and provide sustainable livelihoods. However, in order to protect and enhance the socio-economics, culture and community of an ecosystem, there must first be an understanding of the past and current culture, community and socio-economics of the ecosystem. In addition, the ecosystem's inhabitants must be involved and ultimately engaged in the process. This report provides an insight into Humboldt Bay Historic and Cultural Resources to assist coastal resource management professionals, natural resource management professionals, and the general public in HBEP efforts.

HUMBOLDT BAY DESCRIPTION

Humboldt Bay and the surrounding lands are the ancestral home of the Wiyot people. The bay was undetected by those of European descent until 1850, when a group sailed here from the south and named the bay in honor of famed naturalist and explorer Alexander von Humboldt. Often shrouded in fog, it was difficult for early explorers to spot the bay, and treacherous for ships to enter from the Pacific Ocean.

Humboldt Bay is California's second largest natural coastal bay, and has two navigable channels. The main channel, which serves as the state's only deep-water shipping facility north of San Francisco, runs north from the harbor entrance up to the old mill town of Samoa, with a turning basin for cargo vessels south of the Highway 255 bridge between Indian Island and the North spit. Most of the bay's current maritime uses are concentrated along the main channel, which features a number of active and inactive docks. North of the Highway 255 Bridge, the bay opens up into wide, tidal mudflats and the shellfish operations of Arcata Bay. The shallower southward channel runs past King Salmon, as far as Fields Landing, and terminates into the tidal mudflats of South Bay. Beyond these channels, it is a relatively shallow bay.

The bay's westerly boundary is formed by long spits of land extending from the north and the south, separating the sheltered bay waters from the Pacific Ocean. Rock jetties, at the ends of both spits, form the bay entrance. The jetties are designed to maintain a navigable entrance, but are susceptible to constant silt and sand deposits from both bay sediments and ocean sands carried by the ocean's littoral currents. Keeping the entrance safe and navigable for both large ships and smaller vessels is an ongoing challenge.

The primary zone of the HBEP is the Bay itself and adjacent lands to 10 feet elevation, and is characterized by expansive mudflats, wetlands, eelgrass beds and adjacent diked former tidelands (see figure one). The only river that drains naturally into the bay is the Elk River; however, there are numerous creeks and sloughs that also provide the bay with freshwater. This richly diverse habitat covers approximately 75 square miles of private and public lands, which include the 18 square mile Humboldt Bay National Wildlife Refuge, as well as Humboldt County's two largest cities, Eureka and Arcata.

The lands directly adjacent to the bay, identified as the secondary zone by the HBEP, are relatively low lying areas, except for Table Bluff to the south. The north and south spits at the bay's western edge are approximately 50 feet in elevation at their highest points. Because of this low and relatively flat topography there are large intertidal

areas and sloughs that provide significant biological habitat. Several of these areas are protected and managed as wildlife refuges and wildlife areas.

The watersheds of two other rivers, the Mad to the north and the Eel to the south make up the tertiary zone as defined by the HBEP. These rivers have large coastal estuaries adjacent to Humboldt Bay. At one time the Mad River was rerouted into Humboldt Bay to float log rafts to mills and waiting ships at the bay's docks. While the Mad River channel has been restored to its natural route to the north through the Arcata Bottom, the Mad River slough at the north end of Arcata Bay is used for fishing, birding and kayaking.

Historically surrounded by towering redwood forests, Humboldt Bay still provides invaluable habitat for over 200 bird species, many of which are migratory. Over 100,000 migratory birds stop at the bay on their way up and down the Pacific flyway. The tidal mudflats of Arcata Bay and the South Bay also support a wide range of aquatic life. The bay wildlife includes a number of endangered and protected animal and plant species. Human population in the bay area is currently estimated at approximately 70,000.

The Humboldt Bay area remained in its natural condition, peopled only by the Wiyot tribe, until a major influx of settlers arrived, starting in the 1850s. Use of the bay changed dramatically as the limited activities of the Native Americans gave way to forestry and mining pursuits. Non native communities were quickly established, all along the bay, to serve these interests and their Industrial and Victorian-era stamps are still very much in evidence. Mills that developed along the bay were located near the railroad and docks, to ship their wood products out of the area. Open ocean travel initially provided the primary access in and out of Humboldt Bay, until through-roads and railroads were cut through the forested mountains, across streams and up the river valleys to the north, south and east, to access mines and timberlands.

The area's bountiful bay and ocean fisheries also became an important draw -- and while mining subsided, timber and fishing remained as Humboldt's primary economic drivers until the later 1900s. The continuing depletion of these natural resources has, in more recent years, fostered significant conservation efforts. It has also focused entrepreneurial attentions on developing different bay-dependent industries -- primarily, international shipping and sustainable oyster farming.

More recently, a burgeoning interest in recreational uses has created another form of industry for Humboldt Bay. Two boat basins, including the large marina on Woodley Island, serve numerous pleasure craft, as well as commercial and recreational fishing boats. Opportunities for private fishing, clamming, kayaking, windsurfing and sail-boarding abound, and even surfing is possible, along a uniquely situated east bayside beach.

The departure of large-scale bayside industry has also created opportunities for land-based recreation. Where mills and railroads once dominated the immediate bayside landscape, a new emphasis on trail access, park space and the enjoyment of waterfront views has encouraged the development of an extensive trail system, which is envisioned to run the length of the bay, from Mad River to the Elk River. The City of Eureka has also created a pedestrian-focused boardwalk area along the east bank of the inner reach of the Eureka channel, opening up views, and rezoning that former highly industrial area to accommodate businesses, restaurants and shops.

The Humboldt Bay Harbor Recreation and Conservation District has management interest and authority for much of the bay resources. This multi-faceted special district owns certain parcels, such as the land where Redwood Dock is located, and maintains a comprehensive database of both the natural resources and human made improvements present in Humboldt Bay. They are currently developing a plan to renovate Redwood Dock for commercial shipping. They also oversee dredging activities and monitor shipping activity in and out of the bay. The Redwood Dock location is shown on figure one.

There is considerable local interest in reestablishing the long-inactive rail system, which served the timber industry; however, the realities of maintaining a rail-line on the bay's diked tidelands and wetlands, for a significantly reduced industry, and seasonal tourism, have prevented action. Local support continues to grow for converting the rail route into trails, especially where it would connect Arcata to Eureka, and provide trail connectivity throughout the bay area.

The continuing interest in local heritage is having a positive effect on the bay. Two notable examples are the Samoa Town Master Plan, recently approved by the Humboldt County Board of Supervisors, and Tuluwat Village, recently approved by the City of Eureka for Indian Island. The Samoa Town Master plan proposes to preserve the approximately one hundred houses, the Samoa Block and Cookhouse, and many other structures with historical significance on the north spit. The Wiyot tribe has developed plans for a portion of Indian Island to restore their cultural heritage (e.g., Tuluwat Village and the World Renewal Ceremony) and ecological resources. Both of these restoration projects will preserve significant aspects of the bay history.

Other pending bay oriented developments include the proposed Marina Center, a large mixed use project on the Eureka Waterfront Balloon Tract, an eco hostel near the Adorni Center, and Eureka redevelopment projects near the boardwalk. The locations of these proposed developments, as well as the Tuluwat Village and Town of Samoa described previously are shown on figure one.

The recent completion of the Humboldt Bay Aquatic Center, just west of the Adorni Center in Eureka provides an additional recreational and educational facility to complement improved bay access. This multi-use facility provides for greater use of the bay by having a variety of water craft available at the water's edge. The Center's upper floor meeting spaces and outdoor decks are oriented to the bay, offering views of the Woodley Island Marina, and more expansive bay views to the east and west. Several other Eureka waterfront projects are under construction or in the design phase.

Combining marsh and tidal area restoration, with public access is also increasing. The City of Arcata is restoring portions of the McDaniel Slough to tidal functions, while incorporating visitor access and interpretive facilities. The Elk River slough is also the subject of plans to provide public access and interpretive facilities in a natural setting. Dune restoration projects such as at Ma-le'l dunes (a cooperative management area) are other examples of human driven efforts to improve the bay ecosystem. These recreational and wildlife management areas such as the Humboldt Bay Wildlife refuge, are shown on figure one.

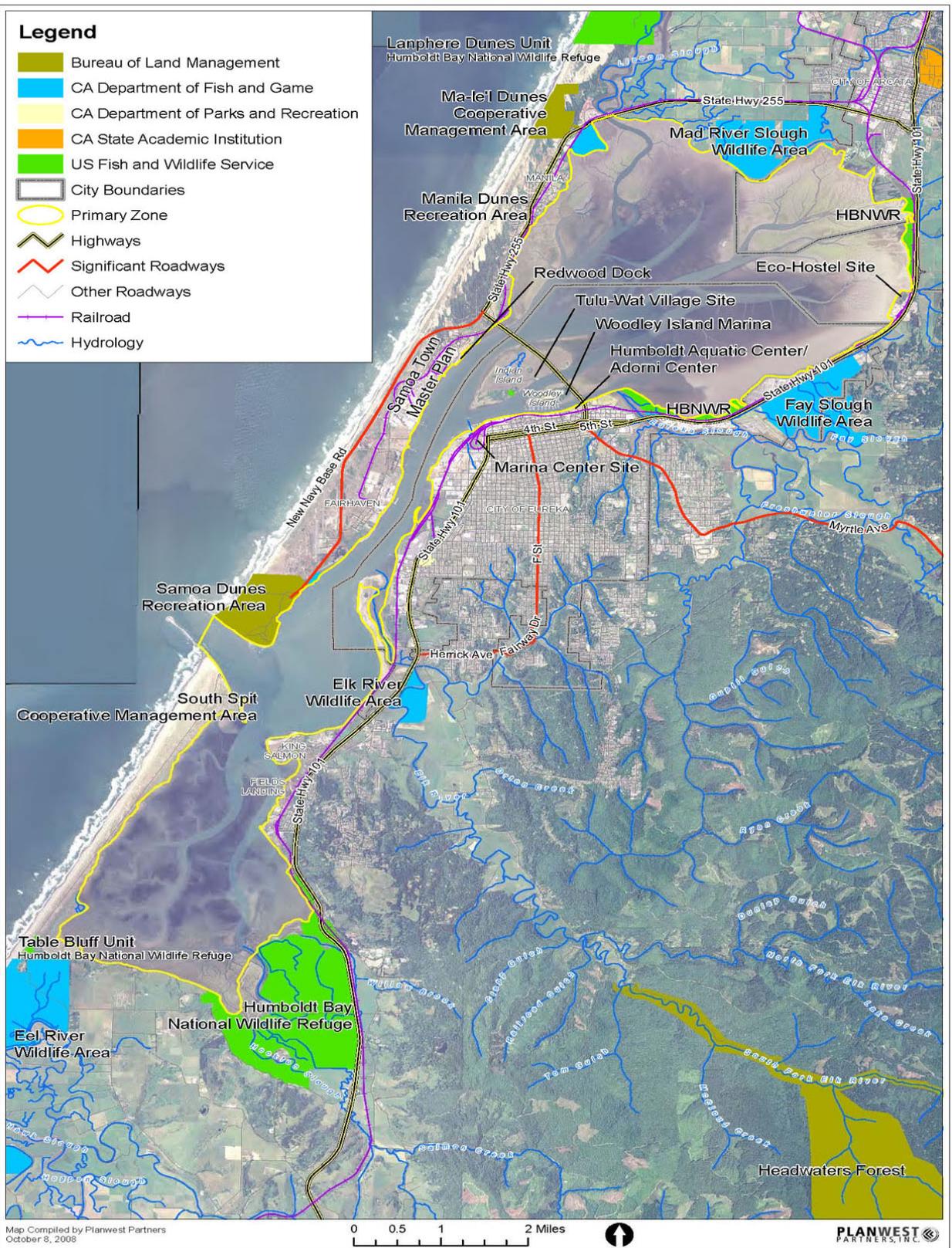
These activities, projects and interests represent an important trend that is occurring on Humboldt Bay. The growing interest in increased access and use of the bay, and heritage preservation, bodes well for continued interest in bay ecosystem restoration. The more accessible the bay becomes the more community and visitor use can be expected. This is expected to result in a greater appreciation for the significant natural resources and history of Humboldt Bay.

This study primarily addresses historic and cultural resources in the primary zone of Humboldt Bay, as defined by the HBEP. (see figure two). The study was restricted to this area due to time and budget constraints.

This report should serve two audiences:

- The interested public, who can use the information contained herein to gain an understanding of the historical activities, events and cultural resources that have influenced the present condition of Humboldt Bay; and
- Agency representatives and decision-makers, who can increase their awareness of the history and culture of Humboldt Bay, and also make more informed evaluations that are required for activities that affect the bay.

Figure 1 Humboldt Bay



HUMBOLDT BAY ETHNOGEOGRAPHY AND HISTORY

INTRODUCTION

This section of the report is intended to serve as a basis for reviewing the Humboldt Bay area from a historical perspective. It uses three approaches:

1. It provides a geographical summary of the bay's history, including that of its Indian inhabitants. This summary reviews not just cultural features of the landscape, but also the physical characteristics of the area surrounding the bay, which have frequently endured human-caused alterations during the last 150-plus years;
2. It offers an overview of the important sources that should be considered when preparing future historical reviews of all or part of the bay; and
3. It focuses on providing *relevant* information, so that stewards of the bay will better understand the mission of historical report writing for Ecosystem Based Management.

The scope of this report has been limited by two factors. First, the funding allocated for the project does not allow for the overall level of review that would be appropriate for individual, site-specific studies of portions of the bay. The information that is thus provided should in no way be considered definitive. Instead, it supplies salient facts and a platform on which to place further studies. Second, the report does not contain specific ethnogeographical information that would reveal details about sensitive Wiyot tribal sites. Although such information should be part of any comprehensive agency report, the NOAA stipulation that all portions of this review must be available to the public prevents the dissemination of certain cultural and geographical information that must, by law, remain classified. In this report, Wiyot village sites are referred to in only the most general terms, with no precise locations given, other than the Indian Island Massacre site, which has been publicized so thoroughly that its location is common knowledge.

This report has been prepared with special attention to the needs of Ecosystem Based Management (EBM). The concept of managing an area by carefully considering the full spectrum of environmental factors that interconnect to create a specific ecosystem, such as Humboldt Bay, provides agency managers, public officials, and the interested public with a new and essential tool in properly interacting with the earth. However, EBM is more than a collection, however extensive, of perspectives from various

scientific disciplines. EBM, to be fully comprehensive and maximally effective, needs to also consider the physical and cultural history of the relevant environment. Only when EBM managers know the previous condition of the environment and the changes, over time, which have occurred within that environment, can they adequately understand the situations that they currently observe. Managing an ecosystem, such as Humboldt Bay, requires historical knowledge to help explain current phenomena, to help understand transitions that have occurred, and to help plan rehabilitation programs when necessary.

If men could learn from history, what lessons it might teach us!

Coleridge

ETHNOGEOGRAPHY

Essential Sources

Any adequate ethnographical review of the Humboldt Bay area requires the use of both published and unpublished sources. It is incorrect to assume that a review of only the published literature will result in an accurate and comprehensive account of the Wiyot tribe, the Indian group that held the area. It is essential to determine the veracity of any information, whether published or not, but this is often especially difficult to accomplish with published material for several reasons:

- A. Many such accounts contain unverifiable conclusions made by archaeologists, anthropologists, linguists, and other specialists that may be speculative or that rely on theoretical methods of analysis.
- B. Published accounts are often based on material, such as interview notes, that is not available for review.
- C. Two or more published accounts may contain conflicting information. An example of this occurs in the Smithsonian Institution's *Handbook of the Indians of North America* series, where accounts of individual tribes, each prepared by a different author, were published without any noticeable attempt to reconcile discrepancies, such as tribal boundaries. Unless the differing accounts fully cite their sources, it is difficult to determine which account is correct.

Unpublished information includes field notes, interview notes, note cards, photos, maps, and file holdings compiled by ethnographers and historians. Much of this is considered primary source material, since it directly records statements made by Indian informants. Over the last 25 years, a considerable amount of unpublished

information has become available on microfilm, so that Indians, researchers, and other interested parties may now review and analyze accounts created as much as a hundred years ago. Locally, Humboldt State University houses several of the most important collections of unpublished ethnographic information, so that any report writer willing to take the time can have access to much essential material. Any thorough ethnographical report should review, evaluate, and use these sources, since the unpublished information often offers the most direct and reliable accounts of Indian history and geography.

For the Humboldt Bay area Indians, the Wiyots, there are two essential unpublished but microfilmed sources:

Harrington, James Peabody

1983 The Papers of John P. Harrington in the Smithsonian Institution 1907 – 1957. Microfilm: Humboldt State University Library, Arcata.

Merriam C. Hart

1998 Papers, vol. I. Microfilm: Humboldt State University Library, Arcata.

Harrington's papers contain interviews with Wiyot elders, including Jerry James and his wife, Birdie. Much of the material consists of a "rehearing" of Loud's site names (see below), with the informants supplying commentary that elaborates on that provided by Loud.

Merriam completed interview forms with several Wiyots, asking them pertinent questions relating to tribal divisions, boundaries, and nomenclature. The information he collected is often especially valuable for its historical and geographical content.

Any report that attempts to adequately cover the ethnography of the Wiyot Indian tribe should also review at least four published sources:

Curtis, Edward S.

1970 The North American Indian, Vol. 13. [1924] New York: Johnson Reprint Corporation.

Loud, Llewellyn L.

1918 Ethnography and Archaeology of the Wiyot Territory. University of California Publications in American Archaeology and Ethnology 14:3.

Merriam, C. Hart

1976 Ethnogeographic and Ethnosynonymic Data from Northern California Tribes. Contributions to Native California Ethnology from the C. Hart Merriam Collection:1. Berkeley: Archaeological Research Facility, Department of Anthropology, University of California.

Nomland, Gladys Ayer, and A. L. Kroeber

1936 Wiyot Towns. University of California Publications in American Archaeology and Ethnology 35:5.

Loud's monograph is the classic study of the Wiyot tribe. As its title indicates, the account contains both archaeological and general ethnographical information; it has an especially thorough section on significant locations in and around Humboldt Bay. Loud's informant for the Humboldt Bay region was "an old Indian patriarch" named Dandy Bill, who had established a small Indian community, called Indianola, near the south edge of the bay. Any study of the ethnogeography of Humboldt Bay should start with Loud and treat his work as a basic source.

Nomland and Kroeber attempted to "corroborate and strengthen" (Nomland and Kroeber 1936:39) Loud's work regarding Wiyot communities. The coauthors each brought their own village lists to the project; their information was collected later than Loud's. Nomland used a different informant, John Sherman, than did Loud, while Kroeber did not indicate his source(s).

Merriam's work contains an extensive section on what he calls the Soo-lah-te-luk tribes, the three groups that are usually combined under the name Wiyot. His list of villages contains ones previously mentioned by Loud and Kroeber but adds others from his interviews with several Wiyots between 1910 and 1923 (Merriam 1998: reel 32, frame 9).

Curtis's chapter on the Wiyots is rich in cultural and village information, the latter contained in an appendix. He relied on the Wiyot elder Jerry James for his Wiyot myths (Curtis 1970:197) and it is probable that James also provided accounts for the other sections.

The aforementioned *Handbook of North American Indians* contains a chapter on the Wiyots by Albert B. Elsasser in its Californian volume (Elsasser 1978:155ff). This work summarizes accounts by other ethnographers but contains little original material. It is therefore valuable primarily for its list of sources. It also offers a significant example of an unharmonized assertion in its map of Wiyot territory, which shows the tribe occupying the drainage of the North Fork Mad River (Elsasser 1978:155), while another chapter in the book assigns this territory to the "North Fork Whilkut" (Wallace 1978:170).

A report can only be as good as its sources, and the sources pertaining to local Indian history generally range from poor to terrible. Contemporary reports usually reflected the anti-Indian bias common at the time; both they and subsequent accounts often falsified the record or omitted parts of it in order to portray whites in a more favorable light. Information from Indians, which might have balanced the reporting, is nearly

nonexistent, and when available, is usually located in obscure scholarly journals. Often the received history that is most readily accessible is thus fraught with errors and misrepresentations, and the uncritical use of such information in ethnohistorical reports will thus perpetuate the inaccuracies. (See section *A Historical Circuit of the Bay, King Salmon area*, below, for a description of the destruction of the Wiyot village of Djorokegochkok that serves as an example of the difficulties in obtaining a full and truthful account of early Indian-white interactions.)

ETHNOGRAPHY

The study area lies within the traditional territory of the Wiki division of the Wiyot Indian tribe. This group occupied lands adjacent to Humboldt Bay (Nomland and Kroeber 1936:42; Curtis 1970:226; Merriam 1998:reel 32), while other divisions of the tribe inhabited areas to the north and south. The Wiyot language has been categorized as Algonquian-based. In it, the Wiyots called themselves the Soo-lah-te-luk (Merriam 1998:reel 32). The name “Wiyot” itself is derived from the Yurok term “weyet or “weyot” (Loud 1918:297). The Yuroks, who lived to the north, also spoke a language classified as Algonkian (Teeter 1964:1). Although the Wiyot and Yurok languages are distinctly different, linguists have linked the two in “a provisional group called Ritwan” that is alternatively classified as Algic (Elsasser 1978:155). Linguistic research implies that the two groups are distantly related, and this “unlikely Yurok-Wiyot proximity” has been hypothetically explained (with daunting syntax) as “parallel migrational responses by two similar but separate groups at different times to similar geographic and ecological pressures and/or opportunities” (Moratto 1984:483, 564-564).

According to Humboldt State University linguist Victor Golla, the Wiyots arrived in the Humboldt Bay area approximately 2,000 years ago, inhabiting a lagoon environment that afforded the use of coastal resources. The Yuroks then came “at a much later date,” sometime subsequent to the arrival of the first Athabascan speakers, who appeared after 600 CE (Common Era) (Golla 2003). The earliest carbon-14 date in the Wiyot’s region is approximately 900 CE (Elsasser 1978:155).

The living habits of the Wiyots have been summarized most notably by Curtis (1970:67-87, 225-228), Loud (1918:231-242), Nomland and Kroeber (1936:39-48), and Elsasser (1978:155-163). Interviews with Wiyots born near the time of white arrival have provided at least a partial picture of what traditional tribal life was like. The photographer and ethnographer Edward S. Curtis relates that “Wiyot houses were like those of the Klamath river tribes, with plank walls and gabled roof, and a deep excavation occupying the greater part of the enclosed square” (Curtis 1970:71). Archaeologist L. L. Loud describes a slightly different structure with a shallow pit in the center, and also tells of sweat houses that were half subterranean and “at least sixteen feet square” (Loud 1918:267). Wiyot redwood canoes were similar to those of the Yuroks and were used primarily on the bay and rivers, although “in calm weather

[the Wiyots] sometimes fished outside the heads” (Curtis 1970:72-76). They hunted two marine mammals from canoes:

A seal sleeping on the water was warily approached by two men in a canoe, who remained quiet while the animal’s nose was above water and paddled when it was submerged. When the canoe was a few yards distant, the man in the bow launched the harpoon (Curtis 1970:73).

Sea lions, on the other hand,

...were harpooned as they lay on the rocks. The victim plunged into the water, carrying the harpoon along, and the hunter then rejoined his men in the canoe and gave chase. Other small harpoons were planted in the animal as opportunity was offered, and at last when it was somewhat exhausted the line was drawn in while one of the men stood ready with a heavy club and another with an additional harpoon. The largest sea-lions were dangerous, and would attempt to seize the canoe in their teeth (Curtis 1970:73).

Other animals were hunted or caught in various ways. Elk were pursued by a hunter and his dogs in a running chase that could last as much as two days. Deer and sometimes elk were caught in rope snares. Bears were trapped in deadfalls, or, if hibernating in a hollow log, suffocated by smoke after the openings had been partially blocked. Waterfowl were hunted from blinds; the expenditure of “thirty to forty wooden-pointed arrows would succeed in killing perhaps six or eight waterfowl out of a flock” (Curtis 1970:73). Salmon might be taken in gill nets or in either of two types of fish weirs. Smelt were caught in surf nets and other fish by other means. Curtis concludes that,

Fish, shell-fish, marine mammals, including an occasional stranded whale, waterfowl, deer, elk, and small land animals such as rabbits, gophers, and skunks, yielded a bountiful *supply* of food, and somewhat compensated for the difficulty of securing adequate quantities of acorns and grass seeds, which were mostly to be found in or dangerously near Athapascan territory....Even so, acorn mush was regularly used, and its comparative scarcity was supplemented by seaweed, various bulbs, berries, and green shoots (Curtis 1970:76).

Clothing was mostly made from deer skins. Women and girls wore basketry caps. Basket-making materials included spruce and willow roots, bear grass, maidenhair and Woodwardia ferns, and a dye made from alder bark juice (Curtis 1970:71-72). The women wove twine baskets for carrying and cooking foods (Curtis 1970:76-77).

Curtis claims that “the Wiyot did not perform the Deerskin dance,” however, Wiyot informant Jerry James recounted the tradition that this ceremony had originally been performed at the mouth of Eel River, but had been lost in gambling to a young man from the mouth of Mad River, who gave the dance away to the Yurok (Nomland and Kroeber 1936:40). Curtis reports that “the Jumping dance was performed only by the

Mad River division, and was an occasion for wishing for good luck” (Curtis 1970:86). He also indicated that,

There seems to have been but one public ceremony common to all the Wiyot. This was Wishiyuluwui, a dance held for the purpose of insuring good luck, so that the shell money, hides, rope, and other articles of value in the possession of neighboring tribes would come to the Wiyot; that the people might have good fortune in hunting; or that the pestilence which some man believed imminent might be averted (Curtis 1970:86).

The Wiyots lived in villages that were uniformly close to water, for they were people of the wetlands, where their sustenance often came from bay or river, and where their way could often most easily be made by canoe rather than on foot. Although the Wiyots were “as ‘coastal’ in residence as a people could be...they used the ocean very little for either subsistence or travel” (Nomland and Kroeber 1936:45). On the other hand, “[e]very bay settlement was on tidewater” (Nomland and Kroeber 1936:45). Their main line of travel and communication linked the three geographical divisions of the Wiyots:

1. The Batawat (Patawat) or northern geographical division of Wiyots, which inhabited the Mad River from its mouth Blue Lake, the coast from Mad River to Little River, and the inland areas of McKinleyville and Fieldbrook (Curtis 1970:226; Nomland and Kroeber 1936:44; Merriam 1976:62; Loud 1918:234, Plate 1);
2. The Wiki or central division, which occupied the Humboldt Bay shoreline, islands and environs (Curtis 1970:226-227; Nomland and Kroeber 1936:42-43; Merriam 1976:62; Loud 1918:Plate 1);
3. The southerly Wiyot or Wiyat division of the lower Eel River (Curtis 1970:227; Nomland and Kroeber 1936:41-42; Merriam 1976:62; Loud 1918:Plate 1).

The main Wiyot travel route extended from the mouth of the Mad River to the mouth of the Eel, running down Mad River Slough and part of the Samoa peninsula before crossing the bay to Indian Island (travelers on the peninsula would shout or build a fire to attract a boatman from the island) (Loud 1918:231), continuing across to Eureka, arcing down and around the bay to near the end of Table Bluff, and then down McNulty Slough to the Eel. Two side trails, one from White’s Slough and one from Hookton Slough, forked southeast to connect with the area near Fernbridge (Nomland and Kroeber 1936:43, 47). So it was that the Wiyot, “though they rarely slept beyond the smell of salt water, managed their lives so as to avoid more than an occasional putting to sea” (Nomland and Kroeber 1936:45-47).

HISTORY

Essential Sources

A well-researched historical report on sites in the vicinity of Humboldt Bay must rely on a variety of carefully reviewed materials. Even the so-called standard sources are often compromised by inaccuracies or omissions that may render them useless or even pernicious. Whenever possible, multiple accounts should be consulted and compared in order to construct the most comprehensive and truthful report. The following evaluation of sources is based on the report author's 18-year exposure to the materials.

1. Coy, Owen C.: *The Humboldt Bay Region 1850 – 1875*. Coy was a one-time history teacher at Eureka High School, professor of history at the University of Southern California, and president of the California State Historical Association. His work is comprehensive, thoroughly documented with extremely helpful reference citations, and clearly written. It also fails to fully disclose the darker side of the area's history, as shown by Coy's suppression of the La Motte account of the first murder of Indians on Humboldt Bay, referred to in *A Historical Circuit of the Bay, King Salmon*, below.
2. Raphael, Ray, and Freeman House: *Two Peoples, Once Place*. A revisionist history of Humboldt County up to the early 1880s, it documents many of the county's unsavory events, including Indian massacres. There are extensive sections on the development of the Humboldt Bay area by whites, including shipbuilding, farming, and logging.
3. Elliott, Wallace W.: *History of Humboldt County, California*. Published in 1881, Elliott's somewhat promotional history features biographical sketches, numerous illustrations, and substantive accounts of various aspects of the county's development.
4. Irvine, Leigh H. *History of Humboldt County, California*. Primarily a collection of laudatory biographies, this 1915 publication also has several general sections on the county's history. Hundreds of individuals are covered in the biography section, and the careful reader can glean essential facts from among the chaff of commissioned fulsomeness.
5. Fountain, Susie Baker. Papers, 128 volumes. Available on microfilm, this staggering collection of news clips, property records, maps, and miscellany runs to about 50,000 pages, all searchable thanks to a personal name index. The papers are an invaluable resource for tracing individuals and through them, the larger context of relevant land ownership, business activities, and other events. One caveat: much of the material consists of handwritten copies of original documents; Fountain sometimes abbreviates or eliminates words and

sometimes makes outright errors in her transcriptions, so if the source of her information is given in enough detail, it should be located and used instead of Fountain's rendering.

6. Belcher Abstract & Title Co.: *Atlas of Humboldt County, California*. Sheets six and seven of this monumental atlas cover the Humboldt Bay area as it was in the early 1920s, providing property boundaries and ownership, sites of schools, transportation routes, and other essential information in great detail.
7. *The Humboldt Historian*. The journal of the Humboldt County Historical Society has been published for over 40 years, providing numerous well-researched articles on Humboldt Bay and its environs. Unfortunately, the *Historian* is only partially indexed, so its use as a research tool can require extensive time to examine individual issues for relevant content.
8. File material at the Humboldt County Historical Society and the Humboldt State University Library. Both facilities have extensive files on a variety of topics related to Humboldt Bay. The information includes newspaper and magazine articles, notes, and reports.
9. Clippings binders at the Humboldt County Historical Society. More than a score of large binders contain thousands of newspaper clippings about individuals and events, all alphabetically arranged for easy access. The photocopied clippings are from Eureka's two main newspapers, the *Times* and the *Standard*, and run from the 1850s to 1940s. An invaluable resource for locating information about local people, from veritable princes to actual paupers.
10. Microfilm copies of various local papers. The collections at the Humboldt State University Library and the Eureka Humboldt County Library cover Humboldt Bay area papers back to the mid-1850s. The most extensive runs are for the *Humboldt Times* and the *Humboldt Standard*. If a researcher can obtain a date for a crucial bay-area event, it is likely that one or more accounts can then be found in these papers.
11. Photo collections. The Humboldt County Historical Society has more than 90,000 photographs pertaining to the county's history. The Humboldt State University Library has a smaller, but nonetheless important collection. The library also features several specific collections that are available online. Most useful is the Shuster Collection, which contains over 2,300 oblique aerial photographs, mostly of the Humboldt Bay area, that were shot during the 1940s, 1950s, and 1960s.
12. The *Historical Atlas of Humboldt Bay and Eel River Delta* (Laird, et al 2007). This DVD, prepared in part by the Humboldt Bay Harbor District, contains numerous sets of maps and aerial photographs, dating from the 1850s to near the present. Images from different sets can be overlaid and compared in detail. Several of the sets are not readily available elsewhere.

Other, more specialized sources may prove essential when covering specific topics or geographical areas. Polk's business directories give the names and locations of county businesses on a yearly basis. Master's theses and class papers on a variety of relevant topics are contained in the Humboldt County Collection at the Humboldt State University Library. The Humboldt County Historical Society holds copies of dozens of family histories. At a minimum, the "methods" section of any comprehensive report should indicate that searches for these types of information have been conducted at the Humboldt County Historical Society, the Humboldt State University Library, and the Eureka Humboldt County Library.

Traditional histories of an area frequently focus on the so-called "development" of a primitive wilderness by resourceful and persevering whites, who create transportation systems, buildings, government, industry, agriculture, and all the other trappings of "civilization." Such accounts often ignore or minimize the effects on the preexisting ecosystem, including earlier inhabitants. Charles C. Mann's recent *1491* is a stimulating example of writing "beyond the verge of history" to describe human and natural environments that predate the arrival of whites. Mann writes that before 1492 the Western Hemisphere was,

...a thriving, stunningly diverse place, a tumult of languages, trade, and culture, a region where tens of millions of people loved and hated and worshipped as people do everywhere. Much of this world vanished after Columbus, swept away by disease and subjugation. So thorough was the erasure that within a few generations neither conqueror nor conquered knew that this world had existed. Now, though, it is returning to view. It is incumbent on us to take a look (Mann 2006:29-30).

Those of us who are involved in ecosystem-based management will concur with Mann's concerns, since the ecosystem we are considering extends not only through space but through time, and it is through this latter dimension that we can observe and understand not only what now is but what once *was*, which allows us to comprehend the ecosystem in a fullness not otherwise obtainable.

Summary of the History of Humboldt Bay

Whites began to have a substantial impact on the bay in the spring of 1850, when numerous fortune-seekers arrived there and promptly established four bayside communities: Humboldt City (on the site of today's King Salmon), Bucksport (in the area south of today's Bayshore Mall), Eureka, and Union (later called Arcata). The sequence of landings and the manner in which land was taken up is a complex and confusing story; Coy systematically chronicles early developments (Coy 1982:52ff), while Raphael and House provide interesting particulars (Raphael and House 2007:73ff). The latter work also offers some details about the dispossession of the land by whites from the Wiyot Indians (Raphael and House 2007:109ff).

The impact of the newcomers on not just the earlier inhabitants but on their habitat was immediate and substantial. Small Indian villages of plank houses were replaced by dwellings and commercial buildings that were usually constructed of lumber and arranged on a grid of hastily built streets. Axmen cut the forest back from the bay, creating at one stroke both building material and open spaces to put the buildings upon. The irregularities of nature were corrected, so that watery gulches and wetlands were gradually filled and leveled, and shorelines rendered hospitable to shipping by the construction of wharves. Oceangoing ships, boats, lighters, and ferries plied the waters that had once floated only canoes. Pathways that had earlier felt the imprint of only Indian feet were now trampled by horses, cattle, and mules, while some routes were widened to accommodate wheeled vehicles. A stable indigenous population, long used to living in balance with its surroundings, was supplanted by an ever-growing, ever-demanding aggregation of recent arrivals, which often used the land and what was on it with little regard for their impact. The changes they created in Humboldt Bay between 1850 and 1860 represented not that of a decade but of a millennium.

In the latter year there occurred a series of events that embodied the transition from the earlier Indian culture to that of the newcomers: in late February 1860, whites attacked several Indian villages on Humboldt Bay and the lower Eel River, massacring the inhabitants and destroying the dwellings (Coy 1982:157-158; Humboldt Times 1860:2; Northern Californian 1860:2). These were not the first such atrocities committed in the county, nor were they the last, but they were the most public and most publicized, and the local response to them indicated the attitude of the white community. While there were many letters condemning the acts, the county grand jury failed to charge anyone with the crimes (Coy 1982:158). Many of the surviving Wiyot Indians were collected by the military and eventually sent to the Klamath Reservation, many miles to the north (Coy 1982:159). A decade of murder and intimidation had caused the death or removal of most of the Indians who had once inhabited the area around Humboldt Bay.

The destruction and dislocation of the indigenous inhabitants was accompanied by similar visitations upon the natural environment. By 1854 there were nine sawmills on Humboldt Bay, capable of rendering the surrounding forest into an aggregate 220,000 board feet of lumber and “framing stuff” per day (Raphael and House 2007:146). While the bay did not see the extensive salmon harvesting that occurred on the lower Eel, this was due more to lack of opportunity than to the impulse; sharks were the readily available cash fish crop on the bay, and they were caught, and their livers removed for oil, with such rapacity that the “shark boom...lasted but half-a decade” (Raphael and House 2007:149-151).

It took but a few years for the four competing bayside communities to reduce their number to two and a half. The southernmost of the quartet, Humboldt City, in a phrase of the time, “lasted quick.” It succumbed due to various causes not fully

explained, although the most decisive was no doubt the failure of its sponsor, the Laura Virginia Company, to secure promised funding from San Francisco financiers. A quickly established community of a dozen houses was, by September 1851 “nearly deserted” (Hoopes 1971:45). Next to the north, Bucksport did succeed in becoming a port, and, as such, the main supply point for Fort Humboldt, which was established on the bluff above the town in 1853 (Coy 1982:142; Elliott 1881:163). The fort, however, was of short duration, being fully abandoned in 1870 (Coy 1982:196). In addition, Bucksport had managed to develop only a single mill, while Eureka could claim several (Raphael and House 2007:146). An opportunity for expansion was lost when Bucksport finished third, behind Union and Eureka, in the 1854 election for the Humboldt County seat (Rohde 2006:10). From then on, Bucksport played third fiddle to its two rival bayside towns that lay to the north, eventually fading into obscurity as its remnants became a southern section of Eureka. A study of the community does, however, offer an object lesson in understanding the history of landscape change in a setting where most of the changes have themselves become obscured. (Section A *Historic Circuit of the Bay, Bucksport*, below, provides an especially detailed account of the development and deterioration of this once-prominent community on the bay, and as such, serves as an example of an in-depth review of a specific cultural feature.)

After a prolonged battle for the county seat, Eureka wrested the prize from Union (Arcata) in 1856. All the perquisites of political power then flowed south along the bay, giving Eureka an ascendancy that she never relinquished. Eureka claimed eight mills at the time, seven for sawtimber and one for flour, along with the requisite “hotels, saloons, retail stores, etc.” Union, always the leading bayside supplier to the inland mines, continued in that role, but as mining diminished, so did Union’s commerce. By 1880 Eureka was by far the largest community in Humboldt County, with a population of 2,639. Arcata (erstwhile Union) was a distant second at 702. (Rohde 2006:10-13).

By 1865 a road ran back of the east side of the bay, connecting Arcata with Eureka and continuing south to cross Table Bluff and reach the Eel River valley (Doolittle 1865). A decade earlier came the bay’s first “railroad,” which ran out into the bay on top of the Arcata wharf, its locomotion provided by an elderly white horse called “Spanking Fury” (Coy 1982:287).

It was a portent of things to come, but they came slowly. In 1885 the Eel River and Eureka Railroad (ER&ERR) had, three years after its inception, pushed its way north from Field’s Landing to Eureka. In so doing, its railroad grade was built through marshlands, the embankment effectively serving as a dike that separated most of the wetland areas from the bay. (The details of the railroad’s effect on one of the bay’s watersheds and adjacent areas are contained in section A *Historical circuit of the Bay, Eureka* below)

With the completion of the Northwestern Pacific Railroad in 1914, Humboldt Bay was at last linked to the other great northern California bay, San Francisco (Genzoli 1953). Until then, the main means of transport in and out of Humboldt County had been by sea, with Humboldt Bay providing the major ports. Chief among these was Eureka, the early shipping history of which is admirably chronicled in Wallace E. Martin's *Sail & Steam*. An exhaustive series of chronologically arranged newspaper clippings provide the stories of the various ships that docked in Eureka. Arrivals, wrecks, and launchings are all reported by the local papers, as are such oddities as the following from the August 19, 1886 *Weekly Humboldt Times*:

A layer of ballast from the barkentine *Monitor* was spread over F street, at the corner of Fourth yesterday. It is Telegraph Hill formation, a large amount of which has been utilized on the streets of our town in days past....It is well known that by means of ballast a considerable area of the city front has been reclaimed from the bay, and the process of filling streets about the waterfront still goes on. Just as in New Orleans many streets are paved with New England cobblestones, so those of our little city have been graded by contributions from Telegraph Hill, San Diego, Japan, Australia and the Sandwich Islands (Martin 1983:160).

Those who think of the Humboldt Bay shoreline in terms of gradual erosion should consider the above report, which indicates not only site-specific accretion, but with materials from a variety of locations. What, we might ask, have been the effects of importing material from exotic locations, some even tropical, which might contain plant material capable of regenerating in the bay's environment? A search of early day shipping records might reveal the origins of various non-native vegetation species that now inhabit the local environment.

Although Humboldt County was a remote and rural part of the state, by 1900 Eureka had become one of California's larger population centers. Of the 116 incorporated towns and cities, Eureka, with a population of 7,327, ranked a remarkable fourteenth—larger than Santa Rosa, Santa Barbara, San Bernardino, Santa Cruz, and Pomona (Encyclopedia Britannica 1910:(5)15). A 1902 oblique aerial map of the city shows a bustling, industrialized community, with two rail lines, a series of wharves on the north side of town running along almost the entire waterfront, a score of ships and boats in motion or at anchorage, a half-dozen lumber mills, and a business district dotted with many substantial buildings (Noe and Georgeson 1902). A little more than a half century after the arrival of whites, their imprint, as shown by this emblematic map of Eureka's progress, had rendered the location into a landscape that would have been unrecognizable to the Wiyots of 1849. Only two places might have seemed familiar: the dark forest that receded to the southwest, with a few as-yet-unharvested trees stippling the rough terrain between today's Eureka High School and Cutten, and the flat green expanse of the Clark's Slough wetlands to the northwest, where only the railroad grade and a few isolated roads cut across the always damp earth, portents of the obliterating effects of subsequent development.

The population's pursuit of economic advancement continued to disrupt the natural economy of the bay. By 1921, two decades of further change saw a shoreline substantially altered by development. From the tip of the Samoa Peninsula to the sloughs south of Field's Landing, the iron bands of two railroads ran close to the water, like a bracelet ready to close around an aqueous wrist; only the South Spit and the southern edge of the bay were trackless, and those stretches remained so only because there was no profit in their being otherwise. Six communities touched the bay: Rolph (Fairhaven), Samoa, Field's Landing, and the remnant of Bucksport were all small; Eureka, largest by far, pushed its grid of streets out from the bay to the obstructing sloughs to the south and east; midsized Arcata, set back from the bay on higher ground, extended a railroad-bearing tentacle more than a mile out into the water, a lifeline of steel and wood that connected the community with the world's commerce. Another wharf, nearly as long, carried the logging railroad from nearby Bayside out beyond the bay's side and into the bay itself. The eastern edge of the bay was marked by the broad line of the state highway, which now supplemented the rail lines as a carrier of goods and people, and which brought forth a new species of traveler, the auto tourist, whose impact was just beginning to be felt (Belcher 1921-1922:6, 7).

The story of the development of Murray Field, starting in the 1920s, illustrates the step-by-step conversion of the wetlands east of Eureka. It also includes a brief history of the logging railroad whose right-of-way came to form part of Murray Field's boundary. (See section *A Historical Circuit of the Bay, Murray Field* area below for the detailed account.)

The late 1940s saw a post-World-War-II housing boom that created a great demand for local lumber. Mills proliferated throughout Humboldt County, many of them cutting Douglas-fir, which was finally recognized as a valuable construction material. By the early 1950s the expansion of milling activity found dozens of mills ringing Humboldt Bay. A snapshot for the year 1952 has been created using maps and aerial photos to locate these mills. (See figures three and four)

Although most of the logs coming to the bay-area mills were brought from distant logging operations, one tract of virgin timber on the outskirts of Eureka was cut during the 1940s. Much of the wood went for shingles to help feed the post-World War II housing boom. (See section *A Historical Circuit of the Bay, Lower Elk River* area below for details.)

The peak of industrial activity in the Humboldt Bay area occurred in the 1950s and 1960s, when dozens of lumber mills of various sizes operated along the shore. Gradually, many of the smaller mills ceased operations; the larger mills sometimes consolidated, leaving Arcata Redwood, Sierra-Pacific, Simpson, and Louisiana-Pacific

as the major bay-area lumber processors in the 1980s. Of these, only Sierra-Pacific and a Simpson subsidiary remain active today.

As a result of closures and consolidation, many abandoned or converted mill sites line the bay. The concrete ruins of the Holmes-Eureka Lumber Company offer opportunities for graffiti artists just north of old Bucksport; the company's lumber yard is now the setting for the Bayshore Mall. Most of A. G. Hammond's large operation at Samoa has vanished, leaving the company's iconic cookhouse, a business block, and dozens of company houses as the most visible remnants. In Arcata, abandoned log ponds west and south of town now provide tree-shaded wetland habitat. At Fairhaven, a huge edifice that was once a pulp mill looms over its surroundings, startling tourists who see it from the foot of Del Norte Street across the bay.

A Historical Circuit of the Bay

The broad historical outline of Humboldt Bay provides a valuable, generalized perspective, but the key information required by land managers and the concerned public is usually highly site-specific. Historical reviews are almost always driven by project proposals, the boundaries of which are definite. A proper historical report will need to review the events that have occurred in the project's potential area of effect, noting the roads, buildings, and other cultural features that have been placed upon (and sometimes later removed from) the landscape and giving an evaluation of their significance.

A geographical/historical review is the appropriate method for such studies, since it defines its scope by an assessment of both spatial (geographical) and temporal (historical) factors. Time and place are inextricably linked, and nowhere is this more apparent than in ecosystem-based management, which in its very title acknowledges a systemic approach, with the comprehensive, holistic perspective this method supplies.

For the purposes of this report, the bay will be divided into 21 "activity clusters," each of which has generated enough historical information to assemble a brief narrative. A project report would likely anchor itself in a detailed study of one or more of these clusters, depending on its scope. The survey will start at the mouth of the bay and proceed clockwise, as if propelled by the Coriolis force.

The Jetties, the Lighthouse, the Lifesaving Station, the Blimp Base, etc.

The use of Humboldt Bay for shipping activity was contingent on the condition of the bar at the bay's entrance. In its original state, it was not conducive to regularized commerce:

The bay affords fine shelter for vessels from all winds, when once inside, but the breakers are heavy over the shifting sands of the bar even in moderate weather, and vessels have been known to wait for a month before they could get out. No one should attempt to enter without a pilot (Elliott 1881:17).

The solution to the problem was to arrest the wave action that formed and reformed the bar. Although Elliott indicated that “[i]t is highly improbable that either breakwater or jetties will be attempted” (Elliott 1881:17), the tide of commercial interest washed away objections, so that the Army Engineers began construction of a jetty on the south side of the bar in 1889; work on the north jetty started two years later. Over the years reconstruction and repair of the jetties occurred periodically; in 1972 the use of concrete dolosse (interlocking pieces of concrete each weighing a wave-defying 42 to 43 tons) finally stabilized the jetties as no other material had before (Humboldt Historian 1981:16).

Railroads were used for construction work on both jetties. For the South Jetty, cars were barged across the bay from Fields Landing. The rail line at the North Jetty ran north to Fairhaven, where it connected with the Hammond Lumber Company railroad. The tracks were torn up and the locomotives scrapped when the hauling of jetty material was taken over by trucks (Fountain 1967:(50)9).

As late as 1930 the bar, despite the best efforts of the jetties, was still capable of wreaking havoc on ships. In September of that year the steamer *Brooklyn* sunk at the mouth of the bay when trying to put to sea in rough weather. The captain and 17 men of his crew were lost (Humboldt Times 1930a:1). The only survivor was first officer Jorgen C. Greve, who clung to a bit of wreckage for more than two days before being rescued by a fishing boat (Humboldt Times 1930b:1).

In 1856 a lighthouse surmounted by a 21-foot-tall tower was built on the North Peninsula about one-quarter mile north of the north jetty. The light itself was 53 feet “above high water of spring tides” and was visible 14 miles out to sea (Elliott 1881:130). The lighthouse was the second built on the California coast. When J. Johnson, the first lighthouse keeper, died in 1859, his widow, Sarah, replaced him and served until 1862. The structure was repeatedly damaged by earthquakes and high water, and was replaced in 1892 by a new lighthouse at Table Bluff (McCormick 1989:10-11).

“Between 1850 and 1878, 23 large ships were wrecked on or near the old Humboldt Bay bar.” To deal with the problem, a “Lifeboat Station” (Times-Standard 2000) or “Life-Saving Station” was completed in 1878. The original “rude structure” was replaced in 1936 by the resplendent white and red building that has become a local landmark (Fountain 1967:(61) 436). It sits almost directly east of the erstwhile lighthouse. The first keeper of the original station, Captain Starr, was aided by six volunteer surfmen; their equipment included a surfboat, a life car, and a mortar to fire

lines to ships in distress. Until 1910 the surfmen had only rowboats; then they finally acquired a power boat to take to sea (McCormick 1989:13-17).

The southern end of the North Peninsula once served a different life-saving function. In 1862 hundreds of captured Indians had been kept, in deteriorating conditions, within a small stockade at Fort Humboldt. The Indians were removed to the end of peninsula and guarded by a small detachment of soldiers. The captives were subsequently sent to a reservation (Merriam 1999:reel 14). In September 1862 the editor of the *Humboldt Times* observed the Indians before they were removed from the peninsula:

To a person who has never seen a band of 700 or 800 wild Indians, of all ages, together, the sight is truly novel....A line of sentries stretches from the Bay to the beach, above the camp and above which no Indians are allowed to pass....They have built their huts in a hollow square, each family or tribe, living together or adjoining. In the centre of the square are the supplies, which are sent over every ten days, and are issued to heads of families, or tribes, by an Indian (Humboldt Times 1862:2).

The jetties managed to affect more than the sea. In 1917, when rock from the Trinidad quarry was hauled by rail line to fill sections of the jetty, five women were hired “to gather seed from the lupine around the [fog signal] station and plant it along the rail road track to Samoa, to keep the sand from shifting over the rails.” The original planting of yellow lupine seed, harvested from the Presidio in San Francisco, had originally been made in 1908 by George Cobb, captain of the Fog Signal Station (Arcata Union 1948). The seed gatherers did their work only too well; in recent years the invasive yellow bush lupine (*Lupinus arboreus*) has become plant enemy number one on the peninsula, the object of an annual “lupine bash” designed to eradicate it from the area.

In May 1943 the United States Navy established a blimp base on the peninsula about a mile north of the Coast Guard station. K-type blimps—250-feet long and carrying four 500-pound depth charges—used the facility, which later became the Eureka City Airport (Times-Standard 1992a). The airport was later converted into a bed and breakfast facility, catering to private plane pilots. In addition to the blimp base, the navy also built a station north of the one belonging to the Coast Guard and a sea-plane base, which is now the location of the Samoa Boat Basin. Government work crews paved the road from the bases that ran north along peninsula and which had previously been only gravel (Times-Standard 1992b).

The site of the sea-plane base was earlier known as Paysonville, after Captain A. H. Payson, who was involved in the construction of the Point St. George Lighthouse in Del Norte County. Granite from a quarry on Bella Vista Hill, south of McKinleyville, was shipped to Paysonville starting in 1884 (St. George Reef 2008); there under Payson’s supervision, the rock was prepared by Italian stonecutters and then sent by

ship to the lighthouse site. A plaque, appropriately attached to a piece of the granite, now stands in the Boat Basin parking lot to indicate the location of Paysonville (Humboldt Beacon 1995:A8).

Principal historical features of the area still present include the jetties; the 1936 Coast Guard station, a postcard pretty structure easily visible from across the bay; the modified structures and other features of the blimp base, including the circular paved pads where the great gasbags were tethered; the historical marker at Paysonville; a scattering of lighthouse bricks upon the sand; and the pale but pestilential blossoms of yellow lupine.

Fairhaven (Rolph)

The area just east of the blimp base, on the edge of the bay, was due west of the early day town of Bucksport. As “West Humboldt,” the location saw commercial activity as early as September 1854, when A. G. Hammon, R. Marvel & Co. announced,

... their intention to apply to the Court of Humboldt County for a License to keep a FERRY between Bucksport and West Humboldt, between the points at which they are now running their Ferry boat. (Humboldt Times 1854a:3)

George M. Fay of Bucksport announced in November 1857 that,

The subscriber has established a ferry from Bucksport to the Peninsula and is always in readiness to cross passengers and animals without delay, in good commodious boats. Terms of Ferriage: passengers 50¢ animals \$1 (Fountain 1967:(24)254).

It is unknown exactly where the ferry landed on the peninsula, but in 1865 George Fay acquired 5.48 acres in the SE ¼ of Section 29, Township 5 North, Range 1 West, Humboldt Meridian (Fountain 1967:(128): 222), an area in the southeastern part of what later became Fairhaven, and which may have included the ferry landing. Two years later, “George M. Fay & Bro.” built “what was probably the first shingle-sawing plant in the County” (Fountain 1967:(96)156) at the place they had named for Fairhaven, Connecticut, “which is situated in relation to New Haven, as our neighbor is to Eureka” (Weekly Humboldt Times 1887:3). The plant was enlarged, and until “about 1875...produced practically all the sawe [sic] shingles manufactured in Humboldt, and had a virtual monopoly of the coast market, which at that time meant San Francisco only” (Fountain 1967:(96)156). In 1882 the mill’s workers, who were white, went out on strike. They were replaced by Chinese. George Speed, who later became an Industrial Workers of the World (IWW) leader, “rallied his fellow strikers and marched on the mill. They removed the Chinese workers and placed them on the next boat leaving the county. When Speed’s employer, George Fay, asked Speed by what authority he acted, Speed replied, ‘By the force of public sentiment, which is higher than any written law’” (Cornford 1987:58-59).

A visit to the Fay brothers' operation in 1887 found them manufacturing "plain and fancy shingles, shakes, and material for orange boxes." The "settlement" of Fairhaven at that time included "residences for fifteen or twenty families...[and] a school house" (Weekly Humboldt Times 1887:3).

George Fay had long labored to develop Fairhaven. To that end, in 1873 he offered Eureka shipbuilder Hans Ditlev Bendixsen shoreline frontage free of charge. Not surprisingly, Bendixsen accepted and had soon moved his company across the bay (Humboldt Standard 1950). "The operation spread over 14 acres covered by shops, sawmills, slips, timber yard, along with cottages and gardens for 150 workers. Many more workers rowed to work each day across the bay" (Times-Standard 1975:5). Bendixsen's shipbuilding business grew to become "one of the most important yards on the Pacific Coast" (Fountain 1967:(104)319). In 1901 he retired and sold his interest "to a stock company headed by J. C. Bull of Arcata, builder of the jetties." After several changes of ownership, the business was purchased in 1917 by San Francisco's mayor, James Rolph Jr. (Humboldt Standard 1917). This gave the mayor the opportunity to endow erstwhile Fairhaven with a name more to his liking, namely, Rolph. Despite the demand for vessels during the latter part of World War I, Rolph's shipyard failed to do its part. "Only five ships were built at Rolph and three of them were thrown back on Rolph because of delays. The French government cancelled a contract for five vessels which were no longer needed after the Armistice was signed" (Humboldt Times 1941a). In 1924 the company launched the *James Rolph III*, whose keel had been laid in 1919 but whose timbers "had been thoroughly seasoned" since then. She was proclaimed "the largest wooden steam schooner ever built on this coast," and was reckoned to "probably...be the last wood ocean carrier to be built on Humboldt bay" (Humboldt Standard 1924). The *James Rolph III* was towed to San Francisco but never had its engines installed (Humboldt Standard 1945) and so failed to sail the seas. The Rolph name proved temporarily transitory when the town named for "Sunny Jim" reverted to being Fairhaven. Rolph managed to keep his name in the headlines, however, becoming governor of California after his stint as San Francisco's mayor. And, in a way not originally anticipated, one of the Rolph ships gained its own bit of fame. The first ship launched by Rolph's company, the *Conqueror*, later played a starring role in the movie *Tug Boat Annie* (Times-Standard 1968).

In 1925 the Little River Redwood Company purchased the Rolph shipyard. To stabilize the sand that drifted onto the property from the ocean beach, the company "planted 10,000 seedlings of redwood, eucalyptus, cypress and spruce, besides sowing many sacks of Jamaica beach grass and rye grass on the sand dunes." Shortly thereafter, Little River Redwood brought suit against rancher Tom Murr, who owned a small dairy about five miles to the north. Among Murr's herd were 13 cows that had been raised on the Nickerson Ranch, which adjoined Fairhaven on the south. Apparently the baker's dozen of cows "followed their instinct, when turned out to graze, invariably roam[ing] down to their old home and brows[ing] in that neighborhood and their

browsing, it is alleged, is done on the tender seedlings now about six inches above ground and on the grass sown by plaintiff” (Humboldt Standard 1925). It is not known if the cattle were convicted.

The alleged bovine assault on Fairhaven was followed by a destructive fire. In August 1929, the New Era Pavilion, centerpiece of what was called the “one time entertainment Mecca of the county,” burned to the ground (Humboldt Standard 1929).

Over the years, other, less dramatic, changes had occurred in Fairhaven. The Fay family, having given 14 acres to Bendixsen, sold their remaining part of the town, some 400 acres, to Theodore and Isaac Minor in 1903 (Blue Lake Advocate 1903a). Four years later, the Minors sold 90 of these acres to a realty syndicate that planned to develop a new town site (Blue Lake Advocate 1907).

Fairhaven saw other activities as the century proceeded. Gillette Marine Ways, Inc. was used for servicing fishing boats from the mid-1940s into at least the 1970s (Times-Standard 1972:9). In 1960, the U. S. Plywood Corporation’s Fairhaven plant underwent a \$700,000 modernization (Fountain 1967:(70)282). In 1967 Simpson Timber Company acquired the plant, and in 1981 it finished upgrading it (Carranco 1982:162). The plant eventually closed, and in recent years it was partially dismantled, leaving a hulking, half-destroyed structure that conjures up images of World War II bombing targets.

Today, the remnants of such operations are scattered about the northern end of town, while a few blocks of houses cluster near the former Fairhaven School, which is now the firehouse. To the north, a block of aging buildings next to the bay marks “Finntown,” the community’s ethnic suburb (Times-Standard 1972:9). All are reminders that the fairest days of Fairhaven have long passed.

Quarantine Station

Between Fairhaven and Samoa was once the Humboldt Bay Quarantine Station, where,

...sailing vessels and tramp steamers were brought to anchorage by the bar tug.

They flew the yellow quarantine flag until cleared by the public health doctor. For many years the late Dr. Charles C. Falk, Sr. served in this capacity.

Many times, Dr. Falk ordered lighted sulphur [sic] pots lowered into the ship’s holds, the hatches battened down and the vessel smoked out for 24 hours. Often, when the sulphur pots were removed, dozens of rats and rat-like rodents, some as big as cats, would be found dead in the hold. The writer [Wallace E. Martin] has seen them hoisted out of the holds in pails and dumped into the bay (Humboldt Historian 1973:5).

And thus another type of fill entered the waters of Humboldt.

Samoa

The town of West Humboldt, on the west side of the bay, was laid out in 1850. The following year, the up and coming metropolis “contained one house” (Hoopes 1971:50). It had reached its peak and was heard no more of. Ten years later, brothers Thomas and David Worth established themselves in the area, thereby starting “Worthville” (Blue Lake Advocate 1899:1), which had a population of at least two. It apparently was worth the Worths’ while to establish a sort of bayside resort; their “Worthville House” was advertised as offering “accommodations, good hunting, good food, good horses at \$5 per week” (Fountain 1967:(96)125).

The property went up for sale in October 1872; it included a new house, about 146 acres of land, and “expensive picnic grounds and commodious wharf.” Also available were such accessories as “furniture, farming implements, dairy fixtures, harnesses, saddles, boats, large and small fish nets, a quantity of salmon barrels, 30 head of cattle, 4 horses, pigs [quantity not stated], chickens [ditto], etc.” (West Coast Signal 1872). Even with these manifold inducements the property took some time to sell. It was early 1875 before Worthville’s 101.2 acres in Section 16, T5N, R1W, Humboldt Meridian sold to James Brown, and by then Thomas Worth, who had been the owner, was dead (Fountain 1967:(96)139, (100)348). Worthville now became Brownsville (Blue Lake Advocate 1899:1), population unknown. For years, Brownsville consisted solely of the Brown Ranch (Fountain 1967:(1)272).

Brownsville lasted longer than Worthville. Only in the early 1890s did Brown sell his namesake town. A group of Eureka businessmen, headed by Dave Cutten, purchased Brownsville and some of the adjacent sand dunes. Their operation was called the Samoa Land and Improvement Company, deriving its name from the south sea island that was then in the news—in 1889 Samoa had come under the joint supervision of Britain, Germany, and the United States (Humboldt Historian 1969:1; Fountain 1967:(96)165); Stearns 2001:577). At first, the company’s development was called West Eureka. Streets and alleys were mapped and two houses were built; nearby, an enterprising hotel owner constructed a swimming tank that was located next to the bay.

And that was about it for West Eureka. Despite the claims of its stirring advertisements—“PERMANENT PROGRESSIVE PROSPEROUS” (Nerve 1893:11)—the proposed town was anything but. The two houses, which represented the furthest extent of West Eureka’s development, were abandoned and eventually erased by the elements (Fountain 1967:(96)164). The Consumer’s Mill, located nearby, soon closed, having never succeeded in providing residents for the town.

Yet a germ of West Eureka remained. The Vance timber interests became interested in the west side of the bay after their Eureka mill burned in 1892. The company relocated across the bay the following year, next to West Eureka. Unfortunately, its

“workers were not greatly impressed with the town” (Humboldt Historian 1969:1) and they, too, failed to become residents. In 1900, A. B. Hammond purchased the John Vance Mill and Lumber Company for a million dollars (McKinney 1984:199). According to one account, the purchase included the property that had recently been West Eureka. The name of the development company was about all that was saved in the process, as West Eureka became Samoa. A few houses had been built by Vance, and Hammond proceeded to add more, along with a business block and the now-iconic cookhouse (Times-Standard 1990). Included in the Hammond purchase was Vance’s Eureka and Klamath River Railroad (E&KRRR), lumber schooners, and timberlands. The redwood mill was, at the time, “the largest operation of its kind” (Redwood Log 1950:2). In 1903, improvements were underway to increase the mill’s cutting capacity from 250,000 to 400,000 board feet per day. Hammond had a dockage capacity of eight vessels, with “more wharfage...being constantly built” (Humboldt Times 1903:2).

As Samoa, the community on the west side of the bay came to life. A ferry ran from Eureka to the dock at Samoa, whence travelers could take the train up the peninsula to Arcata, Essex, and Little River on the E&KRRR (Fountain 1967:(50):95). Hammond improved the town’s facilities, building “a gymnasium, tennis courts, swings and a trapeze[!]” and later a women’s clubhouse (Times-Standard 1986). In 1917 the company built a four-way shipyard, taking “several contracts from the Federal Shipping Board” (Humboldt Times 1917). The company’s war effort took a more personal turn in May 1918, when Hammond workers attacked one of their own, Austrian John Serlmaz, who had refused to donate to the Red Cross fund:

After stripping him to the waist, they applied a generous coat of tar to his body, rolled him in the planer dust, soused him bodily into a butt of stagnant water, then turning the pan of tar upside down on his head, drove him from the premises with a stream of water from the fire hose. When last seen by employees of the mill, Serlmaz was seated on one of the sand hills back of the plant trying to rid himself of the tar by rubbing it off with sand (Humboldt Standard 1918).

The Hammond lads may have had their patriotic fun during World War I, but during World War II it was the women who made headlines—50 of them were at work at the mill by October 1942, filling such jobs as electric monorail car operator, double trim saw feeder and off-bearer, and other positions of less arcane description. Mrs. Alfred Maderas was a trim saw operator whose foreman claimed that she had learned the job “more quickly” than any of her 15 male predecessors (Humboldt Standard 1942).

After the war Samoa was still busy. In 1948 the mill had 550 employees, with about 600 workers and their families residing in 130 company-owned homes and another 100 single men living in the company’s lodge. Other workers commuted from Eureka, using the ferry service that made 14 daily round trips. The mill’s machinery was juiced by the company’s own power plant, which ran on “hog fuel”—log waste that had been

pulverized for better burning. Operating on one shift only, the mill was back to the 1903 output of 250,000 board feet per day (Humboldt Times 1948).

Hammond sold its operations to the Georgia-Pacific Corporation in 1956 (Humboldt County Historical Society Newsletter 1964a:15). Eight years later the original mill, built in 1893 and remodeled in 1924, was replaced by a new facility, Samoa No. 1. The new mill was located “just north of the G-P plywood plant and just south of the Samoa ferry slip.” It was expected to cost “somewhere around \$3,000,000,” but for some unexplained reason would cut only 80,000 board feet per day on two daily shifts (Arcata Union 1963), or less than one-third of the output the old mill generated on a single shift. In 1959 G-P opened a plywood mill at Samoa, which allowed the company to use its Douglas-fir timber. It also started a stud mill that used plywood cores. G-P next added a bleached kraft pulp mill and a “new automated redwood lumber mill.” The latter began production in August 1965; the original Vance mill, which had twice been remodeled, had closed in December 1964. The new mill “required approximately 100 truckloads of logs daily” to produce 400,000 board feet of lumber. The last old-growth redwood logs were lumberized by the mill in February 1980. Within a few days a “small-log mill” began operation. Meanwhile, following a complaint from the Federal Trade Commission, G-P split off its Samoa and Ukiah operations into the newly formed Louisiana-Pacific Corporation (L-P) (Carranco 1982:164-166).

Later years saw the closing and dismantling of the mill and most of its supporting structures. Today, only the school, post office, and cookhouse continue to operate in Samoa. Families still occupy the tract of company housing, but they will never again awake to the mill whistle’s call.

Carson’s; Cole’s Landing

By 1859 Elias Hathaway had acquired a lot in Section 10, T5N, R1W, Humboldt Meridian (Fountain 1967:(96)125). “E. Hathaway” is shown as occupying land in sections 9 and 10, T5N R1W (Doolittle 1865). Hathaway is apparently the “Hattaway” whose Indian wife sounded the alarm at the start of the February 1860 attack by whites on Indian Island (Loud 1918:330). It was in the vicinity of Hathaway’s property that a bayside embarcadero developed called Cole’s Landing, which was “1.2 miles north of Samoa.” Later the location became known as Carson’s, since the Dolbeer and Carson Lumber Company had a roundhouse and shingle mill there (Turner 1993:44). The 1921-1922 Belcher Atlas of Humboldt County shows the Humboldt Northern Railroad line ending at the line between sections 10 and 15, T5N, R1W, Humboldt Meridian (Belcher 1921:7); the USGS quad sheet for the area shows an offshore rectangle labeled “ruins,” that may have been a dock at the landing (USGS 1972a).

Manila

There is no thorough history of the Manila area and only scanty documentation regarding human activity there following the arrival of white settlers on Humboldt Bay

in 1850. Elias Hathaway, mentioned above, is the closest known early inhabitant. The 1865 Doolittle map of Humboldt County shows no ownership in the pertinent area (Doolittle 1865).

By 1921 several landowners are listed in the vicinity of Manila. B. C. Moz(z)etti owned property directly west and southwest of Mad River Slough, in sections 34 and 35, T6N R1W. In the southeast ¼ of Section 34 Lentell and Wandesford are shown as owners. The northeastern portion of Section 3, T5N R1W and a small part of the center of the section belong to the Big Lagoon Lumber Company. The southwestern ¼ of Section 3 is divided between Timmons and Hart. (Belcher 1921:7) Two significant features appear on the 1921 map: 1) the line of Northwestern Pacific Railroad (NWPRR), which crosses Mad River Slough near its mouth and then runs south-southwest on its way to Samoa and points south; 2) the line of the Humboldt Northern Railroad, which crossed Mad River Slough about one-half mile farther north and then took a course through the Manila area a short way west of the NWPRR. The two lines met just south of the section 3 section line. (Belcher 1921:7) The HNRR was known first as the Vance Mad River Railroad; it became the Eureka and Klamath River Railroad in 1896, under which name it was extended south from Mad River Slough to Samoa the same year. In 1903 the line was purchased by the Southern Pacific Railroad and was operated under lease by the Hammond Lumber Company as the Oregon & Eureka Railroad. It was taken over by the NWPRR in 1913 (Fountain 1967:(31)254) and its trackage was apparently consolidated with that of the parent company south of Manila. The NWPRR line is still tracked through Manila, while the HNRR right-of-way is now used for roadways: it serves as the corridor for the dirt road to the Manila Gun Club and then, south of the junction with Young Road, continues briefly along a private road before being subsumed by Samoa Boulevard (CSAA 1999). Farther south, a line of remnant pilings mark the course of the tracks alongside the bay.

The first known mention of the community of Manila occurs in 1903, when a local newspaper makes note of the McNaughton Ranch, which is located “at the settlement known as Manila” (Blue Lake Advocate 1903:7). The McNaughton Ranch was also known as the Manila Ranch. It was purchased by McNaughton in 1901 from an unnamed party and subsequently its 260 acres were leased by McNaughton, first to George C. Johnson in 1901 (with a lease for additional land in 1904), and then to Jack Mullady in 1906. In 1907 McNaughton sold the ranch, now reported as comprising 278 acres, to L. M. Hancock for \$17,100. The second lease to Johnson describes the property as being in section 35 (Fountain 1967:(89)390). It would thus appear that it was the Manila Ranch that B. C. Mozzetti is shown as owning in 1921 (Belcher 1921:7). According to historian and former Samoan McCormick a school was built at Manila in 1903 (McCormick 1989:74). It was located in the woods just west of the drawbridge that spanned Mad River Slough (Fountain 1967:(109)64).

McCormick claims (in apparent contradiction to the 1903 *Advocate* statement) that “the community of Manila did not exist until after the road from Arcata was begun in 1921” (McCormick 1989:74). The 1921 Belcher map shows this road reaching only as far west as Mad River Slough. (Belcher 1921:7) According to McCormick:

Only three or four houses, a long distance apart, dotted the area. The earliest residents were the Deans, Immes, Smigles, Mozzettis, and a Mrs. Cahill...

The first store in Manila was owned and operated by Vic Gihlstrom and may have been largely responsible for the building up of the community in the late ‘30s or early ‘40s. Building of the road from [to?] Samoa also helped.

The Manila area was known to early Samoans as a great blackberry patch...Restaurants in Eureka often bought blackberries and huckleberries produced in a wild state on the peninsula (McCormick 1989:74).

By 1949 the map of Manila had filled in. The Mozzettis still owned their ranch in sections 26 and 35. Store owner Victor Gihlstrom and his wife Alice held parcels comprising about a quarter of section 3, mostly west of the then-main road, which is today’s Peninsula Drive. The Gihlstroms acquired at least part of their property in 1946 from the Northern California Oyster Company. After subdividing their land, they sold a lot east of Peninsula Drive to the Peerless Lumber Company, (Humboldt County 1974:23) where today’s Mill Street runs from Peninsula Drive to reach Peerless Avenue. Another subdivision, called “Bayshore Acres,” ran the length of Victor Boulevard. Approximately 15 other landowners were listed in section 3 in 1949, most of them west of Peninsula Drive (Belcher 1921:7; CSAA).

The Peerless Lumber Company site contained a “saw mill, shingle mill, lath mill, spur track and mill pond.” Many Manilans were involved in building the mill. After being sold to Stotle, Inc. in 1948, the Peerless Mill (which indeed lacked a pier or any other extension into the bay) was acquired ca. 1947-1948 by one of Humboldt County’s most notorious lumbermen, Arthur King Wilson (Humboldt County 1947:24). The mill shut down in 1956 and was sold in 1958 at a sheriff’s sale to Francis Mathews after Humboldt County placed a lien on Wilson’s Samoa properties for back taxes (Humboldt County 1947:24; Fountain 1967:(47)359). The mill had closed the same year that Wilson, described as the “wealthy operator of a Samoa lumber mill,” was indicted in federal court for tax evasion. Two years later, Wilson was fined \$5,000 and sentenced to 18 months in prison for neglecting to pay \$118,078 in employees’ withholding taxes. A fire at the site in 1968 “caused vast destruction” (Times-Standard 1999:C15,C5).

The mill site promptly came to life again as a dumping ground for “hundreds of old autos.” A photo from the time shows numerous car bodies and other large, decaying objects filling the shoreline next to the bay. In 1969, a year after the mill fire, Arcatan Mary Bobillot spearheaded a PTA drive to rid Humboldt County of its approximately

10,000 abandoned cars; the Manila site was “the group’s main focus.” In the early 1970s cleanup started with the mill remains, which included a well-rusted conical burner. In 1972, Humboldt County bought the mill site from the State of California, the same year that the county Grand Jury recommended that the location be made into a park. More work ensued, and today Wilson’s overtaxed mill has become Manila Park (Times-Standard 1999:C1, C5).

Nowadays, Manila’s contribution to the lumber industry consists of the Sierra-Pacific mill north of town on Mad River Slough. In June 2002 the mill made the news when the North Coast Regional Water Quality Control Board revealed that it had detected dioxin in the slough near the mill site. Dioxin was also found in “mussels and crabs immediately adjacent to the Sierra Pacific mill.” Another toxin, the fungicide pentachlorophenol, was found on 43 separate occasions between 1995 and 2002. The mill used “penta” from the 1960s to the 1980s; penta is known to contain dioxin (Easthouse 2002). The following year Sierra Pacific Industries (SPI) agreed to an \$800,000 settlement to clean up the site. According to a news article at the time,

[t]he case stems from Sierra Pacific's treatment of lumber with pentachlorophenol and other chemicals in the 1960s. Chemicals, sawdust and heavy metals leaked into soil and groundwater around the 32-acre site for years, and later turned up in sediment and stormwater runoff samples. Dioxin and furan—which can cause cancer— also showed up in shellfish samples, though whether the concentration of the chemicals is enough to do harm is a matter of dispute (Times-Standard 2003a).

Arcata

Arcata, then known as Union, was one of the four original towns on Humboldt Bay. A collection of landseekers called the Union Company arrived at the north end of the bay in April 1850 and found a townsite that offered “several natural advantages. To wit,

It was situated on a beautiful plateau at the head of the bay, and was surrounded by good agricultural and timber lands; but most important of all, it was the nearest point on the bay to the mining district, and therefore offered the greatest promise as the desired shipping point to the mines (Coy 1982:56).

By the summer of 1850, Union had 190 residents, including 58 women. The following year, the town finished second to Weaverville in the election for the seat of newly formed Trinity County, as Union divided the coast vote with Eureka and Humboldt City (Coy 1982:56). Near Union, especially to the west and north, were agricultural lands. They “were occupied by permanent settlers as early as 1853” (Coy 1982:96). The town prospered as a shipping center, having developed “good trails leading to both the Klamath and Trinity mines, [and] was soon without a rival as leader in the packing trade” (Coy 1982:70). By “1854, Arcata [Union] had twelve or fourteen stores carrying large stocks of goods, besides saddle and harnessmakers, jewels, gunsmith, tin shop, and several blacksmith and wagon shops all doing an active and lucrative business”

(Elliott 1881:160). Two years later the town “was connected with the ship channel by a plank road and rail track two miles in length, passing over the intervening marsh or flat. At the end of the rail track was built a fine wharf and warehouses” (Elliott 1881:160).

Union was approaching its apogee as a commanding community. In 1853 Humboldt County had been carved from the flank of Trinity County, and, after a couple of elections, Union became the new county’s seat. But not for long. In 1855 Eureka’s Casper S. Ricks defeated Union’s incumbent assemblyman, A. H. Murdock, and a third contender. Almost as soon as the new legislature met in 1856, Ricks introduced a bill to move the county seat to Eureka. The bill was promptly approved, and Union found itself bereft of the county offices and no longer the center of many activities. Over the next two decades Union/Arcata saw a decline in the packing trade as mining subsided, while Eureka, with easier access to shipping, a greater number of sawmills, and the county facilities, became ever more ascendant. By 1880, Eureka had 2,639 residents, while Arcata (by then no longer Union) could claim only 702. The issue of which was to be Humboldt County’s prime community had long since been decided (Rohde 2006:1013).

Abetting Arcata’s decline was a series of three major fires that barbecued parts of the business district between the time of the city’s founding and 1880 (Arcata Union 1949). In December 1861 a region-wide inundation washed away “[t]he four bridges on the stream near Arcata” while the contents of Ament’s storehouse on Daniels Slough (sometimes incorrectly referred to as McDaniels Slough in modern times), including an unspecified amount of hay and “some 250 sacks of potatoes, washed out into the slough” (Blue Lake Advocate 1965).

While Daniels Slough may have been an unintentional conduit for various materials, Butcher’s Slough was purposefully polluted. In the 1870s it served as the city’s sewage outlet to the bay (Arcata Union 1922). T. Devlin’s Humboldt Bay Tannery, which began operations about 1866, sat next to Butcher’s Slough on Eighth Street west of the plaza (Fountain 1967:(37)189). By 1888 it was processing up to 3,500 hides per year, using 46 vats in the process (San Francisco Journal of Commerce 1888:1). Four years later, 115 vats were in use, and hide production had risen to more than 23,000 per year (Fountain 1967:(37)190). A news article that energetically described much of the tanning process failed to account for the residue from the vats, but it is likely that the tannery’s waste conveniently went into the adjacent slough.

The potatoes that washed away down Daniels Slough were probably the “Humboldt Red” variety, a commodity that reportedly made “several fortunes” in the Arcata area from 1868 to 1870. The fertile lands of the Arcata Bottom produced yields of up to 300-plus sacks per acre (Fountain 1967:(64)70). Humboldt Reds captured blue ribbons at the state fair, and all went well until a potato blight struck that affected the

Reds more than other varieties. Farmers switched to more resistant strains of spuds, and an attempt to revive the Red in 1889 failed to return the species to its former status (Fountain 1967:(64)65).

In 1873 the Union Plank Walk and Rail Track Company (UPW&RTC) overhauled and repaired its nearly 20-year-old wharf (Humboldt Times 1873a). Two years later the company commenced extending the wharf 600-plus yards farther into the bay, in order to reach “the main ship channel” (Humboldt Times, 1875). That same year the company began using its first steam locomotive, the *Black Diamond*. Strap iron was laid upon the wooden rails to accommodate the transition (Borden 1970:4). In 1881 the Arcata and Mad River Railroad was incorporated as the successor to the UPW&RTC. The corporation’s intent was “to construct and operate from the main ship channel at the northerly end of Humboldt Bay to the north fork of Mad River,” and this task was gradually accomplished (Borden N.d.:6). At Arcata, southwest of the Plaza, were built “an engine house and turntable, car shops, and a depot with a two track train shed.” In 1910 the Arcata wharf was realigned to accommodate all of the line’s locomotives. The southern portion of the line, through Arcata, was abandoned in 1942 (Borden N.d.:10ff). In 1901 “[t]he California & Northern Railway was built between Arcata and Eureka, crossing the Arcata and Mad River tracks at the north end of the wharf.” Four years later, the Humboldt Northern Railway was built by the Dolbeer & Carson Lumber Company “between Fairhaven and Dow’s Prairie, with a branch to Arcata which paralleled the Arcata & Mad River for a short distance” (Borden, N.d.:29). It appeared that Arcata was on the right track.

As packing declined as part of Arcata’s commerce, lumbering advanced. Noah Falk headed a group that operated the Janes Creek Mill, located north of Arcata near Camp Curtis. The mill ran from 1869 to 1888, when it had cut all the company’s timber (Carranco 1982:198). In early 1870 Falk and Isaac Minor established the Dolly Varden Mill (Leavitt and Bayne N.d.:9). Falk and Minor then started the Jolly Giant Mill in 1874, which was located in the gulch of Jolly Giant Creek, just north of today’s Humboldt State University. The mill ceased operating in 1885 (Carranco 1982:199). Of longer duration was the California Barrel Company, Ltd., which began manufacturing “barrels, wire-bound boxes, and wooden containers” in southwestern Arcata in 1902. When the company sold its Arcata plant in 1956 to Roddis Plywood, it had 1,125 employees. Roddis subsequently sold to Weyerhaeuser, which in turn sold to the Arcata Redwood Company (Carranco 1982:203).

The post-World-War-II housing boom proliferated lumber mills in Humboldt County; many of them were located in the Arcata area. As early as February 1947 Arcata reported “over 30 lumber operations in... [the] vicinity,” many of them in the area north of town along Highway 299 (Humboldt Standard 1947a). There were blips in the upsurge—two months after the February tally, the Arcata mill count was reduced by one when Jalmer Berg’s mill burnt north of town (Humboldt Standard 1947b)—but the

increase relentlessly continued so that by 1956, “[i]n and around Arcata...[were] over 50 lumber mills and lumber processing and manufacturing plants that have access to one of the largest remaining stands of timber in the United States.” The timber, transformed into lumber, left Arcata at a dizzying pace: 28,371 railcar loads in 1953, “in addition to the thousands of truckloads transported over the highways.” Also big, in and around Arcata, was agriculture, with “approximately 275 dairy ranches operating within the adjacent area to Arcata, with acreage ranging from 10 to 160 acres.” Arcata claimed second place in the county’s butterfat derby, with one of its cows producing 781.9 pounds of comestible cholesterol. Stock raising, poultry farms, grain production for stock food, and bulb farms rounded out Arcata’s ranching and farming activity. Still, few Arcatans were likely to quarrel with the city’s slogan: “lumber capital of the world” (Eureka Newspapers 1956:5).

In time, though, the boom stopped booming, and the “lumber capital” saw its domain shrink. Today, less than a handful of mills still operate in the Arcata area—most of them along West End Road north of downtown. Remnants of other sites still exist, however—the most prominent being the levee-encircled marshes that were once log ponds. Other vestiges of Arcata’s past include a string of pilings from the old wharf in varying states of decay, which are best viewed at low tide; numerous large redwood barns that loom like wooden ghosts from the Arcata bottom, their numbers diminishing over the decades; the recycled engine barn of the Arcata & Mad River Railroad, which later served as the repair shop for the local Ford dealer; a cluster of well-maintained business buildings on and near the Arcata Plaza, one of which, the Jacoby Storehouse, saw service back in the pack train days. And, beneath many of the sites, or in the nearby creeks and sloughs, the lingering legacy of industrial enterprise still seeps through the embattled environment.

Bayside area

Despite its name, Bayside was not adjacent to the bay. The town’s center, where the Arcata-Eureka road met the route up the canyon of Jacoby Creek, was a mile east of the bay’s shore. Nonetheless, activities in the area stretched a tentacle of influence westward, out into the water. In the 1880s Flanigan, Brosnan & Co. built a railroad seven miles up the Jacoby Creek drainage (Fountain 1967:(50):9). It appears that the company first had a log dump at Gannon Slough, southeast of Arcata (Humboldt Times 1951:7), where the logs could be dropped into the slough and then “floated to the mill at Eureka” (Fountain 1967:(50):9). Later a wharf was built out into the bay “for a mile or so” (Humboldt Times 1951:7), and the rail line extended out over the water. In 1900, the “shingle wharf,” as it was called, caught fire when a spark from a passing locomotive apparently ignited the shingles. Part of the burnt wharf collapsed, plunging some 2,000,000 sizzling shingles into the bay, where they were of little use (Humboldt Times 1900). Flanigan, Brosnan & Co. later became the Bayside Mill & Lumber Company (Fountain 1967:(50)). In 1921, it is the Bayside Mill & Lumber Company Railroad whose tracks are shown running west-southwest into the bay until

they approached the Arcata wharf, whereupon they turned more toward the south to end almost due east of the end of the other wharf (Belcher 1921:7). Remnants of the line are still visible adjacent to the edge of the southeastern most oxidation pond of the Arcata sewage treatment plant (USGS 1972a). Rock from the quarries in Jacoby Creek was carried on the rail line for use on the jetties at the entrance to the bay (Humboldt Times 1951:7).

Another logging railroad also reached the bay from Jacoby Creek. The Dolbeer and Carson Lumber Co. built two miles of track south of the creek in 1875. The grade was such that the cars could gently roll down to the bay, with gravity as their propellant, while the upgrade return relied on horsepower (Fountain 1967:(50)08).

Brainard/ Bracut

Approximately one-half mile south of the mouth of Jacoby Creek, a tongue of high ground licked the bay; it was known as Brainard's Point, no doubt since, from 1853-1862, an A. Brainard owned a timber claim that included the land (Humboldt County Historical Society Newsletter 1965:10). The ridgelet that formed the point was both boon and barrier: in 1887, J. L. Southmayd was reportedly "preparing to furnish building rock from Brainard's Point" (Fountain 1967:(104):272), while in 1900 the California & Northern Railway Co. replaced 48 teams of horses with two steam shovels to complete cutting through the point, which would allow their line to run near the edge of the bay. The following year one of the shovels was making "rapid advancement," nearing the highest point in the survey, which was 78 feet. That December, the first passenger train steamed through the cut (Fountain 1967:(50):86-88). Time passed. Then, in late 1940 brothers Herb and Glen Fehely acquired the California Oyster Company warehouse at Brainard. In the early 1950s the high ground west of the cut was leveled, the earth moved into the bay and diked to form a rectangular excrescence nearly a half a mile long. The southern portion of the new site became the home of the Bracut Lumber Company, while the northern section was sold to William Reeder, who built a lumber dry kiln there that later burned. In 1985 a retail lumber lot called the Mill Yard was added to the site (Humboldt County Historical Society N.d.a). An aerial photo from 1947, before the reconfiguration of the area, shows several buildings, along with two docks and dredge, west of Highway 101, with an auto wrecking company and café across the highway at the approximate current location of Resale Lumber (Shuster 1947).

Murray Field area

Early aviation in Humboldt County is closely linked with pilot Dayton Murray Sr. and with areas just east of Eureka. It was August 1919 when Murray "first winged into Eureka," landing his "wire-wheeled plane...in a grassy field north of the Cottage Garden nurseries in the Worthington district." (Humboldt Standard 1959) The same article states that,

Murray used the field for about two years, then secured a site on the Charles Crivelli ranch beyond the defunct McKay shingle mill past the end of Park Street.

When the highway to Arcata was completed about 1923, Murray secured a field a half-mile past the present one (Humboldt Standard 1959).

This airstrip, which another source indicates was “established in the early 1920s,” (Dreyer 1990:3) became known as Murray Field. The location of this original Murray Field was described by Elwain Dreyer, the son of early day pilot Charlie Dreyer, as follows:

The airport was a piece of land carved out of the marsh of the Devoy Ranch. The entrance to the airport was from Highway 101, which was then a two-lane road between Eureka and Arcata. The entrance was at the present entrance to the Harper auto dealership, and the main part of the airport was just a little north of that road (Dreyer 1990:3).

The wooden, shed-roof hangar at this airport is shown in a June 1929 newspaper photo. It is visible in a 1927 photo as the small, light-colored building to the right of Highway 101 near the center of the picture. Another photo of the area from the late 1920s shows the airstrip as a light-colored rectangle running diagonally toward Fay Slough. Immediately below (south of) the airstrip is an area of marshland that was to become the site of the second Murray Field; this area is bounded on the south by the Pacific Lumber Company’s rail line. The older airfield was photographed in 1937, just prior to its closure; planes can be seen on the field near the hangar.

Although Murray had stopped flying by the 1930s, he “helped persuade the Board of Supervisors to purchase a piece of land for an airport. The property was owned by Murray’s uncle, Gilogy [sic], the price was \$6,150.50” (Crichton 1984:5). A tract of 131 acres was purchased from the Henry Devoy Ranch, a property which totaled over 1,000 acres and was owned by Mrs. Henry Devoy and her son-in-law, M. L. Gillogly (Fountain 1967:(29):18-19). Previously, the airport parcel had been owned by Herrick and Short (Belcher 1921:7)). The Fortuna Businessmen’s Association, perhaps hoping that the airport would be sited nearer their town, complained that “the land was subject to inundation and that after an expenditure of a large sum of county money, it would continue to be a mudhole and eventually be abandoned as an airport” (Fountain 1967:(29):118). Despite this objection, the mudhole was approved as the site for the county airport by Humboldt County Planning Commission in June 1930. An alternative proposal by Mrs. Humboldt Gates, owner of Indian Island, to sell her property for \$75,000, was rejected. It was noted that the island suffered the not inconsiderable deficiencies of “being inaccessible to automobiles and that much of it is under water for a considerable portion of the year” (Humboldt Times 1930). The Devoy/Gillogly land was finally purchased in 1934 (Humboldt Standard 1935a) after some haggling over the price with Gillogly (Fountain 1967:(29):19).

Work on the new airport was reported as set to “begin before July 1 [1935] on filling gullies and ditches and general drainage” (Humboldt Standard 1935b). Less than a year later, another article announced “virtual completion of the new county airport on the old Herrick tract, just south of the privately operated Murray Field” (Humboldt Times 1936). The same news story indicated that “it may take some time, for settling and packing, before the new airport is ready for its first planes,” and that “two bridges will be built soon to give access to the airport from the Redwood Highway.”

In August 1937 it was announced that

**PLANS FOR NEW
HANGAR AT AIR
PORT FINISHED**

...It was indicated that the plans for the hangar, which will cost approximately \$10,000, were acceptable to the [county board of] supervisors.

According to architect [Frank T.] Georgeson, the hangar will be 85 feet wide and 60 feet deep. In addition there will be a shop or repair room.

The hangar will be sufficiently large to house from four to eight airplanes, depending on their size.

Eight doors, working on a rail as one door, will open the building, which will face northward. There will be a 15 foot clearance at the entrance, enabling a good sized plane to enter (Humboldt Times 1937).

Les Pierce, of Pierce Bros. Flying Service, indicated that after the hangar was built “I made arrangements to rent it for \$30 a month, manage the airport, and be aviation advisor to the supervisors.” (Dreyer 1990:5) Pierce added that,

Before getting much use out of the property as an airport, we had to do some work. Low spots were filled and we had to sandbag the dykes to keep the water from flooding at high tide. We pulled a drag behind my car to smooth out an airstrip and hand dug two ditches from the highway for phone and gas lines (Dreyer 1990:6).

A Pierce Flying Service photo from 1937 shows the airport after the hangar was constructed. Looking east, the image shows, in addition to the hangar and the runway, dikes around Fay and Eureka sloughs to protect the airport from high tide, two bridges from the highway to airport that cross a channelized section of slough, and the track of the Pacific Lumber Company rail line running from east to west to the right of the hangar. As of yet, there are no planes on the ground; they are still at the original Murray Field to the north, awaiting the opening of the new airport. The Pierces moved their four planes to the new field on February 9, 1938 (Dreyer 1990:7).

Another Pierce aerial photo, this one dating from March 1941, shows the new airport now having a second runway, which crosses the first. A road now leads from the southernmost of the two access bridges to the hangar, and a locomotive steams west on the rail line, passing in back of the hangar.

Following the attack on Pearl Harbor in December 1941, a civil defense zone was instituted along a 100-mile-wide strip of the coast (Crichton 1984:6). At the time, “there were eight planes based at the airport. The next day all civilian flying was banned, and silence settled over the field” (Humboldt Times 1949). On May 16, 1945, the airport reopened with two planes. By January 1949, there were 40 planes based at the airport, with both Pierce Flying Service and Fleming Flying Service operating there (Humboldt Times 1949).

The area south of the airport was more noted for trains than planes. At various times, two logging railroads provided service between the timber-rich Freshwater area and either Eureka or Humboldt Bay. In 1880, D. R. Jones and Company, which had been logging on Salmon Creek, south of Fields Landing, finished its operations in that area and moved to Freshwater Creek. It took with it the equipment of its South Bay Railroad, which was reconstituted as the Humboldt Logging Railroad Company. By the next year the line was seven miles long (Carranco and Sorensen 1988:120-121). In 1883 the California Redwood Company took over the holdings of the D. R. Jones and Company, along with those of the Trinidad Mill Company and the Joseph Russ Mill on Gunther [Indian] Island. The California Redwood Company became involved in legal difficulties due to fraudulent land patenting, and the Excelsior Redwood Company was formed to salvage remnants of the embattled operation. The Russ Mill then became known as the Excelsior Mill (Carranco and Sorensen 1988:121-122).

In 1886, the Humboldt Logging Railroad Company tracks, which now belonged to the Excelsior Redwood Company, were shown extending northwest from the Freshwater area to a point near the tangled confluences of Eureka, Freshwater, and Fay sloughs (Forbes 1886). According to one account,

The railroad...was first built from McCreedy Creek to Freshwater slough about a mile from the Eureka slough bridge....The logs from Freshwater were transported by the railroad to Freshwater slough where they were dumped into the water and then towed or rafted to the mill on Gunther's [Indian] Island (Humboldt Times 1941b).

The railway closed in 1893, after the Excelsior Redwood Company had finished cutting all its timber in the Freshwater area (Carranco and Sorensen 1988:122). Use of the rail line apparently started again in 1916, when the Pacific Lumber Company began logging in the Freshwater area. Tracks were then built ten miles up the South Fork of Freshwater Creek. The railroad had also been extended to the west, for the main line now “connected with the NWP [Northwestern Pacific] line near the Murray Airport”

(Carranco and Sorensen 1988:147). In 1941 Pacific Lumber halted its logging in the Freshwater area (Carranco and Sorensen 1988:149) and in August the railroad tracks were removed (Humboldt Times 1941b).

Another railroad, somewhat removed, figured in the area's history. In 1908, W. H. Haw constructed a rail line from the head of Fay's Slough eastward approximately one mile to a quarry in the center of Section 21, T5N, R1E, from which Haw would supply the City of Eureka with crushed rock. The rock would be offloaded from the traincars at a wharf on the slough, and transferred to large barges that would speed the material Eureka ward (Humboldt Times 1908:6). In 1916, the city purchased Haw's equipment prior to entering into a 40-year agreement with I. M. Long and G. A. Dungan, who then owned the quarry property (Humboldt Times 1916:8; Belcher 1921:7). Today, motorists on Old Arcata Road can spy portions of the wooden railroad trestle to their west a short distance south of Ole Hansen Road.

Northwest of the current Murray Field, west of its predecessor, another extension into the bay became known as Brainard (not to be confused with Brainard's Cut, to the north). Beginning in 1952, the Arcata Redwood Company operated a facility there that included a dry yard, dry kilns, planing mill, shipping yards, and offices (Carranco 1982:161). Shielded by a long row of eucalyptus trees that are growing in the wrong hemisphere but seem to be doing all right, the mill has, under various ownerships, continued operating down to the present.

Eureka

Beginning at Eureka Slough, the city of Eureka extends south and west across an inclined plane that rises southward until etched by erosion into the broad and deep gulch of Martin's Slough. South of this interruption the plane extends to the Ridgewood area. May 9, 1850, saw a band of white colonizers set forth upon the northern end of this serrated shingle, where they beheld "a wilderness, uninhabited by man, and except for the souging of the wind throughout the timber and roll of the surf it was as silent as the dead" (Bennion and Rohde 2003:229).

But not for long. A dozen city-builders, armed with axes and a defective compass, surveyed and cleared the start of the city of Eureka, failing to set their streets right but at least making a dent in the "wilderness." For six years the city strove for supremacy, building mills and creating buildable lots. Finally, five days shy of six years after the first Eureka's arrival, came success—the struggling city had wrested away the county seat from bayside rival Arcata and never looked back (Bennion and Rohde 2003:229; Rohde 2006:12).

Fifty-two years after its founding, Eureka sprawled across the landscape, a city seemingly satisfied with its entry into the new century, its red-roofed business buildings filling the blocks from the bay up to Fourth Street, its many mansions

flanked by the rows of ornamental trees that replaced the conifers that had earlier covered the landscape like a green blanket. Lumber mills filled much of the waterfront, their stacks of cut timber standing beside docks where a dozen schooners might anchor to take the wood away. Two train stations also lay next to the bay, their rail lines as yet going nowhere far, but their rolling stock rolling redwood logs to the mills and, on Saturdays, loggers to the bars (Noe and Georgeson 1902; Bennion and Rohde 2003:231).

And at what price had this glimmering glory come? It had cost the whites some hard work, and perhaps some fortunes never made or all too quickly lost, but it had lined the pockets of a few plutocrats, like millmen Carson and Vance, with redwood-tinted gold. As for the toilers, they at least had little competition for employment, the Chinese having been driven out in 1885 (Bennion and Rohde 2003:230). The Indians, of course, had been more than driven out—they had often been dealt both death and destruction, and no enclave of the survivors was found any closer to Eureka than Bucksport.

And then there was the land. It could change even without human intrusion: the entire region was transformed sometime before the arrival of white inhabitants when an earthquake lowered the coast some two to three feet. Geologist Lori Dengler believes that prior to that event, the bay was “a large marsh wetted by streams like Freshwater Creek, Elk River, and Jacoby Creek” (Driscoll 2006:26). Such an earthquake episode was quick and decisive; subsequent human activity has been much slower in its effects but has created a cumulative change that in some ways is more drastic; the contamination of the bay by toxins, for example, will no doubt continue to affect the ecosystem regardless of what future cataclysmic natural events occur.

Early records of observations by whites are either brief or vague, in any case telling little of what the country had been like before it was built upon. But under the hand of humans, rather than through the impulses of nature, the transformation was gradual, and some records remain of how this bayside margin stood before a city was built upon it. As Martin’s Slough defined the topography to the south, the area closer to the bay was etched by a series of sloughs and gulches that sometimes blended into marshlands. When the first city builders went to work in the spring of 1850, they found that,

the western part of the [Eureka town]site was forested all the way down to the bayside marsh, while a low, boggy gulch, “impassable except with an ax to cut your way,” slanted southeastward. The northern area, near the water, was mercifully more open, with “only a few scrubby, wind-blown pines [probably spruces]...and covered with a growth of salal and honeysuckle” (Bennion and Rohde 2003:229).

Yet just up from the bay, the forest took over; the line set for Second Street was to run through “a tolerably dense forest of spruce, fir, and redwood timber” (Fountain 1967:(79):570).

Another, more detailed, view comes from Clarence Coonan, an early day Eureka. He observed that,

[a]t the time Eureka was settled in 1850 practically the whole of the area covered by the present [1959] city limits was forest land, with a dense growth of redwood trees, huckleberry bushes, salmon berries, salal, huge sword ferns, and carpeted with redwood sorrel. There was a small open prairie between B and F streets running south to 3rd street, and marsh land and sloughs to the east and west, very largely filled in now. With these exceptions, all the county to the south was forest, with three very considerable ravines or gulches running northward through what is now the most important business district.

These gulches were 30 or 40 feet deep in places, with flowing streams and all the luxuriant undergrowth that one can see in any redwood forest a few hundred feet off the highway. After the trees were cut down and the stumps and brush removed, and the town built beyond the source of the streams, the trend of ravines have become somewhat lost (Coonan 1959a:7).

Coonan elsewhere added that,

One of the interesting creeks which once ran through what is now [1957] almost downtown Eureka had its sources in and about 6th and 7th streets and I street [less than two blocks south of the county courthouse]. When I was a boy there was a spring 20 or 30 feet from the southeast corner of 6th and L streets [a block east of city hall]. This spring had been boarded on its four sides, and I believed used as well water by some of the neighboring residents (Coonan 1959b:5).

Two other springs, at the foot of Whipple (now 14th) Street and at Knight’s Wharf [location uncertain], were places to which “hundreds of people made daily visits” to obtain drinking water (Humboldt Times 1938). East of the original town, draining into Eureka Slough, were First, Second, and Third sloughs, at the heads of which were creeks that ran far to the south. First Slough, whose creek still runs through Cooper Gulch, continued south past the Eureka High stadium almost to Henderson Street—because it went in back of Myrtle Grove Cemetery, it was also called Graveyard Gulch (Fountain 1967:(29):560); Second Slough’s creek runs southward east of Zane Junior High School to cross Harris west of Dolbeer Street; Third Slough’s creek runs between Harrison and Myrtle avenues, finally ending near Harris.

How different, then, was the landscape that the first builders of Eureka beheld. Most of the land west of present-day Broadway was an estuarial landscape of marshlands that included a small lagoon, all of which were drained by Clark’s Slough (USCS 1858,

USCS 1870, USC&GS 1894). In the 1850s, the mouth of the slough appears to have been about at its present location—just east of the Wharfinger Building and immediately north of Waterfront Drive. The slough ran generally southward, through the western portion of what is today known as the Balloon Tract; a small arm of the slough looped west and ended at the aforementioned lagoon, which was just south of the southwestern corner of the Balloon Tract (USGS 1942); the area is now occupied by the Schmidbauer lumber mill (USGS 1951). South of Washington Street, an arm of the slough branched northeastward, reentering the Balloon Tract, and ended at a point west of the western end of 5th Street (USC&GS 1894). The trunk of the slough continued south of Washington Street, running west of Broadway in a southerly direction. It appears to have terminated in the outflow creek of a spring near the foot of Harris Street (USCS 1858). The slough was fed by at least two other creeks: one rose near Long Street east of Fairfield Street and flowed north to cross Broadway near Wabash; the other headed near E and Dollison streets, running northwest to cross Broadway near 14th (formerly Whipple) Street (City of Eureka 1955). W. H. Jewett, a Eureka “old-timer,” called this creek system the “California Street Gulch” (Fountain 1967:(29):561).

Near the western edge of early day Eureka was a long, two-pronged gulch that reached the bay at the foot of B Street. In 1850 its upstream course went south to 2nd Street, where it bent west to cross A Street (Ryan 1850). The western edge of Ryan’s map, which was the plat of Eureka, inconveniently ends here, and the gulch’s course is then difficult to determine. At some point it subsequently turned south and divided; one branch, called by Jewett the “F Street Gulch,” (Fountain 1967:(29):561) ran south-southeast to head between G and H streets at Huntoon Street; the other branch, known as the “G Street Gulch,” (Fountain 1967:(29):561) ran southeast to end at I and 9th streets (City of Eureka 1955). The City of Eureka map shows the two branches joining in middle of the block bounded by 1st, 2nd, A, and B streets, in the area that was later directly east of the Northwestern Pacific passenger station.

Jewett’s California Street, F Street, and G Street gulches apparently comprise the trio mentioned by Coonan. The latter two gulches, which ran through what became the Eureka business district, are also described by Clara Waldner Monroe. As an example of the changes wrought by urban development, Monroe mentions “the old Congregational Church, which was built over the gulch at Eighth and ‘G’” (Monroe 1973:3).

Historian Susie Baker Fountain, on her map of the G Street Gulch, notes that there was a “lagoon near 7th & Pine” (Fountain 1967:(29):540). This feature does not appear on the early coastal survey maps, which did not extend their coverage that far inland. The 1870 coastal survey map (USCS 1870) does include the area but shows only a gulch in the vicinity, with no lagoon. It is possible that by then the lagoon had been filled in during the gradual expansion of Eureka.

Once Eureka was platted, A Street formed the western boundary of the town. Beyond that, all the way to the bay, was a wetland that drained into Clark's Slough. In August 1861 much of the northern part of this area was patented by Charles E. Collins as a 104.99-acre parcel claimed as Swamp and Overflow Lands (Humboldt County Patents 1861:(1)12-14). Part of Collins's parcel was destined to become the station and yards for the Eel River and Eureka Railroad Company (ER&ERR), which built into town seven miles from Fields Landing, its former terminus, in 1885. The route went entirely through marsh land, some reclaimed, some not (Weekly Times-Telephone 1885a:3, 1885b:3, 1885c:3, 1885d, 1885e:3), so that the railbed, elevated above the surrounding wetlands, constituted a dike that divided the area, with most of it on the inland side of the dike, leaving only a narrow strip of land between the railbed and the bay.

By this time, the bayside commercial district of Eureka, which lay just to the east of the railroad's property, was highly developed. As one account put it, "[n]early all of the alphabet streets in Eureka ended in a dock, a wharf, a sawmill, a warehouse or a shipyard" (Sparks 1988:3).

The depot and new terminus for the ER&ERR was located at Second and A streets (Weekly Times-Telephone 1885f:3). The first report of filling near the depot comes about three years later, in September 1888:

The Eel River and Eureka Railroad commenced last Thursday to fill in the marsh land around the turn table at the Eureka terminus....[A] train of five cars loaded with earth [was] discharged in a few seconds with the patent unloader, which is plow shaped and is pulled by the engine, from one car to another....A Times reporter took a trip on the empty train to South Bay [Fields Landing] and witnessed the loading of it, in about fifteen minutes by the new steam shovel, which works with wondrous ease and marvelous rapidity and precision (Fountain 1967:(50):77).

So it was that a bit of the bayshore was moved seven miles north, converting the hillside near Fields Landing into a covering of part of the Clark's Slough wetland. It appears that part of the remaining marshland was used for grazing. One account refers to "Callahan's pasture on the marsh," where there was a swimming hole located on "a good-sized slough (Clark's) [that] cut through the marsh" (Fountain 1967:(29):533). Another source notes that the swimming spot on the slough was within site of the ER&ERR tracks, since "lady passengers made objection to the swimmers being unclothed," (Fountain 1967:(29):561) which brought an end to the swimming, if not to the slough.

Over time the ER&ERR became the Northwestern Pacific Railroad (NWP), which ran all the way to San Francisco Bay. By the time regular train service was running on the full line of the NWP in 1915, the eastern and northern portions of the tidal marsh near the Eureka station had been "filled with a mixture of silt, sand and gravel." The site

was then “used as a railroad yard for refueling and repair;” and a bunker oil storage tank had been constructed. Additional development followed: from 1931 to 1939 the southeastern corner of the site, near the corner of Broadway and Washington, was leased to Richfield Oil Company and General Petroleum Company and two above-ground storage tanks were installed (Doran 2001:11). In 1941 and 1942, dredgings from the construction of the Chicago Bridge and Iron Company’s drydock were brought in as fill for the Balloon Track. Additional fill was delivered from the Shively area. Ballast rock for the railbed came from the NWP’s quarry at Island Mountain (Wyland 2006). Then, during 1946 to 1947 the remainder of the marsh was diked and dredgings from Humboldt Bay used as fill. In 1954 above ground tank for diesel fuel replaced the bunker oil tank (Doran 2001:11). Thus the Balloon tract received a covering from four different locations: the nearby bay, the hillslope near Field’s Landing, the Eel River alluvium from near Shively, and Island Mountain quarry rock from the southwest corner of Trinity County. To further dress the tract’s topcoat, debris from railroad cars and any spilt or leaked petroleum products, cleaning solvents, etc. filtered down from the tract’s imported surface.

Significant changes also occurred in areas near the rail yard. By 1902 the South Park Race Course and the Humboldt Bay Woolen Mills had been built in the Clark’s Slough drainage southwest of the corner of Whipple (14th) and Broadway (Nash 1996:53). The latter, later known as the Eureka Woolen Mills, operated from 1900 to the early 1950s and dumped “all the waste water, dyes, acids and oils...into the slough which ran in back and under the old building and from [t]here drained down to the bay by the local marina” (Nash 1996:57). During the period between 1933 and 1951, Washington Street, which had previously extended only a few hundred feet west of Broadway, was extended westward to near the bayshore, passing over Clark’s Slough in the process. So it was that not only were the wetlands at the rail yard filled, but also those to the south between Washington and 14th (Whipple) streets. South of 14th, additional wetlands had already been “reclaimed.” The lagoon that had existed just southwest of the Balloon Tract was also filled, and a mill built on top of it. West of the rail line, the facility for the Chicago Bridge and Iron Company was constructed for use during World War II.

So it was that by the 1950s, much of Clark’s Slough had been transformed into a nearly level, dry land industrial area. The Wiyot Indians who had rowed their canoes along the slough scarcely a hundred years earlier would have found little reason to row there any longer, if row they even could—log decks, mills (both woolen and lumber), and train tracks had replaced the wetlands that had once provided sustenance and access to village sites.

Before the railroad there were the ships—for a time Eureka’s (and Humboldt County’s) lifeline to the outside world. Eureka became a port of entry in 1871, “which greatly facilitated foreign trade.” Ten years later, ships from the city carried cargoes to such

exotic locations as “Honolulu, Mexico, Panama, Valparaiso, Victoria, Fiji, Tahiti, and Australia.” In 1876, “1,106 oceangoing vessels crossed the Humboldt Bar with passengers or items of trade” (Raphael and House 2007:222). Cargoes aboard incoming ships included more than people and goods, however:

When the first sailing vessels began arriving in numbers in Humboldt Bay to carry out the products of the Redwood Mills they almost invariably came into port without any considerable cargo; hence the disposal of the rocks and gravel they carried as ballast was a problem. For several years the captain usually dumped the ballast into the bay by the side of the vessel, but even to the less astute it was evident that such a method couldn't be continued for within a few years the channel near the docks would be blocked (Fountain 1967:(51):154).

The solution was simple: as mentioned above, the ballast was loaded into wagons that “carried the material away and in most cases dumped it into the streets of Eureka” in an attempt to eliminate the plague of winter mud (Fountain 1967:(51):154). Of course, more than mineral material came with the ballast—plants, including some that were aquatic, may have stowed away in the holds, waiting for the fertile environment of the bay to bring them to their full glory in a new habitat.

Eureka was a city of lumber mills, county offices, shipping docks—and entertainment. Sailors and loggers landed in Old Town after a week in the woods or weeks at sea, and most headed straight for the bars and brothels that satisfied two of their most basic needs. One local minister viewed Eureka just after the Chinese expulsion in 1885 and found it to be thus:

In what was called the lower levels of the city there were half a dozen blocks more or less, densely populated, in which a chaste woman could not be found, and who were employing all the arts and devices know to the trade of harlot, to entice young men into the meshes of destruction. Gambling saloons at every corner stood open night and day. But though their moral effect was evil and only evil and that continually, they were legalized by the government, encouraged and patronized by a numerous class of people, especially by those most loud mouthed in clamoring against the demoralization of Chinatown...” (Bennion and Rohde 2003:230-231).

The new century came, but little of Eureka's culture changed. In 1909 a report found that the city contained “some 65 saloons, and even greater number of ‘gambling dens,’ 32 ‘houses of shame,’ and a brewery.” On the other side of the scales “were a mere 13 churches and a public library” (Bennion and Rohde 2002:231).

From the casbah of iniquity that was Old Town, Eureka spread to the east and south, gradually establishing other centers of activity away from the bayside core of the city. Over the decades, Old Town saw much of the usual progression of urban change; mills and other buildings burned or were torn down and were replaced by others. Many

late-19th-century structures survived, however, and still dot the cityscape, including clusters of Victorian commercial buildings that constitute the National Register Historic District # 91001523 in Old Town. The “350 acre historic district contains 154 contributing buildings and one contributing structure” (Noehills 2008). Today, Eureka lives as much by its past as by its present, as the tourist attraction of Old Town has replaced the mills, loggers’ bars, and bordellos that once provided most of the city’s income. No better symbol for the transformed town exists than the Carson Mansion, which looms over the east end of “the deuce”—Second Street and reigns as “[t]he most famous Victorian house in America” (Walker 1997:157).

Indian Island and Woodley Island

Directly north of downtown Eureka and east of Samoa lay the only two substantial islands in the bay. Both have figured prominently in the county’s history.

Indian Island (also for a time known as Gunther Island) was a prime place of habitation for the Wiyot Indians (Loud 1918:267-268). Nonetheless, John T. Moore saw fit to claim part of it in 1858 under the Swamp and Overflow Lands Act (Sparks 1988:3). The following year, Moore’s partly constructed house on the property “was either blown down, or fell down” (Humboldt Times 1859). Perhaps disillusioned by the experience, Moore sold his property to Robert Gunther on February 22, 1860 (Sparks 1988:3). Four days later the infamous Indian Island Massacre occurred, when the principal village on the island was attacked by whites and dozens of Indians murdered (Loud 1918:267-268, 330-332).

After the massacre, it appears that Gunther had the island to himself. He diked off the “marshy northeast end of the island” and bought up other land claims on the island. Then he began to sell the land, presumably at a substantial profit. First buyer was lumberman David R. Jones, who put a mill on his new acquisition in 1866. Next to buy was none other than local land baron Joseph Russ, along with several partners. In July 1869 the Russ Mill stood upon their land; eventually this operation became the Excelsior Mill. Next to the mill was the shipyard of E. & H. Cousins (who were apparently brothers, not cousins). Charles K. Duff purchased lot number three from Gunther in 1870. His operation came to include a marine railway that hauled ships up from the bay for repairs. Duff’s property was near the massacre site; his deed reportedly contained a covenant that provided that “no one either sex being of Indian birth” would be allowed on the premises” (Sparks 1988:3-4).

The Howatt brothers built a shingle mill between the two sawmills in the early 1870s (Gunther 1982:7). In 1905 the newly formed Sequoia Yachting and Boating Club rented land on the island and built a distinctive clubhouse. Most of the club’s facilities burned in 1913 and were not rebuilt (Sparks 1988:6). Two years later the Excelsior Mill, abandoned for over 20 years, burned when a campfire left by some berry pickers spread to the structure and ignited it. The Jones Mill had “disappeared” years earlier

(Humboldt Standard 1915; Fountain 1967:(37 Appendix):240). Fire claimed a third Indian Island structure when Gunther's three-story mansion was partly burned in 1956 and the rest later torn down. South of the mansion, a handful of more modest homes appeared, and still line the shore (Sparks 1988:6).

Woodley Island lies between Indian Island and Eureka. In 1902 it hosted a handful of docks (Noe and Georgeson 1902). In 1948 it was home to two fishermen, one retiree, and Harvey Harper's cabin and "duck hunting spot" (Schwarzkopf 1948). Only in recent years has the Island expanded its activities; it is now home to the bay's biggest boat basin, a restaurant, the NOAA National Weather Service - Eureka Weather Forecast Office, and a wildlife refuge.

Bucksport

The Josiah Gregg Party reached Humboldt Bay in December 1849 on their way from the Trinity River gold diggings. They arrived at the Wiyot village of Kutsuwahlik, on the east side of the bay, just after Christmas. While in the vicinity, one of the group, David Buck, "expressed himself in favor of this location...and had at that time carved his name on a tree near at hand" (Cutten 1932:34).

The following spring, several land acquisition companies arrived at Humboldt Bay and began choosing sites for cities. That summer, Buck returned to the place of his tree marking and found a log cabin there built by a member of the Union Company, who had meanwhile departed for the town of Union at the head of the bay. Buck then took possession of the land, not without protest (and threats) from the Union Company, but Buck prevailed and from then on the town was known as Bucksport (Coy 1982:57). According to Elliott's history of the county, Bucksport "immediately took a position in the ranks of the then-rival towns of the Bay" (Elliott 1881:156).

Buck may have had the town named for him and could claim physical possession of part of it, but all this happened before title could be acquired to what was then still government land. To complicate matters, Buck proceeded to drown off the Columbia River in 1852 (Fountain 1967:(24)102). By one account, his brother, Leonard, inherited Buck's land (Fountain 1967:(107)3). County records from July 1853, however, show a William C. Martin of Union selling "Buck's claim" to Walter Van Dyke, also of Union (Fountain 1967:(24)114). Various conflicting claims developed for properties in Bucksport and the adjacent Roberts Addition, abetted by a lack of development of the streets as platted. In 1909, residents petitioned to have certain dedicated but unbuilt streets closed; it was found that the titles on various properties were "greatly clouded,...[with] seven different people... paying taxes on one lot" (Fountain 1967:(24)129).

During September 1851, George Gibbs traveled up the bay, observing "Bucksport, a settlement of half a dozen houses, with a fine prairie behind it" (Gibbs 1860:132). The

United States Army's arrival in January 1853 led to the selection of a site on the bluff east of Bucksport for what soon became Fort Humboldt (Hoopes 1971:84-88). Mary Underwood, wife of a lieutenant assigned to the fort, provided a glimpse of Bucksport at the time:

A Dr. Clark had a little weatherboarded office for his home down near the bay below the bluff, with a small kitchen, and a tiny cooking stove, and a shed adjoining in which hung the carcass of an elk, the meat used instead of beef (Humboldt Standard 1914).

Although some accounts claim that a sawmill known as the "Papoose" did business in the town as early as November 1850 (Palais and Roberts 1950:1), this fact is contested. The earliest contemporary mention of a mill is found two years later:

At Bucksport, a pretty little town about a mile below Eureka, there is another steam sawmill in operation called the "Chesapeake Company," built on the old remains of the steamer Chesapeake. The mill runs seventy-five saws and turns out about 10,000 feet of lumber per day. It is owned by Hasty, Kingsbury & Co. (Daily Alta California 1852).

In October 1854, what was apparently the same mill but which was now known as the "Modena," was sold by William Hasty to a pair of San Franciscans for \$20,000. It was described as lying at the "high water mark on coast of town" between 4th and 6th streets. In February 1855, the mill was sold "on an execution for mechanic's lien" (Fountain 1967:(24)104). Included with the mill were some 20 acres of land and various improvements east of the mill (Humboldt Times 20 January 1855:3). The mill's,

...machinery, copper, spikes, bolts and everything that was salable was disposed of. The hull of the vessel [was] torn to pieces and destroyed, or made use of in some manner. Her boilers still lay on the beach in 1880 (Steenfott 1960:1).

During 1853-1854, a "long two-story building" was constructed in Bucksport on the northeast corner of Trusdale and Howell streets (Howell later became the right-of-way for the Eel River and Eureka Pacific) Railroad). It had a schoolhouse on the first floor that also served as the Methodist Church, while the second floor held a Masonic lodge. The building was later "used as a stable and hay loft and was finally destroyed" (United Methodist Women 1975:E). On the northwest corner of the intersection was the Methodist parsonage, the home of Reverend Aristides J. Huestis, who had arrived in Bucksport on July 17, 1850 and conducted his first service the following Sunday. By 1858, Methodist activity has shifted to downtown Eureka and "the parsonage was rented to Chinaman Jim for three dollars a month, payable in advance" (United Methodist Women 1975:E). The parsonage property was sold in 1862 (United Methodist Women 1975:E). Minorities reported in early census records for the Bucksport township include 10 Chinese, 17 Indians and one Negro in 1860 (US

Department of the Interior 1864:29-32), while the 1870 census lists four Indians and no Chinese or Negroes (US Department of the Interior 1870:125-130).

Other early Bucksport buildings included: the Pacific Hotel, at 4th and A streets in the Roberts Addition (Fountain 1967:(24)288); the Roberts Hotel, at or near 2nd and A streets in the Roberts Addition (Fountain 1967:(24)116); Shanahan's store, on the bluff top just south of the present Ocean View Cemetery (Fountain 1967:(61)244); the Bowling Saloon, located somewhere on B Street, probably near 1st (Fountain 1967:(24)114); Murdoch & Hiland's store, on B Street (Humboldt Times 1854b:2); and Kingsbury's store, situated south of the Modena Mill (Fountain 1967:(2)98). In addition, "J. C. Williams, Merchant Taylor," did business at an unknown address (Humboldt Times 1854c:3), and a Mr. Lorbaugh had "a very handsome residence on B Street, corner of 9th" (Humboldt Times 1854d:2).

William Roberts of the so-called Roberts Addition was described as being the "largest land holder" in Bucksport. In 1854, the state legislature granted Roberts and "others" the right to build a wharf at Bucksport (Coy 1929:60-61). When Colonel Buchanan located the site for Fort Humboldt, he had appropriated a small amount of land from both Roberts and Reverend A.J. Huestis. Buchanan subsequently chose a site for a "future government wharf" (Hoopes 1971:88), which may have been the one provided in Roberts's grant. Although Hoopes claims that "the wharf was not built until 1865" (Hoopes 1971:88), some structure existed before that date. The "Roberts Hotel and wharf" were sold by John Chapman in 1863 to Fenton Tomlinson (Fountain 1967:(24)293), the latter being the probable namesake for Tomlinson Avenue, which lies just south of Trusdale. In fact, at least as early as 1855 there was shipping activity that would indicate the existence of some type of wharf for loading and unloading cargo and passengers. The steamship *Glide* announced runs between Union, Bucksport and "Jones' Embarcadero" (located on Salmon Creek in the southeastern corner of the bay) in January (Humboldt Times 1855a), while the following month Adams & Co. advertised that "the fast sailing clipper yacht *Coquasky* will leave Union daily for Eureka and Bucksport" (Humboldt Times 1855b). Ferry service between Bucksport and the peninsula had been established the previous year (see section A *Historic Circuit of the Bay, Fairhaven (Rolph)*, above).

The Wiyot village of Kutsuwahlik apparently lasted until February 1860, when it was reportedly burned by whites in one of several coordinated attacks on Wiyots that included the Indian Island Massacre (Northern Californian 1860:2). Despite the destruction of Kutsuwahlik, in 1905 there were five Wiyot households who owned land in Bucksport: Jerry James (Jerry Jim) and his two wives; Mary Ann Thompson and three children; Alec (Alex) Sam and wife; Winnie (Gilmore) and one child (with another woman, Blind Annie); and Nettie Logan and four children (Kelsey 1971:27-28). In February 1860 Jerry James had been found at the Indian Island Massacre site "in his dead mother's arms" (Humboldt Times 1929). In October 1897, it was announced that

Jerry James was “the newly selected chief of the Indian tribe that resides on Humboldt bay” (Fountain 1967:(26)424).

Another noteworthy Wiyot resident was Alex (or Alec) Sam, who was described as the “last of the male line of the old Mad River tribe of Indians,” this being a reference to the Patawat division of the Wiyot. Sam died in 1925, and his “funeral was held... at Bucksport, the body being laid away in the Indian burying ground at that place” (Fountain 1967:(34)524). It is unclear as to when the last Wiyot left Bucksport, although Winnie Gilmore appears as a property owner there at least until 1937 (Fountain 1967:(24)257).

Bucksport eventually followed Kutsuwahlik into oblivion, but it took a while for it to do so. For a time the town actually competed with Eureka and Union (Arcata) for primacy on the bay. Having failed to gain the county seat, Bucksport relied on Fort Humboldt to support the community, but the closing of the local Indian-white conflict in the mid-1860s spelt the end for the fort, which had its military “force” reduced to three caretakers in 1866 and was finally abandoned in 1870 (Times-Standard 2003b:A-6). The fortunes of Bucksport, which had failed to establish itself as a supply port for the mines, followed the fort, so that the 1865 map of Humboldt County noted under the place “Bucksport,” the dire word, “deserted” (Doolittle 1865). If this evaluation was an exaggeration, it nonetheless signified the diminished importance of a place which only a decade earlier still aspired to be the leading community in the county.

Yet if Bucksport was not destined to be the county’s center of culture and commerce, it still stood in an advantageous location for certain activities. It was nearly adjacent to the mouth of Elk River, and it was upstream along this watercourse that the Elk River Mill and Lumber Company went into operation in June 1885, with its mill at the fresh-minted company town of Falk. The lumber the mill produced had to go somewhere, which proved to be Bucksport, transported to a lumber yard and wharf there by the newly established Bucksport and Elk River Railroad (B&ERRR) (Carranco and Sorensen 1988:95), which opened for service in 1886 (Fountain 1967:(31)254). The company’s Bucksport property approximated that of the erstwhile Modena Mill’s, running back from the bayshore in the vicinity of the Roberts Addition’s 4th, 5th and 6th streets. A large “I”-shaped wharf jutted out into the bay from the shoreline; the date of its construction is unknown (Plats of Eureka 1910:75).

The B&ERRR was not the first rail line to come through Bucksport. A year earlier, in 1885, the Eel River and Eureka Railroad (ER&ERR), which was already operating from Burnell’s (east of Alton) on the Van Duzen to South Bay (Field’s Landing), extended its line northward through Bucksport and on to Eureka (see section *A Historical Circuit of the Bay, Eureka*, above). In 1907, the line became part of the Northwestern Pacific Railroad (NWP) (Fountain 1967:(31)255). The B&ERRR and ER&ERR tracks crossed north of today’s Pound Road, the B&ERRR thence running close to the bay on its way

south and the ER&ERR heading to the east on its way up Elk River. At Trusdale Street, the B&ERRR was actually running on a trestle above the bay, while the ER&ERR had its right-of-way along Howell Street. The NWP still retains its trackage, and it is along much of the railroad's right-of-way that the recently proposed extension of Waterfront Drive would run.

The northern end of Bucksport, long languishing only on the plat map, whose east-west streets bore the names of Gregg Party participants—Tru[e]sdale, Sebring, Southard, Gregg, Van Duzen—finally came to fulfillment in 1903, when J. H. Holmes “purchased 10 acres of sand dunes from William Carson” and began to build the first phase of the Holmes-Eureka Mill (Fountain 1967:(51)146). The following year the B&ERRR extended its line northward along the bay from the Elk River Mill and Lumber Company yards and wharf to the new Holmes-Eureka operation; timber would come from Railroad Creek, south of Jones Prairie in the Elk River drainage (Carranco and Sorensen 1988:99). The B&ERRR made its final northward extension in 1933, when it added track to reach the Dolbeer and Carson log dump north of Holmes-Eureka Mill. The rail line was purchased by the Pacific Lumber Company in 1950, which dismantled the northern section of the railway in 1953 (Borden 1961:6, 8).

The Holmes-Eureka Mill site had already contained a shingle mill, which Holmes-Eureka kept in operation when the company started up in July 1904. The location of the property offered Holmes-Eureka several advantages: a large expanse of land west of Broadway for air drying lumber; the proximity of Humboldt Bay, which was used as the mill pond; the additional proximity of a deepwater channel in the bay, which when reached by a dock, allowed lumber to be loaded directly onto ocean-going vessels; and the presence of two railroad lines running through the property, which provided direct shipping routes for logs cut in the woods (Parker 1988a:4). When Holmes-Eureka began cutting in areas not served by the B&ERRR it began to use the ER&ERR (later NWP) line for log hauling, and the B&ERRR line actually became a nuisance to the lumber company, since:

The Holmes Eureka sawmill was literally built around the B & ER[RR] with very little clearance anywhere along its 20 foot wide right-of-way. The rail line went through such strategic parts of the sawmill that operations had to be suspended when a logging train was on the track leading to or from the log dump. A drawbridge carried the cant conveyor over the B & ER[RR] track. Obviously it had to be raised whenever a train (usually the Dolbeer & Carson logging train) passed over the line. (Parker 1988a:4-5).

Within 20 years, the Holmes-Eureka mill had grown to considerable, and highly visible, size:

...with its location between Broadway in Eureka and Humboldt Bay on the tidal lands overlooked by Fort Humboldt. By the 1920's it was quite a respectable complex of

buildings and other facilities, starting with the deepwater dock on the bay, a part of the bay used as a long pond, the sawmill and the planing mill (built in 1919), the dry kilns (built in 1920), the storage and shipping sheds, the retail lumber yard on Broadway, and the many acres of stacks of piled lumber in the air drying yards. (Parker 1988a:6)

Also of note was “the impressive main gate to the plant, on Broadway,” which was the scene of a memorable and tragic battle between strikers and police in 1935. (Parker 1988a:6-7).

In 1958 Holmes-Eureka was sold to the Pacific Lumber Company for \$6,000,000 (Parker 1988b:20). For the next four years PL continued mill operations at the site, but starting in 1962 the company began to close down certain facilities and remove various buildings. Eventually, “aside from an area right on Broadway occupied by a retail lumberyard, the old Homes Eureka property was barren and unused” (Parker 1988b:22). By the late 1980s the eastern portion of the property had become the site of the Bayshore Mall. Ruins of parts of the mill still occupy area north of the Standard Oil property, between the railroad tracks and the bay.

Another industrial operation commenced southwest of Holmes-Eureka in 1913. It was then that a “tremendous increase in the automobile traffic in the county” induced the Standard Oil Company to locate a distribution plant in Bucksport (Fountain 1967:(24)158), taking the northern parts of blocks B and 3 and the blocks immediately north for their operations (Plats of Eureka 1910:75).

In the early 1930s the mouth of Elk River, which at that time met the bay just west of the NWP bridge, was diverted by the construction of a cofferdam west of the bridge. The result was a northward movement of the river’s mouth, to a point near the now-dismantled Elk River Lumber Company’s wharf. “Slowly, the sandy bay area between the Elk River wharf and the Standard Oil pier...filled in with mud and silt” (Madsen 1976:5). By 1976, “the sandy beach, boat dock and rental at the end of Truesdale [sic] Street... [had] disappeared” (Madsen 1976:5). This passing reference to a boat dock indicates another business operation in the study area.

The locale south of Bucksport was the site of the Press Shingle Mill, which was “probably the finest shingle plant in Humboldt County in the early 1900s” (Nash 1986:13). The plat for the Roberts Addition shows the Elk River Mill and Lumber Company Wharf as belonging to “Whiting G. Press” (Plats of Eureka 1910:77). The Press Mill is shown in 1916 as being located between the B&ERRR and the NWP tracks just south of Press Road, which ran from Broadway to the bay approximately through what is now the Pierson Building Center. It was to a part of the Press property that John Hilfiker moved his pipe-making operation in about 1908. In 1915, Whiting C. (or G.) Press sold the Press Mill site to George H. Close (Fountain 1967:(104)413). The 1931 Sanborn map shows the Press/Close property occupied by Eureka Fibre Co.

At a later date, at least part of this property became the location for the Oil Terminal Company. The latter business was located just south of Hilfiker Lane, which runs on a line roughly corresponding with the Roberts Addition's 5th Street (Plats of Eureka 1910:77). At the end of Hilfiker Lane is the remnant of a pipeline that ran from the oil terminal across the mouth of Elk River, onto Elk River's spit, and thence to an off-loading "dolphin" in the bay (Times-Standard 1995:A3).

North of Bucksport was a marshy area that ran all the way to Eureka. "By 1870, some [of] the wetlands between A Street in Eureka and Bucksport had been diked and reclaimed for agricultural pasture" (EDAW 1984). As indicated above, the ER&ERR added to the diking system when extending its line in Eureka during the following decade. In November 1888 a local paper reported that:

The Eel River and Eureka Railroad have [sic] finished the work of enclosing Clark's Slough, with the exception of the rock on the outside. The work has not only reclaimed a vast tract of marshland, but it has given a solid roadbed instead of piling, which was a source of expense on account of the teredo [the so-called "shipworm" that drills into wood]. There is no better pasture land anywhere than the reclaimed marsh land (Fountain 1967:vol. 104:413).

Clark's Slough, as mentioned above, has been substantially altered and degraded. It is shown by Loud (1918:Plate 2) as running northwest into Humboldt Bay approximately one-half mile west of the train depot. The course and extent of the slough and its adjacent wetlands appear to have changed over time, or to have at least been mapped differently. The Coast Survey map from 1851 shows what is probably the same slough (then unnamed) running almost due east from the bay for approximately three-quarters of a mile, bisecting marshlands that run from the northwest edge of Eureka (1st and A streets) south to a point approximately one mile north of Bucksport (USCS 1851). A 1902 Eureka city map shows a different course for the slough (much closer to that of Loud's), with it running in a southerly direction as far south as the South Park Race Course, just south of Whipple (14th) Street. Its abrupt end there apparently resulted from the construction of the race track (Noe and Georgeson 1902). The 1912 Coast and Geodetic Survey (based on topographic data from 1869 and 1870) map shows the slough actually running between the race track and Broadway and continuing south past the racetrack, which is probably a more accurate rendering than that of the 1902 map. On the 1912 map, the wetland area connected with the slough runs south to what is now Vigo Street, which serves as a dike; a thin tentacle of wetland continues southward, paralleling the bay, to a point opposite Fort Humboldt (USC&GS 1912). In 1913, part of this tentacle, which had been acquired four years earlier "by the Pacific Pulp, Paper and Products Company for a site for a pulp and paper mill," was taken over by the neighboring Holmes-Eureka Lumber Company to be used for dry kilns (Fountain 1967:(24)158).

One operation that utilized the reclaimed land in the Clark's Slough drainage was the Russ Market Company Abattoir (Polk 1930:251), located directly west of the foot of today's Henderson Street, just east of the NWP tracks and just south of Vigo Street. The facility's isolation insulated most of the public from its noisome qualities, but not so the passengers on the NWP, who were able to observe, at a distance of less than a hundred feet, a special refinement of the Russ operation—an elevated traction system that transported hog and cattle manure to a large trackside cesspit (Sanborn 1931). North of Vigo Street, which runs approximately along the northern boundary of the Russ property, is an irregularly shaped parcel that belonged to the B&ERRR, with the property's northern boundary being the line along which, to the east, runs along Trinity Street. A parcel that in 1916 belonged to the Henry Swart Lumber Co. was the next north; it ran from the Trinity Street line north to Murray Street (now Del Norte Street), and from the bay east to Felt Street.

The Swart Lumber Company site, along with areas on both sides of Railroad Avenue north of Del Norte Street, formed part of a historic dump that was “apparently used between the 1880's and the 1930's” (Roscoe and Van Kirk 1997:2). In March 1901, after years of unauthorized dumping in the area, the Eureka City Council adopted an ordinance establishing a city dump site, this being “a 100 ft. x 166 ft. site on the south side of Murray Street (Del Norte) at the southern end of Railroad Avenue and east of the railroad tracks, an area presently part of the PALCO Marsh” (Roscoe and Van Kirk 1997:4). In 1925, William S. Clark, owner of the property on Railroad Avenue north of the official dump, sued the city because it “had operated a dump not only at the specified site, but, according to the complaint, it had also ‘used and maintained’ as a dumping ground Railroad Avenue” (Roscoe and Van Kirk 1997:5). The suit prompted the city to pass a garbage ordinance in 1926 that provided “for letting the garbage collection and disposal contract to an individual or firm,” along with setting a per-can collection fee and selecting a new disposal site. “The dumps on Railroad Avenue, along nearby streets, and on adjacent lands were officially closed with the enactment of the 1926 ordinance” (Roscoe and Van Kirk 1997:6). The above information indicates that the city dump occupied the eastern half of the Swart Lumber Company property; it is unclear what relationship Swart had with the dump. The 1869-1870 topographic data from the 1912 Coast and Geodetic Survey map indicates the presence of a small lagoon in the area just south of today's Del Norte Street and east of the NWPRR tracks—in other words, on the site of the PALCO marsh (USC&GS 1912).

The lumber boom of the late 1940s saw the establishment of at least two other mills in the Bucksport area. To the south was the Wilco Products Co., established in 1947 and located on Press Lane, which indicates proximity to the old Whiting Press and Eureka Fibre Company's operations. North of Holmes-Eureka was Eureka Lumber and Crossarm, whose mill went into operation in 1948 (Humboldt Times 1952:8). The company used scrap wood and lumber from local mills to manufacture cross arms for telephone poles, mining timbers, and railroad ties. Two air drying sheds were

constructed in 1958 and 1959, respectively, and in the latter year the operation was acquired by the Joslyn Manufacturing and Supply Company. Subsequently Pacific Lumber Company acquired the property and buildings (EDAW 1984). The site is located at the end of today's Bayshore Way, where a recycling operation now occupies a parking lot north of the Bayshore Mall (Woods 2004). The mill thus occupied land that had formerly belonged to the Russ Market Company.

The Bucksport area today would be unrecognizable to David Buck. The unnamed slough that curved inland from near the foot of Trusdale Street has long ago ceased to exist. The mouth of Elk River has advanced perhaps a mile north from its earlier location in the vicinity of Herrick Avenue. The high ground east of the original community has been sculpted to conform to the demands of Highway 101. Nothing remains of Kutsuwahlik, or, for that matter, of the original buildings of the white community. Pilings from the wharf and the railroad trestle that stipple the mudflats at the edge of the bay are the only reminders of the early day Bucksport business activity. Concrete endures, however, so that the ghost of the Holmes-Eureka mill is still made manifest by crumbling walls of cement. And the soil, of course, carries its usual unknown legacy of the mill and oil terminal operations that were built upon it.

Lower Elk River area

South of Bucksport the floodplain of Elk River opens as it approaches the bay. The broad stretch of alluvium provided "excellent agricultural lands during...the early years," and so was claimed by ranchers (Coy 1982:96). Elk River was one of three streams draining into Humboldt Bay (the others were Freshwater and Salmon creeks), that were used to transport logs down to the bay. "Splash dams" were built across these streams in summertime. Logs were cut in the forested areas upstream and dragged into the dry streambeds below the dams. Come the high water of wintertime, the dams would be cut, and the ensuing floodtide would carry the timber to the bay, whence it was floated to the shoreline mills. In December 1871, "fully one hundred thousand dollars worth of logs" reposed in the bed of Elk River, waiting for "a freshet to get [them] out." The freshet came just before New Years, with "the river...now full [of logs] for a distance of three miles above the boom near the crossing" (Raphael and House 2007:197).

Both the Dolbeer & Carson Lumber Company and the Elk River Mill & Lumber Company logged Elk River, the former in the North Fork, the latter in the South Fork (Belcher 1921:6). The logging denuded the steep slopes that dropped into the two forks of the river. The ensuing erosion added to the impacts upon the river earlier created by the log drives. By 1948 a 46-year resident of the Elk River valley, Sherman Stockhoff, could comment on one of the effects of this activity thus: "We used to be able to hear them churning over the riffles across the road from the house at night....But no more now" (Schwarzkopf 1949a:13). The "them" Stockhoff referred to were salmon and steelhead, which had once run heavily in the river. In more recent times, the Pacific

Lumber Company has taken over the Elk River timberlands. In 1998 the company had its logging license suspended for various violations, including “being issued Cleanup and Abatement orders by the Regional Water Quality Control Board for destroying the domestic water sources of Elk River residents” (EPIC 1998). Almost a century earlier, this would have been big news, since at the time Elk River served as the domestic water source for the City of Eureka, drawing the water from the river on the “old Shanahan ranch” (Schwarzkopf 1949a:13) a little over a mile upstream from what was then the river’s mouth (Belcher 1921:6).

The lowest tributary to Elk River is Martin’s Slough, which extends eastward from the Herrick Avenue area, creating an elaborate incision on the tilted sedimentary plane that extends south from Eureka. On the south side of the slough stood a stand of old-growth redwood that was unharvested until the 1940s. Then, for the next two decades, five different logging operations cut their way through the territory, often working on steep slopes (Jackson 2007; Larson 2007a; Larson 2007b; Larson, Larson, and Larson 2007; Larson and Moore 2007). Perhaps the heaviest cutting in the area was done from the mid-1940s until 1960 for the Larson Brothers Shingle Mill, which was located near the intersection of Ridgewood and Walnut drives (Larson and Moore 2007; Polk 1960:193). The Larsons selectively cut old-growth redwood from the nearly virgin mixed forest on the property. Prior to their cutting, the only tree removal on the tract had been a small amount done by split-stuff fallers, probably during the Depression. In addition, some “felled and bucked” logs were found on the ground when the Larsons arrived. Many of the trees on the parcel were filled with knots, which in those times made them unacceptable for sawtimber, as only “clear” grade lumber was wanted. The Larsons chose trees that were “good splitters,” which, after falling, were cut into shingle bolts. The biggest tree cut was twenty-one feet in diameter, while many others were in the 12- to 18-foot diameter range (Larson, Larson, and Larson 2007; Larson and Moore 2007). Ernest Pierson used Larson Brother shingles (both for roofs and siding) for all his building work. The mill usually had a crew of five or six workers, while a five-man woods crew made up the shingle bolts. (Larson, Larson, and Larson, 2007; Larson and Moore 2007).

So it was that the Larson shingle operation provided a livelihood for ten to a dozen men, while also providing cladding for many Humboldt County houses built during the post-World War II building boom. Others benefitted from the four other logging operations in the area. But of course these gains came at a price: Eureka lost the last old-growth redwood forest in its backyard, and with it, the chance for a substantial park. And the impact of the logging on Martin’s Slough, Elk River, and Humboldt Bay has, as in most similar cases, yet to be assessed.

King Salmon area

The bayside community of King Salmon occupies the sites of at least two earlier towns: the Wiyot village of Djorokegochkok and one of the original white settlements on the

bay, Humboldt City. It was next to Djorokeyochkok that Hans Henry Buhne and a party from the *Laura Virginia* landed in April 1850, claiming the site for the Laura Virginia Company, which soon set up Humboldt City on the site. How the location, which had been a Wiyot village, came to be available is a sordid story almost always ignored or glossed over in standard historical accounts. Owen Coy, former Eureka, Professor of California History at the University of Southern California, and Director of the California State Historical Association, wrote of the founding of Humboldt City in his *Humboldt Bay Region: 1850 – 1875*, long a standard work. Coy tells us that after the *Laura Virginia* entered the bay, “[i]mmediately the members of the association began to lay out a city (Coy 1982:54). What Coy fails to reveal, however, is that before Humboldt City could be laid out, it was necessary to destroy Djorokeyochkok. Coy knew at least part what had happened, for elsewhere in his book he used parts of the document that tells of a related incident, a “statement” by Laura Virginia Association member Harry La Motte, and the document is cited in his bibliography (Coy 1982:45, 317). In his statement, La Motte describes how a man named Stansberry shot and killed two Wiyot Indians who had guided some whites to the village (La Motte 7-8). Contemporary newspaper accounts tell of both the killings and the subsequent burning of the village; the articles were from editions that were cited in Coy’s bibliography (Coy 1982:321) but were never mentioned in the book. Coy’s treatment of the incident can perhaps best be described as “old-style” history, that is, the type that “is written by the victors.” (An evaluation of the reporting of the Djorokeyochkok incident is found in a series of four articles written by the author of this report (Rohde 2003a, 2003b, 2003c, 2004).)

So Djorokeyochkok was gone, and the whites’ replacement, Humboldt City, was also gone soon enough. On the ashes of the Wiyot village came “one frame house and eight tents in 1850,” which the following year had expanded to a “dozen houses spread over a plateau of forty acres.” Ere 1851 was out, however, Humboldt City had become “nearly deserted.” The reason usually given for this is that “Union and Eureka had opened shorter routes to the Trinity Mines (Hoopes 1971:45), but inasmuch as Humboldt City was actually closer, by the southernmost trail, than was Eureka, the subject deserves further analysis.

By 1886 Hans Henry Buhne, who had led the first party of whites to the site of Humboldt City, owned a tract of land that extended from the ghost town east to nearly Elk River and south into the hills above Fields Landing (Forbes 1886). The property was still in the hands of his heirs in 1921 (Belcher Abstract & Title Co. 1921:6). A view of Buhne’s farm from Elliott’s 1881 history (Elliott 1881:following 108) shows a large house and outbuildings in front of the hill-like landform variously known as Red Bluff, Humboldt Point, Spruce Point, and Buhne Point. In 1907 the dairy at the Buhne property had “150 cows, the milk being taken once a day to Eureka to be retailed” (Standard 1907:3). The site of Buhne’s house, along with most of the point, no longer exist; the erosive effects of bay currents and, more importantly, the waves coming

through the bay entrance, which aim straight at the point, have over time removed at least 200 feet of the northern side of the bluff and surrounding lands (Laird, Powell, Robinson, and Schubert 2007).

Following World War II, dredging and filling in the area southwest of the point created the fishing resort of King Salmon, complete with channels for boat docks (Laird, Powell, Robinson, and Schubert 2007). By 1948 several houses had been built on the 30-acre site (Schwarzkopf 1949b), and today the leeward side of the flat is filled with dwellings, many of them trailers or mobile homes. So it is that King Salmon has become the “born again” community at Buhne Point.

Fields Landing (South Bay)

Fields Landing is probably the only town in Humboldt County to have had three names—simultaneously. Accounts conflict as to when Waterman Field came to the waterside location that was to bear his name. His obituary indicated that he “laid out” a town there in 1862 (Blue Lake Advocate 1898:2) and another account puts his arrival “[s]ometime after the Indian troubles of the 1850’s” (L. Peterson 1982:17). The 1865 county map, however, shows neither town nor Field’s property ownership at that location (Doolittle 1865) In 1871, Field acquired 16.65 acres of swamp and overflow land (Fountain 1967:(75):138), perhaps leading to the claim that “Fields Landing got its start back in the 1870s, when Waterman Field purchased much of what is the present town area, and erected a dock” (Schwarzkopf 1948b). In 1870, the eastern part of Fields Landing has clearly been developed, with a road running past several buildings and what appear to be fields (probably Waterman’s). By 1916 the road has been replaced by the original highway, the fields by a grid of streets, and the swamp and overflow lands to the west have been transformed into higher ground on which are railroad tracks and docks (Laird, Powell, Robinson, and Schubert 2007).

The ER&ERR began operations from Fields Landing to a point east of Alton in November 1884 (Kneiss 1956:93). The docks at Fields Landing came to serve four lumber companies that brought their wood north on the railroad: the Pacific Lumber Company, the Eel River Lumber Company, the Milford Company, and the Metropolitan Lumber Company (Fountain 1967:(51):153). According to one perhaps apocryphal account, lumber baron John Vance, who was part owner of the ER&ERR, had negotiated with Waterman Field for a right-of-way across Field’s property. Field, however, could not be brought to agreement. The line therefore had to bend west around Field’s property. Vance, “possibly out a spirit of revenge,” had the ER&ERR’s station named South Bay, rather than using the name of Field’s community (Martin 1962). For a time, South Bay was the site of the ER&ERR’s shops and headquarters (Schwarzkopf 1948). In 1889 a third name briefly appeared, that of the town’s post office, which was called Adele, and which was likely the name of the wife or daughter of the first postmaster, a Mr. Haugwont (Ferndale Enterprise 1889:4).

The trainloads of wood products went from the docks on board vessels of the “Scandinavian Navy,” as the fleet of lumber schooners, captained and crewed mostly by Danes, Swedes, and Norwegians, was called in the 1890s (C. Peterson 1978:1). The tramp steamer *Cacique* was the first ship to arrive from South America. It was looking for railroad ties and found them at the dock. About 1909, Pacific Lumber began to assemble its own flotilla of steam schooners, which they operated until about 1918 (C. Peterson 1978:6).

In 1907, Fields Landing had about 500 residents, ten percent of whom took their lessons in the grammar school located on the hill in back of town. By then, the community’s names had dropped to two. Adele had lasted a little over 10 months, the post office becoming Fields Landing in December 1889 (Frickstad 1955:41). The two remaining names applied to distinct sections of town. To the west was South Bay, with its railroad station, docks, hotel, and store; to the east was Fields Landing, with its county road, Russ market, hotel, and store. At one place or the other was the blacksmith shop of the appropriately named George Washington Smith (Humboldt Standard 1907:1).

Lumber continued to go out of Fields Landing, while, starting in the 1940s, whales began to come in. It was an involuntary trip for the whales, who were brought in, harpooned and dead, to what was claimed, in 1941, to be the “only whaling station in the continental United States” (Humboldt Times 1941c). The enterprise was at least somewhat improvised—in 1943 the whaling fleet included “two refitted sardine boats,” which now were carrying a somewhat larger cargo than previously (Humboldt Times 1943). In 1945 a marine railway was installed at the Eureka Shipbuilders yard; the first craft to use it underwent “a complete scraping, caulking, and painting job and installation of new steering rods and conduits.” The new way had a 50-foot cradle and was 22 feet wide,; in addition, “[a]ll underwater structures are built of eucalyptus.” In order to accommodate larger vessels, the channel leading to the way was deepened (Humboldt Standard 1945b).

Still operating in 1948 was the oldest of Fields Landing’s port facilities, that of Pacific Lumber. During World War II, 59 ships loaded from there, while before the war, from 1937 to 1939, 184 vessels took on lumber. The volume during the war years was more than double that from the late 1930s, however, indicating that larger ships were used. Seafood operations were going full blast in the late 1940s, including the Paladini fishing plant and the Norcal fish and crab plant, with the La Rocca crab plant scheduled to begin operating the following year. The whaling station still whaled away, while both the South Bay Lumber Company and the Humboldt Shingle Company had mills at Fields Landing, and Bay View Manufacturing converted salvage wood into a variety of products, including “cross arms for grape vineyards.” The Crawford Lumber Company was shut down for overhauling, but was expected to add its activity to the

bustling town in the near future. In from the bay, a row of businesses lined Highway 101, catering to both locals and motorists (Schwarzkopf 1948).

Today Fields Landing is greatly diminished. There is no railroad, and the highway has become a freeway with only offramp access to the community. Some of the docks and ship services remain active, but the whaling station (except for its office building) has been gone so long that hardly anyone even remembers the smell. The last store has closed, but Adele's successor remains—the Fields Landing post office is probably the busiest place in town.

Beatrice (Salmon Creek) area

Probably no bayside rural location has seen greater alteration than the slough, creek and wetland area at the southeast corner of the bay. Sandwiched between the southern side of Humboldt Hill and the northern side of Table Bluff is the mouth of the Salmon Creek watershed, an area now almost unrecognizable when compared to an 1870 map of the area (Laird, et al 2007). Back then, two water features dominated the locale: to the north and east was Salmon Creek, emptying out of its canyon in Section 9, T3N, R1W, then turning north to run near the hillslope until it approached the future location of College of the Redwoods, where it turned west to empty into the bay. A mile to the west was Hookton Slough, which sent squidlike tentacles southeast from the bay, as if it were trying to grasp, or at least tickle, Salmon Creek. At one point, creek and slough connected; elsewhere, dozens of small creeks and sloughlets latticed the landscape (Laird, Powell, Robinson, and Schubert 2007).

The head of navigation on Hookton Slough was the closest shipping point to Rohnerville, the nearest white community on the north side of the lower Eel. In 1853 John Jones settled on the first bit of high ground above the swamplands of the lower slough (Parry 1963:2, 23-24) and by the following year had set up Jones's Landing, which was located approximately 100 yards north of the Hookton Road interchange on the Highway 101 freeway (Humboldt Times 1854e:2; Parry 1963:23-24; Laird, Powell, Robinson, and Schubert 2007). In 1875 the South Bay Railroad and Land Company was formed to transport the Jones company's logs out of the woods. Presently David Evans, John McKay, and H. A. Marks began construction of the Salmon Creek Mill on its namesake stream. At first the mill's lumber was taken by horse team to Hookton, a "port" located on Hookton Slough that had replaced Jones's Landing (Carranco and Sorensen 1988:120). Later in the year, the South Bay Railroad Company laid five miles of track from the bay up Salmon Creek, which allowed them to bypass both horses and Hookton in getting lumber to the bay. "The grade of the road was very steep, sometimes being as much as 200 feet to the mile [nearly 4 percent]" (Elliott 1881:138-139). Near the track ran the "lower road" or the Eureka to Rohnerville, Hydesville, and Eel River Road (Laird, Powell, Robinson, and Schubert 2007), described by one user as being in "deplorable condition. Great ruts and mudholes, into which the horse sank over knee deep and it is a mystery to us how the

Rohnerville stages succeed in pulling through them” (Carranco and Sorensen 1988: 120).

No sooner was the busy year of 1875 out than business failed; the Salmon Creek Mill filed for bankruptcy in January 1876 and three months hence William Carson purchased the property. Less than a year later John Dolbeer and Carson incorporated the Milford Land and Lumber Company to take over the Salmon Creek operation (Elliott 1881:139; Carranco and Sorensen 1988:120-121).

The D. R. Jones & Company also held timber in Salmon Creek, which it used to help feed its giant Gunther Island mill (Carranco 1982:197). Both Milford and Jones shipped on the railroad until 1880, when the latter had logged all its Salmon Creek timber. The railroad, lacking activity in Salmon Creek, proposed tunneling through Table Bluff to extend the line, but the time was not yet ripe (it would come shortly, however, with the ER&ERR). Instead the Salmon Creek railroad moved to Freshwater to become the Humboldt Logging Railroad Company (Elliott 1881:139; Carranco and Sorensen 1988:120-121).

It was in the Dolbeer & Carson Lumber Company’s woods at Salmon Creek that, in July 1881, John Dolbeer first tried out what was to become the 19th century’s greatest advance in redwood logging, the Dolbeer Steam Logging Donkey, which soon replaced horses and oxen as the motive power to haul logs from the cutblocks to landings (Labbe and Carranco 2001:50). After more than 20 years of donkey logging, Dolbeer and Carson’s Milford Mill was sold in 1902 (Carranco 1982:199).

By then, a new railroad had come through the area. In 1883 and 1884 the ER&ERR built from South Bay (Fields Landing) to east of Alton, tunneling through Table Bluff in the process (Humboldt Standard 1926). Coming from the north, the tracks ran between Salmon Creek and the county road, crossing Salmon Creek where the stream turned east. The rail line then veered southwest to enter the tunnel under Table Bluff (Laird, Powell, Robinson, and Schubert 2007).

A visitor to the “Salmon Creek Mill” in June 1876 described not only the mill itself, with a 43-inch-diameter smokestack that was “higher than any in use on Humboldt Bay,” but a substantial community that included two large barns, a blacksmith shop, machine shop, cook and boarding house, company store, and a “great number of small houses which dot the flat between the creek and mountainside” (West Coast Signal 1876:3). The mill was reportedly located at a deep declivity in the contour of the land,” where a millpond was created by damming Salmon Creek (Richmond N.d.). From this description, it appears that the mill site was slightly east of the confluence of Salmon Creek and Little Salmon Creek, in the upper middle of Section 9, T3N, R1W.

From the county wagon road that ran east of Salmon Creek, a road west to Hookton was surveyed in May 1872 (Humboldt County N.d.:40-41). The date of completion is unknown, but the road appears to have followed the approximate route of today's Hookton Road, running just south of the marshlands at the southeastern edge of the bay. At least as early as 1875 a hotel operated at "Salmon Creek Corner" (Richmond 1987:106); the building sat at the northwestern corner of the junction of the county wagon road (today's Tompkins Hill Road), and Hookton Road (Richmond 1988:Map B). Salmon Creek was considered "a sort of generic name for Evans' mill, Lovern's mill, Byron & Chestnut's Hotel and about three other places." It was considered one of Humboldt's "stirring little villages" (Evening Star 1877a:2). The location probably was also known as Chestnut's Corner, where there was also a livery stable in 1877. Reference is also made to "the intersection of the plank and county roads" (Evening Star 1877b:1) suggesting that the route to Hookton was covered with wood to take it over the marshy spots.

Besides the logging and mill activity, the area supported farming. Captain H. H. Ticknor early acquired a claim next to the county road (Fountain 1967:(109):263). According to one account, Ticknor's sloop, the *Sea Gull*, went aground near Eureka in 1852. He subsequently had the purser's cabin removed from the derelict and had it towed "upside down" up a slough at the south end of the bay. At the head of the slough the cabin was dismantled and transported a short distance farther to Ticknor's property, Willowbrook Farm, where it was reassembled and put in use (Fountain 1967:(27)306). Willowbrook Farm, which was situated on the county road south of where it came down from Humboldt Hill, eventually included a traveler's hotel (Irvine 1915:567). North of Willowbrook was a farm owned by William Monroe White (Fountain 1967:(109):263). White's farm supplied eggs and produce to the soldiers at Fort Humboldt; like Ticknor before him, White and other nearby farmers used the nearby slough for transport. White's Slough, as it came to be called, branched off of Salmon Creek where the creek made a dogleg to the west just before entering Humboldt Bay. White's farm occupied the approximate area of today's College of the Redwoods (Genzoli 1982:17, Laird, Powell, Robinson, and Schubert 2007).

Another White gave her name to a part of the local landscape. Daughter Beatrice became the postmaster for the area's new post office in 1884. It was requested that the office be named Milford after the nearby mill, but that name was already taken. Quick as a wink, the postmaster's first name was substituted, and the community of Beatrice was born (Frickstad 1955:41; Humboldt County Historical Society N.d.b). The name took on a special pronunciation for railroad conductors who needed to announce the station stop there. To be understood over the sounds of the train, the conductors began shouting "Bee-AT-triss" (Humboldt County Historical Society News Letter 1966:2)) which, of course, was where the station was "at."

The usable area around Beatrice grew. In 1900 Z. Russ Co. announced plans to reclaim lands from Humboldt Hill to Table Bluff to use for dairying (Blue Lake Advocate 1900:2). In later years the ranch, with its extensive system of diking, was transformed into the Humboldt Bay National Wildlife Refuge.

Today, the most prominent historical feature of the area is the renovated Salmon Creek School, a striking white structure whose red lettering proclaims it to now be the Swiss Hall. It sits just north of the junction of the old county road and the road to Hookton, which currently sees most of its activity in the form of students commuting to and from the College of the Redwoods. Little do they know, when rattling over the abandoned railroad tracks west of the junction, that they are passing through “Bee-AT-triss.”

Hookton

West of Salmon Creek is Hookton Slough. A man named Sawyer had property at the base of the hillslope south of the slough and about three miles due west of Jones’s Landing (Laird, Powell, Robinson, and Schubert 2007). Jones had been in business but two years when Sawyer’s Landing went into action, its wharf apparently built by the owners of the steamer *Glide* (Humboldt Times 1856:2). The landing appears to have consisted of a ditch, dug from Hookton Slough south to high ground, “Allen’s Wharf” (named for H. D. P. Allen, owner of the *Glide*), and a warehouse (Humboldt County N.d.:40-41; Turner 1993:108-122). Sawyer’s house, on the maps since 1854 (Laird, Powell, Robinson, and Schubert 2007), was located approximately 70 rods (1,185 feet) west of the landing at what became the junction of Hookton and Clough roads, just above the bayside marshlands to the north (Laird, Powell, Robinson, and Schubert 2007).

It was not as simple as merely having “Allen’s Wharf” at “Sawyer’s Landing.” George Hook acquired property in the area and by 1870 it was his name that dominated the map. “Hookton” proper was a commercial district located where Sawyer had his house (Laird, Powell, Robinson, and Schubert 2007). In 1861 it possessed a hotel, general store, saloon, and several dwellings (Turner 1993:108). Northwest a quarter mile was “Hookton’s Landing,” which sat next to the slough, connected to high ground at Hookton Road by a 200-foot causeway (Laird, Powell, Robinson, and Schubert 2007). By 1879 the causeway was lined with a series of perhaps ten to twelve warehouses, all with hipped roofs and all built from redwood (Richmond 1990:3).

In 1867 the schooner *Dirigo*, “of Hookton,” carried merchandise from Hookton or Salmon Creek at \$1.25 per ton (Humboldt Times 1867a:2). Competing with her were both the schooner *Glide* and the sloop *Sam Slick*, which charged the same rate (Humboldt Times 1867b:2). J. W. Holt, who operated the Hookton warehouses in 1875, saw nearly 25,000,000 pounds of goods come through, most of it produce, merchandise, and shingles (Daily Humboldt Times 1875:3). In 1881 Hookton was

called “the shipping point for Ferndale, Rohnerville, Hydesville, Petrolia and Springville [Fortuna]” (Elliott 1881:159), although Southport Landing, west along the bay, also claimed a share of the activity (Daily Humboldt Times 1875:3). Freight wagons brought their loads over Table Bluff from the lower Eel River valley and beyond. Routes from Dungan’s and Singley’s ferries came up from the Eel to meet at the ridgetop at the town of Table Bluff; to the north a single road led down to Hookton (Forbes 1886).

Hookton prospered until 1884. Then the ER&ERR began its service, running *under* the daunting bluff and bringing goods all the way up the bay to Fields Landing. Preempted, Hookton began a precipitous decline (Turner 1993:108; Richmond 1990:4).

Today, Hookton has regained its status as a hub of navigation. Kayakers can now launch from a National Wildlife Refuge dock that occupies the approximate location of the old shipping wharf, although the row of warehouses that lined the route to the slough has been replaced by a single structure—a small restroom for the use of refuge visitors. Sawyer’s old claim contains an old house, but of the four streets that were platted around it, only two exist. Down the road, Allen’s wharf is seen no more, the ditch that was dug for it no longer visible; it lay close to an establishment that most recently was an alpaca ranch. For many years now, the tide has been out at Hookton.

Indianola

The Wiyot Indians used several locations along the south side of the bay for villages or camps. One of these places was frequented by the Wiyot leader Kiwelattah (other spellings of his name exist—this is Loud’s version) and others for gathering clams (Loud 1918:271). In 1873, Dandy Bill, a Wiyot, purchased land in the vicinity from Elisha Clark (West Coast Signal 1873:3). In 1875 Bill had the property platted (Fountain 1967:(34)508). That same year “he sold several lots each to Humboldt John, Humboldt Henry, Humboldt Doctor, Humboldt Peter, Humboldt Cavalier, and Captain Joe. Dandy Bill named his settlement Indianola. It survives today [1963] still owned by the same race that founded it” (Parry 1963:11-12).

In 1893 Indianola hosted “one of the biggest hits of the season,” a dance line that “kept up for five successive nights. Dancers were present from all over the county, some walking down from Hoopa to participate” (Ferndale Enterprise 1893:8). In May 1898 the Indianola baseball team, it was noted, could not play the Ferndale nine because “rain [had] left the baseball grounds a trifle too moist” (Ferndale Enterprise 1898:5).

But time passes, as have Indianola’s dancers and ballplayers. By 1972, all the original Wiyot families had left the little community (Berman 2004). Today, only two of Indianola’s houses remain, and the only sense that passersby have of the place’s past is the road sign at Hookton Road with Dandy Bill’s name on it.

Southport Landing

Modern-day Humboldt Bay has two channels that run toward its southern edge; they divide not far from the mouth of the bay, opposite King Salmon. Hookton Channel, to the east, has an arm that connects to Salmon Creek, while its main stem runs up to Hookton Slough. The channel has a depth of six feet about a mile north of the site of Hookton Landing. To the west is Southport Channel, which runs toward the southwestern corner of the bay. It has a depth of six feet about a half mile north of what was once Southport Landing (USGS 1972b). One-hundred and twenty years ago, the channels were considerably deeper. Hookton Channel was twelve feet deep when it reached Hookton slough and nine feet deep in the slough itself a short distance upstream from Hookton Landing. Southport Slough undulated on its way south, reaching a shallow point of ten feet and then dropping again to eighteen feet near its end, which was about a half mile from shore. By 1870 Southport Wharf extended out into the bay to make up the difference (USC&GS 1886).

A quarter-section of land south of Southport Channel was occupied by J[acob] D. Myers in 1862 (Parry 1963:2). In 1854 the spot had been mapped as Meyer's [*sic*] Landing (Laird, Powell, Robinson, and Schubert 2007). Myers' Landing (the usual spelling) was connected to the Eel River area by a mile-and-a-half-long "portage" road that crossed over a saddle in Table Bluff to reach Waite's Slough, which was attached to the Eel River (Carranco 1984:17). Ethan Waite had a landing approved on his namesake slough in December 1853 (Parry 1963:26; Humboldt Times 1861:3). The bounty of the lower Eel River section could thus be transported downriver to near its mouth, then north up Waite's Slough, offloaded there and moved by road to Myers Landing, and then reloaded onto vessels for transport up the bay. In 1857 the *Glide* began gliding between Myers Landing and Eureka on a weekly basis. During the 1859-1860 season, Eel River salmon fishermen shipped 600 tons of the finny food over the bluff and up the bay on the Myers route. Three years later the clipper sloop *Ida* include both Myers Landing and Hookton on its weekly trips to Eureka (Parry 1963:26-27). About three-fourths of a mile west of Myers Landing was a store owned by N. Durperu, while De Lassaux and Pulsford operated the Table Bluff Bar near the haul road between Myers and Waite's landings (Parry 1963:47; Laird, Powell, Robinson, and Schubert 2007). The west end of Table Bluff thus had all the essentials for a community.

Myers offered his "landing and farm" for sale in 1865. The property included "all the stock, warehouses [plural], wharf and 10 years chart [the latter probably detailing the changes in the channel]" (Fountain 1967:(99):166). Apparently there were no takers at the time, for it was only in February 1873 that Myers sold to Eureka merchant Charles H. Heney for \$6,000 (Parry 1963:28).

Heney hit the ground running. By June he had laid out a townsite, which he named Southport (Parry 1963:28). He also had men "at work driving piles for a substantial

wharf and warehouse,” and had prepared plans for the grading of the bed for—of all things—a railroad. The awestruck reporter noted that a “terrible earnestness has taken the place of a visionary uncertainty” (Humboldt Times 1873b:3).

In the fall of 1873, Heney’s railroad was rolling—it featured five miles of track that looped around the western end of Table Bluff to reach McNulty’s (formerly Waite’s) Landing; the rails were made of pepperwood and mules pulled the tramcars. The center of the track was planked “for about two miles for the mules to walk on.” The mules pulled in tandem, wearing spiked shoes that prevented their slipping when the planks were wet. The mules pulled and pulled; in 1875 Heney’s warehouse had 5,796,000 pounds of freight pass through it, including “3,204 sacks of potatoes, 2,818 sacks of oats, 232 sacks of wheat, 433 sacks of barley, 203 sacks of peas, 3,418 half barrels of salmon, 94 half barrels of pork, and 157 half barrels of butter” Carranco 1984:17-18).

But all was not well with Heney’s operation. A sandbar at the mouth of McNulty’s Slough closed it to traffic for about a month in early 1876. Then shippers began using Boynton’s wharf on Salt River, sending their cargoes down the Eel and then directly into the ocean. In September 1877 Heney, bereft of business, closed his railroad. Then came heavy storms in the winter of 1878. Winds and high tides destroyed much of the rail line near Southport Landing (Carranco 1984:18). Heney’s railroad never ran again, and its engines—the plodding mules—joined the ranks of the unemployed.

Then, in 1882, it appeared a new railroad might emanate from Southport Landing. That November, the *Rohnerville Herald* announced that,

The parties whose names are given below have organized a company and purchased the McPherson & Weatherbee [sic] tract of timber on Eel River comprising about 9,060 acres. The corporation will be known as the Pacific lumber company, and is composed of the following capitalists: Paxton & Curtis, Bankers, of Austin, Nevada; [former California governor] B. F. Low, president of the Anglo-California bank, San Francisco; James A. Rigby, and others. They have purchased the Southport railroad and franchise of C. H. Heney, and intend to build a first-class narrow-gauge railroad from Heney’s landing up Eel river valley...to their timber, where extensive saw mills will be built....The company represents millions in capital, and will acknowledge no such word as fail. They will put the Heney railroad and landing in perfect repair during the winter, and will commence on the new road as soon as the rains cease. The survey of the road is made, and the right of way in many cases has already been obtained (Humboldt Times 1882a:3).

What the investors had actually acquired from Heney was a stretch of right-of-way and a potential shipping point on Humboldt Bay, Southport Landing. In addition, the Pacific Lumber Company (TPL) purchased a ribbon of land along the coast up to the harbor entrance, along with a similar strip south to Centerville (Allen 1949:IV:7).

These assets were to form the nucleus of the Humboldt Bay and Eel River Railroad (HB&ERR), which TPL incorporated on November 17, 1882 (Stindt 1987:40).

This was exactly seven days after the incorporation of the ER&ERR (Humboldt Times 1882b:3). It looked as if the two rail lines were going to go head to head.

While the ER&ERR pondered tunneling under Table Bluff (Daily Times-Telephone 1883), the HB&ERR opened the throttle on its railroad project:

By the first of December, James Rigby (superintendent of the railroad) had begun rebuilding Heney's wharf at Southport. The survey of the right-of-way began on January 12, 1883. Using day labor, Rigby completed the roadbed to McNulty's Slough by the last of June and was rushing to get as far as the foot of Singley Hill before winter. The roadbed was completed to within a mile of the present town of Loleta by the first of December, but there, work came to a halt (Parry 1963:42-42).

The HB&ERRR and the ER&ERR had decided to compromise. The latter would build and operate a line from Humboldt Bay to Burnell's (Fountain 1967:(50):252), east of Alton, while TPL would run its railroad from a junction at Alton southward up the Eel to its mill site at what later became Scotia. The ER&ERR would haul TPL's products north from Alton (Stindt 1987:40). The rail lines were built, but it took more than four years before TPL shipped, in June 1887, the first lumber from its brand-new Mill A (Allen 1949:Calendar of Events:1, IX:1).

The net results of all this for the western Table Bluff area were three: 1) Southport Landing did not become the northern terminus of the new rail line—that honor went to South Bay instead; 2) the railbed that was built from Southport most of the way to Loleta served as the start of Copenhagen Road; 3) TPL owned the South Spit.

Southport Landing reopened briefly, in 1892, when a new dock was built to accommodate the receipt of construction materials for the nearby Table Bluff lighthouse (Parry 1963:30-31, 139). In 1909, various promoters hoped to have the government construct a canal from McNulty Slough through the low spot in Table Bluff to Southport (Humboldt Standard 1909a), but its cost was deemed too great and so another attempt to revive Heney's old landing went for naught (Humboldt Standard 1909b).

The Heney mansion, today visible far across the bay as a white, templelike structure, was eventually renovated and became a bed and breakfast accommodation. Below it, near the bay, the now-empty railbed still stretches oceanward. Nearby, Heney's shoreside warehouse stood until November 2007, when the building was allegedly leveled by a windstorm (Butler 2007:A9).

South Spit

The western end of Table Bluff, with a little help from the wave action of the pearly Pacific, drops abruptly to a dune area about two miles west of Southport Landing. The lighthouse and wireless station that were built on the blufftop had little, if any, impact on the bay. North of them stretches the South Spit, some four miles of dunes and beach vegetation that terminates at the breakwater of the South Jetty. Except for a segment of federal property near the jetty, most of the rest of the spit was for years owned by TPL. For a time the spit became an encampment for many of the area's homeless people. Health concerns finally compelled their removal and the temporary closure of the county road along the spit. In 1997 a state grant of \$170,000 allowed the county to clean up the remains of "100 illegal encampments" (California Integrated Waste Management Board 1997). The area is now part of the Bureau of Land Management's South Spit Cooperative Management Area (Bureau of Land Management 2008).

CONCLUDING REMARKS

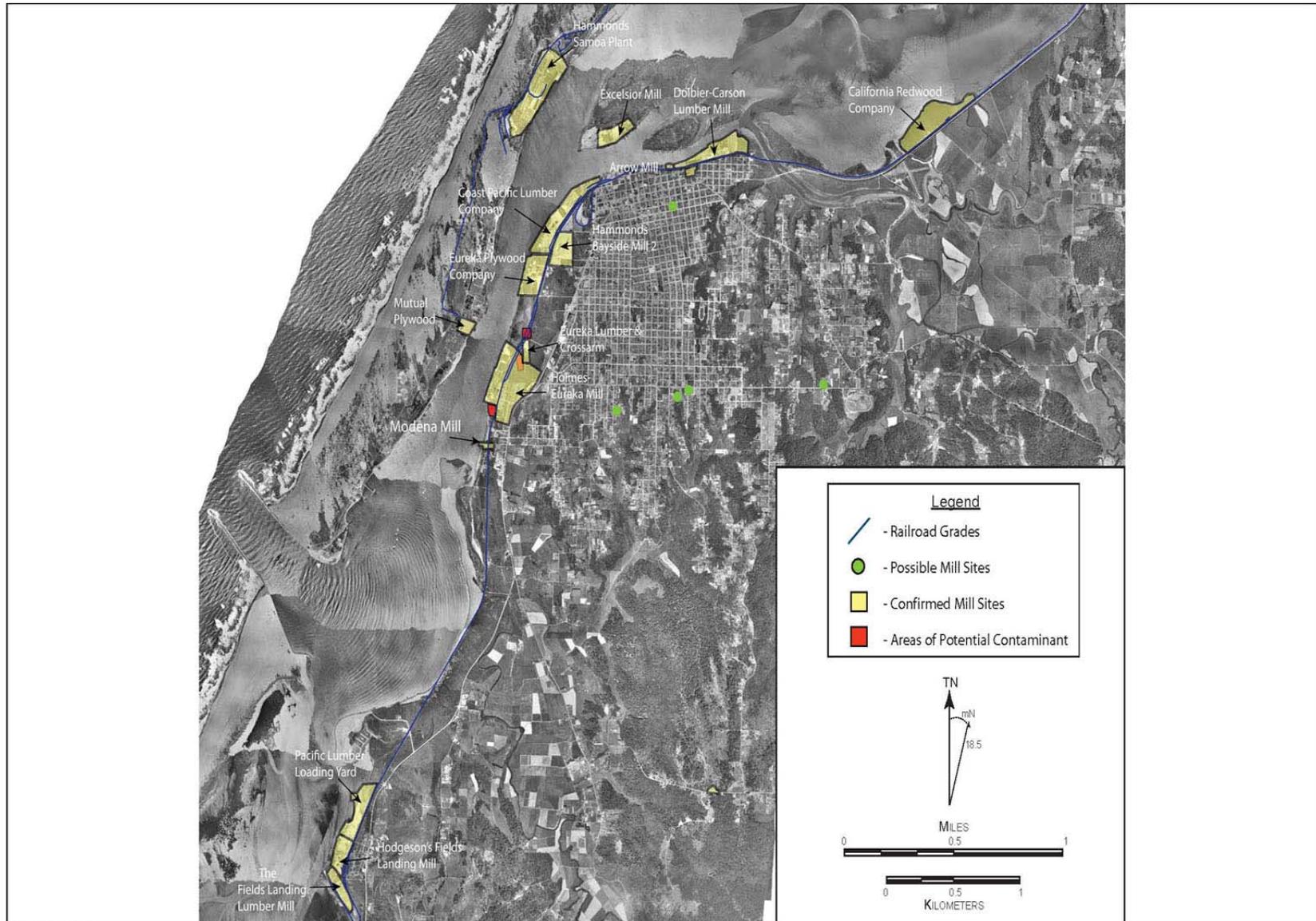
The above summary of the Humboldt Bay area's features and historical activities is based on information that for the most part is little known and therefore little utilized by land managers, program planners, and members of the concerned local community. There is scant awareness of the area's physical environment prior to white contact, while the alterations wrought by whites since their arrival is only hinted at by a brief perusal of the historical literature or the casual observation of the landscape. Yet the changes which have occurred during the last 150-plus years are both substantial and significant. In each of the 21 activity clusters reviewed above, human action has reshaped and retextured a portion of the bayside environment, sometimes with effects that have yet to be fully discerned. To reach its full potential, Ecosystem Based Management requires a deep understanding of the ethnography and history of whatever areas it attempts to manage; the above report has attempted to provide part of that for Humboldt Bay.

Figure 3 Arcata Mill Sites



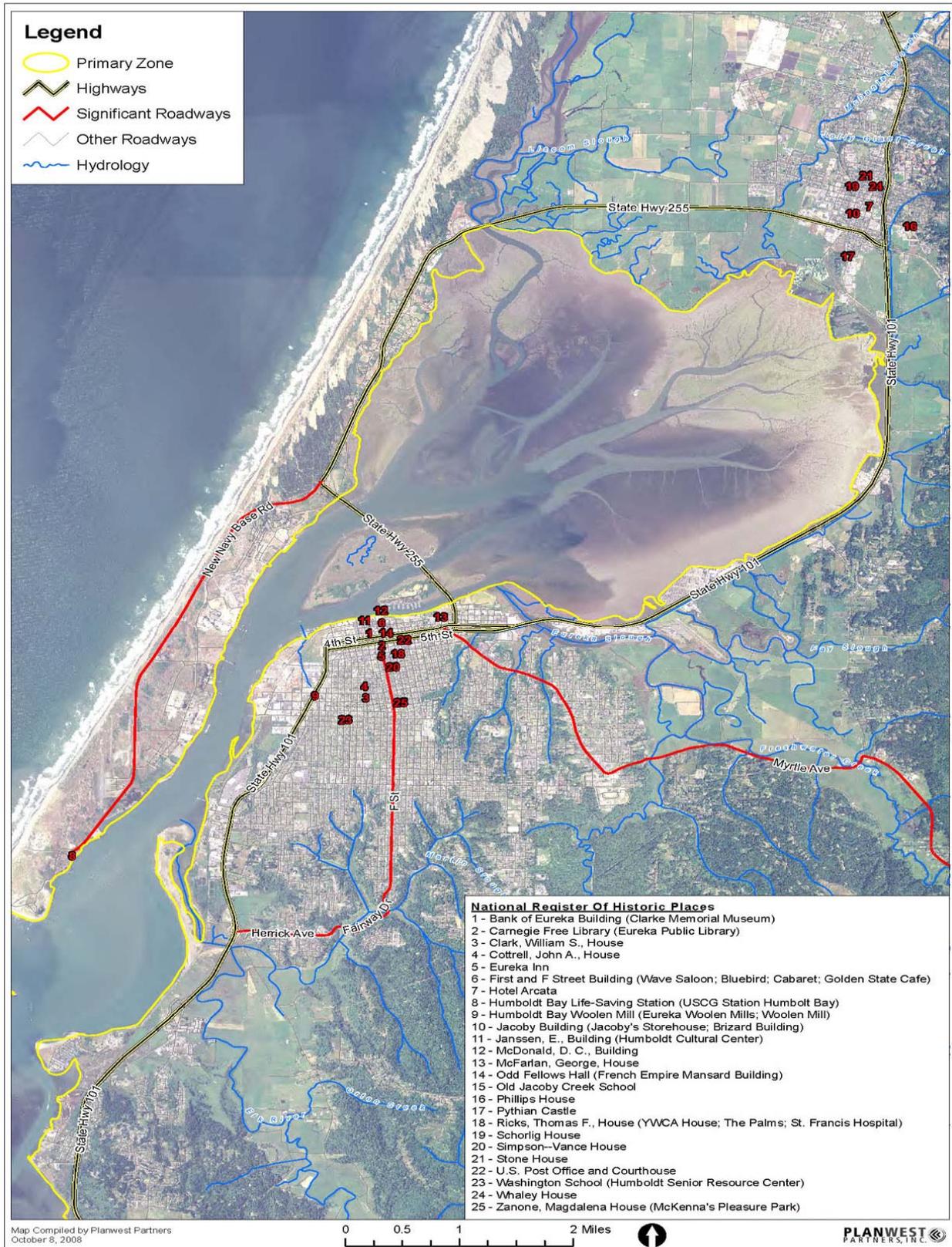
Arcata Mill Sites.

Figure 4 Eureka Mill Sites



Eureka Mill Sites.

Figure 5 National Register Sites



CURRENT CULTURAL RESOURCES

METHODOLOGY

Prior to establishing a methodology for characterizing and inventorying Humboldt Bay Cultural Resources, the project team requested that NOAA Coastal Services Center staff provide relevant background materials pertaining to Cultural Resources identification. NOAA CSC provided the following list of reference materials for the project:

- Morehead, S., Beyer, T.G., and Dunton, K. *Community Characterization of the Mission-Aransas National Estuarine Research Reserve and Surrounding Areas*. University of Texas at Austin – Marine Science Institute. 2007.
- Mission-Aransas National Estuarine Research Reserve Round Table Agenda, Presentation and Summary.
- Chesapeake Bay Program. *Resource Lands Assessment Chesapeake Bay Watershed Cultural Assets*. 2004.
- Chesapeake Bay Program. *Cultural Assessment Methodology Summary*. 2004.
- K-State Research and Extension. *Healthy Ecosystems Health Communities*; website and worksheets. 2006.
- Oregon Trust for Cultural Development website
- Schroeder, H.W., *Special Places in the Lake Calumet Area*. General Technical Report NC-249: United States Department of Agriculture, Forest Service, North Central Research Station. 2004.
- University of New Hampshire Cooperative Extension; Land Conservation: Getting Our Money's Worth
- Upstate Forever. *Special Places Inventory for Greenville County South Carolina*. 2005.
- Inventory Manual for Wetland Cultural Values.
- North Dakota State Historic Preservation Office (SHPO) Guidelines Manual for Cultural Resource Inventory Projects.
- Coastal Fairfax County Cultural Assessment Summary.
- Tribal Consultation and Cultural Resources Assessment – Cordes Junction Interchange Environmental Assessment. Arizona Department of Transportation.
- NOAA Coastal Service Center website.

Upon conclusion of the review, the project team determined that the methods used to characterize and inventory cultural resources were diverse. For example:

- The *Mission-Aransas characterization* includes a brief description of the areas geography, the reserve partners, and Mission-Aransas watershed characteristics. In addition the demographic characteristics (population, household income, age distribution, etc.) of the area were mapped using GIS;
- The *Chesapeake Bay Program Cultural Assessment Model* utilized GIS to map National Historic Landmarks, National Historic Districts, National Historic Register Sites, State Inventoried Sites, and Archaeological Sites for the Chesapeake Bay Watershed;
- The *Special Places in Lake Calumet Area* project utilized a survey to identify places that are considered special by residents, in addition to the thoughts, feelings and memories that they associate with the special place(s); and
- The *Greenville County South Carolina Special Places Inventory* identifies lands with primes, rivers, streams, lands that provide habitat for rare and endangered plants and animal species, unusual geologic features, outcrops and waterfalls, and historic places and districts listed on national, state, and local registries.

Although interesting, the background materials did not provide a clear direction with respect to the inventorying and characterization of cultural resources; the methods used to inventory cultural resources were diverse and the definition of cultural resources varied considerably. However, the background materials did support the premise that cultural resources are unique, and that they must be characterized and inventoried in relation to the context and / or the study being conducted.

After reviewing the background materials and the Statement of Work provided by NOAA, the project team made the decision to characterize Humboldt Bay's cultural resources as 'historic' and 'current' cultural resources. The project team also made the decision to limit the focus of the study to historic and cultural resources in and directly adjacent to the Primary Zone as defined by the HBEP.

For the study's purposes, historic resources include a geographic summary of the bay's history, including Indian inhabitants, cultural features of the landscape, and the physical characteristics of the area surrounding the bay as they existed at or near the time of white contact and how they have evolved during the last 150-plus years. Historic resources also include historical sites located within the study area and pertaining to relevant activities conducted within the study area (see the *Humboldt Bay Ethnogeography and History* section for a detailed historic resource characterization and inventory methodology). Current cultural resources are defined as the perspective, values, and beliefs of various ethnic groups, festival participants, recreational bay users, and individuals involved with natural resource extraction use, about the importance of Humboldt Bay, development and/or conservation of the bay,

cultures associated with the bay and opinions of Humboldt Bay management.

The project team characterization and inventorying of cultural resources included a list of ethnic groups, festivals, recreational bay users, and individuals involved with natural resource extraction and use in and around Humboldt Bay. Ethnic groups include those that have moved to and settled in the area (e.g., Native Americans, Hmong, Lao, Portuguese, Hispanic, Latino, Italian, Swedish, Finnish). Festivals with bay connections include Arcata Bay Oyster Festival, Godwit Days, and the Kinetic Grand Championship. Recreational bay users include kayakers, canoers, duck hunters, bird watchers, surfers, Arcata Marsh users, and all-terrain vehicle enthusiasts. The natural resource extraction user group includes cattle grazers, and timber harvesters. It should be noted that Sea Grant was conducting the North Coast Fisheries Community Project, describing the areas fishing communities, while the Humboldt Bay Historic and Cultural Resource study was being conducted. As a result, the project team excluded commercial fishing, recreational fishing, and aquaculture from the natural resource extraction user group to avoid a duplication of efforts.

Once the current cultural group lists were finalized, the project team created a Humboldt Bay Historic and Cultural Resource Characterization draft outline. The project team met with the HBEP team to get input on the draft outline and historic and cultural resource interests, given that the project information would be integrated with the HBEP. The HBEP team expressed an interest in understanding how and why the Hmong and/or Lao use the bay. After the HBEP meeting, revisions were made to the draft report outline and sent to the NOAA CSC project team for review.

A NOAA Coastal Services Center staff member arranged a conference call with HBEP members, NOAA and the Humboldt Bay Historic and Cultural Resource Characterization project team to review the draft outline. The conference call prompted additional outline revisions, which were made and once again reviewed by NOAA Coastal Services Center staff. Once the outline was approved by NOAA CSC, the project team met to establish a methodology for the Humboldt Bay cultural resource characterization.

The project team gathered as much information as the project budget and schedule allowed. Sources included a variety of the current cultural groups identified in the outline, rather than representative data from one population. In addition, in order for a sample to be representative, it must include every member of the population from which a sample is taken. The project team did not have access to complete lists for the current cultural groups identified and therefore a representative sample could not be obtained. Given the sample parameters identified, semi-structured interviews were

used as the research method to ascertain current cultural group's opinions about the importance of the bay to the community, and the associated social values.

The project team created a list of questions or an interview schedule to use as a guide for the semi-structured interviews. The interview questions pertained to: use patterns; resource values; economic significance; cultures; cultural significance; management; development of Humboldt Bay; and willingness to participate in Humboldt Bay public forums. The interview schedule also included questions related to further research methodology, if funded. For example, current cultural groups were asked about the best methods to contact other members of their group, and the best time of year to initiate contact. It should be noted, that although an interview schedule was constructed, additional questions were posed to interviewees based on topics that arose during individual conversations.

Once the interview schedule was finalized, project team members were assigned current cultural groups to interview. Given the variety of the current cultural groups being interviewed, different methods were used to contact individual members of each user group; the methods used are detailed below.

Hmong

Initially, Humboldt County departments known to work with local Hmong residents were contacted for a list of Hmong translators, but the contact information for the translators was no longer valid. Libby Maynard, the Executive Director of the Ink People Center for the Arts, was contacted as she assists with the yearly Hmong New Year Festival. Libby provided several contacts, one of which was the Gang Risk Intervention Program (GRIP) in Eureka. The GRIP coordinator provided contact information for a Humboldt State University student of Hmong descent. In addition, the owner of the Oriental Food & Spice store in Eureka was contacted and directed the interviewer to a person considered to be a Hmong community leader; who agreed to be interviewed. The final interviewee was a local Hmong resident, identified through contacts at the Arcata Educational Farm.

Lao

Initially, Humboldt County departments known to work with local Laotian residents were contacted for a list of Laotian translators, but the contact information for the translators was no longer valid. As a result of a recommendation provided by the Ink People Center for the Arts Executive Director, the GRIP coordinator was contacted. The coordinator provided contact information for a Humboldt State University student of Laotian decent, who agreed to be interviewed. Coincidentally, while eating at a local Thai food restaurant, a member of the project team noticed a posted flyer for the Laotian New Year Festival held in early April at the Humboldt Hill Grange. A connection was made with two young Laotian community leaders at the festival, as a

result of the previous interview conducted with the Laotian Humboldt State University student. The Laotian community leaders agreed to be interviewed for the project.

Hispanic and Latino

The Hispanic and Latino interviewees were contacted at their place of employment, in both Eureka and Arcata.

Kinetic Grand Championship

The Kinetic Grand Championship interviews were conducted outside the Kinetic Lab in Arcata, one week after the event. The Kinetic Lab was identified as a location to find individuals involved with the event, after reviewing the Kinetic Grand Championship website.

Arcata Bay Oyster Festival

The Arcata Bay Oyster Festival interview was conducted at the festival; the interviewer located a vendor that was willing to be interviewed the day of the festival.

Surfers

A member of the project team attended the Cascadia Leadership Program at the Humboldt Area Foundation. Two of the program participants were self-identified surfers who agreed to be interviewed for the project. Both of the interviewees recommended that a local surf shop owner also be interviewed for the project. The surf shop owner was contacted and agreed to be interviewed for the project.

Bird Watchers

All of the bird watcher interviews were conducted at the Arcata Marsh and Wildlife Sanctuary. The Arcata Marsh Interpretive Center provided a map identifying potential areas of the marsh to locate bird watchers. Interviewees were obtained by frequenting the locations identified by the Interpretive Center employee, and asking bird watchers if they would be willing to be interviewed for the project.

Kayakers

Initial efforts focused on determining sites around Humboldt Bay that are utilized by kayakers. The Eureka Waterfront and Woodley Island boat launch facilities were identified as areas frequented by kayakers. Kayakers utilizing the facilities were approached and asked if they would be willing to be interviewed for the project. In addition, attempts were made to contact individuals at a local business that specializes in kayak rental and guided tours; a business employee agreed to be interviewed for the project.

Canoers

Initial efforts focused on determining sites around Humboldt Bay that are utilized by canoers. As a result of the information obtained, canoers were approached at the Arcata Marsh and Wildlife Sanctuary boat launch, and in the vicinity of the Woodley Island Marina and asked if they would be willing to be interviewed for the project. Two canoers using the Arcata Marsh and Wildlife Sanctuary, and one canoer at the Woodley Island Marina parking lot agreed to be interviewed for the project. A fourth interview was conducted at a local outdoor shop that specializes in canoe related equipment.

Arcata Marsh Recreational Group

Arcata Marsh users were approached at the marsh and asked if they would be willing to be interviewed for the project. Eight marsh users agreed to be interviewed.

Humboldt State University Women's Crew

Interviews with the Humboldt State University (HSU) Women's Crew were conducted at the conclusion of a training session in Eureka. The HSU Women's Crew training schedule was obtained from HSU Center Activities. Women Crew members were approached after practice and asked if they would be willing to be interviewed for the project. Two crew members agreed to be interviewed.

Duck Hunters

A Planwest Partners staff member indicated that she had acquaintances who are avid Duck Hunter that might be interested in participating in the project. She contacted them and they agreed to be interviewed. Both of the interviews were conducted at a pawn shop owned by one of the Duck Hunters.

Cattle Grazers

A member of the project team is the Executive Director of the Jacoby Creek Land Trust, a community based organization dedicated to the protection of land with conservation values in the Jacoby Creek Valley, and around northern Humboldt Bay. As a result of her involvement with the land trust, she has previous relationships with the cattle ranchers that graze their cattle on Humboldt Bay land pastures or on slough lands of the Mad River. She contacted cattle ranchers and asked if they would be willing to be interviewed for the project; four cattle ranchers agreed to be interviewed.

Timber Heritage Association

The mission of the Timber Heritage Association is to create a logging and timber museum and operating tourist railroad on California's Redwood Coast to celebrate the role the timber industry has played in the settlement and development of California.

An active member of the Timber Heritage Association was contacted and asked to participate in the project, and he responded favorably.

Madaket

One of the captains of the Madaket, a boat owned by the Maritime Museum that makes four runs around the bay on a daily basis, was asked to participate in the project as a result of his familiarity with historic and cultural resources around Humboldt Bay. The gentlemen agreed to be interviewed.

INTERVIEW NARRATIVES

As stated previously, the information obtained from the various groups identified, is not representative of the group as a whole, and is the opinion of the individuals interviewed. In addition, the groups interviewed do not represent all of the Humboldt Bay user groups or Humboldt County ethnic groups. For example, ATV users were not interviewed, nor were members of the Native American or Italian community. Efforts were made to contact as many different groups as possible, but the project was limited to a one year time-frame. Although the information is not representational, it does provide insights and direction for further research efforts, and should not be disregarded.

Hmong

Background research uncovered that ‘Hmong’ people, considered Lao Sung, ‘*people of the mountaintops*’ live(d) in the high altitude regions of Laos. In April of 2004, the United States announced its Resettlement Program, “fulfilling a promise made by the United States after the communist takeover of Laos in 1975.” 15,000 Hmong refugees were offered asylum. (Reineke, Dengnoi. 2001. *The Lao State and Hmong Relationship*. Brown University).

It is estimates that there are about 500 people of Hmong decent in Humboldt County. Four Hmong interviews were conducted, three with men in the 30s to 40s, and one with a 21 year old man. The interviewees made it clear that their opinions represent the views of individuals from the Hmong culture, and that they were not speaking for all Hmong people.

Frequency and Location of Humboldt Bay Use

The three interviewees in their 30s and 40s report knowing people with boats, who sometimes boat in the bay, but that they themselves do not use Humboldt Bay. One interviewee noted that he knows people with boats who prefer to go to fresh lakes, such as Freshwater Lagoon in Orick.

Conversely, the younger man said he uses Humboldt Bay regularly. In his assessment, younger people of Hmong decent use Humboldt Bay. His family has a boat and he estimated he uses the bay, on average, ten times a month. He uses the bay for fishing, crabbing and boating in general. He believes that the water is very important to the Hmong people, but that Humboldt Bay is not associated with the Hmong culture specifically. He knows Hmong people from Sacramento who access the bay via the Fields Landing boat ramp; like himself, they come to the Humboldt Bay to fish, crab and boat (see figure six).

All the interviewees said that Humboldt Bay is not really of cultural significance to the Hmong people. Two interviewees said that the bay is for fun.

Humboldt Bay Management and Development

The interviewees did not know who managed the bay. They all believe some economic development could occur around the bay, but it should not cause pollution. They all agreed that the cleanliness of the water is very important. Two of the interviewees mentioned that they think the bay stinks sometimes, and wondered about its cleanliness. They didn't provide any economic development recommendations, but they thought there should be community input to the decision making process.

Outreach to Hmong People

While one interviewee said that the Hmong community is not easy to communicate with directly, they all agreed that the Oriental Food & Spices store at 306 West Harris Street in Eureka is one of the best places to initiate outreach with the Hmong community.

Laotian

A total of three Laotian interviews were conducted; the average age of the interviewees is 26. Two of the interviewees were born in Humboldt County and one moved here in the early 1990s. It is estimated that there are four to five hundred people of Laotian decent residing in Humboldt County.

Frequency and Location of Humboldt Bay Use

The interviewees agreed that there is a cultural significance for Laotians to be around water. Many Laotians have ancestral ties to rural fishing villages in Laos, and as a result, fishing and being near water is central to daily life.

The interviewees noted that Humboldt Bay is very important to the Lao people, particularly access to fishing. The three interviewees agreed that the older generation go to the bay in the morning to catch a fish for domestic use. One said that, "my father and mother in-law go to the Del Norte pier almost daily." One of the young men

interviewed owns a boat and he mentioned that he, “enjoys going out on the Bay for recreation and to fish. My brother owns a boat docked in King Salmon and he goes out for tuna and crab, etc. everyday”. Two of the interviewees said that while they appreciate the bay, they don’t go to the bay often, as they are too busy.

When asked where they or their family access Humboldt Bay, interviewees mentioned the South Jetty, North Jetty, Del Norte pier, and ‘Stinky Beach’ (so named for the now defunct tallow works that once operated in the vicinity - see figure six).

Development of Humboldt Bay

All of the interviewees thought that Humboldt Bay’s water quality should be kept high. They felt that some economic development could occur, but that clean water and the health of the bay was of first concern. One of the interviewees stated:

“Cleanliness of the bay is of utmost importance and personal use should take precedence in decisions. There can be some economic development, but pollution should be avoided.”

One person thought that there could be a happy medium between development and keeping the bay clean; he thought there should be more economic development.

One man said that he doesn’t think the bay is that clean now – he perceives it as polluted. Another said the bay is managed well today, as he “hasn’t seen any fish with three eyes!” This made the first man recant saying that maybe it isn’t too polluted, and maybe the management isn’t terrible – but he thinks there should be more economic development.

Of the three interviewees, two thought that Humboldt Bay should be managed mostly for ecological and fishing benefits, while one thought that more economic development was necessary.

Humboldt Bay Management

The interviewees were not familiar with the entities that manage Humboldt Bay, but they think that people should have say in management of the natural resource. One interviewee noted that, “Lao people are also business people in Eureka and they care about the region.” They thought that the younger generation would like to be kept informed about the bay and have input with regard to management decisions. One interviewee noted that it is too hard for the older generation to meld with the American culture and language, but that younger people are adapting.

The woman interviewee suggested that, “rather than have a strict rule for development types around the bay, decision makers could evaluate each opportunity individually and weigh it against bay values defined by the community”. She noted that her values included creating minimum pollution and allowing access for fishing, etc.

Additional Outreach Opportunities

The best way to reach Lao people in Humboldt County is through the news media, including, TV, and the free Tri City, Eureka Reporter and Lumberjack newspapers. In addition, utilizing schools and English as Second Language classes as informational networks (newsletters, announcements read at the start of the day) are also avenues to reach Laotian residents. It was also noted that the Oriental Asian Market on Harris Street and Thai restaurants are a good places to distribute informational posters, and/or other forms of written communication.

Hispanic and Latino

In 2006, 7.7 percent of the Humboldt County population was Hispanic. The City of Fortuna is in the process of updating its General Plan. According to *The City of Fortuna General Plan Update Background Report* the Hispanic and Latino population in the City of Fortuna doubled between the years 1990 and 2000. It can be assumed that this trend is not isolated to the City of Fortuna, and that the Hispanic and Latino community is growing throughout Humboldt County.

Three interviews were conducted with Hispanic and Latino Humboldt County residents. Two of the interviewees were with men in their early 20s, and one interviewee was a 50-year old business owner. Information was not gathered about their place of birth or the number of years they have resided in Humboldt County.

Frequency and Location of Humboldt Bay Use

All three men said that while they appreciate that Humboldt Bay is there, they don't use it or go to it. The businessman said he used to go to the bay as a youth, but now he is too busy. They all said they don't know anyone who owns a boat, or people who fish in the bay. One young man said he knows people who fish the rivers. They all reported that they are too busy working to go to the bay.

Attitude toward Humboldt Bay

All three interviewees stated that cleanliness is an important value for management of the bay. One man commented that families might go to the bay more if they felt it was clean. The young man noted that people leave messes on the beach, and that he thought it is important to develop community values to keep the bay clean. Another young man said that Hispanic people really like to volunteer, and if he heard about volunteer efforts to clean the bay he would join.

Humboldt Bay Management and Development

The young men did not know who manages Humboldt Bay, but the elder businessman knew of the local government – the Board of Supervisors and the Humboldt Bay Harbor,

Recreation and Conservation District. None of the men said they pay attention to decisions made about the bay.

Additional Outreach Opportunities

The El Heraldo newspaper, posters in Spanish at Mexican restaurants, and the Spanish radio station in Fortuna, KNCR 1090 AM were all mentioned as good mediums to reach the Hispanic and Latino population.

Kinetic Grand Championship

The first Kinetic Sculpture Race was held in 1969, after a Ferndale resident named Hobart Brown made a few repairs to his son's tricycle and ended up with a kinetic work of art. Some of his neighbors challenged him to race down Main Street, which led to a bet over who could build the best human-powered sculpture. Word got around town, and on Memorial Day, twelve contestants arrived to battle it out and thousands of people turned out to watch. The event is now titled the Kinetic Grand Championship. The annual three day event has become a race that brings thousands of visitors and over two million dollars to Humboldt County every year.

A total of two interviews were conducted with individuals involved in the Kinetic Grand Championship. The ages of the interviewees were 26 and 38. The interviews were conducted outside of the Kinetic Lab in Arcata, California roughly a week after the 2008 annual event had passed.

Frequency and Location of Humboldt Bay Use

The ultimate test in the Kinetic Grand Championship is the ability of the pedal powered sculpture to maneuver and operate in the waters of Humboldt Bay for an extended period of time. In addition to the annual race, many teams also use the bay to practice and test their sculptures in the weeks leading up to the race. The frequency of Humboldt Bay use tends to increase in the weeks leading up the race; it does not appear as though the bay is used by race participants for practice purposes the entire calendar year.

Culture of the Kinetic Sculpture Race and Humboldt Bay

When asked about culture associated with the event, the interviewees discussed a Kinetic Grand Championship culture, which revolves around the use of alternatives for traditional ways of doing things that have a minimal impact on the environment. The interviewees also spoke about a sense of community the annual event fosters amongst fans and contestants:

“I have been participating in the Kinetic Sculpture race for over ten years. Each year we get ours to go further and more efficient overall. Me and my buddies look

forward to this every year and many of our friends also come up for the race. We almost won a couple of years back. Since then we have been determined to win the Grand Championship despite our latest performance. Events like these really bring people together.”

During the past several years the race course has been expanding to incorporate increasingly difficult challenges for the racers. The event began utilizing a Humboldt Bay crossing in recent years, as the ultimate test in craftsmanship and engineering on the part of the contestants (see figure six). Not only does the Humboldt Bay crossing provide the greatest challenge of the race, but according to one interviewee it provides a great deal of entertainment for race spectators:

“The bay is the real test to find out who is going to win. In addition to floating, your sculpture has got to be designed right in order for you to actually compete once everyone hits the water. It is also the most entertaining part of the event as a contestant or spectator”

Interviewees were asked about the significance of the bay in relation to the annual event. The interviewees noted the importance of bay crossing for the annual event, but did not express any additional connections. One interviewee did express concerns about race fans littering or damaging areas of the bay.

“I guess when you have thousands of ‘out of towners’ all converging on this area, it can be a little rough on the environment, especially if people are disrespectful and littering. That could be something the festival needs to address as it continues to grow.”

When asked about cultures associated with the bay, the interviewees mentioned the local Native American tribes and the massacre at Indian Island in particular. In addition, the interviewees discussed the culture associated with logging exports and oyster farming.

Humboldt Bay Management

When asked about Humboldt Bay Management, both interviewees indicated that they didn't know enough to comment about it.

Development of Humboldt Bay

The interviewees expressed an interest in knowing what is going on with the bay and the management decisions being made. They both agreed that there needed to be an eco-friendly approach to bay development. Interestingly, the interviewees touched upon the culture or 'essence' of the Kinetic Grand Championship when discussing economic opportunities in relation to the bay. The interviewees suggested that the Kinetic Universe model should be applied on a broad scale:

“When it comes to bringing in jobs and money up here, we need to think about doing it in a way that leaves a minimal imprint on the land. The old residents of this area have already destroyed the bay in many ways with regards to waste and pollution. Looking at alternative ways to develop is kind of the essence of the Kinetic Sculpture Race. We defy the norms of travel and fuel by creating sculptures that move without using traditional sources of power with minimal environmental impact. The Kinetic Universe model for life is to work for alternative ways to produce energy and move ourselves. We just need learn how to apply it on a large scale”.

Although the actual scope of connections between the Humboldt Bay and the Kinetic Grand Championship may be confined to a limited timeframe (i.e., one day’s activity on the race course and practice a few weeks prior to the event), the interviewees appreciation of the bay is worth mentioning; the bay crossing is revered as the true challenge to winning the race and claiming victory.

Economic Impact Associated with Kinetic Sculpture Race

The numbers of tourists that are drawn to Humboldt County as a result of the Kinetic Grand Championship are testament to the positive economic impacts of the race. Tourists spend money at local hotels, restaurants and gas stations. In addition, race contestants spend money at local stores for supplies and necessities vital to the race and corresponding camping trip.

Arcata Bay Oyster Festival

The Oyster Festival is an Arcata Main Street event held annually in Arcata, California. The festival began 15 years ago as a way to promote the areas local aquaculture industry. On average, 15,000 people attend the festival each year.

Over 70 percent of the fresh oysters consumed in California are grown in 450 acres of the Humboldt Bay (see figure six). One of the shell mounds on Indian Island dates back more than 7,000 years. According to the Arcata Main Street website, there are five companies raising Pacific Oysters and Kumamoto Oysters for export and the restaurant trade in Humboldt Bay. The oysters are harvested using a method that does not require harmful dredging in an effort to maintain high water quality, which is essential for aquaculture.

Only one Oyster Festival related interview was conducted. The interviewee was an Arcata local, who has been a vendor at the festival for the last ten years.

Frequency and Location of Humboldt Bay Use

Although the Oyster festival occurs only once a year, the Humboldt Bay oyster farmers

are busy year round harvesting oysters from the bay. The oyster farms are quite visible from the Samoa Bridge, where they are set near the Samoa end of the bay.

Culture of the Arcata Bay Oyster Festival and Humboldt Bay

The Oyster Festival is steeped in tradition. As stated previously, the festival was started as a way to appreciate the areas aquaculture. When asked about cultures associated with the bay, the interviewee mentioned fishing, Native Americans, and kayakers.

Humboldt Bay Management and Development

When asked about the current bay management, the interviewee felt that they were doing a good job as far as he could tell. He iterated:

“With the oyster farming, the folks in charge have been pretty helpful and supportive. It makes good sense to use the resources we got in a way that doesn’t hurt anything. Besides, people have been harvesting oysters forever; it is a natural part of the bay.”

The interviewee discussed how events such as the Oyster Festival are good examples of balancing conservation with economic growth. He noted:

“The economic growth comes with the 15,000 + people who are coming to eat oysters, drink and have fun. The conservation ideals are upheld because you don’t need to massively develop the bay in order to farm it for oysters. This is one way to have a balance between conservation and economic growth that works.”

Over the past ten years the attendance of the festival has steadily increased every year. In addition, the entire oyster farming industry within Humboldt Bay has also steadily increased as a result of the oyster festival and overall state wide demand for fresh water oysters.

When asked if he would like to be involved or informed about the future plans and decisions that impact the bay, the interviewee expressed an interest.

Economic Impact Associated with the Arcata Bay Oyster Festival

Similar to the impacts of the Kinetic Sculpture Race, the Oyster Festival attracts visitors from all over country. The festival's attendance has steadily increased since its inception 15 years ago. While in town to attend the festival, visitors frequent local shops, restaurants, and hotels. In addition, the oyster farming industry benefits from the sales and increased exposure of Humboldt Bay oysters to festival attendees.

Surfers

A total of three surfers in their mid to late thirties were interviewed. One of the surfers is a Humboldt County native, who has been surfing in Humboldt County for 25 years. The other two interviewees have been surfing in Humboldt County approximately 15 years.

When asked why they surf, one discussed the rush surfing provides.

“I surf because of the rush - in the beginning the learning curve is high and the rush is intense. After awhile, you surf to maintain ...At first, there was a feeling of, sort of getting in touch with nature, but it was more the high.”

A second interviewee reported surfing for exercise and the natural energy:

“I enjoy surfing for the exercise, and riding a natural energy, it is a fast and smooth movement without electricity or engines. It is humbling to be involved in a bigger ecosystem.”

While discussing why they surf, one interviewee detailed the unique qualities of Humboldt County, he noted:

“Although the water is cold, it is one of the few places that you can surf all year. There might be days that you will search for hours to find a wave, but you can usually find one. Also, the beaches are very accessible, Humboldt County has a lot of coast line and clean beaches. There are not many surf spots south of Humboldt County and north of San Francisco. In a lot of places, it is always crowded and you can't surf year round. In some places you can go three weeks at a time without having surfable waves, and as a result, the water is very crowded on days that you have good waves.”

In addition, all three surfers commented that they have definitely noticed more people surfing over the years. The native Humboldt County resident has witnessed a drastic increase in the number of surfers at the local beaches. When he first started surfing having six people in the water was crowded, now it is not uncommon to have 60 people in the water at one surf spot. When asked if the majority of the surfers are local or from out of the areas, he replied, “you are a local if you were born here, it doesn't matter how long you have lived here, if you were not born and raised here, you are not local.” Given his definition of a local, he estimated that 75 percent of the surfers are not from the area and 25 percent are local. A second interviewee believes that, “it is a good mix of local and students or out-of-towners.” A third surfer also believes there is a combination of local surfers and surfers from out of the area. According to him, 10 to 15 years ago the majority of the surfers in Humboldt County were long-time, local surfers, but in the past ten years there has been an ‘explosion’ in the number of students that are surfing. He also believes that in general there are more people surfing now as a result of popular media coverage (e.g., Outside Online)

and wetsuit enhancements, which has created a large number of people who are just learning how to surf, and also increased the number of non-locals surfing in Humboldt County.

Frequency and Location of Humboldt Bay Use

All three interviewees surf three days a week on average. All interviewees indicated that water quality has an impact on where they surf; as a result all three prefer to surf up north (i.e., Moonstone Beach and above), due to Humboldt Bay's poor water quality. All three surfers indicated that they have water quality concerns with respect to Humboldt Bay.

One surfer said that he will surf the jetty, but that the water quality, the pulp mill, the crowds, the car break-ins and dirty beaches don't make the bay appealing. Where he surfs depends on the waves, wind direction and swells. If all things were equal at all locations, he would surf up north. He firmly stated that he will not surf the bay after dredging or following the first hard rain after a dry spell because of the noticeable impact on the bays water quality. Another interviewee also stated that river and bay run-off causes him to drive north to surf to avoid polluted areas. When asked about noticeable changes in water quality not related to river or bay run-off he noted that, "the Samoa Peninsula seems to have more dead bird than normal and soapy white foam that smells like ammonia".

While discussing water quality concerns, the interviewee commented on the water quality of the bay when he first moved to Humboldt County:

"When I first moved here the water quality at the jetty was awful. In the late 80s and early 90s Surfrider won a lawsuit against Louisiana-Pacific (LP) Corporation and Simpson Paper Company - the water quality was poor, the water would ruin wetsuits, people would get sick, and their eyes would burn when they surfed. As a result of the lawsuit, LP extended their ocean outfall pipes and the water quality got better. However, the water in the vicinity of the jetty still has a funky smell. I will surf the jetty when the waves are good, but not as often as other places on the coast because water quality does affect my decision as to where to surf."

The interviewee also noted that he moved to West Haven in order to be closer to the areas he prefers to surf.

When asked how often they surf at the jetty or other bay locations, interviewees reported surfing in the bay on average two to six times a year. The surfers reported that although the waves at the jetty can be inviting, the water quality of the bay deters them from surfing the area on a more frequent basis. However, the surfers also mentioned that they do participate in other activities related to the bay, such as

sailing, kayaking, and walking at the Arcata Marsh or the Board Walk in Old Town Eureka. Two surfers reported visiting a bay location at least once a week.

Cultures Associated with Humboldt Bay

When asked if they associate any particular culture with Humboldt Bay, all three surfers referenced Native American culture. One interviewee responded, “when I think of cultural significance, I think of the Wiyot. I think it is a cultural significance that should be embraced by everyone. I don’t have cultural ties to it, but as a surfer who uses it recreationally.” A second interviewee commented:

“Yes, the Native Americans in our community constantly educate me about the significance of the bay and how it has provided valuable resources for their community. There is also a culture of fishing, where they launch boats. The bay is also a vehicle for getting timber out, but there isn’t a timber culture associated with the bay”.

The third interviewee, a Humboldt County native, stated, “When I think of cultural heritage and the bay, I think of the Native Americans, fisherman, loggers and the internment camps on Woodley Island. That is what the area is all about.” When asked if the culture of the area should be respected, he said:

“Yes, the cultural heritage of the area should be respected. You don’t need to stop development, but you could erect signs in honor of the culture at parks or erect statues. It is hard to say how much effort should go into protecting culture; it just depends on the situation. For example, the Buhne warehouse should be salvaged, but it should be preserved in another spot. I have noticed a major cultural shift in the area. When I was a kid, folks didn’t visit the beach or the bay. I see a lot of people enjoying the beach now. There has also been a change in regards to industry. My parents are very supportive of the reestablishment of rail service to move things in and out of the county. My parents grew up here in a time of heavy industrial use. My father grew up in Rio Dell during the times when the majority of the people were working in the mills; those industries offered good paying, blue collar jobs. As a result, my parents are supportive of those industries, whereas the new guard is more for resource protection and sustainable development.”

It is interesting to note, that another interviewee drew a connection between culture and economics. In his opinion, both economics and culture are important, and one must think about both. Furthermore, economics and culture are not mutually exclusive and they shouldn’t be mutually exclusive, both can be accommodated easily.

Development of Humboldt Bay

All three surfers believe that Humboldt Bay is an important resource. One interviewee stated, “the bay is an economic resource, however, to be used as an economic resource it needs to be used wisely; we need to have a happy ground between recreational and

economic use." He doesn't consider himself anti-development, but insists that development must be good development. When asked to provide a description of "good development" and what a happy balance would look like, he discussed Seaside Oregon as an example of what Humboldt Bay could become. He doesn't believe that we should have big box development on the waterfront, but thinks that small restaurants, boutique stores, and light industrial would be good development. He believes that the beauty of the area needs to be respected. He also believes that if you have good infrastructure, a well developed bay, and nightlife, outside business will be attracted to the area. Additionally, he believes that proper amenities would allow the area to retain college graduates. He further iterated that we should do more with aquaculture, and utilize all aspects of the bay:

"Development is good, but it needs to look at ecological and environmental impacts that keep the bay healthy. If I could wave my magic wand and suddenly see the bay developed in a positive way, it would have restaurants, shops, light industry, green building practices, and be ecologically and environmentally friendly ... I think people support something happening with the bay, they just want to make sure that it is done correctly, ecologically sound and environmentally sound, a good balance".

A second interviewee also believed that the bay is an important resource and an economic resource, but that recreation and community enjoyment also needs to be sustained. He also believes that the aesthetics of the area are very important, for that is what draws folks here. In his opinion, the water front needs to be aesthetically pleasing, a place that people come to and enjoy walking around, a place that people can look at and say, "this is neat". He used the Arcata Marsh as an example of a bay location that is something to treasure and a direction the community should head. He doesn't believe that a container port would be wise. In his opinion it would bring more trucks and big ships into the area, which isn't something the community can be proud of. Furthermore, he doesn't think that container shipping and timber extraction for port development make sense, as natural resource extraction is slowing down. He stated:

"Ships moving in and out of the port, for goods movement doesn't make sense; the infrastructure and the railroad do not exist. If they widened the channel for container shipping, the jetty would no longer be surfable. The port should be used for economic purposes, but the use should be sustainable, such as oyster farming. The bay should be allowed to go back to its natural state. As it is now, why would tour ships want to dock here? They should accentuate the nice things, improve the water front, improve upon good qualities, do away with old extraction economics; heighten the natural beauty and charm, such as the Victorian aspect of Old Town. Balance can be achieved between economics, culture and recreation; it just needs to be done in a sustainable way, a way that does not damage the appeal of the bay".

The third surfer interviewed, also believes that the bay is an important resource. He believes that they bay can be used for economic purposes. However, he also believes there is an opportunity to take advantage of the incredible geographic resource as a tourist attraction and as a staging area for goods and services. He believes that a balance can be achieved between recreational and economic uses, as long as one does not negatively impact the other for gain.

Humboldt Bay Management

When asked if they thought that Humboldt Bay was being managed correctly, two interviewees stated that they didn't have enough information to answer the question. One noted that he believes checks and balances are in place to evaluate options. A second interviewee stated that he isn't sure about the various agencies that are in charge of managing the bay, thus it is hard for him to say if he thinks it is being managed properly. He commented further that he believes proper studies should be done prior to making management decisions and then cited an example of bad bay management practices:

“After the bay dredging in 1999, there was a major fish kill due to the amount of sediment that was kicked up and the high level of toxins. When they were making decisions regarding bay dredging, they had not done the proper studies. Surfrider stepped in and asked that they perform the correct studies to determine toxin levels and the appropriate place to dump the dredging spoils. At a later date, the Coastal Commission was going to make a decision regarding the dredging of Humboldt Bay at their quarterly meeting out of the county, down south. Surfrider sent a local representative and requested that they hold off making a decision about the dredging until their meeting that was scheduled to take place the following quarter in Humboldt County. I find it concerning that they would make a decision that impacts the community at a meeting out of the area, and that Surfrider had to request that proper studies be conducted after the 1999 incident.”

The third surfer believes that on the whole,

“the people who are managing it have their hearts in the right place. The resource extraction issue should be looked at critically for the future of the watershed, there needs to be balance ... I would like the bay reserved for my son. I think the bay management needs to establish a sustainable path and something that the community can be proud of.”

When asked if they would like to participate in management decisions that affect Humboldt Bay, all three surfers responded differently. One said, “no, there are others who have more knowledge about the issues and how they may affect communities.” A second surfer responded, “I don't necessarily want to be involved, but I would if asked to. I do believe that community input is vital.”

The third interviewee said,

“Yes, I would be willing to attend a Town Hall or meet with a subgroup working on issues. It is tough to bring folks in at the beginning; you should have a general plan for folks to look at, a 5, 10 or 20 year plan, one that covers short and long term plans. If you reach out to folks you will get passionate individuals. You have people on both sides of the spectrum peacefully coexisting together, with fireworks at times”.

One interviewee also believes that the public should have a chance to be involved if a new plan is being considered, or a new project or endeavor that has not been done before. He also believes that as long as the project is on public property, those impacted by the decisions should be considered.

Economic Impacts Association with Surfing

Two of the surfers reported frequenting local establishments before and after surfing. One surfer stated that he stops to get gas and a breakfast burrito prior to surfing, and also gets a meal at a local restaurant after surfing. A second surfer stops to pick up beverages prior to surfing. One surfer reported that if he is surfing with friends, they will stop to get coffee in the morning before surfing and get lunch at a local eatery after surfing. However, if he is surfing alone, he tends to, “go get the waves and then go home to do family stuff.”

Additional Outreach Opportunities

Surfers were asked what would be the best method(s) for talking to a large population of surfers. All three interviewees stated that the local Surfrider chapter would be a good avenue to reach a large population of surfers. Other suggestions included, advertising in local surf shops, posting a questionnaire on a local surf shop website, or simply approaching folks on the beach with a questionnaire.

The surfers were also asked what time of year they thought it would be best to contact surfers. One interviewee recommended contacting surfers in the summer when the surf is flat, a second believed that anytime during the year was a good time, and a third suggested contacting surfers in the late fall through late winter or early spring, as the water is warmer those months than in summer months.

Bird Watchers (Godwit Days)

A total of four interviews were conducted with bird watching enthusiasts. The interviewees' ages ranged from 48 to 66; all four interviewees have lived in Humboldt County for over 20 years. In addition to being avid bird watchers, each of the four interviewees had either volunteered at or attended Godwit Days, California's north coast spring bird migration festival. Two of the bird watching enthusiasts had

volunteered at the 2008 Godwit Days festival, which occurred two weeks prior to when the interviews were conducted.

Godwit Days is a three-day spring migration bird festival celebrating the Marbled Godwit and all the birds of the coastal redwoods, bays, marshes, and mudflats of California's Redwood Coast. The festival began 13 years ago and is held annually in April. Many of the festival's activities are centered on (i.e., Humboldt Bay boat tour) and around (i.e., Arcata Marsh and Wildlife Sanctuary, Indian Island, Eureka Waterfront, and the southern bay) the bay.

Frequency and Location of Humboldt Bay Use

Interviewees noted that the Arcata Marsh and Wildlife Sanctuary is the primary location they utilize for bird watching (see figure six). The frequency of Humboldt Bay use was high for bird watchers; interviewees reported visiting the bay at least once a week, three times a week, or up to five times a week. One interviewee commented:

“Well I started bird watching when I was in college. I got my degree here from Humboldt State University back in 1969. The marsh wasn't here back then, but since they have made it, I think it has been very good for all of the birds, as well as the people who love birds. Now I come here all the time to get my exercise, and I see all kinds of people bird watching. It is really great that so many people are getting into birds. I am sure the Godwit festival helps with all that.”

Bird watchers provided many reasons why the Arcata Marsh and Wildlife Sanctuary is a prime location to view birds, reasons included: long, wide trails; marshy habitats; surrounding marshy habitats and sloughs; wind patterns that make Humboldt Bay an attractive home and/or rest stop for thousands of migratory birds; panoramic views of the bay with various vantage points for optimum viewing; established wildlife viewing stations that facilitate viewing wildlife, while creating minimal distractions; and the peaceful feeling of the marsh.

One of the interviewees also indicated that the Mad River Beach and the Humboldt Bay National Wildlife Refuge were other areas of the county visited by bird watching enthusiasts. A US Fish and Wildlife official was interviewed for the project. The official estimated that the number wildlife viewing visits to the refuge in 2006 was 17,222. The official indicated that the majority of the wildlife observations centered on the bird species of the southern bay and sloughs.

Culture of Bird Watchers, Godwit Days, and Humboldt Bay

The many different natural factors of the Humboldt Bay ecosystem make it an important place for bird watchers and enthusiasts. One interviewee spoke about the sense of community that is a result of seeing 'bird watching regulars' at the Arcata Marsh. He commented:

“I’ve been coming out here and looking at birds for over 15 years. I used to come with my wife before she passed five years back. She loved birds, all kinds. She taught me about them, how to appreciate them and differentiate them from one another. This place is very peaceful for birds I think, that is why so many people come here to bird watch. The birds are at peace and they don’t mind to you watching. I usually see the same people out here watching; many of them were friends of my wife Ellen. It is nice to see them; it makes you feel like you’re in a community.”

One woman discussed how she is part of a group that frequents the marsh not only to watch birds, but to exercise as well. The bird watching group not only facilitates social connections, but has become the highlight of her social calendar.

“I have a bird watching group that I come out here with about once a week. We are a group of retired women and tend to be in the same groups. We have a book club, movie club, etc., but the thing I look forward to all week is the bird club. We come out here and go for nice walks and look at all of the beautiful creatures. Our instructor from the school tells us all about them and where they are from. It is all so fascinating to me, to learn about their migration and how they always come back to Humboldt Bay every single year.”

The unique setting of Humboldt Bay, which is quite favorable to many species of migratory birds, has begun to attract the attention of bird enthusiasts. According to one interviewee, the festival attracts people from all over the world, which fosters a sense of pride in being a Humboldt County resident:

“This year’s festival was by far the largest I have ever been to. There were so many people on each of the field trips and lectures, it was so wonderful. I met a man from China who was a bird specialist who had read about our festival in China. I also met people from all over the United States. To see so many people from all over the world, that come to learn about and celebrate local birds and stuff was really wonderful and makes me feel proud as a Humboldt County resident.”

When asked about cultures associated with the bay, interviewees repeatedly remarked on the timber culture and the central importance it used to have for the entire region. A few interviewees remarked on the railroad and how the railroad used to connect communities with another, a sense of connection that felt lost to one gentleman:

“Back when I was young, the rail and the timber companies had a lot more of a connection with Arcata and Eureka. We were more of a community back then and relied upon each other in order to survive. These days, with no rail connection, no logging, we are left with very little to work with. The way things were connected is something that young people don’t understand.”

Development of Humboldt Bay

When asked about the development of Humboldt Bay, the three interviewees over 60 all felt that the current harbor management was working, “as far as they could tell” and shared similar opinions on bay development. The interviewees supported development as long as it was in balance with the environment and didn’t affect local birds or the patterns of migratory birds.

“Well, you know, they have been talking about opening up the bay for 40 years. Back then we had more money as a county then we do now. If they did not go through with it then, I don’t see how they’re gonna do it now? If they do, do it, overall I think it would be good for the county to have more jobs and an intact rail like back in the old days. I don’t know how that will affect the birds, I just don’t know.”

“I am the first one to be in favor of bringing jobs to the county, but at the same time, we need to protect the beautiful things up here that make this place so wonderful. I cannot see how big ships in the bay would not hurt the wildlife, especially birds. Maybe they could expand only a certain part or something. The birds will survive either way; it’s about whether we want them to stop coming here. I think we should try to find a balance to accommodate everybody, including the birds.”

One of the interviewees, a relatively young bird enthusiasts and specialist, was strongly opposed to any kind of major bay development. He explained how large ships would certainly affect wind patterns that would ultimately affect bird migration patterns. He also mentioned that large vessels would affect the bay’s fish and other sea life, further hurting the various species of birds that are home to Humboldt Bay, as well as migratory species. In general, the interviewees were sympathetic to the county’s need to increase economic development, although they expressed a concern for the possible impact that development might have on the birds.

Economic Impacts Associated Bird Watchers and Godwit Days

Although, the economic impacts of the bird watchers interviewed at the Arcata Marsh, may be minimal, the overall economic benefit of bird watching to the county is substantial. The Godwit days festival in particular, is one of the county’s most well publicized events. National groups, such as the National Audubon Society, boast of Humboldt County’s natural beauty and presence of abundant bird species. One of the interviewees who volunteered at this year’s festival stated that “one of my acquaintances mentioned that all of the hotels in town were completely booked just like it was graduation weekend”. The growth of festival such as Godwit Days may be a symbol of economic growth that does not compromise the natural aesthetics of the region. In addition, the conservation minded design of the Arcata marsh, is an example of how a section of Humboldt Bay can effectively be used to promote the area as well as attract outside visitors, which ultimately strengthen the local economy.

Kayakers

A total of 7 kayak related interviews were conducted. The interviewees included five kayakers, a local kayak rental and guided tour business owner, and a U.S. Fish and Wildlife Service official. The interviewees ages ranged from 22 to 45 and on average, interviewees had been kayaking in Humboldt Bay for at least 5 years. Although a couple of the interviewees had “river” kayaking experience, the majority of the interviewees experiences centered around Humboldt Bay. For the purposes of this report, veteran kayakers are defined as those who have been kayaking for more than 10 years, while younger kayakers were defined as those having less than ten years of experience.

Frequency and Location of Humboldt Bay Use

Frequency of Humboldt Bay use varied among the kayakers interviewed. Interviewees reported kayaking in Humboldt Bay once or twice a week, a couple of times a month, or a few times a year. One of the interviewees was an employee from a local business that specializes in kayak rental and instruction, guided kayak fishing tours, as well as guided tours of Humboldt Bay. The local kayaking business owner mentioned that many of their customers are first timers and that on average, the weekly beginning kayak classes are comprised of six to 20 students a week. Woodley Island serves as a central point for kayak classes, due to the conditions of the location and the frequency of kayaking in this specific portion of the bay. The majority of interviewees noted that Woodley Island is the primary location where they “drop in” to the bay (see figure six). The Fields Landing boat launch site was mentioned as an area where kayakers “drop in” to explore the South Bay sloughs. When asked about Humboldt Bay recreational use patterns, the US Fish and Wildlife Service Official interviewee commented on the number of un-motorized boats (e.g., kayaks) that are often observed in the waters and sloughs of southern Humboldt Bay.

When asked why kayakers use Humboldt Bay, interviewees discussed the calmness of the bay and the wildlife viewing opportunities. Interviewees also spoke about Humboldt Bay as an ideal place to learn how to kayak. A local, twenty year kayaking veteran stated:

“My first experience in a Kayak or any kind of un-motorized boat was in Humboldt Bay. My father, who was a fisherman and river/ocean kayaker, felt that the calmness of the bay would be a perfect place for me to get started. Now that I have been kayaking for almost 20 years primarily in the rivers east of here, I appreciate the bay even more. Sometimes, when I am in the middle of the bay, I can still remember the feelings of fear and uncertainty I had all those years ago when I was first introduced to kayaking and the waters of the Bay. Humboldt Bay, especially the northern portion is probably the best place to learn the basics of kayaking in the whole state.”

In addition to Humboldt Bay, the Trinity and Klamath rivers, and ocean were also mentioned as areas frequented by kayakers. Although the local business owner mentioned Trinidad as a common location for kayak fishing, kayak fishing was not common place among the interviewees who predominately kayak in Humboldt Bay.

Culture of Kayaking and Humboldt Bay

When asked why they kayak, interviewees mentioned exercise, meditation and wildlife/bird viewing. A few excerpts from the interviews conducted further elaborate on the favorable kayaking attributes discussed.

“After getting hurt while river kayaking, one of my friends suggested kayaking in Humboldt Bay. The calmness, abundance of water and lack of huge rocks made it far more relaxing compared to kayaking on the river. I have navigated my own path that I like to take in the water, which gives me a good long workout as well as beautiful views of wildlife and marshes. I particularly enjoy the days when the bay is very still and clam. I like to get into a zone with the rhythms of my arms. Despite the rigorous exercise, I find my time kayaking in the bay as some of the most peaceful and serene moments in my day-to-day life.”

“Due to a sports injury affecting my knee, my physical therapist suggested I try kayaking for exercise as opposed to activities that would impact my knee. After taking a few classes and getting the basics down, I fell in love with the endorphin rush I get after I finish going around the north bay. In fact as my knee has continued to deteriorate, my weekly kayaking trips are the only activity I can do that keeps my mind and body in shape.”

“My favorite part of kayaking in Humboldt Bay is when I see one or more Egrets (large white birds) walking in the sloughs or marshy areas. I feel like I am not as disturbing in a kayak as compared to walking. Sometimes, I think the birds don’t even know than I’m there, which is a great feeling. I just float by and try to take in the atmosphere of the setting. In my everyday life, whenever I get stressed out, I try to imagine myself there in the water next to the Egrets, which helps me a lot.”

According to the local business owner, kayakers have a culture onto themselves and the number of kayakers is steadily increasing, especially on the North Coast. Humboldt Bay was repeatedly mentioned as being central to getting into kayaking and ultimately, being acclimated into the kayak culture. When interviewees were asked about other cultures attributed to the bay, a correlation was observed between length of residency in Humboldt County and perceptions of cultures associated with the bay.

With regards to kayakers who have resided in Humboldt County ten years or less, native cultures including, the Wiyot Massacre at Indian Island, were often referred to as their interpretations of other cultures associated with the bay. With regards to the Humboldt County kayakers who have been here for more than 20 years, timber and fishing were often cited as other cultures associated with the bay. This variation

attributed to length of residency is also illustrated in the data compiled concerning how kayakers feel about development of conservation of Humboldt Bay.

Development of Humboldt Bay

When asked how the bay should be developed, there was division among the kayakers. With regards to expanding the bay to allow container shipping, interviewees who have been in Humboldt for less than 10 years strongly opposed the idea. They believe that they may be forced to stop kayaking in the bay all together, if large ships were to begin entering the bay.

When interviewees were asked whether or not they would be willing to stop kayaking in a certain area of the bay in order to accommodate economic development (e.g., container shipping), the reactions were also mixed. A couple of the younger kayakers were strongly opposed to any ships or large scale development in the bay, and a couple others were a bit open to the idea of creating designated kayaking areas that could co-exist with the proposed economic developments. A few of the older residents interviewed, were more accepting to the notion of Humboldt Bay development as illustrated in the following excerpt.

“I have seen the local economy go from bad to worse here in the last 20 to 25 years. It was already bad back then, but now with the PALCO fiasco, and gas prices, we need to do something to keep Humboldt alive. If a shipping port or cruise ship terminal would be possible and helpful to the local economy, I would figure out other places to kayak. Back in San Diego, I used to kayak in that bay, full of boats, cruise ships and Naval aircraft carriers. Just because the community needs to grow economically does not mean that we have to stop doing what we love. We have got to bring more into this county if we want to continue to live here and grow.”

Of course this sentiment was sharply contrasted by the opinions of younger kayakers who also tended to be on the pro-conservation side of the issues. What is clear is that, kayakers who tend to have moved to the area within the last 10 years shared common notions of conservation, awareness of indigenous peoples of Humboldt Bay, and an overall reluctance to favor any type of economic bay development. Some of these notions are described in this brief portion of an interview.

“I think the bay should be left the way it is regarding new developments. I also think if money is going to be spent it should be used to clean up all of the mess that has already been made in the bay from logging and Pacific Gas and Electric. Nobody wants to talk about how much pollution has already been dumped in the bay over the last 100 years. They are just now finally beginning to talk about all of the Indian blood that was spilled into the bay. I personally cannot see how I or anyone would want to kayak in a bay full of ships. I mean, the whole point to why I even like to kayak is because I enjoy the natural beauty of the bay and the surrounding marsh areas. I can’t imagine how badly development would affect

the birds and other wildlife. I also cannot see how we as kayakers would be able to still use the bay if it is turned into a shipping port.”

“Why would anyone want to make this beautiful natural bay look like San Francisco Bay? The arguments about economics are in my opinion misguided when applied to the bay. People think that the bay is here for the community to use for selfish economic reasons. What they don’t realize is that they do not own the bay like they think they do. The bay is an important central part of the entire Humboldt ecosystem. Birds, fish, trees and yes, humans all depend on the bay for different reasons. For the original Humboldt residents, the Wiyot, the bay was thought to be the center of the universe. I think that people around here need to get together and fight for the rights of the bay.”

Although the difference of opinion with respect to conservation and development was apparent, a few of the interviewees advocated for a balance between conservation and development. Unfortunately, this type of balance can often be problematic and difficult to maintain. With regards to who maintains this balance and makes decisions, the kayakers as a user group were quite aware of the Harbor District and their role in overall Bay Management.

Humboldt Bay Management

Most interviewees felt that the overall management of the bay was neither good nor bad. One of the long time residents felt that the management is better now than it was before. Another made positive mention of the “green bay” initiative that was taken up by the Harbor District some time ago. Although a couple of younger kayakers were strongly opposed to any type of development, overall the user group believes that achieving a balance between conservation and development would be critical for the future of the bay and county. For the most part, each of the kayakers interviewed expressed interest in being involved with future development decisions affecting the bay. There was a little hesitation expressed by one of the younger kayakers who explained how they felt the Harbor District is just another “game of politics where money rules.” As far as a public input process regarding Bay Management, all of the kayakers interviewed expressed interest in getting involved.

Economic Impacts Associated with Kayaking

With regards to the overall community, the kayaking recreational group certainly generates a degree of economic income for the county. Kayak rental/instruction businesses attract visitors from out of the area and contribute to the local economy. Kayakers themselves also frequent local shops in conjunction with kayaking adventures. One kayaker mentioned how their kayaking group, which ranges from three to nine kayakers, always head to the Lost Coast Brewery after a kayak trip in the bay. This along with other economic indicators suggest that not only do kayakers contribute to the local economy, but their subculture is one that will continue to grow and attract people from all over to come and experience Humboldt Bay.

Additional Outreach Opportunities

The Woodley Island launching area tended to have the largest numbers of kayakers in any given place and would be a good location to conduct additional interviews or outreach with the kayaking community. In addition, local shops that cater to kayakers are also good locations to find other kayakers to speak with. The kayaking and outdoor sports shops tend to serve as places for kayakers to network and share experiences. With regards to the good time of year to reach kayakers, the summer, and fall weekends were repeatedly mentioned as excellent opportunities to reach more kayakers. The later summer and fall seasons are typically the best outdoor activity months for kayakers in Humboldt County.

Canoers

A total of four canoers were interviewed. The canoers ages ranged from 22 to 36, and all four have lived in Humboldt County for more than five years. Although, the canoers indicated that local lakes were attractive canoeing spots, each interviewee identified canoeing spots in Humboldt Bay and discussed positive aspects of canoeing in the bay.

Frequency and Locations of Humboldt Bay Use

The frequency of Humboldt Bay use varied among the canoers interviewed. Interviewees reported canoeing in Humboldt Bay once or twice a month, a few times a month, or a few times a year. Canoers reported that weather conditions are a factor when deciding whether or not to canoe in the bay, and that the summer and fall seasons as the best time of the year to canoe in Humboldt Bay.

When asked where they canoe in Humboldt Bay, two interviewees identified the north bay as an area they frequent, and two interviewees expressed enthusiasm for canoeing in both the north and south bay. The Fields Landing launch site was an access point discussed in relation to canoeing in the southern bay and sloughs (see figure six). A US Fish and Wildlife Official was interviewed for the project. When discussing observed bay uses, the official noted that the south bay was popular with canoers.

All four canoers identified other areas of the county where they frequently canoe, such as Big Lagoon (located north of Trinidad) and Ruth Lake (located off Highway 36). However, all four canoers discussed that their use of Humboldt Bay is increasing given rising gas costs and the distance to get to other canoeing destinations. One interviewee commented:

“I used to go up to the lagoon a lot more a few years ago. But now with gas at almost \$4 dollars a gallon, the convenience and 10 minute drive to Eureka makes a more practical solution for me. I still get out to the lagoons maybe a couple of times a year. With the bay you just gotta be ready and know the weather.”

Culture of Canoeing and Humboldt Bay

The culture of canoeing can be described as loosely organized, based on the four interviews conducted. Interviewees discussed how canoeing often goes hand in hand with camping and that the bay is not really the best place to camp. Camping canoe excursions were cited as preferable in the summer when temperatures are warm in the inland valleys. Although camping excursions that involve canoeing were popular with interviewees, they did express enthusiasm regarding canoeing in the bay.

Some of the favorable attributes of canoeing in Humboldt Bay expressed by the interviewees include, exercise, meditation, bay and slough exploration, and the ability to view wildlife and birds. The canoers and the US Fish and Wildlife official identified the north and south bay as particularly good places to view wildlife and birds. One of the canoers iterated:

“The canoe is a gentle enough water craft that you can really be unobtrusive and watch local wildlife in its natural state. I enjoy just gliding through the slough very quietly and watching the birds hunt for fish and things. You feel like you are the camera on a National Geographic or something...”

As stated above, canoeing as a form of exercise and meditation were common themes to emerge from the interviews. One of the canoers explained how he has two separate sized canoes that are designed for different degrees of exercise.

When asked about cultures they attribute to the bay, they had interesting associations with respect to Native Americans. There was a great degree of recognition of indigenous cultural origins of the canoe, as well as the bay. One of the canoers who moved to Humboldt County approximately ten years ago expressed the following connection with regard to Native American cultures and the origin of the canoe and Humboldt Bay:

“I first learned how to canoe back in the Nebraska on a beautiful lake near my parent’s home. Canoeing all started with the Native Americans. They use to canoe on lakes and rivers to get around to other tribes. When I moved out here to Humboldt, I read this whole book about the Yurok tribe and how they made these huge redwood canoes. I often think about native people and all the bad that has happened to them. Sometimes while I am canoeing here in the bay, I feel like I am tapping into some type of native energy. Especially with that massacre that happened, you can feel the pain in the water. The bay is definitely alive in more ways than one. Canoes have been navigating through the bay for probably hundred or maybe thousands of years.”

The connection to the indigenous people of the area was a theme that emerged in three of the four interviews conducted with canoers. Other interviewees expressed admiration for local natives’ use of the canoe and amazing capabilities of working with redwood, which is illustrated in the following quote:

“Have you ever seen the big native redwood canoe in the HSU library? That was the first time I had ever seen one, and right then, I knew it was something I wanted to do. I got signed up with Center Activities, and went out on the bay for my first time. Now that I have experienced being in a canoe, I have even more respect for the one in the library. It is really a work of art and craftsmanship. The natives really knew how to make the most of their resources for things like canoes.”

Although, the interviewees drew connections between Native Americans, the Humboldt Bay and canoes, the interviewees did not mention the Wiyot Tribe specifically. Only one interviewee discussed the timber and fishing culture with relation to Humboldt Bay.

Humboldt Bay Management

When asked about how the bay is currently being managed, three of the four canoers did not have an opinion on current bay management. None of the four interviewees could name the Humboldt Bay Harbor, Recreation and Conservation District (HBHRCD) Commissioners.

Development of Humboldt Bay

Three of the interviewees expressed concern regarding the potential development of the bay as a shipping port, and the possibility of large ships in the bay. One of the interviewees believes that balance needs to be achieved with respect to bay uses, in order for everyone to get along in the community. With respect to the HBHRCD, one canoer stated:

“The people in the local politics, like the Harbor district, seem like they are easily influenced by outside companies. I understand that we need to grow economically, but sometimes I think using local businesses to work on the ideas would make better sense. Local people who live here understand the environmental needs of the area and can make better decisions than a company in southern California or the federal government.”

Many of the interviewees comments with respect to the development of the bay, focused on the development of the bay as a shipping port.

“I have heard that some people want to turn the bay into a big shipping port. I think it would be a terrible decision for the local environment in the long run; ships produce a lot of pollution.”

“The bay is not something that can be bought or sold. It is an eco-system that is the determining factor for a large part of the county. The entire approach to the management of the bay is wrong. You cannot make economic development at the expense of our entire eco-system.”

“I think, the forces that want to expand the harbor and bring in large ships, are the same forces at work that wanted to bring in Wal-Mart and a Home Depot. People are always trying to corporatize any place that is self-sufficient and build on local business.”

“The economic problems in Humboldt County will not be solved if you open up the bay to some big shipping company or a cruise ship company. The economy as whole has added to the dire situation happening in Humboldt County. I am afraid, that somehow this harbor expansion will pass, and we’ll spend millions of dollars, and end up in debt forever. What will the county do then?”

All four interviewees believe that canoeing would be not be possible in many parts of the bay, if there were large ships in the water. The canoers represent a subculture that is very committed to the conservation of the bay.

Economic Impacts Associated with Canoeing

One of the canoers discussed canoeing trips with a group of five to six canoers that typically frequent local food establishments after canoeing. The other three canoers mentioned stopping at local grocery stores prior to canoeing to stock up on food for the excursion. In addition, local outdoor stores benefit from the sale of canoeing gear.

Additional Outreach Opportunities

All four did express interest in being involved with future bay decisions and proposals. The interviewees stated that the summer and early fall months were good times of the year to reach out to a large number of canoers using the bay.

Arcata Marsh Recreational Group (Runners, Walkers, and Bicyclists)

A total of nine interviews were conducted with Arcata Marsh and Wildlife Sanctuary users (hereafter referenced as AMRG). Four interviews were conducted with walkers, two with bicyclists, and three with runners. The AMRG ages were quite diverse ranging from 20 to 69. For the purposes of this report, AMRG users who have lived in Humboldt County for more than ten years are referred to as ‘older residents’ and AMRG users that have lived in Humboldt County for less than ten years are referred to as ‘newer residents’.

Frequency and Location of Humboldt Bay Use

Although the interviewees indicated that they run, walk or bicycle in other parts of county, the Arcata Marsh and Wildlife Sanctuary is frequented most often by AMRG users (see figure six). Frequency of use varied among interviewees, from as little as once a week to everyday of the week. Two of the interviewees noted that trips to the Arcata Marsh and Wildlife Sanctuary are part of their daily lives.

Culture of Arcata Marsh Recreation Group and Humboldt Bay

When asked why they use the bay, interviewees commented on the aesthetics of the area, including the beautiful views of Humboldt Bay; the pleasant breezes; wildlife viewing opportunities, bird watching opportunities; to exercise; and the nostalgia of the area. The following interview excerpts illustrate interviewee's reasons for visiting the Arcata Marsh and Wildlife Sanctuary:

"I started bicycling here a couple of years ago. I really enjoy the wonderful breeze and the great views of the bay. Sometimes I try to come earlier when there are less people here so I can just ride and not have to keep stopping to get past people. There are more birds earlier in the day. I really enjoy stopping and sitting on the benches and watching the birds get their food"

"We have been walking here for years. We try to come here every day in the evening. The sunsets are just beautiful over the bay. We also enjoy coming at low tide when the bay is dried up; you can see the logs from the old bridge that the trains use to move the lumber with. It is kind of nostalgic for us."

"I run here just about every day. I usually run from home which is about two miles away. When I get to the water, I really feel great. The wind is usually going and really cools you off. It is like a half way point for my run and it works great to get me ready for the second half."

"When I go for walks out here, I always reflect on the achievement of the whole sanctuary. If you think of what it used to be, just marsh sloughs and a nearby dump, you get a perspective of how wonderful it is that we now have a sewage wastewater treatment plant, a wildlife refuge for birds and a place for exercise. I learned about it in my Environmental Planning class at HSU. It is a primary example of how development can be achieved with a balance."

When asked about cultures they associate with the bay, interviewee's responses reflected a variety of views. Although older residents associated the timber and fishing culture with the bay, newer residents did not make that association. Both new and old residents referred to the Native American's and culture of nature associated with Humboldt Bay. Although all interviewees associated the bay with Native American culture, only two interviewees referred to a Native American group by name (Wiyot).

Development of Humboldt Bay

The AMRG user groups opinions varied considerably with respect to the development of Humboldt Bay. A few were unaware of who is responsible for bay management and management decisions, while other were well versed and had formed opinions on the matter. Interviewees discussed both large scale development and conservation. A long-time Humboldt County resident expressed his feelings and frustration with conservationists, which are as follows:

“I think the folks down at the Harbor District are trying to do what is best for the county. The ideas for the shipping port or cruise ships will really help out the county in the long run. It is always the same story with stuff like that. Even if most folks in the county want to develop the bay, environmentalists, and big groups like Earth First will come and create a big fuss and nothing will get done. Look at what’s happened with the logging industry. The folks making the harbor decisions need to also do what’s right for the economy, and sometimes that may not work to the liking of environmentalist. That’s just the way it is. The funny thing is most of these protest kids don’t have responsibilities to their families, they are not interested in helping the economy because they are selfish.”

A newer resident commented on the need for a balance between conservation and development, which is illustrated in the following excerpt:

“The funny thing about the whole bay debate, as well as the Rails versus Trails debate, is that people are not willing to realize that we can have both conservation and economic growth. Look at this marsh for example, the needs for city and sewage treatment were met and infused with the need to create a hospitable habitat for the local birds and migratory populations. The balance achieved here could be a model for the future of Humboldt Bay. With the rails versus trails, if the trails were developed, they would become another tourist attraction to the area that could bring in more money for the economy.”

A young runner expressed concerns about the environmental impacts associated with port development:

“Well in addition to being concerned about what the pollution from large ships would do to the wildlife, I am also concerned about the whether the development would affect the air quality around the bay. When you are running the last thing you want to smell is an exhaust of some kind. As a runner, I guess I am concerned about how much will the air be affected by a large shipping port created in the bay.”

While the diversity of opinions and views on the future of Humboldt Bay were quite apparent, it was also clear that the members of this user group are very concerned and willing to get involved. The majority of interviewees expressed interest in being informed about upcoming harbor decisions, as well as being able to vote on ideas and proposals that would affect the Marsh and the bay.

Economic Impacts Associated with the Arcata Marsh Recreation Users Group

The AMRG users did not indicate that they spent money at local establishments in conjunction with Arcata Marsh and Wildlife Sanctuary excursions.

Humboldt State Women's Crew

A total of two interviews were conducted with members of the Humboldt State University (HSU) women's. The ages of the two women interviewed were 21 and 23. Both transferred to HSU from different states to finish their degrees.

Frequency and Location of Humboldt Bay Use

The HSU women's crew utilizes the Eureka Waterfront boat launch facility for training, practices, and competitions; the team uses the facility up to four times a week for sessions that can last up to three hours (see figure six). Once in the water, the team typically practices in the northern bay.

Culture of Women's Crew and Humboldt Bay

There are fifty seven women on the 2008-2009 women's rowing roster. The HSU Women's crew scope of activity revolves around Humboldt Bay. One interviewee discussed the beauty of the bay as a deciding factor in her decision to transfer to HSU, she stated:

"I fell in love with Humboldt Bay by looking at pictures before I moved to Humboldt. I came here so that I could train and be here in this beautiful place. My experiences with the team in the waters of this bay will be with me forever."

When asked cultures that they associate with Humboldt Bay, the interviewees expressed a degree of uncertainty. One briefly mentioned that she had heard at some point that Native American's lived along the bay, but did not mention timber or fishing cultures.

Development of Humboldt Bay

One of the interviewees expressed confusion as to where a container shipping port would be developed on the bay.

"I have heard a lot of talk lately about this bay development, but do not understand where it would be. I guess we would have to change our practice routes if large shipping channels were developed. I am sure we could work something out when the time came."

Both interviewees expressed a degree of understanding regarding the perspective of the county and the need to create economic growth and jobs. When asked about whether they would like to be informed about future bay decision, both replied yes. As far as the degree of involvement needed from the public, the two interviewees expressed personal reservation due to their hectic scholastic and sport schedules.

Economic Impact Associated with HSU Women's Crew

From the two interviews conducted, it is hard to ascertain the degree of economic impact associated with the HSU women's crew. It can be assumed that there is local income generated as a result of the rowing events that are held locally. Teams and spectators from outside the area spend money at local hotels and eateries, but to what degree is unknown.

Duck Hunters

Two interviews were conducted with local duck hunters. The interviewees are Humboldt County natives in their mid to late twenties. In addition, an interview with a US Fish and Wildlife official provided additional information regarding duck hunters and Humboldt Bay.

Frequency and Locations of Humboldt Bay Use

The two young men interviewed indicated that they go duck hunting about 20 to 24 times during the duck hunting season. The season begins in October and ends in January. They indicated the North Bay and sloughs are the best areas for duck hunting in Humboldt Bay (see figure six). In addition, they spoke of a small hunting shack that is located by Jacoby Creek right off of the US 101 Safety Corridor as an excellent place for duck hunting. Although they mentioned occasional duck hunting visits to the Eel River, Humboldt Bay was by far the most productive place for duck hunting in the county.

"We hunt around Humboldt Bay because it is the largest body of water which makes it a productive place to find a lot of ducks. There really isn't anywhere else in the county that has as many ducks in the bay and slough areas."

Culture of Duck Hunting and Humboldt Bay

The interviewees discussed traditions within their family networks affiliated with duck hunting and fishing in Humboldt Bay. With regards to a duck hunting culture, the interviewees expressed connections between duck hunting and fishing. One interview noted:

"We do a lot of fishing as well as duck hunting. Sometimes we come out and do a little of both. There is a lot of close connections between the duck hunters and fishers; it's often the same people."

When asked about other cultures associated with Humboldt Bay, they mentioned fishing, bird watching, oyster farming, and log shipping.

Humboldt Bay Management

With respect to the current management of the bay, the interviewees had a couple of suggestions for improvements that would ultimately help all Humboldt Bay users.

“One of things that the bay management folks could really improve is the conditions of the boat launch facilities. We usually use the Waterfront, but that gets really busy sometimes especially on the weekends. If they could improve the Samoa launch under the bridge and the Fields Landing launch, it would be more convenient for duck hunters and other folks who use the bay.”

The interviewees were not aware of the current politics, but expressed an interest in being involved with future decisions involving the bay.

Development of Humboldt Bay

The interviewees favored a trail along the bay so that there would be a safe way for people to get between Arcata and Eureka. They discussed the need for balance between development and conservation, with one stating:

“It is important to help develop the local community but you have to be careful to not destroy it. The Liquid Gas shipping proposal from a few years back is an example of an idea that is not good for the environment that was shot down by the people once they voted on it. Better options could be increasing tourism, oyster farming, and things like that.”

Economic Impact Associated with Duck Hunters

With regards to economic impact, both interviewees explained how they often spend money in local establishments while they are on their hunting trips. Duck Hunters must spend money on ammunitions, gear, food, beverages, and other necessities every time they go out hunting. Taken as a whole, this user group certainly generates a degree of economic impact for local outdoor shops as well as food and drink establishments. The interviewees indicated that the best time to reach their peers is during the duck hunting season between October and January.

Cattle Ranchers

A total of four ranchers who graze cattle on agricultural lands or former baylands around northern Humboldt Bay were interviewed. The rancher’s average age is 66, with one 42 years of age. The ranchers raise beef cows on 150 acres in Freshwater valley, 150 acres in the City of Arcata, and about 500 acres in Arcata Bottoms region, of which 120 acres abuts the Mad River Slough. Three of the interviewees are native Humboldt County residents, some from families that have lived in Humboldt County since the early 1860’s. One of the ranchers is highly regarded around the state for his

innovative ranch and timber management – especially related to rotational grazing and uneven aged timber management. All four ranchers were raised in the ranching and timber business and are Farm Bureau members. One served with the Humboldt Bay Watershed Advisory Council board in the early 2000's.

Attitude Towards and Frequency of Humboldt Bay Use

The ranchers interviewed have a broad attitude toward Humboldt Bay – with opinions ranging from neutral, with no personal interest in the bay; to another believing the bay is a very important resource, essential for wildlife; and yet another who thinks the bay is a 'pain' because of the environmental controls around it. In general, the ranchers have a deep appreciation of the qualities a healthy environment provides, but feel squeezed by public land acquisition and management. The interviewees also expressed concern for levee removal around the bay. One said it is hard for the reclamation district to maintain the dike.

The ranchers interviewed interact with land around the bay, or on sloughs, on a daily basis. They felt that nutrients were being managed well around the bay. They had a wry thought on nitrogen and phosphorus in the bay, noting that Aleutian geese poop quite profusely around the bay during spring rains - does anyone take notice?

Development of Humboldt Bay

Discussion about the development of Humboldt Bay produced a response of 'a shipping railroad doesn't make sense' from the four ranchers interviewed. "Development should not rely on the railroad. It is too expensive, will need maintenance, etc." one said. One rancher had an experience with a stepfather working for twelve years on the Elk River line of the railroad, and he recalled him heading out to work the line every winter. He didn't think it made sense to try and revive a shipping port if it depended on a railroad through the Eel River.

One rancher thought that economic development should be the number one value for the bay, while the other three said that environmental integrity is critical, along with economic development. "There should be balance in development", most agreed. It was mentioned that economical development could occur with "some industry, oysters, and tourism." Two interviewees said that they support the continued dredging of the bay, to keep it in its current state. The Arcata's Marsh and Wildlife Sanctuary was mentioned as being an environmentally and economically successful development model. It was pointed out that there are empty properties around the bay. They like the idea of enhancing the port, but all agreed to "forget about the shipping containers and the railroad."

Three of the four mentioned Greg Dale, owner of Coast Seafoods, recently taking the Farm Bureau to see a commercial oyster producer in Humboldt Bay. "They looked like

vineyards” one rancher said of the rows of beds in production in the bay. They appreciated the oyster production in the bay and saw it as critical for the future.

Humboldt Bay Culture and Cultural Resources

All the interviewees mentioned Indian Island as a culturally significant landmark, particularly for the native Wiyot Indians. They thought it was good the native people got back at least part of the island. Culture and history exist in the memories of the long time residents.

One of the ranchers is related to Harvey Harper, and he mentioned that in 1912 Mr. Harper would ship cars up to Humboldt by barge. He noted how difficult it was to travel by road in those days, and how many supplies were brought in through the bay and the wharfs. Another interviewee said he appreciated the idea of the old wharfs and the bay access people had historically.

One rancher talked about all the tepee burners that were in Arcata in the early 60’s. “There was sawdust everywhere”, he said “it felt like it was a second gold rush, after the war, as there was so much demand for timber.”

Agricultural Ownership of Land around Humboldt Bay

One rancher mentioned Aldaron Laird’s bringing forth the doctrine of Public Trust; the public trust law that says resources such as the seashore must be used in a way that benefits the entire public, not just a few people.

“The doctrine of public trust says that you can’t own the seashore, the air, the ocean, or the navigable waterways,” according to Laird. The doctrine of public trust, which goes back to Roman times, is the underlying basis of English common law, adopted by the United States. When California joined the Union in 1850, all its tidelands became its sovereign lands, subject to public trust.

The rancher said that the Farm Bureau had a lawyer look into the claim of public trust doctrine over former Humboldt Bay lands and their lawyer interpreted the law to say that if people are currently using, and have a history of continually using the bay lands, then they can be held as private property.

Agricultural Management of Land around Humboldt Bay

All of the ranchers interviewed managed their pasture with rotational grazing. This means the cows are moved every two days or so, rotating through the pastures. The ranchers said that land managers are very aware of nutrient and soil management and they don’t want to lose nutrients or soil to erosion. One rancher said that isolated managers may not do a perfect job, but if nutrients are running off their farms weeds will grow up in the ditches. Mother Nature doesn’t let the nutrients go to waste.

One rancher relayed that “About 30 – 40 years ago we made a management decision to fence the cows out of the creeks. Erosion control was one of the driving reasons.” He also said they have recently decided not to irrigate out of Jacoby Creek. “There is just not enough water to pull out in the summer.” They have been dry farming (depending on groundwater), and it works for them for forage. With rotational grazing, they find that they can run more cattle on less land, even without irrigation.

All of the farmers interviewed have a winter site to bring the cows when the lower lands are flooded. One Freshwater rancher said that some of his ground gets too wet for cows in the winter and he moves them up, but still on his property. He supplements their feed in the winter, from about Dec 1st through April 15th because, “About one-third of my property gets too wet for winter grazing”. He said that when he rotates his cows, he avoids the wet fields in the winter. Every other year, or so, it floods pretty bad. He said it has always been this way – it flooded in the 1964 flood. Another rancher has 1200 acres on Liscom Hill to bring the cows to in the winter.

The ranchers mentioned Dr. Peterson, a state veterinarian, as having data that shows pollution found in the bay today is from human waste, not cows. All in all, they agreed that the ranch management around the bay is the best it could be, and that Fish and Game are the least competent, but getting better, on how to use cows for grazing to manage restoration land.

Humboldt Bay Management

The ranchers are well versed in Humboldt Bay management, being familiar with local, state and federal agencies that oversee regulations. In general, they said the bay management was currently acceptable, with one rancher expressing that there are too many environmental laws, while another appreciated the current clean-up efforts of toxics.

They believe that there is enough opportunity for public input with the Humboldt Bay Harbor, Recreation and Conservation District, which has elections, representatives, and then public hearings. They said if too many people get involved in decisions, nothing will get done. “There are too many ‘experts’ who mess things up” was a common quote. They all agreed that the Farm Bureau is a good way to communicate with the ranchers.

Timber Heritage Association

An interview was conducted with a member of the Timber Heritage Association (THA). The interviewee is 54 year old male that has lived in Humboldt County since 1975. He came to Humboldt County to attend Humboldt State University and majored in

Forestry. He currently works as a building contractor and was interested and excited to talk about Humboldt Bay's culture and history.

Humboldt Bay Culture and Cultural Resources

The interviewee has studied the history of Humboldt Bay and can name facts and dates off the top of his head, going back to 1806 when a Russian boat, captained by Captain Jonathan Winship, made the first authentic ocean discovery of Humboldt Bay. He believes that preserving the history of the bay is critical. He noted that the historic resources of the bay are discussed in the Humboldt Bay Harbor, Recreation and Conservation District (HBHRCD) strategic plan and that the historic resources are slated to be preserved, if possible.

He said that the industrial history is the least well preserved historic resource, and emphasized his support for preservation and recognition of the 'working' past historic sites; from ballast rocks near the old wharf in the north bay, to the existing lumber company towns around the bay. He sees history as with us today, and wants to develop and sustain a Timber Heritage Museum, along with an excursion train, around Humboldt Bay.

The interviewee discussed the potential for the Humboldt Bay region to be a National Heritage Area; the National Park Service in Oakland, California has a partnership program to preserve history, landscape and culture. He believes that the establishment of a Timber Heritage Association Museum and/or a National Heritage Area designation for a portion of Humboldt County was a natural fit given the areas redwoods, natural landscape and creative inventions.

He emphasized that while he is an advocate of an excursion train around the bay, he does not think it precludes trail development between Eureka and Arcata, and around to Samoa. He believes the trail and the excursion train can be developed, and has been exploring options for preferred trail sites on both the east and west of US 101. The interviewee attends meetings that have been going on for about one and a half years between interested entities - cities, the county, etc. - about the rail and trail, between Arcata and Eureka that are facilitated by the National Park Service.

Development of Humboldt Bay

The interviewee thinks that development of the bay will occur, maybe even as a deep port, but that it will be done in a "green" manner. He thinks that in Humboldt County people have figured out how to achieve economic development and keep a healthy environment intact – and he believes the HBHRCD Board will guide development with a green emphasis. He said he trusts Mike Wilson and Pat Higgins, and the HBHRCD Board members, to be environmentally vigilant. He thinks the new strategic plan for the HBHRCD takes a broad outlook and has an even focus between economic development and recreational use.

He discussed that THA has been negotiating with the HBHRCD regarding the establishment of a timber heritage museum in the Hammond Lumber Company building. The building is owned by HBHRCD and dates back to the 1890s. The THA holds a one year lease on the building. He thinks a timber museum will be important for the establishment of an excursion train, and if the Redwood Dock should become developed for cruise ships, the Hammond Lumber Company building could be a Welcome Center. He said that consultants were hired to do a feasibility study for the timber museum (2002), and they were impressed that a portion of Indian Island was given back to the Wiyot people. This situation presents a cultural opportunity, adding to the interest of the excursion train and the museum.

Humboldt Bay Management

The interviewee was very familiar with the HBHRCD, saying he attended their June meeting. He supports HBHRCD efforts to further develop the bay for economic interests, but as stated before, he believes it will be done in a “green” manner.

When asked about the future for trains in Humboldt County, he reflected and said that rail is growing “astronomically”. He talked about Humboldt County in 1914 when the railroad was completed and how there was a party in Humboldt for three days celebrating the railroad. He said that trains get about four times the fuel economy that a truck gets. He had no comment on the train through the Eel River valley, from Eureka to San Francisco, but reiterated that an excursion train around the bay is a good idea.

When asked about the North Coast Rail Authority (NCRA), he said the NCRA is an independent agency of the state, established in 1990 when voters passed Proposition 116. The sister bill, to provide funding for the NCRA, was vetoed by then Governor Deukmejian, and the NCRA is not well funded. Still, the agency thrives, and each county has two appointed representatives on the NCRA. Currently, the Humboldt County representatives are John Woolley and Charles Olivia.

Madaket

The Madaket is the oldest passenger vessel in continuous service in the United States. The Madaket was built in Humboldt Bay, in Finn Town (Fairhaven) in 1910 and has never left the bay. The boat was once called the Nellie C, after a member of the Cousins family, the original owners.

The Madaket was originally a ferryboat, with stops in Table Bluff, Fields Landing, Eureka, Samoa and Arcata. Before the Samoa Bridge was completed in 1972, mill workers would get on the Madaket in Eureka and ride across the bay to work at the Georgia-Pacific Lumber Co. Currently, the Madaket is owned by the Maritime

Museum and makes four runs around the bay on a daily basis; it makes three runs daily as a narrated history of Humboldt Bay cruise, and one run a day as an evening cocktail cruise.

One of the interviews conducted was with a Captain of the Madaket who is a 5th generation Humboldt County native. His family moved to Humboldt in 1872, and they have always made their living on the water, crabbing and fishing. He has worked around Humboldt Bay for most of his life, specifically working at the *Crab Shack* in Eureka from 1992 until recently, when the City of Eureka closed it down to build a motel on the waterfront.

Humboldt Bay Culture and Cultural Resources

When asked about cultures associated with the bay, the interviewee mentioned fishing, Indian Island, harbor cruises, Finn Town and King Salmon. He thought the Buhne Warehouse should be preserved and also lamented the loss of the *Crab Shack* – of which he said,

“In less than 100 square feet 250,000 pounds of crab was processed a year. The Crab Shack was one of those wonderful, authentic small places that make a town attractive”.

He also reminisced how a restaurant, Lazio’s, on the waterfront worked so well with the Madaket:

“When Lazio’s was operating, people used to make a reservation at the restaurant, then come down to the foot of C Street for a cocktail cruise on the Madaket. Do you know the Madaket boasts the smallest licensed bar in California?”

Development of Humboldt Bay

If the interviewee had his way, “Humboldt Bay would be the front door into Humboldt County, not the back door.” He thinks the bay is a critical resource with phenomenal wildlife, recreational value, and untapped potential for economic development. He is somewhat leery about the decision makers in the City of Eureka and around Humboldt Bay, and he jokingly called the kayakers a “pain”; he sees potential for niche development of Humboldt Bay in ecologically based businesses such as whale watching, etc. and industrial based such as small barge building. He noted that:

“Not long ago, there was a company named Santa Maria Shipping that wanted to locate on Humboldt Bay. They wanted to build fuel-efficient barges for short distance sea shipping, like from Humboldt Bay to Coos Bay. I tried to set them up with meetings with the Harbor District - but no one would take them seriously! The District representatives are stuck thinking ‘too big’ for this bay. Humboldt is not going to be a mini-Oakland”

He knows the fishing history of Humboldt Bay, particularly the recent history from the 1970's. He said that in the 70's there were 27 different fish brands selling out of Humboldt Bay. Now there is one – Pacific Choice, a corporation.

He has some thoughts about waterfront and bay development. While he likes the boardwalk, he noted that there is no boat tie along the whole distance. He thinks that the City of Eureka is making poor choices for the waterfront. He said that the Fish Terminal is 30 years too late. He doesn't think the cranes work, as they are too cumbersome and there aren't any fish left anyway. He said that the Humboldt State University building doesn't have a dock, and that in general there is not enough public access to the bay.

Humboldt Bay Management

While the interviewee is not complimentary to the management of Humboldt Bay, he hasn't lost hope that it can be managed correctly. He thinks that decision-making people, in both the City of Eureka and at the HBHRCD, are not listening to the public. He lamented:

“There is a small group of people who only speak amongst themselves. They have the attitude that the people don't know what they want”

He thinks that public hearings are a waste of time, as decisions have already been made in back room deals. He mentioned that he is glad that Mike Wilson is on the HBHRCD. He also feels that the bay is too bureaucratic. He said that when a ship comes in to Humboldt Bay it is “Greeted by security guard with guns. It is not user friendly.”

He has had enough experience to make him a cynic, but he emphasized that he really has hopeful feelings for Humboldt Bay. He thinks Humboldt Bay should develop along the lines of Astoria, Brookings, or Coos Bay - all of which he cited as good examples of appropriately scaled port development.

He noted that Humboldt Bay is currently dredged to 48 feet, but it fills in too quickly. This is one reason he doesn't believe in a deep-water port and prefers barge traffic. He said that a barge uses 5 percent of the fuel used by 170 trucks, and holds the same capacity.

When it comes to dioxin management in the bay, he wondered if maybe we should just leave them buried. “I think it is more toxic to dig it up and disturb it. Maybe we should just let it be.” He believes in healthy management of the bay, but fears going overboard with environmental issues. He highly valued Maggie Herbalin's seminar efforts about Humboldt Bay as an educational tool. He said he found them to be truthful and effective.

Summary of user groups interviews

A total of 50 interviews were conducted. The frequency of Humboldt Bay use varied among interviewees. User groups that reported accessing the bay via the Arcata Marsh and Wildlife Sanctuary had a higher frequency of bay use, than groups who reported accessing the bay from other locations. Interviewees from three user groups reported curtailing their use of the bay due to water quality concerns.

A few interviewees discussed a ‘sense of community’ that is fostered either as a result of participating in an event (e.g., Kinetic Grand Championship) or taking part in an activity with a community of regulars (e.g., bird watching). Typically, interviewees would discuss a sense of community when asked about cultures associated with the bay or reasons they participate in an event or activity.

Interviewees reported using the bay or lands adjacent to the bay because of the vast wildlife viewing opportunities, the natural beauty of the bay, the marshy habitats and sloughs, the calmness of the bay, and the nostalgia of the area.

When asked about the management of Humboldt Bay, a few of the interviewees were familiar with the agencies responsible for managing the bay; although the majority of interviewees were not familiar with the agencies responsible for Humboldt Bay Management. Interestingly, a majority of the individuals interviewed support a management strategy that seeks a balance between economic development and the environment. A common value among interviewees was the notion that the bay is an important economic resource, but that water quality, air quality, wildlife habitat and recreational opportunities are just as important.

A few interviewees believed that recreational use of the bay should take precedence over economic development, and one interviewee supported economic development of the bay at whatever cost. Only two interviewees strongly supported the development of Humboldt Bay as a shipping port. Suggested development alternatives to port development included: the expansion of oyster farming; increased tourist opportunities (e.g., restaurants, shops); additional festivals that celebrate the bay’s assets, in a fashion similar to the existing festivals (e.g., Godwit Days, Arcata Oyster Festival); and light industry. Frequently, interviewees would reference the Arcata Marsh and Wildlife Sanctuary as an example of how a balance can be achieved between economic development and conservation.

When asked about cultures associated with the bay, a correlation was observed between the length of residency in Humboldt County and perceptions of cultures associated with the bay. Interviewees that have lived in Humboldt County on average 10 to 12 years or less, largely associate Native American culture with the bay; in contrast, interviewees that lived in Humboldt County 12 years or more, associate timber and fishing cultures with the bay, in addition to Native American cultures. A

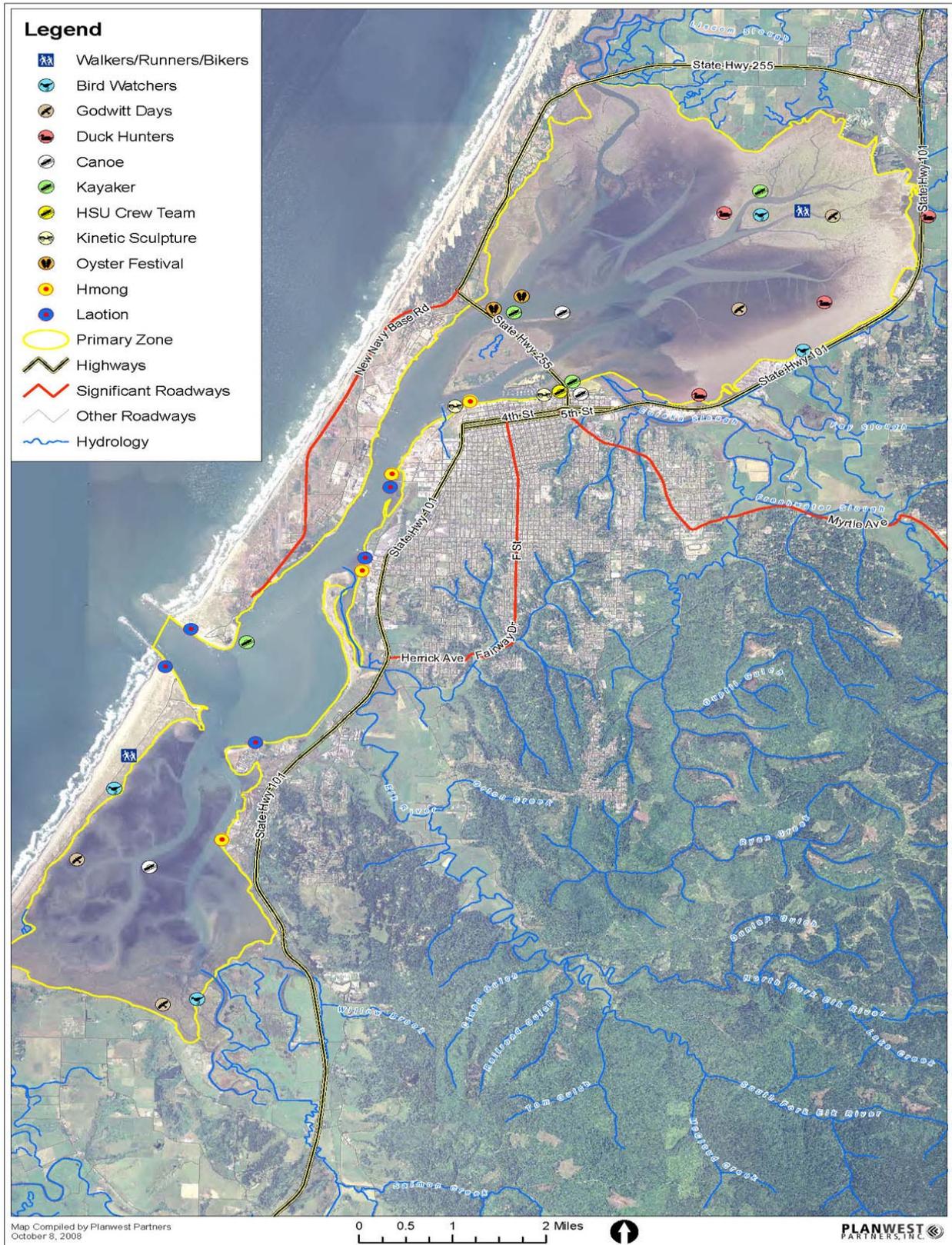
few interviewees specifically mentioned the Wiyot culture as being associated with the bay.

The majority of interviewees support the community's involvement with Humboldt Bay management decisions. However, a few believed that the community input process is a waste of time because the managers don't take the public's comments into consideration, or that too many folks involved in the decision making process impede the ability to get anything done. Interviewees were split with regard to their willingness to be involved. When asked if they would like to be involved with management decisions, interviewees were either very enthusiastic about getting involved, hesitant that they had enough knowledge to be involved, hesitant due to their schedule, or believed that decisions were best left to the managers.

Although a few questions were asked to ascertain the economic impact of uses associated with Humboldt Bay on the local economy, economic impacts cannot be evaluated via the interviews alone. However, the majority of interviewees report spending money at a local establishment in conjunction with visiting Humboldt Bay.

Once again, it should be noted that the themes that emerged from this sample of user groups, cannot be applied to the entire Humboldt County community. However, the information obtained should not be disregarded. The themes that emerged from this research project can serve as a platform for future research efforts.

Figure 6 Humboldt Bay User Groups Access Points



HUMAN DIMENSIONS REGIONAL ROUNDTABLE

To initiate roundtable event planning, the NOAA Coastal Service Center staff recommended using the Mission-Aransas National Estuarine Research Reserve Human Dimensions Regional Roundtable agenda as a model for the Humboldt Bay Human Dimensions Regional Roundtable. The Planwest Partners team reviewed the Mission-Aransas agenda, and the scope of work provided by NOAA CSC, to define the roundtable purpose and outcomes. A draft agenda was constructed based on the roundtable purpose and outcomes, and sent to the NOAA CSC and HBEP project team for review (see Appendix B for a copy of the agenda). NOAA Coastal Services Center staff organized a conference call in order for members of the project team to discuss the agenda and come to a consensus on suggested modifications. Project team recommended changes were made and construction of a roundtable participant list began.

Each member of the project team submitted individual, organization and agency names for the Human Dimensions Regional Roundtable participant list. In total, 96 potential participants were identified. The Planwest Partners team then worked on filling in the Participant List information gaps (i.e., contact names, numbers, and emails). The complete participant list was sent to NOAA Coastal Services Center staff members, who then sent out a Human Dimensions Regional Roundtable informational email to all 96 potential participants. A few weeks later, a second email was sent to potential participants requesting that they R.S.V.P for the roundtable. As a result of the emails, the project team received inquiries from individuals, organizations, and agencies that had not been included on the original participant list, but were interested in attending; interested folks were encouraged to attend. Thirty participants attended the roundtable held on August 20th, 2008.

The Humboldt Human Dimensions Regional Roundtable included four presentations and two break-out sessions. In the first break out session, small group facilitators asked participants the following questions:

- What are your historic resource areas of interest?
- What are your historic resource areas of concern?
- What are your cultural areas of interest?
- What are your cultural resource areas of concern?
- What local cultural and historical topics interest you?
- What topics would you like to discuss in greater detail during this afternoon's discussion?

Participants were asked to brainstorm around the questions asked and then to select their top five areas of interest. Participants received five sticky dots to place next to their top five areas of interest. The transcript summaries from the first break-out session are below; asterisks represent the sticky dots placed by participants, which were used to determine the top areas of interest to be discussed during the second round of breakout sessions.

Group A

- Conversion of transportation corridors
- Context Studies (topical studies similar to those that have been done in the area on agriculture, etc.) **
- Pre/post contact management and use of resources *****
- Paleo-ecological understanding of Humboldt Bay (focusing on variations) *****
- Inventory of toxic sites
- Cultural resource inventory (to use in management plan) to include secondary areas (i.e. broadening the geographic scope of the current research) *****
- Decision making / consensus building, more inclusivity, broader advisory group (i.e. procedural issues related to management of cultural and historic resources) *****
- Secondary impacts and tertiary impacts of dredging (erosion) *****
- Quality of life / public health impacts of marsh restoration *****

Group B

- Historical landscape of Arcata Bottoms – Eel River Basin / Ferndale Bottoms *
- Cultural Stories
- Agriculture, transition to managed areas
- Industries: Fisheries, lumber/lumber camps, agriculture, canaries, dikes, roads, railroads, farms, rail lines, camps *****
- Inventories Needed – Up to Federal and State Standards

- Contextual Studies for the Humboldt Bay Area, Statewide Resource Planners, useful in large areas so individual study(s) / project(s) can have a framework
- Studies are currently done fragmentally. Possible Contextual Studies could include* – Dairy Industry *; logging, pre-rail (Falk, Crannell), post-rail, trucking; shipping, Fisheries
- Management Plans for both cultural and natural resources need to be done at the county level, they need teeth, and should be incorporated into the General Plan
- Humboldt Heritage Professional Network - the group started six years ago. They have submitted comments on current projects [to clarify, improve information flow]. They hold workshops and get 75 to 100 attendees
- Conservancy Interests * – Opportunities to educate on cultural use/historical – Coastal Trail Project: which areas to highlight?
- Maximize Public Access Ways **
- Redwood Community Action Agency Trail Project needs more cultural/historical interpretive signage and reason to plan trails to some of them.
- Local residents are nearing 80-100 years old. We need to document their stories, get oral histories (done correctly), conduct interviews ***
- Barns – Educational opportunities, brings landscape to life (Merced has a project, as well as many other states)
- Toxic Legacy – Inventory upfront, documents are missing, we need oral history ***

Group C

- [Native Groups] Wiyot Sites (Cher-Ae-Heights, Trinidad Rancheria) and others that are no longer present
- Resource Extraction
- Subsistence use (fishing, seaweed and other plants, crabbing, clamming, land-based) ****
 - o Variety of groups and individuals
- Access to the Bay ***
 - o Impacts of development on public access
 - o Traditional access / historic access
- Ceremonial Sites and their cultural significance (example Indian Island) ***

- Nostalgia
- Cultural integrity protection
- Consultation with local Native groups
- Connection to Place
- Influence of all various ethnic groups in area – social values ***
 - Land use
- Fishing and Timber as ways of life. Values/connections to area and how these influence use of bay **
- Livelihood information is missing from standard data collection vs. occupation / income
- Tourism as a use
 - Coastal related activities
- Other contributions of recreational and commercial fishing
- Historical / traditional local management and knowledge
- Historic biological productivity and ecosystem services *****
 - Historical management and use patterns traditional
 - Understanding these connections
- Awareness by various groups of the connections and features *

Group D

- 1) There are too many Repetitive Plans ***
 - There needs to be an integrative plan
 - The average person needs to be able to access an integrative plan
 - We need better integration between agencies
 - Agency or over site authority should integrate plans
- 2) Public Participation ****
 - How it is organized to get people involved
 - Getting information to the public, helping them become involved
 - Better involve stakeholders
 - Public participation process – reevaluate
- 3) More Information on ‘How People Use the Bay’ ****
 - Current and Historic Uses

Example: Combine fishing location data and/or biological data with toxic site information (overlay information to prioritize assessment)

- 4) Visual Historical Patterns of Land Use ***
 - o Images showing Agricultural / Industrial land use would be helpful
- 5) Role of Ranchers / Timber/ Fisheries/ Agriculture as cultures ***
 - o These local cultures should not be overregulated / treated the same as big industries and/or corporations
 - o Looking at the history of the culture
 - o How can these cultures be preserved?
- 6) Tourism as a culture (evolving) **
- 7) Increasing Coastal Access *
 - o Recreation
 - o Conservation (birding)
 - o Coastal access is becoming a higher priority (improve) enhance recreation (boat dock, trails, signage)
- 8) Oyster Farming as a culture ***
- 9) Children's future – continuing to live / work in Humboldt **
 - o Jobs, culture, etc.

At the conclusion of the first breakout session, the project team assembled the transcripts from the first breakout session to determine the discussion topics for the second breakout session. The project team looked for areas of interest and or concern that were mentioned by all four groups, or group consensus, to determine the discussion topics for the second breakout session. The discussion topics were written on flip chart sheets for introduction to participants and small group facilitators were assigned a topic. The second breakout session was introduced to participants, and they were asked to select a discussion topic of interest to them. The discussion topics and transcripts for the second breakout session are as follows:

Group A

Discussion Topic = Planning and Decision Making

The table below addresses the following question: What entities are currently involved in the management of cultural and historic resources, and what are their respective roles (e.g. funding, planning, permitting, etc.)?

Organization	Role
California Coastal Commission	Planning & Permits
Coastal Conservancy	Funding
US Army Core of Engineers	Federal Review of local permits
USFWS (US Fish and Wildlife Service)	Federal Review of local permits, Funding
NOAA Fisheries	Federal Review of local permits
Environmental Protection Agency	Funding, toxic assessment and clean-up
California Fish and Game	Funding, permits
Humboldt County	Planning & Permits
Cities – Eureka/Arcata/other local governments	Planning & Permits
Tribal entities	Planning
Harbor District	Project review, permitting & planning
Private Landowners	Control access, some planning
State Water Quality Control Board	Permitting, Technical Assistance, Funding
CalFIRE	Permitting, Technical Assistance, Funding
Nongovernmental Organizations	Advocacy, technical assistance, education
Foundations	Funding
Economic Development Entities	Planning, Funding, implementation

The bullet points below address the following question: How do these agencies currently manage cultural and historic resources, and how do the agencies interact with one another?

- Historical focus has been on natural resources, agencies are not mandated to observe culture
- Agencies are mandated to comply
- Cultural resources are secondary (from compliance perspective only)
- *How could this approach to cultural and historic resource management be improved?*
- Interagency Management Plan (e.g., plan created for town of Trinidad)
- In Washington, new agency created for joint management (i.e. Puget Sound)
- Need comprehensive inventory of cultural resources in bay (to state and federal standards), which could be the basis for funding

- Needs to go beyond local level
- Entity itself would need to be new, rather than giving new authority to an existing agency
- Another option is formal establishment of a “heritage area” in Humboldt Bay
- Integrated Regional Watershed Management Plan (IRWM)

TASKS (for implementation of an interagency cultural and historic resource management entity):

- Entity (i.e. legal creation of the interagency entity)
- Policy/law analysis (i.e. analysis of existing cultural and historic resource management authorities)
- Research (e.g., inventory of existing cultural and historic resources)
- Public education/public involvement
 - Public education program (need funding)

WORK IN PROGRESS (i.e. aspects of this work are already underway)

Group B

Discussion Topic = Local Ways of Life (fishing, timber, agriculture/ranching)

1. How does this influence values/connections to the bay?
2. Management protects resources, but not ways of life. What are the impacts on cultural/community uses? Example: California Environmental Quality Act (CEQA) considerations don’t include human/cultural aspects

The following table addresses the question: What organizations have information relevant to protecting the interests/values of the local community and its various ways of life?

ORGANIZATION	WHAT TYPE OF INFO?
ASJE – Alliance for Sustainable Jobs & the Environment	Restoration Economy
United States Department Agriculture – National Resource Conservation Service	
State Coastal Conservancy	
Ag extension (Sea Grant)	

ORGANIZATION	WHAT TYPE OF INFO?
Humboldt Bay Historical Society	Documented history back to 1948 including families
Blue Ox	Educating children and the community
Pacific Coast Shellfish Growers Association (PCSGA)	Scientific studies, small community farms, outreach via web, community forums
Humboldt Bay Fishermen's Marketing Association	Local organization strive for consensus among fishermen
Clark Museum	
Farm Bureau	
Cattleman's Association	
Humboldt Resource Conservation District	Good model for cultural change (e.g., Salt River)
(Trawlers) Fishermen's Marketing Association	
Humboldt Bay Tuna Club	

The following table addresses the question: What information or action(s) is needed to protect local ways of life or to account for ways of life in management decisions?

NEED	HOW
Need to protect or consider ways of life as cultures (e.g., ranching) when making management decisions	<ul style="list-style-type: none"> • Contact organizations when project scoping • Ensure public input and review
Restoration: need to consider tradeoffs (for example, ag versus restoration; private versus public)	<ul style="list-style-type: none"> • Examine tradeoffs • Threshold levels of use type to maintain way of life
Need to maintain ways of life that have lasted for generations in the face of change	<ul style="list-style-type: none"> • Participation at festivals (e.g., Oyster festival) • Focused survey reaching many different people on maintaining natural resource community • Measure existence value
Need to define sustainability of culture and of ecosystem	<ul style="list-style-type: none"> • Instill in the community/public the connection between healthy environment and healthy economy, which leads to a healthy/sustained culture
Need education and outreach at sites concerning ways of life	<ul style="list-style-type: none"> • Signage including schools, programs, festivals
Need to streamline government processes: the CEQA process (for example) is lengthy – even with access to comment, people feel disenfranchised, etc.	

NEED	HOW
Need to determine how to include a consideration of ways of life in the management process (the question we're answering)	<ul style="list-style-type: none"> • Survey the community about their “special places” that would not normally be mapped – talk to people • Conduct a trade off analysis

The following bullets address the question: How can this information be shared with the public/community/stakeholders?

- Extensive, sustained, and comprehensive agency / organization outreach
- Personal invitations to participate
- Encourage attendance of old-time, local families
- Overcome suspicion of government, need transparency
- EBM is a buzz-phrase/buzz-acronym!
- Communicate concept (not term) to avoid estrangement of the public
- Consider providing additional formal venues for communication with resource managers that are periodic and occur at a fixed time
 - Communicating with the public is difficult because there are issues with how people define Humboldt Bay’s boundaries... People don’t feel they need to be at table because they don’t have the expertise or they focus on one particular part/aspect of the Bay, but when considering issues on an ecosystem level, they do need to participate! (For example, tide gates: impact on properties is significant; tide gates themselves are a part of a culture shift (from installing to removing) and there are trade offs in different parts of the ecosystem)

Group C

Discussion Topic = Current and Historical Uses of Humboldt Bay

1. Data inventories / spatial analysis
2. Impact analysis
3. Inform decisions makers

Data inventories that exist, including maps, records, collections, etc.:

- C.A.T.S. toxic mill sites list
- Wiyot Tribe cultural and archeological site data (not public)
- North Coast Information Center (not public)
- Caltrans agency historic and cultural data, right-of-way photos, etc.

- Bureau of Land Management - General Land Office Records
- US Forest Service (aerial photos, etc.)
- NOAA Office of Coast Survey - Historical Map and Chart Collection (nautical charts, hydrographic surveys, topographic surveys, bathymetric maps, geodetic surveys, city plans, etc)
- U.S. Geological Survey
- Humboldt County public works
- Humboldt State University Library
- HSU Cultural Resource Center
- Humboldt Historical Society (map collections, vertical files, magazine collections)
- Regional Water Quality Control Board has inventories on toxics
- Humboldt Bay Wetlands Review & Baylands Analysis (Shapiro & Associates) (County has one and HSU library)
- North Coast Fisheries Project – Carrie Pomeroy (CA Coastal Conservancy)
- Harbor District Planning Documents
- Pacific State Marine Fisheries Commission (PacFIN)
- Recreational Fisheries Data (RecFIN)
- Susie VanKirk’s report on fisheries – Newspaper Clippings
- Timber Heritage Association – Mike Kellogg’s inventories of sites, rails
- Steam in the Redwoods and other books
- Water trails groups - I.D. spots
- Clark Museum
- The Historical Atlas for Humboldt Bay – Electronic (Alderon Laird’s work)
- Aerial Photos
- NRCS - Soil Mapping Project
- Northcoast GIS User's Group – various GIS data
- California Natural Diversity Database (CNDDB) - sensitivity areas for rare flora and fauna
- Friends of the Pleistocene - members that are interested in quaternary geology
- Agency 'grey literature' reports and records based on subject areas

Needs:

- Access to data (public vs. private, knowing where to find data, etc.)
 - o consultations with staff are available for some inventories not open to the public
- Effort to integrate data and inventories, make inventories available in digital format
 - o Collections exist that have not been fully dug thru, they are sitting in boxes
 - o Funding is needed for new concentrated effort to bring together all information
 - o Harbor District and County Planning – a new person could be funded to do this work
- There is a need to address the conflicting management goals of Humboldt Bay
- There is a lack of public data available – historic and cultural data

- Studies that would be useful:
 - Climate History
 - Physical History
 - Paleo-environmental
 - Geomorphic

Opportunities:

- Incorporate local knowledge (tribal, fishing, agricultural, etc.)
- Engage with north coast GIS user group
- Agency like Caltrans has mitigation needs, partner needs, finding areas and projects, enhancements
- Sensitivity models can be created from the specific data that deal with potential site location based on time and settlement and subsistence patterns.
- Planning entities around the bay would benefit from contextual synthetic studies on various aspects of Humboldt Bay history (Diary, Lumber, Fishing to name a few) to help determine their significance for historic properties and development of management plans.
- Management plans should be based on information. Data collection, access and retrieval will be important and necessary for the creation of a management plan. Generally speaking one could conceive as the major data categories as being related to natural environment, past human environment and current human environment.
 - o Natural environment: climate data, geology, quaternary geology, hydrology, flora, fauna, etc.
 - o Past human environment: Prehistoric settlement and subsistence patterns, historic settlement and subsistence patterns (important toward the identification of point sources for toxics, alterations in hydrology), etc.
 - o Current human environment: current social geography, current economic geography, general plans, zoning, etc.

Please note, transcripts for Group C, were revised based on a follow up email received from a roundtable participant. Changes to the transcripts were made at the discretion of the NOAA Coastal Services Center.

RESEARCH OPPORTUNITIES

NOAA funded the Humboldt Bay Historic and Cultural Resource Characterization and Human Dimensions Regional Roundtable to not only inform the HBEP, but also to begin to understand the community values and attitudes that lead to support for coastal conservation within coastal communities. NOAA also intended to identify a methodology or process that could be replicated in other coastal communities wishing to better understand their historic and cultural resources. Finally, NOAA hoped for the information compiled as part of this effort to serve as a foundation for future community endeavors or additional research efforts within the Humboldt Bay Watershed. The research needs and opportunities identified through this project are discussed in detail below.

The Historic Resource portion of this report not only provides a geographical summary of the bay's history, but also provides an overview of the important sources that should be considered when preparing future historic reviews. As illustrated previously, this report only covers a small portion (the primary zone) of the HBEP. Future efforts should focus on preparing a similar Historical Resources Characterization for applicable areas of the Humboldt Bay Ecosystem Program zones.

The Current Cultural Resources section provides an example of research methodologies that can be used to understand how residents view watershed resources, and how they use those resources. An essential Ecosystem Based Management component is an understanding of the resident's resource and community values, and a socio-economic profile to consider possible tradeoffs necessary for resource conservation.

This study provides a solid foundation for further research on resident's resource and community values, and to construct a socio-economic profile for the entire Humboldt Bay watershed. The interviews revealed the language residents use to discuss issues and express values related to Humboldt Bay. This insight helps to frame issues in a way that is understood by the community at large. Information from this work will also assist with the framing of future qualitative research methodologies.

Survey research is a commonly used quantitative research method. Survey research when done correctly yields information that is representative of the community at large. An important component of survey research is the wording of the survey questions - understanding the language used by a community assists with survey question and response category construction. For example, a correlation was emerging between the length of residency in Humboldt County and the cultures associated with the bay. On average, interviewees who have lived in the area 10 - 12

year or less only associate Native American culture with Humboldt Bay. Conversely, interviewees who have lived in the area 12 years or longer, attribute not only Native American culture with the bay, but a logging and fishing culture as well. Further survey research could refine this observed correlation by breaking residency length into five year increments rather than two year increments.

As a result of the information gathered from the roundtable, there is an understanding of the myriad of ways cultural resources are defined by Humboldt County residents, agency and organization representatives. For example, roundtable participants defined Cultural resources as narratives; structures eligible for listing on local, state and national registries; ways of life; historic landscapes; toxic sites; connections to place; tourism; historic land use patterns; cultural stories; barns; and contextual studies. The information obtained from roundtable participants illustrates how various contexts can be used to define cultural resources.

The roundtable was an important event for bringing out information and perspectives on cultural resources (e.g., current and historical uses of Humboldt Bay). Further research efforts could focus on obtaining more information from the various data sources provided. Finally, roundtable participants identified information gaps, and how the information could be obtained - information that could also serve to guide additional research studies.

The information gathered for this report is useful and informative, but due to limitations on time and funding, does not represent a comprehensive characterization of the historic and cultural resources in and around Humboldt Bay. Nonetheless, the information is valuable for both current and future research efforts. NOAA's intent was to fund a study that would not only illuminate community values that lead to conservation to assist the Humboldt Bay Ecosystem Program, but also to serve as a catalyst for future community-driven research.

A variety of research techniques were used to characterize and inventory Humboldt Bay Historic and Cultural resources. The project team utilized literature reviews, interviews and a stakeholder roundtable. The information and insights gained have been compiled in this report, for use by NOAA, the HBEP, and other coastal communities in managing coastal resources. This report provides a solid foundation for additional research, bringing many different perspectives to light and illustrating the importance of historic and cultural resources for local residents.

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REFERENCES

INTRODUCTION

Scientific Consensus Statement on Marine Ecosystem-Based Management. March 21, 2005. (http://www.compassonline.org/pdf_files/EBM_Consensus_Statement_v12.pdf - June 30, 2008).

Humboldt Bay Harbor Recreation and Conservation District. Humboldt Bay Management Plan. May 2007.

Schlusser, Susan; Anderson, Jeff; Price-Hall, Becky; Mierau, Darren; Shaughnessy, Frank; Bjorkstedt, Eric; Crawford, Greg; White, Adona. The Humboldt Bay Ecosystem Program Progress Report. April, 23, 2008.

HISTORIC RESOURCES

Allen, Ben Shannon

1949 From the Penobscot to the Eel. Unpublished book, photocopy: Humboldt County Library, Eureka.

Arcata Union

1922 Early History Is Reviewed. Arcata Union, March 23.

1949 Arcata Business District Burns 3 Times....Arcata Union, September 9.

1963 New mill going up at Samoa. Arcata Union, October 11, 1963.

Belcher Abstract & Title Co.

1921-1922 Atlas of Humboldt County, California. Eureka: Belcher Abstract & Title Co.

Bennion, Ben, and Jerry Rohde, eds.

2003 Traveling the Trinity Highway. Eureka: MountainHome Books.

Berman, Ken

2004 In-person interview with Jerry Rohde at Indianola, November 15.

Blue Lake Advocate

1898 Waterman Field obit. Blue Lake Advocate, August 20:2.

1899 Worthville-Brownsville-Samoa article. Blue Lake Advocate, May 20, 1899:1.

1900 Russ reclamation article. Blue Lake Advocate, March 24:2.

1903a Fays sell property. Blue Lake Advocate, May 30, 1903:2.

1903b Railroad article. Blue Lake Advocate September 19:7

1907 Sale of real estate. Blue Lake Advocate, October 26.

1965 The Flood the Old-Times Talked About. Blue Lake Advocate, February 25.

- Borden, Stanley T.
 1961 Bucksport & Elk River Railroad. *Western Railroader* 24(1).
 1970[?] Arcata and Mad River. *Western Railroader* 17:8.
- Bureau of Land Management
 2008 South Spit Cooperative Management Area Facilities Map. Electronic Document, http://www.blm.gov/ca/st/en/fo/arcata/sspit_map.2.html, accessed April 24, 2008.
- Butler, Wendy
 2007 Landing warehouse destroyed;...Eureka Reporter, January 12, 2007.
- California Integrated Waste Management Board
 1997 State Aids in Environmental Cleanup on Humboldt Bay. Electronic document, <http://www.ciwmb.ca.gov/Pressroom/1997/Oct/nr137.htm>, accessed on April 24, 2008.
- Carranco, Lynwood
 1982 Redwood Lumber Industry. San Marino, CA: Golden West Books.
 1984 The railroad that traveled on wood tracks. *Humboldt Historian*, September-October.
- Carranco, Lynwood, and Henry L. Sorensen.
 1988 Steam in the Redwoods. Caldwell, ID: The Caxton Printers, Ltd.
- City of Eureka
 1955 Map of City of Eureka, California Showing Original Water Courses and Filled Areas (1854 – 1955). City of Eureka, Public Works Department.
- Coonan, Clarence
 1959a Paths of the Pioneers. *Humboldt County Historical Society News Letter*, November:7.
 1959b Paths of the Pioneers. *Humboldt County Historical Society News Letter*, July:5.
- Cornford, Daniel A.
 1987 *Workers and Dissent in the Redwood Empire*. Philadelphia: Temple University Press.
- Coy, Owen C.
 1982[1929] *The Humboldt Bay Region 1850 – 1875*. Eureka: Humboldt County Historical Society.
- Crichton, R. Chalmers.
 1984 Living Legends: Les and his wings. *Humboldt Historian*, September-October.
- CSAA (California State Automobile Association)
 1999 [Map of] Eureka, Arcata, McKinleyville, Fortuna, Crescent City, Ferndale, and Vicinity. California State Automobile Association.

- Cutten, C.P.
1932 Notes. Quarterly of the Society of California Pioneers IX(1):18-40.
- Daily Alta California
1852 Bucksport article. Daily Alta California, November 6.
- Daily Humboldt Times
1875 Shipping article. Daily Humboldt Times, September 2:3.
- Daily Times-Telephone
1883 Eel River and Eureka R. R. Co. Daily Times-Telephone, July 15.
- Doolittle, A. J.
1865 Official Township Map of Humboldt Co., Cal. San Francisco: A. J. Doolittle.
- Doran, Bob
2001 Finding Beauty in the Blight. Northcoast Journal, October 11:9-11.
- Driscoll, John
2006 Our Nature. Eureka 1856-2006. Times-Standard insert, April 17.
- Dreyer, Elwain
1990 Memories of a Field of Dreams WINGS. Humboldt Historian, July-August.
- EDAW, Inc.
1984 Bayshore Mall Draft Environmental Impact Report.
- Easthouse, Keith
2002 Poisoned Slough. North Coast Journal, June 13.
- Elliott, Wallace W.
1881 History of Humboldt County, California. San Francisco: Wallace W. Elliott & Co.
- Elsasser, Albert B.
1978 Mattole, Nongatl, Sinkyone, Lassik, and Wailaki. *In Handbook of North American Indians*, vol. 8: California. Robert F. Heizer, ed. Pp. 190-204. Washington: Smithsonian Institution.
- Encyclopædia Britannica
1910: Encyclopædia Britannica, Eleventh Edition. New York: Encyclopædia Britannica, Inc.
- EPIC
1998 Pacific Lumber Loses License to Cut Trees CDF Revokes License Because of Incessant Lawbreaking by PL. Electronic document, <http://www.geocities.com/rainforest/vines/9901/notop.html>, accessed April 19, 2008.
- Eureka Newspapers
1956 Eureka Newspapers, Inc. 1955-56 Directory and Guidebook. Eureka: Times Printing Co.

Evening Star

- 1877a Salmon Creek. Evening Star, April 28:1.
- 1877b Salmon Creek. Evening Star, March 30:1.

Ferndale Enterprise

- 1889 Local News. Ferndale Enterprise, March 8:4.
- 1893 Indianola dance article. Ferndale Enterprise, March 31:8.
- 1898 Local Items. Ferndale Enterprise, May 17:5.

Forbes, Stanley

- 1886 Official Map of Humboldt County, California. San Francisco.

Fountain, Susie Baker

- 1967 Susie Baker Fountain Papers. 128 volumes. Microfilm: Humboldt State University Library, Arcata.

Frickstad, Walter N.

- 1955 [More Than] A Century of CALIFORNIA Post Offices: 1848 to 1954. Oakland, CA: Philatelic Research Society.

Genzoli, Andrew M.

- 1953 Northwestern Pacific Cost \$25 Per Foot to Construct. Humboldt Times, September 27, 1953.
- 1982 Redwood Country. Humboldt Beacon, November 25:17.

Gibbs, George

- 1860 Journal of the Expedition of Colonel Redick McKee. *In* Henry Rowe Schoolcraft. The Indian Tribes of the United States. J.B. Lippincott & Co.: 99-177.

Gunther, Robert

- 1982 Robert Gunther's account of Indian Island. Humboldt Historian, July-August.

Hoopes, Chad

- 1971 Lure of the Humboldt Bay Region. Dubuque, Iowa: Kendall/Hunt Pub. Co.

Humboldt Beacon

- 1995 Marker Restores Paysonville's Name. Humboldt Beacon, July 27:A8.

Humboldt County

- N.d. Road Register, volume 2.
- 1861 Patents, Book 1. Humboldt County Recorder's Office:12-14.
- 1974 Manila Community Park Project Environmental Impact Report. Eureka: Humboldt County Department of Public Works.

Humboldt County Historical Society

- N.d.a Photocopy of Bracut article. Humboldt County Historical Society topical file: "Lumber Co.: Bracut Lumber."
- N.d.b First Hand History. Newspaper article in "Fort Humboldt" file, Humboldt County Historical Society, Eureka.

Humboldt County Historical Society Newsletter

- 1964a Last of the Old Humboldt Bay Redwood Mills....Humboldt County Historical Society Newsletter, September-October:15.
- 1964b Timber Holdings of A. Brainard 1853-1862. Humboldt County Historical Society Newsletter, May-June:10.
- 1966 Old-times Call It "Bee-at-triss." Humboldt County Historical Society Newsletter, May-June:10.

Humboldt Historian

- 1969 They Called It West Eureka. Humboldt Historian, September-October:1.
- 1973 Ship Quarantine Ends. Humboldt Historian, July-August:5.
- 1981 Humboldt Bay and Harbor....Humboldt Historian, November-December.

Humboldt Standard

- 1907 Promotion Work In Humboldt County: Fields Landing. Humboldt Standard, February 8:3.
- 1909a Progress On Canal Survey. Humboldt Standard, June 30.
- 1909b Why Eel River Canal Wasn't Recommended. Humboldt Standard, October 26.
- 1914 Fort Humboldt article. Humboldt Standard, November 12.
- 1917 Bendixsen Shipbuilding Co. Is Sold To Mayor Rolph Jr. Humboldt Standard, February 17.
- 1918 Coat Of Tar Is Given Mill Man. Humboldt Standard, May 25.
- 1919 Fire Destroys On Time Entertainment Mecca of County....Humboldt Standard, August 26.
- 1924 Last Wooden Ship.... Humboldt Standard, June 6.
- 1925 Beach Grass Causes Suit....Humboldt Standard, March 4.
- 1926 April Number...History of South Bay. Humboldt Standard, May 6.
- 1935a County airport article. Humboldt Standard, December 9
- 1935b County airport article. Humboldt Standard, June 20.
- 1942 Humboldt Women In Lumber Industry....Humboldt Standard, October 14.
- 1945a A Story of Industry. Humboldt Standard, March 3.
- 1945b New Marine Way. Humboldt Standard, April 28.
- 1947a Arcata Lumber Mills Flourish. Humboldt Standard, February 3.
- 1947b Fire is Costly....Humboldt Standard, March 31.
- 1950 Bendixsen story. Humboldt Standard, November 27.
- 1959 Dayton Murray story. Humboldt Standard October 20.

Humboldt Times

- 1854a Ferry article. Humboldt Times, September 16:3.
- 1854b Murdoch & Hiland ad. Humboldt Times, October 7:2
- 1854c J. C. Williams, Merchant Taylor ad. Humboldt Times, December 9:3
- 1854d Bucksport article. Humboldt Times, October 7:2
- 1854e Corn. Humboldt Times, September 16:2.
- 1855a *Glide* ad. Humboldt Times, February 3.

- 1855b Adams & Co. ad. Humboldt Times, January 27.
- 1856 The Southern Part of the County. Humboldt Times, September 13:2.
- 1859 Tumbled Down. Humboldt Times, November 26:2.
- 1860 "A large ranch of Indians." Humboldt Times, March 3:2.
- 1861 Found. Humboldt Times, April 6:3.
- 1862 Our Indian Prisoners. Humboldt Times, September 6:2.
- 1867a Freighting ad, *Dirigo*. Humboldt Times, January 19:2
- 1867b Freighting ad, *Sam Slick*.... Humboldt Times, August 28:2.
- 1873a Arcata Items. Humboldt Times, November 22.
- 1873b Letter from Myers' Landing,. Humboldt Times, June 14.
- 1875 When They Will Commence. Humboldt Times, July 7.
- 1882a Pacific Lumber Company article. Humboldt Times, November 18:3.
- 1882b Railroad. Humboldt Times, November 12:3.
- 1900 Costly Fire At Bayside Wharf. Humboldt Times, May 31.
- 1903 Samoa of the Past and of the Present. Humboldt Times, October 28:2.
- 1908 Will Haul Gravel By Train. Humboldt Times, June 7:6
- 1916 Quarry Deal to be Closed Today. Humboldt Times, November 29.
- 1917 Shipyard At Samoa For H. L. Company. Humboldt Times, April 25.
- 1929 Indian massacre article. Humboldt Times, April 2.
- 1930a Steamer Brooklyn Sinks....Humboldt Times, November 9:1.
- 1930b Brooklyn article. Humboldt Times, November 12:1.
- 1935 County airport article. Humboldt Times, June 7.
- 1936 County airport article. Humboldt Times, April 19.
- 1937 County airport article. Humboldt Times, August 11.
- 1938 Old Timer Do You Remember. Humboldt Times, August 31.
- 1941a We Could Do Our Share. Humboldt Times, January 5.
- 1941b Freshwater railroad article. Humboldt Times, August 17.
- 1941c Whaler Returns to Station Here. Humboldt Times, June 12.
- 1943 Whaling Industry Only One Of Kind. Humboldt Times, July 15.
- 1948 Samoa—Between Bay.... Humboldt Times, December 26.
- 1949 Murray Field article. Humboldt Times, January 30.
- 1951 Things Aren't the Same in Old county Milltown. Humboldt Times, September 23:7.
- 1952 Mill article. Humboldt Times, January 13:8.

Irvine, Leigh H.

- 1915 History of Humboldt County, California. Los Angeles: Historic Record Co.

Jackson, Judd

- 2007 In-person interview with Jerry Rohde, February 2, 2007.

Kneiss, Gilbert H.

- 1956 Redwood Railways. Berkeley: Howell-North.

Labbe, John T., and Lynwood Carranco

- 2001 A Logger's Lexicon. Hillsboro, OR: TimberTimes.

- Laird, Alderon, Brian Powell, Jeff Robinson, and Karen Schubert
2007 Historical Atlas of Humboldt Bay and Eel River Delta. Eureka: Humboldt Bay Harbor, Recreation and Conservation District. Electronic document: DVD.
- La Motte, H. D.
c. 1885 Statement. Manuscript: Bancroft Library, University of California, Berkeley.
- Larson, Garth
2007a Phone interview with Jerry Rohde, February 5, 2007.
2007b Phone interview with Jerry Rohde, February 9, 2007.
- Larson, Garth, Merlyn Larson, and Evelyn Larson
2007 Joint in-person interview with Jerry Rohde, February 13, 2007.
- Larson, Garth, and Henry Moore
2007 Joint in-person interview with Jerry Rohde, January 25, 2007.
- Leavitt, Jean, and Jo Ann Bayne
N.d. Isaac Minor. Blue Lake: Blue Lake Museum Society.
- Mann, Charles C.
2006 1491: New Revelations of the Americas Before Columbus. New York: Vintage Books.
- Martin, Wallace E.
1962 Ida Miller Peterson. Humboldt County Historical Society Newsletter, May 1962.
1983 Sail & Steam on the Northern California Coast 1850-1900. San Francisco: National Maritime Museum Association.
- McCormick, Evelyn
1989 Little Grains of Sand. Rio Dell, California.
- McKinney, Gage
1984 A. B. Hammond, West Coast Lumberman. Journal of Forest History, October.
- Merriam, C. Hart
1999 Papers, vol.1. Microfilm available: Humboldt State University Library, Arcata.
- Monroe, Clara Waldner
1973 Early Eureka. Photocopy: the Humboldt County Historical Society, Eureka.
- Nash, Glen
1986 Shingle mill boom boosted by Eureka-made machine. Humboldt Historian 37(1).
1996 Making a Living, Making a Life in Humboldt County. Eureka: Globe Properties.
- Nerve
1893 The Town of West Eureka. Nerve, July 29, 1893:11.

- Noe, A. C., and G. R. Georgeson
1902 Eureka Humboldt County California [map]. San Francisco: Britton & Rey.
- Noehill
2008 National Register of Historic Places in Humboldt County, California. Web page. Electronic document, <http://www.noehill.com/humboldt/nat1991001523.aspx>, accessed April 14, 2008.
- Northern Californian
1860 Indiscriminate Massacre of Indians. Northern Californian, February 29:2).
- Palais, Hyman, and Earl Roberts
1950 The History of the Lumber in Humboldt County. Reprint. The Pacific Historical Review 19(1).
- Parker, Stanley
1988a Reflections on Holmes Lumber Company. Humboldt Historian 36(3).
1988b Final Days of Holmes Lumber Co. Humboldt Historian 36(4).
- Parry, M. A.
1963 History of Loleta. M. A. thesis: Humboldt State University Library, Arcata.
- Peterson, Charles A.
1978 Memories of Fields Landing. Humboldt Historian, May-June.
- Peterson, Lester M.
1882 Fields Landing was always a busy place. Humboldt Historian, May-June:17.
- Plats of Eureka, volume 2.
Ca. 1910 Original available at the Humboldt County Historical Society, Eureka, California.
- Polk, R.C. & Co.
1930 Polk's Eureka City Directory 1930. San Francisco: R.C. Polk & Co.
- Raphael, Ray, and Freeman House
2007 Two Peoples, One Place. Eureka: Humboldt County Historical Society.
- Redwood Log
1950 A. B. Hammond, Founder. Redwood Log, March:2.
- Richmond, George McClelland
N.d. Richmond Tales. Manuscript: Humboldt County Historical Society, Eureka.
1987 A Brief History of the Richmond Family: 1816 – 1931. Manuscript: Humboldt County Historical Society, Eureka.
1990 Hookton. Humboldt Historian, March-April.
- Rohde, Jerry
2003a We, Us, and Them: A Tragic Trinity. Humboldt Historian, Summer 2003:37ff.

- 2003b The Absent, the Unreliable, and the Incomplete: Seven Flawed Views of the Destruction of Djorokegochkok. *Humboldt Historian*, Fall 2003:30ff.
- 2003c "They Were Never the Aggressors." *Humboldt Historian*, Winter 2003:12ff.
- 2004 Mollie Brock and Kaquaish Beach. *Humboldt Historian*, Spring 2004:17.
- 2006 Ricks to the Rescue. *North Coast Journal*, April 13:8-13.

Roscoe, James, and Susie Van Kirk

- 1997 Final Report of a Cultural Resources Data Recovery and Monitoring Program at the Price-Costco Site, Eureka, California. Submitted to SHN, Consulting Engineers and Geologist, Eureka, California.

Ryan, J[ames Talbot]

- 1850 Map of Eureka, Humboldt Bay, 1850.

San Francisco Journal of Commerce

- 1888 Humboldt Bay Tannery. *San Francisco Journal of Commerce*, November:1.

Sanborn Map Co.

- 1931 Eureka California Insurance Map. New York, NY: Sanborn Map Company.

Schwarzkopf, Chet

- 1948a Humboldt Bay islands article. *Humboldt Times*, December 19.
- 1948b Fields Landing article. *Humboldt Times*, November 7.
- 1949a Elk River article. *Humboldt Times*, February 20:13.
- 1949b Buhne's Point article. *Humboldt Times*, May 22.

Shuster, Merle

- 1947 Brainard's Cut. Humboldt State University Library, Shuster Photo Collection, photo number 2001.01.0212.

Sparks, Virginia

- 1988 Indian Island: A place of triumphs and tears. *Humboldt Historian*, September-October.

St. George Reef

- 2008 St. George Reef, CA. Web page. Electronic document: <http://www.lighthousefriends.com/light.asp?ID=26> on May 31, 2008.

Stearns, Peter N., ed.

- 2001 *The Encyclopedia of World History*. Boston: Houghton Mifflin Company.

Steenfott, Norton E.

- ca. 1960s Early Sawmills of Eureka. Manuscript on file under "Lumbering—19th Century," Library, Humboldt State University, Arcata, California.

Stindt, Fred A.

- 1987 *The Northwestern Pacific Railroad: Redwood Empire Route*. Kelseyville, CA: Fred A. Stindt.

Times-Standard

- 1968 Rolph story. Times-Standard, February 13.
- 1972 Fairhaven: Memories of the Past. Times-Standard, May 15, 1972:9.
- 1975 Bendixsen's sailing vessels helped....Times-Standard, January 6:5.
- 1986 The Hammond life on Samoa. Times-Standard, July 30.
- 1990 Hammond Co. reunion recalls a bygone era. Times-Standard, July 18, 1990.
- 1992a Blimp article. Times-Standard, February 2.
- 1992b Close to home. Times-Standard, June 22.
- 1995 Elk River article. Times-Standard, February 5:A3.
- 1999 Manila cleanup article. Times Standard, March 28:C-5, C-15.
- 2000 You have to go out.... Times-Standard, July 30.
- 2003a Sierra Pacific pollution suit put to rest. Times-Standard, April 23.
- 2003b Fort Humboldt article. Humboldt Times, March 2:A-6

Turner, Dennis W.

- 1993 Place Names of Humboldt County, California. Orangevale CA.

United Methodist Women

- 1975 Honoring the Bicentennial and the 125th Anniversary of the First United Methodist Church: Book of Favorite Recipes. Eureka: United Methodist Women.

United States Department of the Interior

- 1864 Eighth Census of the United States: 1860, Population of the United States. Washington, D.C.
- 1870 Compendium of the Ninth Census: 1870. Washington, D.C.

USCS

- 1851 Preliminary Survey of Humboldt Bay, California [map]. United States Coast Survey.
- 1858 Preliminary Survey of Humboldt Bay [map]. United States Coast Survey.
- 1870 Part of Humboldt Bay, California [map]. United States Coast Survey.

USC&GS

- 1886 Humboldt Bay, California [map]. United States Coast and Geodetic Survey.
- 1894 Humboldt Bay, California [map]. United States Coast and Geodetic Survey.
- 1912 Humboldt Bay, California [map]. United States Coast and Geodetic Survey.

USGS

- 1942 Eureka, California [map]. United States Department of the Interior: Geological Survey.
- 1951 Eureka, California [map]. United States Department of the Interior: Geological Survey.
- 1972a Eureka, California [map]. United States Department of the Interior: Geological Survey.
- 1972b Fields Landing, California [map]. United States Department of Interior, Geological Survey.

Walker, Lester

1997 *American Shelter*. Woodstock, NY: Overlook Press.

Wallace, William J.

1978 Hupa, Chilula, and Whilkut. *In Handbook of North American Indians*, vol. 8: California. Robert F. Heizer, ed. Pp. 190-204. Washington: Smithsonian Institution.

Weekly Humboldt Times

1887 Fairhaven. *Weekly Humboldt Times*, June 2:3.

Weekly Times-Telephone

1885a ER&ERR article. *Weekly Times-Telephone*, June 6:3.

1885b ER&ERR article. *Weekly Times-Telephone*, June 27:3.

1885c ER&ERR article. *Weekly Times-Telephone*, July 8:3.

1885d ER&ERR article. *Weekly Times-Telephone*, July 9.

1885e ER&ERR article. *Weekly Times-Telephone*, July 12:3.

1885f ER&ERR article. *Weekly Times-Telephone*, July 25:3).

West Coast Signal

1872 Valuable Real Estate for Sale at Worthville Opposite Eureka. *West Coast Signal*, October 16.

1873 Real Estate Transactions. *West Coast Signal*, April 23:3.

1876 Salmon Creek Steam Saw Mill. *West Coast Signal*, June 28:3.

Woods, Tom

2004 Personal interview with Jerry Rohde.

Wyland, Earl

2006 Interviews with Jerry Rohde, April 14, 2006 and May 1, 2006.

CURRENT CULTURAL RESOURCES

Godwit Days website, <http://www.godwitdays.com/>

Arcata Oyster Festival website, <http://www.oysterfestival.net/>

Kinetic Grand Championship website, <http://kineticgrandchampionship.com/>

Appendix A

Complete List of National Register Sites in the Humboldt Bay Area

1. Bank of Eureka Building - 240 E Street, Eureka (added 1982 - Building - #82002180)	
Also known as Clarke Memorial Museum	
Historic Significance:	Event, Architecture/Engineering
Architect, builder, or engineer:	Pissis,Albert
Architectural Style:	Renaissance
Area of Significance:	Architecture, Commerce
Period of Significance:	1900-1924
Owner:	Private
Historic Function:	Commerce/Trade
Historic Sub-function:	Financial Institution
Current Function:	Recreation And Culture
Current Sub-function:	Museum
2. Carnegie Free Library - 636 F Street, Eureka (added 1986 - Building - #86000101)	
Also known as Eureka Public Library	
Historic Significance:	Event, Architecture/Engineering
Architect, builder, or engineer:	Foster,Ambrose, Evans,Knowles & Trarver,B.C.
Architectural Style:	Classical Revival
Area of Significance:	Architecture, Education
Period of Significance:	1900-1924
Owner:	Local Gov't
Historic Function:	Education
Historic Sub-function:	Library
Current Function:	Education, Recreation And Culture

Current Sub-function:	Library, Museum
3. Clark, William S., House - 1406 C Street, Eureka (added 1988 - Building - #87002394)	
Historic Significance:	Architecture/Engineering, Person
Architect, builder, or engineer:	Butterfield, Fred B.
Architectural Style:	Stick/Eastlake
Historic Person:	Clark, William S.
Significant Year:	1888
Area of Significance:	Architecture, Politics/Government, Commerce
Period of Significance:	1875-1899, 1900-1924
Owner:	Private
Historic Function:	Domestic
Historic Sub-function:	Single Dwelling
4. Cottrell, John A., House - 1228 C Street, Eureka (added 2005 - Building - #05001084)	
Historic Significance:	Architecture/Engineering
Architectural Style:	Queen Anne
Area of Significance:	Architecture
Period of Significance:	1900-1924
Owner:	Private
Historic Function:	Domestic
Historic Sub-function:	Single Dwelling
Current Function:	Domestic
Current Sub-function:	Single Dwelling

5. Eureka Inn - 7th and F Streets, Eureka (added 1982 - Building - #82002181)	
Historic Significance:	Event, Architecture/Engineering
Architect, builder, or engineer:	Whitton, Frederick
Architectural Style:	Tudor Revival
Area of Significance:	Architecture, Entertainment/Recreation
Period of Significance:	1900-1924
Owner:	Private
Historic Function:	Domestic
Historic Sub-function:	Hotel
Current Function:	Domestic
Current Sub-function:	Hotel
6. First and F Street Building - 112 F Street, Eureka (added 1974 - Building - #74000511)	
Also known as Wave Saloon; Bluebird Cabaret; Golden State Cafe	
Historic Significance:	Event, Architecture/Engineering
Architect, builder, or engineer:	Unknown
Architectural Style:	Other
Area of Significance:	Architecture, Commerce
Period of Significance:	1875-1899
Owner:	Private
Historic Function:	Commerce/Trade
Historic Sub-function:	Restaurant
Current Function:	Vacant/Not In Use, Work In Progress
7. Hotel Arcata - 708 9th Street, Arcata (added 1984 - Building - #84000775)	

Historic Significance:	Event, Architecture/Engineering
Architect, builder, or engineer:	Weeks, W.H.
Architectural Style:	No Style Listed
Area of Significance:	Architecture, Commerce
Period of Significance:	1900-1924, 1925-1949
Owner:	Local Government
Historic Function:	Commerce/Trade, Domestic, Social
Historic Sub-function:	Civic, Hotel, Restaurant
Current Function:	Commerce/Trade, Domestic
8. Humboldt Bay Life-Saving Station - S. of Samoa on Samoa Road, Samoa (added 1979 - Building - #79000477)	
Also known as United States Coast Guard Station Humboldt Bay	
Historic Significance:	Event, Architecture/Engineering
Architect, builder, or engineer:	et al., Maurer, Fred J.
Architectural Style:	Other
Area of Significance:	Architecture, Social History, Military
Period of Significance:	1875-1899, 1925-1949
Owner:	Federal
Historic Function:	Defense
Historic Sub-function:	Coast Guard Facility
Current Function:	Vacant/Not In Use

9. Humboldt Bay Woolen Mill - 1400 Broadway, Eureka (added 1982 - Building - #82002182)	
Also known as Eureka Woolen Mills; Woolen Mill	
Historic Significance:	Event, Architecture/Engineering
Architect, builder, or engineer:	Little, W.J.
Architectural Style:	Greek Revival
Area of Significance:	Architecture, Industry
Period of Significance:	1900-1924
Owner:	Private
Historic Function:	Commerce/Trade, Industry/Processing/Extraction
Historic Sub-function:	Manufacturing Facility, Specialty Store, Warehouse
Current Function:	Commerce/Trade
10. Jacoby Building - 791 8th Street, Arcata (added 1982 - Building - #82002179)	
Also known as Jacoby's Storehouse; Brizard Building	
Historic Significance:	Event, Architecture/Engineering
Architect, builder, or engineer:	Johansen & Skillings, Webb & Kincaid
Architectural Style:	Renaissance, Classical Revival
Area of Significance:	Architecture, Transportation, Exploration/Settlement, Commerce
Period of Significance:	1850-1874, 1875-1899, 1900-1924
Owner:	Private
Historic Function:	Commerce/Trade, Domestic
Historic Sub-function:	Hotel, Professional, Warehouse
Current Function:	Commerce/Trade
Current Sub-function:	Professional, Restaurant, Specialty Store

11. Janssen, E., Building - 422 1st Street, Eureka (added 1973 - Building - #73000402)	
Also known as Humboldt Cultural Center	
Historic Significance:	Event, Architecture/Engineering, Person
Architect, builder, or engineer:	Unknown
Architectural Style:	Other
Historic Person:	Buhne, Hans Henry
Significant Year:	1875
Area of Significance:	Architecture, Commerce
Period of Significance:	1875-1899
Owner:	Private
Historic Function:	Commerce/Trade
Historic Sub-function:	Department Store
Current Function:	Recreation And Culture
Current Sub-function:	Museum
12. McDonald, D. C., Building - 108 F Street, Eureka (added 1982 - Building - #82000966)	
Historic Significance:	Event, Architecture/Engineering
Architect, builder, or engineer:	Unknown
Architectural Style:	Classical Revival
Area of Significance:	Architecture, Commerce
Period of Significance:	1900-1924
Owner:	Private
Historic Function:	Commerce/Trade
Historic Sub-function:	Business

Current Function:	Commerce/Trade
Current Sub-function:	Business
13. McFarlan, George, House - 1410 2nd Street, Eureka (added 1978 - Building - #78000672)	
Historic Significance:	Event, Architecture/Engineering
Architect, builder, or engineer:	White, Martin
Architectural Style:	Other
Area of Significance:	Architecture, Industry, Exploration/Settlement
Period of Significance:	1850-1874
Owner:	Private
Historic Function:	Domestic
Historic Sub-function:	Single Dwelling
Current Function:	Domestic, Vacant/Not In Use
Current Sub-function:	Single Dwelling
14. Odd Fellows Hall - 123 F Street, Eureka (added 1978 - Building - #78000673)	
Also known as French Empire Mansard Building	
Historic Significance:	Event, Architecture/Engineering
Architect, builder, or engineer:	Simpson, James
Architectural Style:	Second Empire
Area of Significance:	Architecture, Social History
Period of Significance:	1875-1899
Owner:	Private
Historic Function:	Commerce/Trade, Social
Historic Sub-function:	Clubhouse, Department Store, Meeting Hall, Professional

Current Function:	Commerce/Trade, Work In Progress
15. Old Jacoby Creek School - 2212 Jacoby Creek Road, Bayside (added 1985 - Building - #85000353)	
Historic Significance:	Architecture/Engineering
Architect, builder, or engineer:	Mohn, W. G.
Architectural Style:	No Style Listed
Area of Significance:	Architecture
Period of Significance:	1900-1924
Owner:	Private
Historic Function:	Education
Historic Sub-function:	School
Current Function:	Domestic
Current Sub-function:	Single Dwelling
16. Phillips House - 71 East Seventh Street, Arcata (added 1985 - Building - #85003373)	
Historic Significance:	Event, Architecture/Engineering
Architect, builder, or engineer:	Unknown
Architectural Style:	Greek Revival
Area of Significance:	Architecture, Exploration/Settlement
Period of Significance:	1850-1874, 1875-1899
Owner:	Local Government
Historic Function:	Domestic
Historic Sub-function:	Single Dwelling
Current Function:	Work In Progress
17. Pythian Castle - 1100 H Street, Arcata (added 1986 - Building - #86000263)	

Historic Significance:	Event, Architecture/Engineering
Architect, builder, or engineer:	Glidden, A.P.
Architectural Style:	Queen Anne
Area of Significance:	Architecture, Social History
Period of Significance:	1875-1899
Owner:	Private
Historic Function:	Commerce/Trade, Social
Historic Sub-function:	Business, Clubhouse
Current Function:	Commerce/Trade, Domestic
Current Sub-function:	Business, Multiple Dwelling
18. Ricks, Thomas F., Housen - 730 H Street, Eureka (added 1992 - Building - #92001302)	
Also known as YWCA House; The Palms; St. Francis Hospital	
Historic Significance:	Event, Architecture/Engineering
Architect, builder, or engineer:	Butterfield, Walter, Butterfield, Fred B.
Architectural Style:	Stick/Eastlake
Area of Significance:	Architecture, Social History, Health/Medicine
Period of Significance:	1875-1899, 1900-1924, 1925-1949
Owner:	State
Historic Function:	Domestic, Health Care
Historic Sub-function:	Hospital, Institutional Housing, Single Dwelling
Current Function:	Education
Current Sub-function:	College
19. Schorlig House - 1050 12th Street, Arcata (added 1978 - Building - #78000670)	

Historic Significance:	Event
Area of Significance:	Architecture
Period of Significance:	1875-1899
Owner:	Private
Historic Function:	Domestic
Historic Sub-function:	Multiple Dwelling, Single Dwelling
Current Function:	Commerce/Trade
20. Simpson--Vance House - 904 G Street, Eureka (added 1986 - Building - #86001668)	
Historic Significance:	Architecture/Engineering
Architect, builder, or engineer:	Mowry, E.C.
Architectural Style:	Queen Anne
Area of Significance:	Architecture
Period of Significance:	1875-1899
Owner:	State
Historic Function:	Domestic
Historic Sub-function:	Single Dwelling
Current Function:	Commerce/Trade
Current Sub-function:	Organizational
21. Stone House - 902 14th Street, Arcata (added 1986 - Building - #86000267)	
Historic Significance:	Architecture/Engineering
Architect, builder, or engineer:	Dean, Theodore
Architectural Style:	Queen Anne
Area of Significance:	Architecture

Period of Significance:	1875-1899
Owner:	Private
Historic Function:	Domestic
Historic Sub-function:	Single Dwelling
Current Function:	Domestic
Current Sub-function:	Single Dwelling
22. U.S. Post Office and Courthouse - 5th and H Streets, Eureka (added 1983 - Building - #83001181)	
Historic Significance:	Event, Architecture/Engineering
Architect, builder, or engineer:	Taylor, James Knox
Architectural Style:	Mixed (More Than 2 Styles From Different Periods)
Area of Significance:	Architecture, Art, Politics/Government
Period of Significance:	1900-1924
Owner:	Federal
Historic Function:	Government
Historic Sub-function:	Courthouse, Post Office
Current Function:	Government
Current Sub-function:	Courthouse, Government Office, Post Office
23. Washington School - 1910 California Street, Eureka (added 2002 - Building - #02000329)	
Also known as Humboldt Senior Resource Center	
Historic Significance:	Event
Area of Significance:	Education, Social History
Period of Significance:	1900-1924, 1925-1949, 1950-1974
Owner:	Private

Historic Function:	Commerce/Trade, Defense, Education
Historic Sub-function:	Arms Storage, School, Warehouse
Current Function:	Social
Current Sub-function:	Civic
24. Whaley House - 1395 H Street, Arcata (added 1979 - Building - #79000475)	
Historic Significance:	Architecture/Engineering
Architect, builder, or engineer:	Whaley, John A.
Architectural Style:	Greek Revival
Area of Significance:	Architecture
Period of Significance:	1850-1874, 1900-1924
Owner:	Private
Historic Function:	Domestic
Historic Sub-function:	Multiple Dwelling, Single Dwelling
Current Function:	Domestic
Current Sub-function:	Multiple Dwelling
25. Zanone, Magdalena House - 1604 G Street, Eureka (added 2004 - Building - #04000335)	
Also known as McKenna's Pleasure Park	
Historic Significance:	Architecture/Engineering
Architect, builder, or engineer:	Maloy, Selby L., Johnson, A.C.
Architectural Style:	Queen Anne
Area of Significance:	Architecture
Period of Significance:	1900-1924
Owner:	Private

Historic Function:	Domestic, Recreation And Culture
Historic Sub-function:	Outdoor Recreation, Secondary Structure, Single Dwelling
Current Function:	Domestic, Landscape
Current Sub-function:	Garden, Secondary Structure, Single Dwelling
Eureka Historic District - Roughly, 1st, 2nd, & 3rd, between C & N St.'s (added 1991 - District - #91001523)	
Also known as Eureka Old Town Historic District; See Also:82002180;73000402	
Historic Significance:	Event, Architecture/Engineering
Architect, builder, or engineer:	Multiple
Architectural Style:	Late Victorian, Greek Revival, Classical Revival
Area of Significance:	Architecture, Industry, Commerce, Exploration/Settlement
Period of Significance:	1850-1874, 1875-1899, 1900-1924, 1925-1949
Owner:	Private , Local Gov't
Historic Function:	Commerce/Trade, Domestic, Recreation & Culture, Social, Transportation
Historic Sub-function:	Hotel, Multiple Dwelling, Single Dwelling, Specialty Store, Warehouse
Current Function:	Commerce/Trade, Domestic, Landscape, Recreation & Culture
Current Sub-function:	Business, Multiple Dwelling, Park, Restaurant, Single Dwelling, Specialty Store
Falk Historic District - Address Restricted, Eureka (added 2004 - District - #04000067)	
Historic Significance:	Event, Architecture/Engineering, Information Potential
Architectural Style:	No Style Listed
Area of Significance:	Historic - Non-Aboriginal, Industry, Transportation, Exploration/Settlement
Cultural Affiliation:	Euro-American
Period of Significance:	1875-1899, 1900-1924, 1925-1949
Owner:	Federal

Historic Function:	Domestic, Industry/Processing/Extraction, Transportation
Historic Sub-function:	Camp, Extractive Facility, Manufacturing Facility, Rail-Related, Village Site
Current Function:	Landscape, Recreation And Culture
Current Sub-function:	Conservation Area, Outdoor Recreation
Gunther Island Site 67 - Address Restricted, Eureka (added 1966 - Site - #66000208)	
Also known as 4-Hum-67;Tolowot;CA-Hum-67;Dulawo't	
Historic Significance:	Information Potential
Area of Significance:	Prehistoric, Historic - Aboriginal
Cultural Affiliation:	Yurok, Tolowa, Wiyot
Period of Significance:	1000-500 AD, 1499-1000 AD, 1749-1500 AD, 1750-1799, 1800-1824, 1825-1849, 1850-1874
Owner:	Private , Local Government
Historic Function:	Domestic
Historic Sub-function:	Village Site
Current Function:	Landscape
Current Sub-function:	Underwater
Tsahpek - Address Restricted, Eureka (added 1972 - Site - #72000224)	
Also known as 4-Hum-129	
Historic Significance:	Information Potential
Area of Significance:	Prehistoric, Historic - Aboriginal
Cultural Affiliation:	Yurok, Chilula
Period of Significance:	1749-1500 AD, 1900-1750 AD, 1500-1599, 1600-1649, 1700-1749, 1850-1874, 1925-1949
Owner:	State

Historic Function:	Domestic, Funerary
Historic Sub-function:	Graves/Burials, Village Site
Current Function:	Landscape
Current Sub-function:	Park
Zane's Ranch Bridge - Zane's Road over Elk River, Eureka (added 1976 - Structure - #76002315)	
Owner:	Local Government
Fort Humboldt - Unknown at this time, Eureka (added 1970 - Site - #70000927)	

Appendix B

Human Dimensions Regional Roundtable Agenda

Human Dimensions Regional Roundtable Agenda

Purpose

To review the Humboldt Bay historic and cultural resource inventory prepared by Planwest and the Center for Indian Community Development (CICD) and to assess historic and cultural resource areas, issues of interest and /or concern (i.e., cultural and historic sites, practices and values) related data gaps, and applied social science approaches necessary to integrate historic and cultural considerations into Humboldt Bay ecosystem-based management (EBM).

Outcomes

By the end of this roundtable, we hope that you will have ...

- Understanding of historic and cultural values , uses and resources identified in the Planwest CICD study in and around Humboldt Bay
- Understanding of how historic and cultural information can be used in decision-making
- List of historic and cultural resource areas and issues of interest and / or concern
- List of historic and cultural resource information data gaps
- List of ideas for gathering and sharing Humboldt Bay historic and cultural resource information

What	How	When
Opening <ul style="list-style-type: none"> • Purpose & outcomes • Agenda & roles 	<ul style="list-style-type: none"> • Review (Tiffany Wilson – Planwest Partners) • Q&A 	9:00 – 9:20 (20)
Humboldt Bay Ecosystem Program	<ul style="list-style-type: none"> • Presentation (Susan Schlosser – Marine Advisor UC Sea Grant) • Q&A 	9:20 – 9:40 (40)
Historic & Cultural Resources in EBM	<ul style="list-style-type: none"> • Presentation (Zac Hart – NOAA CSC) • Q&A 	9:40 – 10:00 (20)
Early days of Humboldt Bay	<ul style="list-style-type: none"> • Presentation (Jerry Rohde – CICD) • Q & A 	10:00-10:45 (45)
Current Cultural Resource Assessment	<ul style="list-style-type: none"> • Presentation (Tiffany Wilson - Planwest) 	10:45-11:05 (20)
	BREAK	11:05-11:20
Humboldt Bay watershed historic and cultural resource areas / issues of interest and/or concern	<ul style="list-style-type: none"> • Brainstorm & discuss (35) • Identify top five areas of interest or concern (10) • Report out / record (15) 	11:20-12:05 (45)
	LUNCH	12:05-1:00
Data gaps /information collection and sharing	<ul style="list-style-type: none"> • Brainstorm & discuss (65) <ol style="list-style-type: none"> (1) What information do we have? (2) What information do we need? (3) Who is currently collecting the data? (4) How can this information be collected? (5) How can this information be shared? • Report out / record (20) 	1:00-2:30 (90)
Summary of discussions	<ul style="list-style-type: none"> • How can this information be incorporated into EBM (Susan Schlosser) 	2:30-2:50 (20)
Close	<ul style="list-style-type: none"> • Next Steps (Tiffany Wilson) • Evaluate Roundtable Process • Thank you for coming 	2:50-3:10 (20)