TSURAI MANAGEMENT PLAN

FINAL

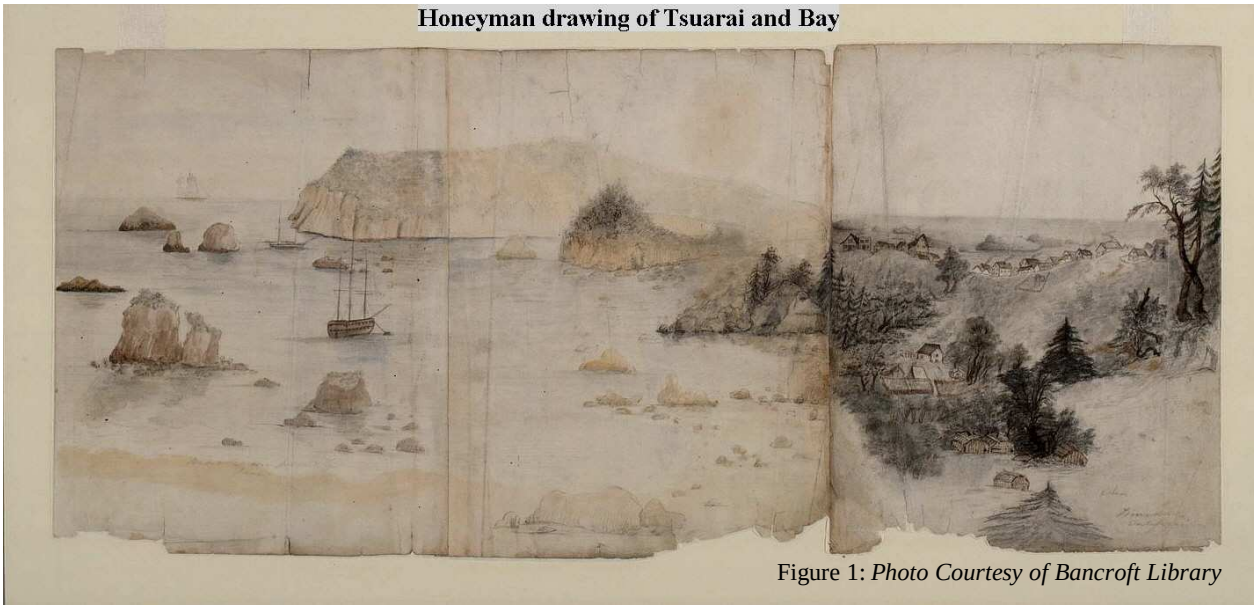

Figure 1: *Photo Courtesy of Bancroft Library*

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Executive Summary

The Tsurai Management Plan (Plan) is the result of a three-year collaborative effort by representatives of the Coastal Conservancy, City of Trinidad, Tsurai Ancestral Society, and the Yurok Tribe to resolve areas of past and present conflict over the management of the Tsurai Study Area (TSA). The Plan was prepared by the Yurok Tribe Environmental Program under a grant agreement with the Coastal Conservancy and presents the findings of research and scoping meetings with stakeholder groups, Management Team meetings held over the past three years, and archival and primary research on the history and current conditions of the cultural, natural, and recreational resources contained within the TSA. The goal of this project has been to identify areas and causes of past conflict between interested parties over management and implementation decisions concerning the TSA, to make recommendations to resolve and prevent such conflict to identify areas of common ground for potential collaboration, and to provide specific recommendations and future projects intended to help protect, preserve, and where possible restore, the cultural, natural and recreational resources within the TSA for the benefit of future generations.

The TSA is located within the ancestral lands of the Yurok Tribe, which extend along the California coast from Little River in Humboldt County to Damnation Creek in Del Norte County, and inland along the Lower Klamath River. The TSA contains a cherished and irreplaceable cultural resource that is significant to Yurok People, and contemporary residents of Trinidad: Tsurai Village. Within this village are not simply archeological resources, but the remains of one of the most significant traditional Yurok coastal villages, including the graves of those buried within the village over generations. The issue of cultural resources management and protection has been at the heart of both diverging positions and the determination and commitment of all participants to work together to find a better way to manage and care for the TSA and Tsurai Village.

Furthermore, the natural resources contained within the TSA are components of a larger environmental area, directly adjacent to a designated Critical Coastal Area (CCA) (previously designated as an Area of Special Biological Significance (ASBS)): Trinidad Bay. Just as the TSA contains irreplaceable cultural resources, the TSA borders a unique biological marine area, due to its unique coastal and marine resources. The Trinidad Bay is protected because of its status as an ASBS/CCA under state and federal law. For example, no contaminant discharge of any kind is allowable. City and regional development, management decisions, and other activities on land and sea including those impacting tributaries that empty into the Bay, all have the potential to harm the CCA. Again, disagreements have occurred over past decisions that have the potential to harm this fragile and irreplaceable marine ecosystem. Again, the Management Team has collaborated to identify problems, potential solutions, and make specific recommendations to ensure to long-term viability of natural resources within and adjacent to the TSA.

Additionally, recreational resources, specifically public beach access trails are considered an important public resource. Trails enable visitors and residents to experience the beauty

and character of the Trinidad area and enjoy scenic vistas of the Trinidad Bay, coastal outcrops and geological formations, and the Pacific Ocean, as well as view the natural resources (flora and fauna) abundant in this area. Diverging stances have arisen over past management decisions regarding public beach access, enhanced visitor experience, the need to protect cultural and natural resources within the TSA, ensure user safety, and respect the privacy of local residents and adjacent landowners. Again, the Management Team has worked within the Trinidad community to identify possible solutions to conflicts over trails and recreational uses of the TSA.

The following pages summarize the goals and objectives of the Management Team in conducting research and preparing the Plan. The methods of obtaining, compiling, presenting, and analyzing the information contained within this document are also identified. An overview of Trinidad and Tsurai Village history are provided to inform the reader, as well as to establish cultural context and background on contemporary issues and management concerns. A review of the current conditions and management issues as seen from the perspective of all stakeholders is also provided and serves to demonstrate the need for such a management plan, and justifies the need for the Management Team to have devoted the time, resources, and energy into the preparation of the Plan. Findings are summarized and are used to identify alternatives and to inform and justify recommendations made in the Plan. Similarly, the implementation section of the Plan identifies specific areas for future actions and collaboration by providing suggestions for discrete projects to be conducted in the future, which are intended to resolve the management conflicts of the past.

Key findings and recommendations from the Management Team include:

- Installation of a handrail on the Axel Lindgren Memorial Trail to provide safer use of this primary beach access trail by the public;

- Development and installation of signs throughout the TSA to direct user traffic and protect environmental and cultural resources contained therein;

- Analysis and mitigation of the run off and saturation issues that are impacting the Tsurai Village site;

- Completion of a comprehensive botanical and vegetation survey of the TSA with recommendations for select vegetation removal to improve site conditions and assist in the removal of invasive species;

- Development of a Vegetation Management Plan with a protocol for reviewing and making decisions on management of vegetation within the TSA; and

- Continued collaboration between the Coastal Conservancy, City, Tsurai Ancestral Society, and Yurok Tribe on the future management of the TSA via the continuation of the Tsurai Management Team through implementation of the Management Plan.

This Management Plan has been prepared for the purpose of presenting research findings to the public and scope for public input on a range of alternatives for managing recreational, cultural, and natural resources contained within the TSA, and to inform Management Team completion of the Plan in developing recommendations and implementation projects for the TSA. It is the intent of the Management Team to submit the final draft of the Plan to the public for review and comment. It is our intent that the Management Plan be factually accurate, constructive in recommendations, and forward-looking in implementation. The Management Team remains committed to the ongoing dialogue between stakeholders over the future management of the TSA. We propose an adaptive management approach for future management decisions, an approach that allows stakeholders to participate in the decision-making process, is responsive to input and innovation, allows for adjustments based on observed results of past decisions, always with the intended purpose of preserving, protecting, and enhancing the cultural, natural, and recreational resources within the TSA for the benefit of current and future generations in a manner that is respectful and cognizant of the past.

Vision Statement

The goal of the Tsurai Management Team that the Management Plan will serve to enhance and coordinate effective management of the TSA consistent with the values of the stakeholders. Those values are to protect, preserve, and restore the cultural, natural, and recreational resources present in the TSA for this and future generations. This protection is sought through an adaptive management strategy that includes cooperative and effective dialogue that will enhance a collaborative decision making process, as well as foster public appreciation of the valuable resources found throughout the TSA. "Adaptive management**"**, or Adaptive resource management (ARM), is a structured, iterative process of optimal decision-making in the face of uncertainty, with an aim to reducing uncertainty over time via system monitoring (Wikipedia 2007). In this way, decision-making simultaneously maximizes one or more resource objectives and, either passively or actively, accrues information needed to improve future management. It is the goal of the Management Team to foster good stewardship of the TSA free from the constraints of the past and with optimism for the future.

A community vision for the future of the TSA has emerged and evolved through the scoping processes and public participation in the identification of issues, goals, and objectives in the development of the TMP. The Management Team has prepared the TMP and its recommendations for implementation with an emphasis on restoration and protection of the 12.5 acres. Viewshed and vegetation management issues will be considered in future projects and the environmental reviews for specific proposed projects. The TMP is not intended to address the issue of enhancing views from private residences outside the 12.5 acres, although the Management Team recognizes that this is a concern on some Trinidad residents and property owners adjacent to the TSA. A restored TSA will include the removal of invasive species, the re-introduction and enhancement of the native ecosystem and flora, the improvement and protection of recreation trails that provide access to the beach and coastal area, and the restoration and increased protection of the irreplaceable cultural resources contained within the 12.5 acres.

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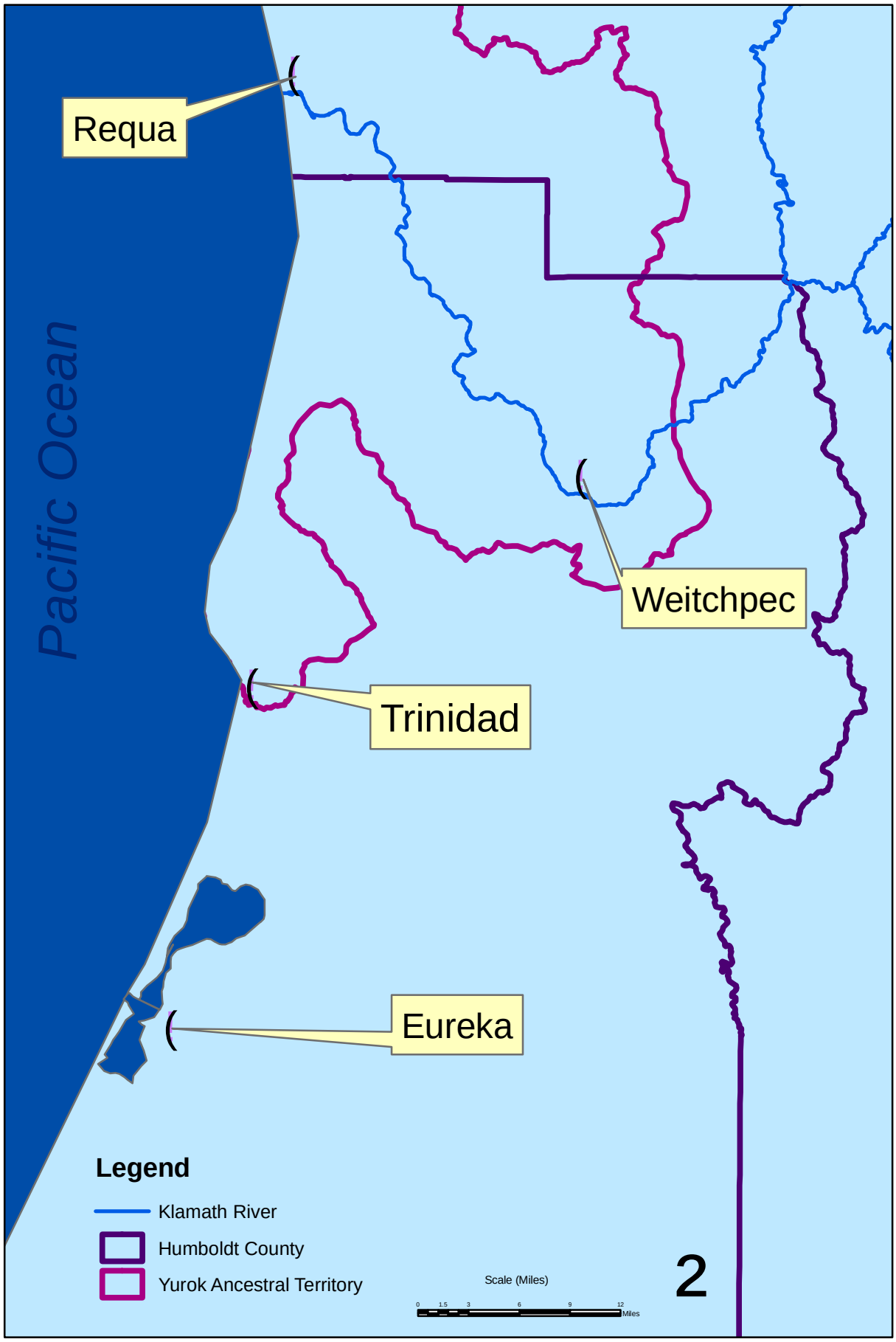
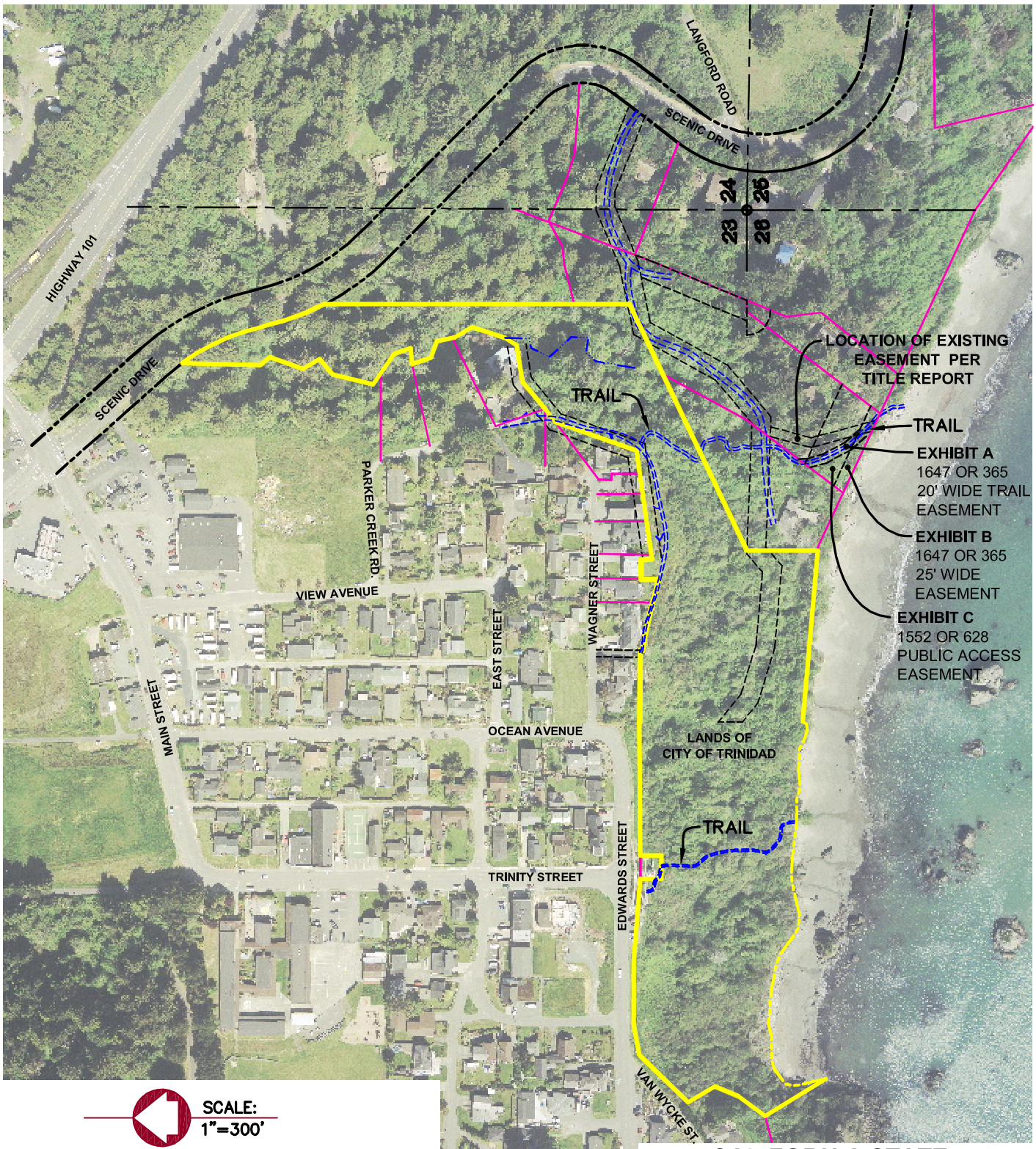


Exhibit 2: Management Plan



Part 1: Introduction

1.1 Overview

This document summarizes the research, findings, and recommendations of the Tsurai Management Team and represents a collaborative effort to ensure the protection, preservation, and restoration of significant recreational, cultural, and natural resources contained within the Tsurai Study Area TSA. The Tsurai Management Team is comprised of representatives of the City of Trinidad, the California Coastal Conservancy, the Tsurai Ancestral Society, and the Yurok Tribe, each having an active and lasting interest in the management of the TSA. The City of Trinidad and the Yurok village of Tsurai are located in Humboldt County on the north coast region of California (See Figure 2). The extent of the TSA is approximately 12.5 acres located in Township 8 North, Range 1 West, Section 26 of the U.S.G.S. 7.5' Trinidad, Humboldt County, California Quadrangle (See Figure 3). The Assessor Parcel Numbers that comprise the TSA are Humboldt County parcels APN: 042-102-42, APN: 042-091-05, APN: 042-102-41, APN: 042-102-40, and APN: 042-102-39. The TSA is currently owned and managed by the City of Trinidad. However, the California Coastal Conservancy holds a conservation easement over the (TSA) for the purpose of preserving public access and for the protection of natural and cultural resources. The Tsurai Ancestral Society and the Yurok Tribe represent the lineal descendants of the original occupants of Tsurai Village and retain strong cultural connections to the area.

Recreational trails are one of the most popular and utilized recreational resources along the north coast of California. Visitors and residents utilize trail systems for recreational hiking, beach access, and experiencing the coastal redwood forests and scenic ocean views that are unique to the region. Several pedestrian trails occur within or around the TSA, providing public access to the beach (See Appendix E). The creation of trails through the TSA has increased public access to coastal areas, and scenic views, resulting in an enhanced recreational value for residents and visitors. However, increased access through the TSA has also led to increased impacts and potential threats to irreplaceable cultural resources.

The Yurok village of Tsurai is located within the TSA and is a component of a larger cultural landscape utilized by Yurok people in generations past and in to the present day. Yurok people inhabited Tsurai (later generally referred to as Trinidad) since time immemorial. Since the early decades of the 20th century, and after Yurok were removed from the village lands, the cultural resources contained within the TSA have undergone periods of archeological excavation, looting, erosion, and neglected management. (See Figure 2).

The TSA is directly adjacent to Trinidad Bay, a designated Critical Coastal Area (CCA formerly known as an ASBS). Trinidad is situated within the redwood belt of the north coast of California, a region of diverse and unique flora and fauna. Natural resources within the TSA also require proper care and management to preserve their unique quality

and protect them from invasive, non-native species that threaten many coastal areas in California.

A management plan is needed to identify and study management issues and to make recommendations related to the ongoing maintenance, resources management, and coastal access of the TSA and Old Home Beach, in accordance with future recommended studies. This Management Plan has been prepared as a result of several scoping meetings involving the various stakeholders, which include adjacent property owners, the general public, the City of Trinidad, the Tsurai Ancestral Society, the California Coastal Conservancy, and the Yurok Tribe. In addition, extensive historical and technical archival research has been conducted to compile information on the history of the TSA. A cultural survey and preliminary environmental review were conducted to inform management decisions (See Appendix F). The findings of all of this research are summarized in this document in Part 10. A series of recommendations and implementation projects are presented in Part 11 and Part 12. This final draft is being released for public review and a comment period of 30 days. After public review and comment, the Management Team will meet to review public input and finalize a final document. Each entity comprising the Management Team will have the opportunity to adopt the final plan or specific implementing actions.

The Tsurai Management Team:

The Tsurai Ancestral Society, the City of Trinidad, the Coastal Conservancy, and the Yurok Tribe comprise the Tsurai Management Team, formed for the purposes of preparing this Management Plan. The Tsurai Ancestral Society (a non-profit organization comprised of some of the lineal descendants of Tsurai Village) and the Yurok Tribe (a federally recognized Indian tribe) represent the Yurok people with ancestral affiliation to the village site. Axel and Kelly Lindgren represent the Tsurai Ancestral Society on the Team, while Dr. Thomas Gates is representing the Yurok Tribe. The City of Trinidad (an incorporated city) is the current owner of the TSA and has been represented from 2003 through 2006 by City Council members Dean Heyenga and Chi-Wei Lin. In January 2007, Council member Stanley Binnie replaced Dean Heyenga on the Tsurai Management Team. The Coastal Conservancy provided funding for the preparation of the Management Plan and is represented by Project Manager Su Corbaley. Professional staff of the Yurok Tribe, on contract with the Coastal Conservancy for the purposes of this Plan, conducted the research, facilitated scoping meetings, conducted preliminary cultural and biological surveys, as well as prepared and authored the Management Plan. The entire Tsurai Management Team has collaborated with the staff of the Yurok Tribe to prepare this plan for the purpose of documenting issues, and recommending management strategies for providing coastal access and identifying future management options for the preservation and protection of natural and cultural resources within the TSA. The Tsurai Management Team is committed to the implementation of the Management Plan and its recommendations and will continue to serve as the primary body for the purposes of implementing the Management Plan for the TSA.

1.2 Stakeholders

For the purpose of this study, stakeholder groups have been identified as those who have a vested interest in the management of the TSA. Stakeholder groups have provided input to the Management Plan through a series of scoping meetings facilitated by the staff of the Yurok Tribe. Stakeholder groups have been identified as follows:

Tsurai Ancestral Society (TAS): A non-profit organization comprised of some of the lineal descendants of the village of Tsurai. The Tsurai Ancestral Society has assumed a long term, custodial role for the protection and preservation of the cultural resources associated with Tsurai. Founder Axel Lindgren II, a lineal descendent, was for many years the primary caretaker of the village and cemetery, as well as the local historian on Tsurai. The TAS continues to take an active role in promoting the protection of the site, care taking of the cemetery grounds, and continuing ceremonial activities associated with the ancestral village.

City of Trinidad (the City): As the landowner holding fee title to the TSA, the City has the primary responsibility of maintaining and protecting the TSA and the trails that run through it.

California Coastal Conservancy (the Conservancy): The California Coastal Conservancy was established to implement policies and objectives of the California Coastal Act, which passed in 1976. Primary objectives of the Conservancy include:

- protecting and improving coastal wetlands, stream and watersheds;
- providing and enhancing coastal access through trail building, acquiring and maintaining easements, and providing low-cost accommodations including campgrounds and hostels;
- revitalizing urban waterfronts;
- resolving complex land-use problems;
- purchasing and holding environmentally valuable coastal and bay lands;
- protecting and supporting coastal agriculture; and
- accepting donations and dedications of land and easements for public access, wildlife habitat, agriculture, and open space.

The Conservancy currently retains a conservation and public access easement over the entire TSA. The Conservancy has funded the preparation of this Management Plan and has also participated in the scoping meeting process as a stakeholder.

Adjacent Property Owners: This diverse group of stakeholders has been identified as those landowners who share a physical property boundary with the TSA. This group includes individual property/residence owners, the Humboldt North Coast Land Trust, and the Trinidad Civic Club. This stakeholder group has been identified as those who have the potential to directly impact or be impacted by the management of the TSA, due to a shared property boundary.

Interested Public: This stakeholder group includes Trinidad residents and those who live outside the Trinidad area, but have an interest in the management of the TSA.

Yurok Tribe: The Yurok Tribe has ancestral rights and responsibilities over Yurok ancestral lands, as defined in the Yurok Constitution, which was passed in 1993. Yurok ancestral lands include the Lower Klamath River and the California coast from Little River (south of Trinidad) running north to Damnation Creek (south of Crescent City). The ancestral village of Tsurai is situated within Yurok ancestral territory, as well as within the larger cultural landscape of the Yurok people. The surrounding landscape, particularly Trinidad Head, is central to Yurok creation stories and oral tradition. The Yurok Tribe is committed to the protection and preservation of all Yurok cultural resources within Yurok ancestral territory, including the Tsurai Village, cemetery, and all other associated cultural resources. As a federally recognized tribe, the Yurok Tribe has rights and responsibilities for ensuring the protection and preservation of Yurok cultural resources. The Yurok Tribe has worked in partnership with the Tsurai Ancestral Society in advocating for improved resources protection and management. The Yurok Tribe has participated in this process through consultation with the Tribe's Culture Committee and the Yurok Tribal Council.

Cher-Ae Heights Indian Community of the Trinidad Rancheria (the Rancheria): The Cher-Ae Heights Indian Community is a federally recognized Indian tribe comprised of Yurok, Tolowa, and Wiyot descendents, located adjacent to the City of Trinidad. In Trinidad's Local Coastal Program, implemented in 1989, Policy 69 required that there be

> no disturbance, vegetative removal or construction, except for a protective fence around the burial grounds, on lands designated as Open Space within the Tsurai Study Area without approval of the lineal descendants of Tsurai (TAS), Trinidad Rancheria (Cher-Ae Heights Indian Community), City of Trinidad, and The State Historic Preservation Officer.

Cher-Ae Heights Indian Community should be considered a stakeholder in the future management of the TSA. The Rancheria was invited to participate as a member of the Management Team for the purposes of preparing this plan, but declined. However, at this time they remain a stakeholder as identified in the City's consultation protocol of Policy 69.

1.3 Purpose

The purpose of preparing a Management Plan for the TSA is to help identify and resolve on-going management issues that have the potential to negatively impact public access, as well as the cultural and natural resources within the 12.5 acre TSA. This Management Plan is a product of the Management Team's efforts to identify, evaluate and give equal consideration to the diverse opinions and objectives of the individual stakeholder groups, to conduct objective and archival research on these issues, and provide recommendations for future management designed to address and even resolve some of these conflicts. The recommendations made in this document are based upon research findings by the

investigators and authors as qualified cultural and natural resource professionals. In identifying common ground, as well as areas of divergence with regards to management of the TSA, the Tsurai Management Team proposes to make recommendations based upon what is best for the TSA, its future management, and the protection and preservation of the significant cultural and natural resources contained within its boundaries, while maintaining public access to the coast. This Management Plan represents a collective effort by members of the Tsurai Management Team to identify efforts and changes that can be taken in order to protect and better manage the TSA for future generations.

1.4 Objectives

The following objectives were identified for the Management Plan.

- Identify and provide recommendations on management issues surrounding:

    - coastal and beach access through the TSA;
    - preservation, restoration, and protection of cultural resources; and
    - protection of natural resources.

- Make recommendations concerning long-term management of the TSA in relation to coastal access.

- Provide general guidance for City of Trinidad and the Coastal Conservancy on historic property preservation procedures within the Tsurai Study Area.

- Provide information on proper Native American consultation protocols.

- Provide an adaptive management approach to future management of the entire TSA in ways that protect and enhance recreational, cultural, and natural resources contained therein.

1.5 Methods

The investigators and authors applied the following methodology in preparing this Management Plan.

- Identify members of the Tsurai Management Team and prepare a scope of work detailing goals, objectives, and methods to be used in obtaining data.

- Identify stakeholder groups for the purposes of this study. Hold scoping meetings with each stakeholder group, using a standardized format, to obtain information to be used in identifying issues, concerns, conflicts, and common goals.

- Transcribe and content analyze all information obtained through scoping meetings with stakeholders and prepare a matrix to be used in the Management Plan document. (See Appendix D)

- Conduct a review of past archaeological studies, site records, by means of a formal records search prepared by the North Coastal Information Center, operated by the Yurok Tribal Heritage Preservation Office under contract with the California Office of Historic Preservation.

- Conduct archival research and a literature review to obtain historical records to document the history of the TSA, including past and present ownership and management decisions. Include the archives of the Yurok Tribe, the Tsurai Ancestral Society, the Trinidad Museum, the Humboldt County Historical Society, Humboldt State University Library, and Internet searches through the Library of Congress and the World Catalogue. Conduct online information searches for information on specific topics as needed to complete the document.

- Review all local, state, and federal laws, codes, and/or regulations that are applicable or could be applicable to the regulation of cultural and natural resources management within the TSA. This includes conducting Internet searches of the Federal Register, relevant Code of Federal Regulations, the California Coastal Commission, the Native American Heritage Commission, and the California State Historic Preservation Office.

- Review past geo-technical studies conducted on the TSA and surrounding areas by contracting a site specific geo-technical study to be prepared for the purpose of identifying geological, hydrological, and anthropogenic causes and making recommendations for the mitigation of such erosive forces.

- Conduct an initial environmental examination of the TSA for the purposes of identifying environmental resources, issues, and management concerns in need of further study.

- Conduct a cultural resources survey of the TSA for the purposes of identifying the extent of cultural resources, issues regarding protection, and management concerns in need of resolution.

- Summarize all findings and present recommendations based upon these findings in the Draft Tsurai Management Plan.

- Hold periodic management team meetings to review progress, review findings and provide input on the preparation of the Draft Tsurai Management Plan.

- Conduct consultation with the Yurok Tribe via the Yurok Culture Committee and the Yurok Tribal Council on the recommendations of the Tsurai Management Plan for approval of the Yurok Tribe.

- Facilitate public scoping meeting to present and receive comment on the range of project Alternatives, including cumulative effects resulting from each alternative.

- Summarize public comment on alternatives and hold management team meeting to decide which alternatives to include in the Draft Plan (Appendix H).

- Present the final draft of the Tsurai Management Plan to the public for public comment and review.

- Finalize a Vision Statement that captures the common vision of the stakeholder groups for the future management of the TSA consistent with the goals and objectives identified in the findings and recommendations of the Plan.

- Finalization and possible adoption of the Plan by the Management Team members upon the successful completion of all of the above.

Part 2: Resources

For the purposes of this Management Plan three types of resources are examined for consideration in identifying potential management options and informing recommendations contained in this document:

- recreational;
- cultural; and
- natural resources.

These resources within the TSA are protected by the conservation easement held by the Coastal Conservancy and require special considerations due, in part, to regulations and laws that dictate proper management and protection. A complete assessment of all applicable federal and state laws is included in Appendix A. A brief description of each of these three types of resources follows.

2.1 Recreational Resources

Recreational resources in the Trinidad area are directly linked to the natural and cultural resources unique to the area. Visitors and residents appreciate and value the scenic ocean vistas, pristine beaches, and redwood forests that are hallmarks of California's north coast region. The Trinidad area has a small year-round resident population, but experiences a continual flow of tourist traffic throughout the year by visitors who come to experience the beauty of the area, walk along the beaches and trails, and contribute to the local economy. Most of the recreational resources for the Trinidad area involve outdoor activities associated with the coastal beaches and resources. Fishing, kayaking, boating, hiking, and camping are some of the recreational activities that the public enjoys in and around the Trinidad area.

Pedestrian trails are particularly important components of the recreational resources of Trinidad and surrounding coastal area. Beach access trails help direct visitors around dense vegetation, cultural areas, and private property, as well as provide the public with scenic walks and public views from public lands, in addition to safe access to the beach. Trails are an important component of the Coastal Conservancy's mandate to help provide and maintain beach and coastal access and the Conservancy holds trail easements over the entire TSA. Throughout Trinidad and within the TSA, trails are often the only way to access the beach, due to steep bluffs, dense vegetation, and rocky terrain. Trails are a very important component of this Management Plan because they require special consideration of both their cultural and recreational values. The management issues and considerations regarding trails within the TSA will be discussed in detail within some of the following sections of this document.

2.2 Cultural Resources

Cultural resources for the TSA include historic properties, defined in the National Historic Preservation Act, as objects, sites, buildings, structures, and districts. Cultural resources also include places significant to past and contemporary Yurok culture such as ceremonial areas, sacred sites, traditional cultural properties, and traditional trails that connect areas, sites, and properties. All of these are integral components of a larger cultural landscape that connects Yurok people, places, history, culture, and resources. Specific plant and animal resources are also considered cultural resources when they serve a vital role in Yurok cultural practices. For example, basketry is an important cultural and artistic tradition for Yurok people and as such, plants used in basketry are considered both natural and cultural resources. Furthermore, these plants are situated in landscapes that provide environmental contexts for cultural resources. The protection and preservation of Yurok cultural resources, particularly in relation to public access trails, is one of several primary goals of this Management Plan.

Recommendations for the protection and management of these cultural resources are a significant component of this Management Plan. These recommendations are based upon consultation with Yurok tribal elders, the Yurok Culture Committee, the Yurok Tribal Council, and members of the Tsurai Ancestral Society. Laws, regulations, and modern standards that regulate Cultural Resource Management (CRM) and direct CRM professionals in compliance with cultural resources protection laws and mandates also inform these recommendations. The Yurok Tribe and the Tsurai Ancestral Society have both legal rights and custodial responsibilities with regard to cultural resources management within the TSA. It is for this reason that the two groups, representing the lineal and ancestral descendants of Tsurai, have taken the lead in determining how best to protect and preserve Yurok cultural resources within the TSA.

2.3 Natural Resources

Natural and environmental resources are important components of the California North Coast, and greater Trinidad area. Natural resources are both independent of and directly related to the cultural resources described above. The Yurok people who occupied Tsurai for many generations relied upon the abundant natural resources within the vicinity. The landscape and natural beauty that attract visitors from around the world are a result of the unique and diverse natural resources in the region. The protection and preservation of these natural resources is vital to ensuring ecological longevity, public access stability, aesthetic quality, and cultural survival. The regulation of these resources, and mandates for protection, are dictated by a large body of environmental resource law, federal, state, and local, as described in Appendix A. For the purposes of this report, several types of natural resources need to be considered in recommendations for management of the TSA. These include coastal and marine resources adjacent to the TSA and impacted by conditions within the TSA (specifically water quality), existing animal species within the TSA, and invasive, non-native plant species within the TSA.

The natural resources of the greater Trinidad area, including the TSA, are significant cultural, economic, and recreational resources and are of great value to all of the stakeholders consulted in this process. There is a common recognition that these resources are vital components of the quality of life (past and present) for area residents and visitors who come to experience the natural beauty of California's North Coast region.

Part 3: Environmental Context

The Trinidad region is located within the hydrologic unit known as the California North Coastal Basin, a region defined by the presence of westward draining watersheds into the Pacific Ocean (Green 1999). The ecological unit for the Trinidad area is the Northern California Coast sub-region of the Coast Ranges Geomorphic Province (USDA Forest Service 2004). The ecological sub-section for the Trinidad area is the Humboldt Bay Flats and Terraces and is defined as "a coastal plain and terraces between mountains of the northern California Coast Ranges and the Pacific Ocean" (USDA Forest Service 2004).

The climate within this region is a maritime climate comprised of cool, wet winters, and mild, dry summers with a mean average temperature of 50 to 53 degrees Fahrenheit (USDA Forest Service 2004). Fog is common year-round, particularly during summer months. The majority of precipitation, approximately seventy percent, comes in the form of rainfall between November and March (Green 1999:2). Average annual rainfall for the entire Northern California Coastal sub-region ranges from 20 to 120 inches, with the Trinidad area experiencing an average of 30 to 50 inches of precipitation per year (USDA Forest Service 2004). Disturbance regimes that impact the sub-region include: fire (pre-scribed and naturally occurring fire events), seismic activity, and periodic flood events (USDA Forest Service 2004). Periodic landslides, particularly along coastal bluffs and steep drainages occur as a result of both seismic activity and intense precipitation events.

3.1 Geological Setting

The geography of the California north coast is defined by streams, sand dunes, marine terraces, coastal bluffs, and estuaries (Green 1999:2). The TSA is located within the Northern Coast Ranges Geologic Province, an area known for seismic activity, earthquakes, and tsunamis (LACO 2004:3). The City of Trinidad and the TSA are "underlain by uplifted, southwest trending late Pleistocene marine terrace sediments in contact with underlying central belt Franciscan Formation bedrock" (LACO 2004:4). The Franciscan Formation is made up of "mélange containing large, disparate blocks of resistant metamorphosed basalts (oceanic crust), chert, and sandstone within a matrix of highly sheared argillites containing abundant clay ("blue goo"). This formation is "particularly prone to slumping due to its relatively low internal shear strength and direct exposure to wave and tidal action" (*Ibid.*). Tectonic activity has resulted in impacts to the coastline and bluff through uplift, earthquakes, and tsunami events over time. These events and processes have a direct impact on the physical conditions of the coastal bluff, its stability, and its vulnerability to failure in the future.

The TSA occupies "a portion of the southwest dipping forelimb of the Trinidad anticline that formed in response to repeated movement along the Trinidad fault" (LACO 2004:5). LACO (*Ibid.*). describes the Tsurai Village location as occupying

> …what appears to be a remnant of a former Late Pleistocene-aged marine terrace surface. The isolated benched slope the village site occupies may correlate with younger terraces noted by Rust (1982)

> to the east of Trinidad Bay. Alternatively, the topographic bench may be a back-tilted slope remnant having formed in response to deep seated translational/rotational landsliding of a portion of the coastal bluff. Based on the elevation of the site, and the occurrence of marine terraces surrounding Trinidad Bay at similar elevations, it is quite possible that the village is situated atop a marine terrace remnant that may have once extended further southward into Trinidad Bay. Continual tide and wave erosion of the toe slope along the back edge of Old Home Beach (a.k.a. "Indian Beach") has since undermined the slope, resulting in past and present coastal retreat.

Bedrock geology and geomorphic processes have impacted the region and the TSA throughout time and will continue to do so in the future. Fluvial erosion and deposition are the primary geomorphic process impacting the terraces beyond the coastal beaches throughout the region (USDA Forest Service 2004).

Soils in the Northern California Coast sub-region of the Coast Ranges Geomorphic Province include Alfisols, Inceptisols, Mollisols, Spodosols, Ultisols, and Vertisols. The soils within the Humboldt Bay Flats and Terraces are primarily Typic Humitropepts and Typic Tropohumults with Tropofluvents, Fluvaquents, and Humaquepts formed on marine terrace sediments and recent alluvium (USDA Forest Service 2004).

3.2 Flora and Fauna

Vegetation types are generally referred to as "series" named for the dominant plant species over a given biological region with layers falling into three primary categories: trees, shrubs, or herbaceous communities (Green 1999:4). An exhaustive classification system for California vegetation has been developed by the California Native Plant Society (Sawyer and Keeler-Wolf 1995) and has been adopted by the U.S. Forest Service, Bureau of Land Management, Biological Resources Division of the U.S. Geological Service, U.S. Fish and Wildlife Service, and the California Biodiversity Council (Green 1999:4).

The predominant tree species within the Northern California Coast sub-region include the Redwood series, Douglas-fir-tanoak series, Oregon white oak series, Purple needlegrass series, Tanoak series, and Coast live oak series . The dominant tree series for the marine terraces near Trinidad are Sitka spruce series along the coast and Redwood series for inland areas . A successional cover throughout the area includes Red Alder series and a variety of shrubs (USDA Forest Service 2004).

The dominant vegetation classification for the general Trinidad area is Northern Coastal Scrub, vegetation that inhabits rocky, exposed coastal bluffs and headland terraces (Green 1999:10). A "super-series" identified as the Northern Coastal Bluff Shrub is listed as a "globally rare and threatened series" in a regional inventory study for the California North Coastal Basin (*Ibid.*). The primary vegetation layers for this classification are species that are classified as shrubs and herbs. The dominant vegetation for the Northern Coastal Scrub are shrubs including: Salal (*Gaultheria shallon*), Salmonberry (*Rubus*

spectabilis), Thimbleberry (*Rubus parvifolium*), Silk tassel (*Garry eliptica*), and Black-huckleberry (*Vaccinium ovatum*), and are commonly described as "bramble and thicket" vegetation (Green 1999:15).

Vegetation within the TSA is dense and includes both native and non-native species. The upper canopy of the TSA is currently dominated by Cascara (*Rhamnus purshiana*), Red alder (*Alnus rubra*), and willow (*Salix*). Other species present within the TSA may include Sitka spruce (*Picea sitchensis*), Redwood (*Sequoia sempervirens*), Grand fir (*Abies grandis*), California bay (*Umbellularia californica*) and Western hemlock (*Tsuga heterophylla*). Other plant species occupying the middle and lower canopy of the TSA may include Oregon crab apple (*Malus fusca*), Hazel (*Corylus cornuta*), Baccharis (*Asteraceae*), Elderberry (*Sambucus nigra*), Salmonberry (*Rubus spectabilis*), California blackberry (*Rubus ursinus*), Black huckleberry (*Vaccinim ovatum*), Himalaya berry (*Rubus discolor*), Periwinkle (*Vinca minor*), Wild radish (*Raphanus raphanistrum*), Wild cucumber (*Marah macrocarpus*), Wild parsnip (*Pastinaca sativa*), mint (*Mentha sativa*), Sword fern (*Polystichum munitum*), Western azalea (*Rhododendron occidentale*), False lily-of-the-valley (*Maianthemum dilatatum*), Chain fern (*Woodwardia fimbriata*), Common vetch (*Vicia angustifolia*), Bracken Fern (*Pteridim aquilinum*), Salal (*Gaultheria shallon*), Poison oak (*Toxicodendron diversilobum*), Willow (*Salix ssp.*), Red flowering currant (*Ribes sanguineum*), Pacific reedgrass (*Calamagrostis nutkaensis*), Coast silktassel (*Garrya elliptica*), Stinging nettle (*Urtica dioica*), Thistle *(Cirsium ssp.)* and a variety of grasses. (Redwood Community Action Agency 1995:10). The entire TSA is densely vegetated providing minimal ground surface visibility.

Archival research conducted for the TMP indicates that the TSA was once an open area, containing some old growth trees, a traditional plank-house village, and a historic village component of European-style houses in the mid-1800s. Oral history and archival research indicate that the area was once managed and maintained by Tsurai Village residents, possibly through prescribed burning (a traditional Yurok practice), resulting in the open, park-like quality of the Village and surrounding area. The current saturated and overgrown conditions of Tsurai Village and the TSA are not historic but are a result of management decisions by past and present landowners.

Common faunal species known to inhabit the Northern California Coast sub-region of the California Coast Ranges Province include Roosevelt elk, black-tailed deer, black bear, mountain lion, coyote, bobcat, raccoon, skunk, marten, fisher and river otter. Birds include eagles, hawks, owls, peregrine falcon, osprey and a variety of shorebirds and waterfowl along the coast. Species that can be present in Northern California Coastal Shrub provided special protection and consideration include the marbled murrelet, northern spotted owl, peregrine falcon, and select anadromous fish (USDA Forest Service 2004).

In addition to common fauna species, there are also several terrestrial and aquatic animals that have been identified as threatened, endangered, and/or candidate species within the U.S. Geological Survey 7.5' Topographic Quadrangle for Trinidad, by the U.S. Fish and Wildlife Service. Thus, these species are not necessarily present within the TSA and may require a biological assessment and/or consultation with the U.S. Fish and Wildlife

Service to determine presence, as well as possible impacts to such species when conducting environmental compliance for proposed projects. Following is a current list of these species, including their present status (E = endangered, T=threatened, C=candidate), as well as identifying whether Critical Habitat has been designated for each species (P= Proposed, Y=Designated, N=None Designated) within the Trinidad Quadrangle. Fish species include tidewater goby (*Eucyclogobius newberryi*) (E, P); Northern California steelhead (*Oncorhynchus mykiss*) (T, Y); and California coastal chinook salmon (*Oncorhynchus tshawytscha*) (T, Y). Reptile species include the loggerhead turtle (*Caretta caretta*) (T, N); green turtle (*Chelonia mydas (incl. agassizi*) (T, N); leatherback turtle (*Dermochelys coriacea*) (E, Y); and the olive (Pacific) ridley sea turtle (*Lepidochelys olivacea*) (T, N). Bird species are the marbled murrelet (*Brachyramphus marmoratus*)(T, P); western snowy plover (*Charadrius alexandrinus nivosus*)(T, P); Western yellow-billed cuckoo (*Coccyzus americanus*)(C, N); bald eagle (*Haliaeetus leucocephalus*)(T, N); brown pelican (*Pelecanus occidentalis*)(E, N); short-tailed albatross (*Phoebastris albatrus*)(E, N); northern spotted owl (*Strix occidentalis caurina*)(T, Y); and Xantus's murrelet (*Synthliboramphus hypoleucus*)(C, N). Lastly, mammal species include the sei whale (*Balaenoptera borealis*) (E, N); blue whale (*Balaenoptera musculus*) (E, N); fin whale (*Balaenoptera physalus*) (E, N); Steller (northern) sea-lion (*Eumetopias jubatus*) (T, Y); humpback whale (*Megaptera novaengliae*) (E, N); and sperm whale (*Physeter macrocephalus*) (E, N).

Focusing on species within the TSA, there are several listed species of special concern, as designated by the California Department of Fish and Game's Natural Diversity Database (2005). These plant and animal species include: southern torrent salamander (*Rhyacotriton variegates*), coast cutthroat trout (*Oncorhynchus clarkii clarkii*), western tailed frog (*Ascaphys truei*),Oregon coast Indian paintbrush (*Castilleja affinis ssp. litoralis*), running pine (*Lycopodium clavatum*), flaccid sedge (*Carex leptalea*), white footed vole (*Arborimus albipes*), Tracy's romanzoffia (*Romanzoffia tracyi*), Pacific gila (*Gilia capitata ssp. pacifica*), Wolf's evening primrose (*Oenothera wolfii*), and fork-tailed storm-petrel (*Oceanodroma forcata*). At this time, however, none of these species have been listed as threatened and/or endangered according to relevant federal and state law.

Field observations of the TSA documented the presence of osprey, pileated woodpeckers, seagulls, cormorants, brown pelicans, and variety of songbird species in addition to skunk, rabbit, mice, and woodrats (Redwood Community Action Agency 1995:10-11). A population of *Aplodontia*, commonly known as Mountain Beaver, has been observed throughout the TSA. However, it should be noted that the subspecies of *Aplodontia* seen in the TSA is the *A. rufa humboldtiana* (Humboldt Mountain Beaver), not the endangered *A. rufa nigra* (Point Arena Mountain Beaver). In addition, otters are present within the TSA. While the ocean otter is considered endangered for the northern California coastline, the otters in the Trinidad Bay are river otters that have adapted to the ocean environs and are not, therefore, a federal or state protected species.

Part 4: Historical and Cultural Context of Trinidad Area

4.1 Yurok Cultural Overview

Yurok culture is deeply connected to the environmental landscape in which it has existed for many generations. Cultural relationships between places and people are evident in Yurok cultural traditions, language, stories, resources use, land management, settlement, and contemporary life. The cultural landscape of Yurok people comprises what is known as "ancestral territory" and connects coastal, inland, river, and high country areas and resources. Yurok people utilized specific resources obtained from each region within their ancestral territory. Yurok culture, tradition, and oral histories reflect the complex, integrated, and interdependent relationships that exist between Yurok people and their natural environment. The importance of coastal resources to all Yurok people and villages is evident through extensive trail systems that linked river and coastal villages, ceremonial areas, and resource areas throughout Yurok territory (Gates 1995). Coastal areas provided abundant food resources including a variety of seaweeds, mussels, clams, surf fish, and other diverse coastal marine species. In addition a variety of coastal plant species were utilized as foods, medicines, and for other cultural practices, throughout Yurok country, including spruce root, ferns, and grasses used for basketry. Many important traditional Yurok resources are only available from coastal environments and access to these resources has been a vital component of the coast-river connection of Yurok culture (for a more detailed discussion of the Yurok cultural context, See Appendix B).

Prior to European contact and settlement of the region the largest concentration of occupants were located in the villages along the river, while the total number of houses in the coast villages was approximately one-third the number in river villages (Waterman 1920:184). However, one of the largest Yurok villages was located on the coast. This southernmost village known as Tsurai, is not only unique in that it is one of the largest Yurok villages and it is on the coast, but it is located right on a cove protected from the ocean. Moreover, the language spoken at Tsurai is the most divergent dialect from what Yuroks of other villages spoke (Kroeber 1925:8, 15). Tsurai and the surrounding landscape are places of great significance to Yurok culture as evident in oral histories, ceremonial activities, and subsistence practices that continue to this day.

4.2 Early European Exploration- Initial Contact

The first recorded exploration of the northwest coast of California by non-Indian explorers occurred from 1542-1543 when explorer, Juan Rodriquez Cabrillo sailed north from Mexico for the Spanish Crown. Cabrillo, however, did not sail far enough north to see the Humboldt coastline. English explorer Francis Drake accomplished this feat in 1579, by sighting the Humboldt coast, but was not able to locate the entrance to Humboldt Bay, most likely due to heavy fog. Then in 1603, Spanish Commander Sebastian Vizcaino entered the mouth of the Eel River, just south of Humboldt Bay and was greeted by the Wiyot people in canoes who offered the sailors food (Eidsness 1988:26). Spanish exploration continued along the coast and in 1775, Juan Francisco de

la Bodega y Cuadra and Bruno de Heceta sailed north to the Tsurai cove. The Spanish held a ceremony commemorating the Holy Catholic Trinity and claimed the land for the King and Queen of Spain. Hence the bay, head, and subsequent town were named Trinidad. American vessels followed as early as 1803 and 1805 (McBeth 1950:2; Bearss 1982:17, 26-27).

Fur traders from the Hudson's Bay Company in 1827 were the first known non-Indians to have contact with Yuroks living inland. Jedediah Smith then encountered upriver Yurok villages when he traveled down the Trinity River the following May and June. Smith mistakenly thought that the River course he partially followed emptied into Trinidad Bay and hence he named the river "Trinity."

For the next several decades a variety of Spanish, English, American, Canadian, and Russian ships stopped at Trinidad Bay to restock their food and water supplies, as well as trade for furs. In 1849, American explorers, led by Josiah Gregg, conducted an overland trip from Redding to the coast for the purpose of finding the two bays of Northern California. After an arduous journey, the expedition reached the coast at Little River and proceeded north about eleven miles before turning around and returning south along the coast. On this return trip, the Gregg Expedition stopped at Trinidad, which they had named Gregg's Point. Here the group encountered the occupants of Tsurai with whom they remained for two days, living off of mussels and dried salmon provided to them by the people of the village (Woods 1856).

4.3 Early Euro-American Settlement

Some members of the Gregg Expedition returned to the North Coast a year later to firmly establish Trinidad as a viable port of entry for supplies inland when the gold rush exploded in northwestern California in 1850. Trinidad and Uniontown (Arcata) established early and grew rapidly because their geographic locations were ideal to act as supply stations for the mines of the Klamath, Trinity, and Salmon Rivers. In April of 1850 there were thirty tents and three houses under construction in the rapidly growing city of Trinidad (DeMassey 1927:55). The traditional Yurok trail between the beach and the bluff, now called the Axel Lindgren Memorial Trail, was used as one of the primary haul routes for transporting goods between the beach and the bluff. At the tops of the bluff were pack train outfitters who transported goods to the interior gold fields. Trinidad took the lead early in the packing trade because of its closer proximity to the Klamath River than Uniontown (Bearss 1982:131). In the summer of 1850 a trail was opened from Trinidad inland to get goods, supplies, and men into the gold mines. One branch of this trail went from Trinidad north along the coast to Klamath (Bearss 1982: 134-135). The inland trail went from Trinidad north to Big Lagoon, and then crossed over to Redwood Creek. From here it followed the trail that is assumed to have been first established by members of the Chilula Tribe, across Redwood Creek near present-day Tall Trees and continued to Elk Camp (Bearss 1982:43-44, 131). This inland supply trail was later abandoned in the last decade of the 19th century when the Bald Hills Road was established, which connected Orick via Bald Hills to Martin's Ferry (Bearss 1982:133).

By 1851, Trinidad had a population of 3,000 (Murray 1950:5). This sudden increase in population can be partially attributed to the influx of miners and supplies inland, but a large majority of those miners came because of the exaggerated stories of gold found at bluffs north of Trinidad, now known as "Gold Bluff" (Coy 1982:50; Pilling 1978:140). Between December 1850 and March 1851, 28 vessels sailed from San Francisco to Trinidad or Gold Bluff directly (Coy 1982:121). The population of Trinidad remained steady for the next few years and was the county seat for the no longer existent, Klamath County from 1851 to 1854 (Coy 1982: 51). After it was realized that there was little gold along the coastal bluffs and routes to the inland gold fields were established elsewhere, the population in Trinidad quickly subsided and in 1855, not a single sailing vessel was recorded being bound for Trinidad (Coy 1982:124). In September of 1851, Redick McKee, leader of the U.S. Government Treaty Expedition reported that: Trinidad upon the coast has been the principle rival of Union (Arcata), in this trade, and was suffering under the same depression. It contains the same number of houses (100) and probably about the like population (500 and dwindling) (Gibbs 1852:132)

Mining, logging, and the desire of settlement brought many non-Indians to Humboldt and Del Norte Counties. Lawlessness abounded, especially on the coast and within the interior mining regions along the Klamath, Trinity, and Salmon Rivers. Vigilante paramilitary crews quickly formed, such as the Humboldt Home Guard and the Eel River Minutemen whose sole purpose was to murder Indigenous Peoples and kidnap Indigenous children (Castillo 1998). Many vigilante massacres and Indigenous retaliations occurred between many Yuroks and non-Indians. One example along the coast occurred in 1850 when members of the ship *Hector* were robbed as they camped at Patrick's Point. In retaliation, the crew instigated the massacre of Opyuweg, at the southern end of Big Lagoon.

> My companions at once began firing their guns. The occupants of the huts, who had been fast asleep, ran out and scattered. Some of the party went into the huts, and found a rifle and other articles, which the Indians had stolen during the night; likewise about a dozen hatchets, which they had picked up from time to time at Trinidad. On this, our men began firing at the Indians (Gihon 1891).

Vigilantism became so rampant that military forts were established throughout the region in order to settle conflicts and help protect the Indians from the settlers and miners.

In 1851 a "Treaty of Peace and Friendship" was signed between the United States Government and the Klamath River Indians (Yurok, Karuk, and Hupa) under the direction of U.S. Indian Agent Colonel Reddick McKee in order to establish Indian lands for the sole use of tribal people in an effort to quell the continued violence. Tsurai people were invited to attend the treaty meeting at Eel River with the possibility of moving to that proposed reservation, but declined, stating that they preferred to remain in their oceanside village.

4.4 Industry: Fishing, Whaling, and Logging

The salmon industry provided employment for many coastal Yurok. During the final years that the Klamath Indian Reserve remained independent of the Hoopa Valley Indian Reservation, U.S. troops remained in Requa to maintain amicable relations between non-Indian settlers and the Yurok. The primary purpose of the troops was to "prevent intrusion on the Indians' land" and to protect Yurok access to their primary industry-salmon fishing (Bearss 1982:124). In 1888 some Yurok entered into a partnership with John Bomhoff, a resident of Crescent City. Bomhoff established a cannery at Requa employing many of the Yurok at Requa, as well as "for some distance up the river" (Bearss 1982:125). Bomhoff supplied the Yurok with boats, nets, and other necessary equipment and men were able to make a daily salary, in addition to their subsistence (Bearss 1982:125). Many young men from tribes in the surrounding area came to Requa during the late 1890s to early 1930s to work summers in the salmon industry (Pilling 1978:138).

In addition to the salmon industry, the whaling industry had some success in Trinidad during the early 1900s. In November of 1912 the West Coast Whaling Company considered the establishment of a station in Trinidad. The California Sea Products Company did establish a station eleven years later. Whaling was done by first harpooning the whales at sea and then towing them into the processing plant at the Bay. Here at the plant, the whale was butchered and made into pet food, fertilizer, and crude oil (Lindgren 1982). The whaling industry did not last long, however, as the whaling station at Trinidad Bay was closed in 1929.

Large Redwood trees lined the Pacific Coast and continued inland for several ridgelines. Such magnificent trees developed the immediate establishment of local lumber companies, as well as brought in outside logging interests. Byron Deming and William March moved the Luffenholtz Lumber Mill to Mill Creek, just north of Trinidad in 1853 (Turner 1993:150). In February 1868 the Hooper Brothers formed the Trinidad Mill Company. This mill was followed in 1869 with the Smith and Dougherty Mill, which was located on a creek just south of Trinidad, also named Mill Creek. The Hooper Brothers and the Smith and Dougherty Mills consolidated under the Hooper Brothers in 1875. In 1871 the Trinidad Mill Company built a logging railroad, which extended from Trinidad into their logging operations. These log cars were pulled by animals until 1880 when a new locomotive was purchased (Borden 1970). A few years later in July of 1883, the Trinidad Mill Company was purchased by the California Redwoods Company, which erected another mill at Luffenholtz Beach. In October 1884 the mills closed because of the stagnate lumber trade and the high productivity and export from the mills on Humboldt Bay. The era of Trinidad as a mill town ended when the mill in Trinidad was destroyed by fire in 1886 (Borden 1970). However, mills in the area remained, such as the McConnahas Mill on Mill Creek, just south of the TSA during the 1920s (Turner 1993:145).

4.5 Contemporary Trinidad

The City of Trinidad is quite a bit smaller than the boom years of the 1850s. Many of the industries that previously prospered in the region declined in the 20th Century. Today, Trinidad has a local population of less than 400 residents and over 12,000 seasonal and vacationing visitors each year. Trinidad Bay supports a modest commercial and recreational fishing fleet. However, recent fishing restrictions have curtailed the previous burgeoning fish industry. Due to the scenic beauty of the Trinidad Bay area, the City of Trinidad has concentrated its recent economic efforts on expanding and promoting tourism. This shift from industry to tourism has occurred throughout the redwood belt region of the California Coast. The region includes the Redwood National and State Parks as well as the Six Rivers National Forest and is the destination of travelers and tourists from all over the world. Currently the City of Trinidad, comprised of retirees, seasonal fisherman, college students, Yurok people, and other local Native Americans finds itself in a low revenue economy.

Part 5: Tsurai Study Area

This section provides a brief overview of the documented history of the Yurok ancestral village of Tsurai. Extensive archival research was conducted to compile past archeological studies, ethnographic research, and tribal consultations. In addition, a formal records search was conducted to help identify the chain of ownership, past management practices, and potential long term impacts to the TSA. This section is intended to provide historical context to the management surrounding the TSA. It is not possible to include the vast amount of documentation acquired as a result of the archival review conducted for this project, but the following should be considered a summary of the information obtained through this research process.

5.1 The Yurok Village of Tsurai

Tsurai is the southernmost village within Yurok Territory. The geographical boundaries of the village are a small stream four miles north of Trinidad Head (Tsurewa), Beach Creek (O prmrg wroi) and the village located at the Little River (Me'tsko or Srepor), which acted as both the southern boundary of Tsurai, as well as the southern boundary between the Yurok and the neighboring Wiyot Tribe (Lindgren 1991).

> The nucleus of Tsurai was one-half mile east of Tsurewa, on a steep hillside between two spring-fed streams which flowed year-around (sic). This permanent site (which was some twenty-five feet above the Pacific breaker line) comprised ten or twelve Redwood slab houses, a sweathouse, quality waterhole, brush-dance pit, trails, graves, boat landing, and Alder trees. Two pepperwood trees of… spiritual significances grew beyond the boundaries, one on the East and the other on the West (Lindgren 1991).

Tsurai is a unique Yurok village because the people here speak the most linguistically divergent Yurok dialect. Moreover, Tsurai, meaning "mountain," because of its association with Tsurewa, is the only Yurok village that is in a protected bay as it sits tucked between the windy bluff above and the beach below (Waterman 1920:270-271).

5.2 Mythic Period

The Yurok, like many cultures around the world, have stories that relate the beginning of their existence, as well as the formation of the land around them. Lame Billy of We'itspus related the story of the creation of Tsurewa (Trinidad Head) to Anthropologist Albert Kroeber of the University of California, Berkeley between 1901 and 1902. The story begins that a young man who grew up at Tsurai had a sister who he told one morning, "I should like to see a pretty hill be" (Kroeber 1976:18). When she asked him what the purpose of this hill would be, the young man replied,

> I always hear laughing when the wind blows from there. I almost hear someone laughing. That is why I want to make a good hill here. I want to sit on it that I may look about. There may be people somewhere.

> Perhaps they will see me when they come by (Kroeber 1976:18).

The young Tsurai man then proceeded to go down to the beach, gather a pile of sand in his hands, make the pile round, and set it down again. Thus, Tsurewa was created.

After the young man had created Tsurewa, he sat upon it and said, "I wish you would be higher," and the sand grew higher. After some time had passed, the young man again said, "I wish you would be a little higher," and the sand grew even higher. Satisfied, he looked around and said, "That is all," and ran down the hill to his home (Kroeber 1976:19). When he got home he grabbed a stool and returned to the top of Tsurewa and placed it securely. "Downstream from it he set a white rock, across a black rock, above a red rock. Upstream was the side to which he looked (Kroeber 1976:19). The young man sat on his stool and began to wonder what his stool should become. He then thought,

> It will be best if I make a hole here with a spring in it. I shall come here sometimes if I want woodpecker crests. I think that is how I shall make my stool. On the side here next to it I shall make a small hole. I shall come there if I want persons' money (dentalium shells). I shall come and wash my hands in that. (Kroeber 1976:19).

So the young man made two water holes up on the top of Tsurewa and sat on his stool.

This story continues as the young man of Tsurai travels within Yurok Ancestral Territory and visits many villages to instruct other Yurok on how to properly conduct ceremonies (Kroeber 1976:19-28). What is important is that this story relates the creation of Tsurewa and establishes that the village of Tsurai predates the rock promontory known as Trinidad Head in regards to Yurok oral tradition.

Great heroes are also an important element in Yurok oral tradition. One story about Wohpekumeu, a culture-hero, relates the way people got fire, as well as the reason why there were no oaks or string iris on the immediate coast around Tsurai.

> Wohpekumeu came to Tsuräu (Tsurai) from the north. He was going to make acorns grow there, and iris for string; but he wanted girls in payment. Then, when they were not given him, he became angry, and tore up what he was making and threw it away. (Hence no oaks or string iris on the immediate coast.) He went off southward. He did not go very far when he was carried across the ocean. He left the fire drill of willow root, and that is how people have fire (Kroeber 1976:476).

Another story about Wohpekumeu tells of the culture-hero leaving from Trinidad Head to his home across the ocean. When it is time for Wohpekumeu's second coming, it is the thought that he will return to this land via Tsurewa.

There are many stories that relate the creation of the world and Yurok culture that remain a part of a strong oral tradition. Many stories have also been lost since the occupation of Yurok ancestral territory by non-Indians, the displacement and relocation of Yurok people, and the U.S. governmental efforts of forced assimilation.

5.3 Historic Period from Contact to 1916

Historical documents record that the coastal Yurok had initial contact with Europeans as a result of Portuguese, and then Spanish expeditions spanning the mid-1500s to the late-1700s (McBeth 1950:3; Bearss 1982:17-24). In November of 1595, Portuguese sailor Sebastian Rodriguez Cermeno entered Trinidad Bay, but did not anchor for fear of rocks (Hoopes 1971:4-5). In the summer of 1775, on the ninth of June, two Spanish ships sailed north of Mexico along the coast with the purpose of exploration in the name of Spain. Bruno de Heceta was captain of the *Sonora* and Juan Francisco de la Bodega y Cuadra captained the *Santiago*. These two ships sailed north and as the pilot Francisco Mourelle noted, they came upon

> …a land-locked harbor to the SW., we determined to enter it. The schooner cast anchor opposite a little village, which was situated at the bottom of a mountain. As soon as we had anchored, some Indians in canoes came on board, who, without the least shyness, traded some skins for bugles (Bearss 1982:22).

Two days after the Spaniards docked, they climbed to the top of Tsurewa and erected a cross, celebrated mass, and proclaimed the land for the King and Queen of Spain. The day of occupational celebration occurred on the day of the Holy Trinity, thus the area was named Puerto de la Trinidad (or La Santisima Trinidad) in remembrance of that day (Bearss 1982:23; Hoopes 1971:7; Heizer and Mills 1952:22).

> The Indigenous Peoples that the Spanish had encountered at "Trinidad" were the Yurok people of the village of Tsurai. For the next ten days the Spanish occupied the village of Tsurai and repaired their ships, studied the people, traded goods, and replenished their food and water supply (Heizer and Mills 1952:19-31).

This Spanish expedition was followed in April, 1793 by the Englishman, George Vancouver and in 1803 by Russian ships seeking otter pelts. The American ship, *Leila Byrd* anchored in Trinidad Bay in 1804 where the crew killed several Yuroks in what is recorded as an act of self-defense (Hoopes 1971:11-12). This first known conflict between local Indians and non-Indian settlers manifested a defensive approach by the Tsurai. Thus, when the English ship the *Columbia* docked in the Trinidad Bay in 1817, dugout canoes from the village of Tsurai swiftly surrounded it. Once the intent of friendliness was understood, the trading of food, furs, and iron commenced. After purchasing all the pelts the Tsurai had for sale, the Englishmen set sail from the bay (Bearss 1982:28).

As stated previously, some members of the Gregg Expedition on a return trip, established Trinidad as a viable port of entry for goods and supplies for the mining fields inland along the Klamath, Trinity, and Salmon Rivers. Subsequently, within the same year as the 1850 expedition, prospective landowners laid claim to the land surrounding Trinidad Bay.

> Commencing at a point at low water on Trinidad Bay, and running N 16° 45'W along the line of a certain survey (Made under the direction of Robert A. Parker) one mile, -Thence West 16° 45'S 750 ft. thence S 16°45'E to the water edge making a distance of one mile and a quarter, more or less; thence along the lower line of tidewater mark to the place of beginning (Records of Trinidad 1850:1).

Thus, the land around Trinidad was "claimed" by non-Indians "for the purposes of settlement, cultivation, and improvement…(Records of Trinidad 1850:2). Trinidad was connected to other non-Indian establishments south via the Old Wagon Road.

> Trinidad and Union had been connected by a mule trail soon after the founding of these towns. As late as 1854 much of the mail and express of the bay was carried over this trail, although it was characterized as "dangerous and in winter almost impassable." In 1857 the citizens of Trinidad and the farmers from the region began the agitation for a road, and were successful in constructing a "passable" wagon road as far north as Little River (Coy 1929:75).

With the rise in the non-Indian settler population, in addition to the enactment of the Homestead Act, pressure mounted on the people of Tsurai to give up their traditional lifeways and homes, but the Tsurai people remained. U.S. Indian Agent, Redick McKee met with the Tsurai in September of 1851, presenting them with gifts from the President and requesting that they relocate to a reservation near the mouth of the Eel River. The Tsurai refused, apparently due to their fear of being mistreated (McKee 1853:155). In 1903, a Sheriff and two Little River Redwood Company employees forced medicine woman Annie Kirby and her husband Kirby George, also known as Injun George, from their traditional home on the southern portion of Tsurai. Their belongings were thrown into the road and to ensure that the two did not return, their house was set on fire (Lindgren 1984:4). Although the village portion of Tsurai, which was in the Trinidad city limits was not evacuated at this time, the U.S. government did want to remove the remaining Tsurai to the Wiyot Tribal Reservation, which the Tsurai refused to do (Lindgren 1984). Instead the village of Tsurai remained occupied by people, such as Weitchpec Jim, who was later known as Humpback Jim when he moved to Tsurai. Kroeber interviewed Humpback Jim, one of the last remaining residents of Tsurai, in 1907 (Lindgren 1983). The following year, the last Brush Dance at Tsurai was held.

5.4 Modern Period from 1916 to Present

The Spanish upon arrival in 1775 first claimed the Tsurai village for the King and Queen of Spain. Then, as stated previously, in 1850 the whole town site, including the village was claimed by non-Indian ownership. The land then fell into commercial ownership with purchase by the Little River Lumber Company and Hammond Lumber (Pratte 1977). While the land was no longer "owned" by the Tsurai, members of the village continued to reside there. Many of the younger Tsurai men and women had moved away for jobs and economic pursuits. However, several of the older people remained in their homes at Tsurai. In 1900, these homes included the residents Old Jennie, Old Mau, Wild

Annie, Blind Tom, Humpback Jim, Old Tsurai, Oscar, Old Willie, Old Pete, and Elizabeth Warren (Heizer and Mills 1952:180). In addition to the homes, when Kroeber's assistant, T.T. Waterman came to the village around 1906, he found two sweathouses and a Brush Dance pit (Heizer and Mills 1952:182).

Eventually, the remaining few residents at Tsurai began to move away until Humpback Jim and his wife were the only remaining residents. In 1913 or 1914, Humpback Jim passed away and his wife continued to live in their Tsurai home until 1916, when the site's water source had been contaminated, presumably by garbage dumped off the bluff and onto the site; she was forced to leave her ancestral home by the property owners (Heizer and Mills 1952:182).

In 1920, Axel Lindgren II leased the property that included the area of the Tsurai village from the land's new owners, Hammond Lumber Company and Carl Langford. However, Axel Lindgren II only leased the property until the 1940s and the land remained in private non-Tsurai ownership, which over time was divided into several parcels (Pratte 1977). Despite the variety of ownership, lineal descendent Axel Lindgren II took on the responsibility of continually caring and maintaining the village site and the cemetery in particular.

Such care was especially needed, not only because of the neglect of the village by the private landowners, but also because of the excavations and looting that occurred. In 1931 amateur archeologists excavated the last marked graves at Tsurai, which had been surrounded separately by picket fences, looting the goods for their personal collections and leaving the human remains insensitively strewn around the gravesites. Axel Lindgren II remembers,

> (e)arly one morning while on our way to school, my brothers and I
> witnessed those remains of Old Tsuris [Tsurai] his son Oscar, and "Old Mau",
> our great-grandfather, the last male leader of Tsurai (Lindgren 1991).

Many Yurok recall this incident as an example of the lack of respect demonstrated towards those Yurok buried within the village.

In 1948 a private property owner deeded land to the Trinidad Civic Club. The following year the Club erected a 25-foot Memorial Lighthouse on the ocean bluff at Trinity and Edwards Street directly above the traditional Yurok trail (now known as the Axel Lindgren Memorial Trail). The land in which the monument sits is the location of the old Childs' home, lineal descendants of the village of Tsurai. The Memorial Lighthouse is a concrete replica of the functioning lighthouse maintained by the U.S. Coast Guard located on Trinidad Head. Originally constructed as a tourist attraction, the Memorial Lighthouse has no utility for either the U.S. Coast Guard or boats at sea. Rather, it continues to serve as the iconic symbol of Trinidad, as well as a memorial to those who have been lost or buried at sea.

Academic archeological excavations of the village and some burials within the village were conducted between August and September of 1949. Professors Heizer and Mills and

students from the University of California at Berkeley conducted archeological investigations on the site. Yurok oral history suggests a lack of cultural sensitivity on the part of those conducting the study. When Axel Lindgren II went down to the village to inquire about what was going on, Professor Jack Mills told him, "If you have come here to cause trouble or interfere with this scientific survey like your mother-in-law has, I will call the sheriff" (Lindgren 1984a). Professor Mills declared that they were only to excavate midden beds, but instead excavated fifteen cubic yards of which little was in midden soil (Lindgren, 1984b)..

In 1950, following the Heizer excavation and the construction of the Memorial Lighthouse, a portion of the TSA was graded with a bulldozer, for the purpose of development (Pratte 1977:9). In 1977, the Planning Commission and the City Council of Trinidad twice approved residential building permits on parcels within the TSA, specifically between Parker and Pepperwood Creeks. This occurred despite the fact that the Coastal Commission had denied approval of one of the permits (Pratte 1977:5). In the same time period the City of Trinidad declared the TSA "Open Space" in its General Plan (later approved as the Local Coastal Program), which would be inconsistent with such permits.

Between the 1950s and 1970s looting of the gravesites and the village continued. However, Axel Lindgren II remained faithful to the protection of the site. In 1978, the Tsurai Ancestral Society, comprised of the descendents of the village and led by Axel Lindgren II, was formed as a non-profit organization. The Society was formed for the purposes of caring for and maintaining the village and burial grounds, as well as to advocate and work for its protection.

Furthermore, in 1978, the Coastal Conservancy, a state governmental agency established to preserve, protect, and restore California coastal resources while ensuring public access, authorized the purchase of six parcels, which included the Tsurai Village. These six parcels, which were all purchased in 1978, have come to be known as the "Tsurai Study Area." The Conservancy later sold this land to the City of Trinidad in 1989 with funds granted to the City from the State of California's Environmental License Plate Fund (Pursuant to Chapter 1633, Statutes of 1988, in accordance with authority provided in CA Pub. Res. Code Sec. 31354). The conservation easement was attached to the deed for each parcel within the TSA and as a result, the Coastal Conservancy retains a conservation easement to ensure its statutory goals are achieved. Existing trails protected by this conservation easement not only provide direct coastal access from the bluff, but also extend inland along Parker Creek toward Scenic Drive.

In 1997 the City of Trinidad and the Trinidad Civic Club recorded a quitclaim deed (1997-12649-2) that altered the existing boundaries of the Memorial Lighthouse, and transferred the land within those boundaries to the Civic Club. On February 12, 1997, the Coastal Commission and Coastal Conservancy requested that the City not transfer the land to the Civic Club without their approval. The City reviewed the Commission and Conservancy's request in a closed session and decided that they were willing to proceed

with the land transfer without this requested approval. On April 9, 1997, the City Council unanimously voted to quitclaim the property.

Also in 1997, the City of Trinidad unanimously opposed in a closed session the reconstruction of the traditional Tsurai trail. This traditional trail began where the Memorial Lighthouse is now located and extends down into the Tsurai Village. The reconstruction of the trail did occur and the trail was renamed the Axel Lindgren Memorial Trail (ALMT). The Yurok Tribe constructed the ALMT with funds acquired by the Tribe from a litigation settlement agreement; tribal, state and private donations; and tribal funds. The ALMT was built in the cable-step style construction. Due to engineering considerations and budgetary constraints, the lower portion of the traditional trail was not restored, but instead was routed along its current path. The traditional entrance at the top of the ALMT was also diverted, due to the placement of fencing around the Memorial Lighthouse.

Despite changes in ownership and the continued maintenance of the Tsurai Village by Axel Lindgren II and the Tsurai Ancestral Society, protection of the cultural and natural resources within the Tsurai Study Area remained problematic. Looting continued to be a problem, including the desecration of gravesites (Times-Standard 1990; Lion 1989). Management decisions and actions taken by the City continued to be a source of contention between the City and the Tsurai Ancestral Society. In the summer of 1991, the City of Trinidad denied the Tsurai Ancestral Society the right to maintain the burial site by clearing brush and weeds (Forster 1991). This conflict between the people of Tsurai and the City escalated and remained unresolved over the next decade. Following the re-organization of the Yurok Tribe in 1993, the Yurok Tribe, as a federally recognized tribal government, began to take an active role in advocating for the protection and better management of one of their most significant ancestral villages.

Beginning in the summer of 2002, after the Tsurai Ancestral Society contacted the Coastal Conservancy with concerns about vegetation dumping on the property, discussions concerning the need for a management plan were initiated between the TAS, the City of Trinidad, the Coastal Conservancy and the Yurok Tribe. Those discussions resulted in a Coastal Conservancy grant to the Yurok Tribe to develop this management plan in partnership with the Tsurai Ancestral Society and the City of Trinidad, in order to evaluate access needs, identify use conflicts, and recommend possible access improvements for the benefit of public access and protection of Native American cultural resources. The purpose of this Plan is to make recommendations to aid in the successful accomplishment of these objectives. The Tsurai Management Team was formed, with the purpose of developing a draft Plan to be submitted for public review and comment, and finalized via the adoption by the members of the Team.

In April 2005, the California Coastal Commission, Coastal Conservancy, City of Trinidad and Tsurai Ancestral Society entered into a settlement agreement that resulted in resolution of the issues among those parties in the case of *Frame v. City of Trinidad* (Humboldt County Superior Court Case No. DR 98 0359). The parties agreed to continue with the Management Plan process and to use best efforts to implement

recommendations of the Management Plan with regard to protection of the Tsurai Village, protection of natural resources, soil stability, and public access to and along the beach on all existing trails in the TSA. The parties also agreed to cooperate in effecting the transfer of a portion of the TSA to the Yurok Tribe to be held and managed in accordance with the Management Plan, contingent on an agreement with specified terms and conditions between the City, the Conservancy and the Yurok Tribe.

Heavy winter storm events in January of 2006 revealed the need for continuous monitoring and trail maintenance within the TSA when intense wave action and increased rainfall amplified damage to the lower portion of the ALMT. The resultant damage consisted of the complete removal of the cable and steps on the lower portion, which descends onto the beach. The storm also revealed the instability of the toe of the slope, evident with new surface cracks and slope slippage. The lower portion of ALMT was repaired, again using cable and steps reinforced with local rock in May 2006. Trail repairs were performed by tribal volunteers from the AmeriCorps, Tribal Civilian Community Corps (TCCC) located in Hoopa, California. Supplies for the repairs were provided by the City. Trail repairs and the TCCC crew were supervised and monitored by the Yurok Tribe Environmental Program.

Over the past 150 years ownership of the TSA has gone from being the home and lands of Tsurai People, to private ownership, to the Coastal Conservancy, and finally to the City. Since Tsurai descendants and the Yurok People lost their ability to manage and maintain the village and cemetery, it has suffered from decades of neglect, mismanagement, illegal looting, Human impacts, and natural erosion, all resulting in site damage. The archival record shows that through these years the consistent appeals for appropriate stewardship by the landowners from the Tsurai Ancestral Society and the Yurok Tribe have often been ignored, and the descendants from Tsurai continue to demonstrate good stewardship and advocate for appropriate management of the TSA. The Yurok Tribe has expressed a willingness to assume management responsibilities and demonstrate appropriate stewardship and restoration of the natural and cultural resources within the TSA for the benefit of the public and future generations.

Part 6: Tsurai Study Area: Current Conditions

This section provides a site-specific overview of the current resource conditions and ongoing processes that impact the TSA in relationship to management issues identified by the Management Team for the purposes of preparing this Management Plan. In some cases, recommendations for further studies will be made based upon gaps in the current data and the identification of additional data and research needs for future management purposes.

6.1 Geomorphic Conditions

Bedrock geology, plate tectonics, and ocean wave action each have significant roles in creating the geomorphic conditions on the north coast of California. The City of Trinidad is situated on top of a coastal bluff within this geologically dynamic region. The TSA is located downslope of the concentration of development within the City, comprising steep and sloping terrain between the beach and the bluff. Tsurai Village is situated mid-slope, approximately 25 to 40 feet above the high tide line (LACO 2004:1). Three creeks or streams run through the TSA and flow directly into the Trinidad Bay, also contributing to geomorphic processes throughout the property.

Erosion of the site, both above and below Tsurai Village is a serious concern to the Yurok Tribe, the Tsurai Ancestral Society and city residents with homes located on top of the bluff's outside edge. Various parties have conducted several geo-technical studies over the years in an attempt to define the processes, risks, causes, and possible mitigation measures that could be implemented to prevent further erosion and possible bluff failure. Failure of the bluff will cause serious damage to the cultural resources within the village site below, as well as significant property losses to those residents who own homes on the land above. Some erosion and bluff failure is clearly due to natural processes as expected in such a dynamic geomorphic region. While the impact of foot traffic on the trail above Tsurai Village may have some effect to the stability of the bluff to "no practical effect" (LACO 2004: 18), the impacts of development, runoff, and increases in groundwater surface elevation should be addressed in management decisions for the TSA because these are areas that are definite contributions to bluff failure.

A portion of the Coastal Conservancy grant that funded the preparation of this Plan was combined with funds provided by the Tsurai Ancestral Society to contract with LACO and Associates to conduct an engineering and geologic assessment of Tsurai Village and the TSA. The LACO (2004) report summarized previous studies, addressed the site-specific issues identified by the Tsurai Management Team, conducted a site evaluation of the TSA, and provided a series of recommendations for mitigation of the anthropogenic causes contributing to geomorphic processes that are adversely impacting the TSA and the village site. That report represents the first attempt to synthesize the findings of a variety of past geo-technical studies and provide site-specific recommendations for mitigating processes that are adversely impacting the TSA and village site (See Appendix F). Moreover, the Tsurai Ancestral Society has submitted a grant proposal to fund further geological survey work to be performed by LACO, on additional areas within the TSA.

6.2 Environmental Conditions and Natural Resources

Trinidad Bay and the surrounding coastal areas are elements of a unique ecosystem within what is commonly referred to as the "redwood belt" of northwestern California. In the process of archival research, no comprehensive environmental assessments of the biological plant and animal resources have been located for the TSA. Therefore, a preliminary environmental review has been performed by the Yurok Tribe Environmental Program according to the requirements of the National Environmental Policy Act (NEPA) and the California Environmental Quality Act (CEQA) in order to inform management decisions (See Appendix E. All supporting documentation for determinations is on file with the Coastal Conservancy and the Yurok Tribe Environmental Program.) This preliminary assessment should not be construed as meeting the requirements of NEPA or CEQA for any future proposed project. In addition, this assessment is based on environmental documentation and did not include an intense biological site investigation. The following section identifies both general and specific information about the known environmental conditions and natural resources within the TSA that require consideration in management decisions.

A. Aquatic Resources:

Aquatic resources, in and adjacent to the TSA include those within ocean, spring, and creek habitats. In regards to migratory and native fishes of these habitats, the assessment determined by California Department of Fish and Game, California Cooperative Fish and Habitat Data Program (CalFish), finds that Coho, Chinook, and Steelhead fishes are only *historically* or *possibly* located within the streams of the TSA. Moreover, Cutthroat has been determined as *probable* within the TSA. And according the California Department of Fish and Game, California Natural Diversity Database (2006), coast cutthroat trout (*Oncorhynchus clarkii clarkii*), a species of special concern, is located within Parker Creek. Therefore, the streams within the TSA, while not *critical habitat* in terms of the federal and state Endangered Species Act, may be considered probable habitats of concern, particularly when assessing cumulative impacts as required by NEPA.

As previously noted, the Kelp Beds in Trinidad Bay have been designated as an Area of Special Biological Significance (now a Critical Coastal Area) and are subject to protection and regulation under the California Coastal Act. The entire city of Trinidad is within the designated Coastal Zone and as such is also subject to protection and regulation under the Coastal Zone Management Act. The TSA is approximately 41 miles from the closest Wild and Scenic River (the lower Klamath River) and, therefore, will not adversely affect a river that has been designated as Wild and Scenic.

No water quality issues concerning those streams within the TSA are specifically discussed in the North Coast Regional Water Quality Control Board Basin Plan and the TSA is not located near a sole source aquifer. However, water quality issues have previously been identified in past water sampling and monitoring of the three streams that flow through the TSA and into the protected Bay. Preliminary water sampling has detected the presence of fecal coliform in the streams that pass through the TSA, but its

source is not yet known. A draft grant application for the City of Trinidad's proposed Onsite Wastewater Treatment System Management Program states:

> A large portion of the existing Onsite Wastewater Treatment Systems (OWTS) are more than 20 years old and were either installed prior to County Health Department permit requirements or prior to permanent record keeping…
>
> It is unknown whether the OWTS in and around the City of Trinidad are being maintained or functioning properly. The unknown status of OWTS within the City poses a substantial risk to the water quality of the three coastal, perennial streams (Parker Creek, Mill Creek, McConnahas Mill Creek) that run through he City, as well as groundwater runoff from the coastal bluffs and coastal resources (City of Trinidad 2002, Proposition 13 RFP, Coastal Non-point Source Grant Program, Exhibit A).

In addition, erosion and sedimentation within site and beach areas may be affecting water quality in the Bay. The City of Trinidad 2002 draft application to the Coastal Non-point Source Grant Program proposed a joint undertaking with Humboldt County Water to conduct a wastewater facilities study "to determine if septic tanks are presently creating pollution problems between Mill Creek and Luffenholtz Creek" (Trinidad Planning Commission 2001).

Recognizing the importance of monitoring and maintaining the septic systems, the City applied for and received two grants for Onsite Wastewater Treatment Systems. The combined State and Federal grants will establish a monitoring program to determine the status of runoff water quality. The City has included the TSA in the monitoring program and will share the results with the community. Water quality issues need to be investigated to identify potential causes, sources, and impacts and identify appropriate mitigation measures for protecting terrestrial, coastal, and marine resources in addition to public health.

In terms of the impact of those streams during flood events to the surrounding environment, the TSA has not been included in the area of study by the Federal Emergency Management Agency's Flood Insurance Rate Maps (FIRM). However, it may be concluded that the TSA is not in an area of flood concern as the directly adjacent lands are located in Zone C, which are "Areas of minimal flooding." Additionally, the Humboldt County Community Development Services has mapped the TSA as outside of the 100-year and 500-year flood zones.

B. Terrestrial Resources:

The TSA is situated in a coastal area, with a diversity of plant and animal life that reside within the Pacific coastal zone. Many of these plant species are invasive, non-native species that have opportunistically exploited a biological niche created by changes in land-use and land management since Tsurai residents left the village. Early images of the Tsurai area, including the TSA, illustrated an open landscape dotted with a few large

redwoods or Sitka spruce. The dramatic change in the appearance of the land within the TSA is likely due to the cessation of cultural and annual burning in the mid 1800s, a traditional land management practice of Yurok people. This change of land management has led to a change in the biological communities that inhabit and exploit the area. This change in species distribution throughout the TSA has changed the natural environment, and leads to impacts to cultural resources within the TSA.

An example of how change in the natural environment leads to impacts to cultural resources is evident in the presence and impacts of the *Aplodontia rufa humboldtiana* (Humboldt Mountain Beaver). Although *A. rufa humboldtiana* are native to the area (Steele 1989: 15, Godin 1964), their presence may be exacerbated by the current overgrown condition of the TSA, particularly within the village area. This is due to the types of foods and locations preferred by the *A. rufa humboldtiana. Aplodontia* consume poisonous, invasive, and other plants uneaten by most other vertebrates, including various types of ferns (*Pteridium spp.),* lupine, larkspur, foxglove *(Digitalis purpurea),* thistle *(Cirsium* spp.), and nettle *(Urtica* spp.) (Steele 1989: 25).

> These plants all have physical or chemical defenses that keep many animals from consuming them. The mountain beaver is a primitive rodent with a somewhat uncontested food niche including many plant species. It has a voracious appetite and feeds on almost all available vegetation growing near its burrow (*Ibid.)*.

Subsequently, when an area, such as the TSA becomes overgrown with poisonous, invasive plants, the *Aplodontia* may thrive in a habitat no longer inhabitable by other native species, due to food availability. Preferred topography also plays a role in the desired habitat of the *Aplodontia*. Steele (1989) has researched and documented the tendencies and locations of *Aplodontia* stating

> The mountain beaver digs extensive underground tunnels that can form a network of passages. These tunnels are usually only a few inches below the surface and have many openings. Local topography such as fallen logs, the slope of a bank, rocks, soil factors, and the location of food plants determine the direction and extent of the runways and the location of their entrances and exits. …Most nests are located at sites with good drainage, often under mounds, logs, uprooted stumps, logging slash, or in dense thickets (Steele 1989: 24).

Therefore, the area within the TSA may be a prime topography for the *Aplodontia* to thrive, excluding areas were the ground is highly saturated. As a result, the burrowing of the *Aplodontia* are perceived as contributing to the erosion of the bluff and damage to cultural resources particularly within the village. The issue of *Aplodontia* and the impacts of this species on both slope stability and damage to cultural resources are an example of why environmental conditions can lead to natural and cultural resource issues that have adverse effects on the TSA; and as such, need to be given adequate consideration in future management decisions.

The location of the TSA, as well as the use of the land and nearly impenetrable layer of dense vegetation lead to the conclusion that the site is not located on or directly adjacent to agricultural farmland that is categorized as prime, unique or of state or local importance and therefore, is exempt from the Farmland Protection Act. In addition, none of the recommended projects will convert agricultural land to a non-agricultural use. Also, mineral resources are not a concern as no mineral resources of local, state, or regional importance are located within the TSA.

C. Air Quality

Air Quality is a concern of the environment that is regulated according to the Clean Air Act. In regards to the TSA and air quality, the Federal Ambient Air Quality Standards have all been met in the site location. Moreover, all State Ambient Air Quality Standards for the location are classified as attainment, including ozone, carbon monoxide, nitrogen dioxide, sulfur dioxide, sulfates, lead, and hydrogen sulfide. The only exception is for Particulate PM10, which is classified as nonattainment. However, the North Coast Unified Air Quality Management District is continually taking measures to reduce emissions of PM10 and bring ambient levels of PM10 down to below the state requirement . In addition, PM2.5 and visibility reducing particles have not been classified for Humboldt County and no asbestos has been identified at the site.

D. Hazards and Hazardous Materials

Hazardous waste should also not be considered a concern within the TSA. The area is not located within one mile of a National Priorities List, CERCLA, or equivalent state listed site. Moreover, there are no nearby toxic or solid waste landfill sites and no underground storage tanks located on the project site.

E. Environmental Justice

Environmental conditions must also be recognized according to issues of Environmental Justice, as well as be assessed by federal agencies under Executive Order 12898. Therefore, any federally funded projects must be assessed as to whether a project will have a disproportionately adverse effect on the environments of low income or minority populations. Whether a project will disproportionately adversely effect low income or minority populations is contingent on the scope of a proposed project.

6.3 Cultural and Archeological Resources

The cultural landscape of the Yurok people encompasses coastal areas between Little River and Damnation Creek and the Lower Klamath River. This traditional landscape was interconnected through a complex network of villages, trails, and resource areas. The Yurok Village of Tsurai should be considered the residential area of a larger cultural and natural resource area utilized by Tsurai people. Two renowned anthropologists, A.L. Kroeber and T.T. Waterman, conducted early ethnographic research in the 1900s. Dr.

Kroeber devoted many years to documenting the oral history and cultural practices of Yurok people with the help of his primary informant, Robert Spott. As Kroeber's assistant, T.T. Waterman conducted a comprehensive study in cultural geography, mapping and documenting Yurok cultural and natural resources, including place names, traditional trails, villages, settlements, ceremonial and resource areas. The body of research compiled and published by both Kroeber and Waterman provide a wealth of cultural information on Yurok people during a time of significant cultural upheaval and transition. These scholars captured many aspects of traditional cultural life that are still evident in contemporary Yurok society. Their research provides valuable insights into traditional Yurok land use practices, settlement, commerce, communication, transportation, natural and cultural resources, and cultural understanding and practices.

Robert F. Heizer, John E. Mills, and other researchers from the University of California, Berkeley, initially conducted archeological investigations of the village of Tsurai in 1948-49. Heizer and Mills (1952) published a history of the village in a book entitled, *The Four Ages of Tsurai* (Heizer and Mills 1952) and later published the archeological findings of the 1948-49 excavations in a comparative site study (Elasser and Heizer 1966). Subsequent cultural resources studies were conducted in efforts to identify site extent, site boundaries, or address management concerns (Hampson 1974; Pratte 1977; Arbuckle 1979; Eidsness 1982). No recent comprehensive site surveys have been conducted for the village of Tsurai or the TSA. A summary of the findings of prior research is included in the formal records search obtained from the North Coastal Information Center. These previous studies are also summarized in the archival research findings section (Sections 4 and 5) of this report. Past archeological studies indicate that the village was a permanent village, containing multiple levels of human occupation through time. Cultural resources previously identified within the TSA include a cemetery, traditional trails, sacred trees, house pits, a sweathouse, and Brush Dance area, as well as a dense archeological deposit associated with the occupation of the village and the use of surrounding coastal and marine resources.

It is important to note that Professor Heizer's assertion that Tsurai village was between 300-400 years old was based upon the results of a single radiocarbon date. Artifacts, specifically stone tools, recovered from the site suggest a much deeper time span of human occupation. These lithic chronologies were not well established at the time Heizer interpreted his site data and as a result Heizer's interpretations about the age of the site are not supported by current established lithic chronologies for the region. Heizer's interpretations did not include what is now accepted to be the date of the last major tsunami to inundate the northern California coastline, that occurred on January 26, 1700 AD, resulting from a 9.0 magnitude earthquake along the Cascadia Subduction zone between Cape Mendocino, CA and Vancouver Island, B.C. (Popenoe 2006). As a result, Heizer's conclusions that the site is 300-400 years old may well be a result of tsunami activity rather than an accurate interpretation of the archeological record for the site. Standards, methods, and theory for archeology have changed significantly since Heizer's excavation at Tsurai. Furthermore, the nearly 30 year lag between excavation, analysis of the collection, and publication raises potential questions about Heizer's interpretations of site use and occupation history at Tsurai.

Erosion of the lower portions of the village site at the toe of the slope onto the beach is primarily the result of naturally occurring processes, specifically wave action. However, two locales in which erosion is occurring at an accelerated rate and where archeological materials are being exposed onto the beach may be associated with the areas of excavation conducted in 1949. Archeological excavation and backfilling of excavation units after excavations result in unconsolidated soils, which are more prone to erosion than undisturbed, intact sediments and deposits. Initial observations of the areas by the a professional archaeologist found that where archeological materials are eroding onto the beach suggest that this may be a result of the 1949 excavations at the site.

On November 3, 1969, the village of Tsurai was designated a California State Historical Landmark (Landmark Number 838) and commemorated with a historical marker, installed on top of the bluff near the intersection of Edwards Street and Ocean Avenue in 1970. The village was nominated to the National Register of Historic Places in 1977 but was never evaluated.

Yurok oral history identifies Tsurai and its surrounding landscape, particularly Trinidad Head as areas of profound spiritual significance to Yurok culture. Yurok creation stories recorded by A.L. Kroeber recount the story of Tsurewa Man and his role in the creation of the Yurok world. The Yurok Tribe considers Tsurai Village and Trinidad Head to be sacred sites a well as areas of archeological and cultural significance. Under national guidelines for identifying historic properties, both the village of Tsurai and Trinidad Head would be considered Traditional Cultural Properties, which are defined generally as properties that are

> eligible for inclusion in the National Register because of [their] association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community (Parker and King 1992:1).

Tsurai Village, Trinidad Head, the sea stacks, and other landscape features within the Trinidad viewshed are components of the Yurok cultural landscape embedded with deep cultural, historical, and spiritual significance to Yurok people. This relationship and significance is well documented in both Yurok oral history and early ethnographic research conducted by Kroeber and Waterman. The Trinidad area continues to be of profound cultural and spiritual significance to contemporary Yurok people. The appropriate management and protection of the cultural resources contained within the TSA are the primary concern of the Yurok Tribe and the Tsurai Ancestral Society. For decades, Tsurai Ancestral Society founder and lineal descendant of Tsurai Village, Axel Lindgren II was the primary caretaker and advocate for the protection of the cemetery, the village, and the traditional trail through the village, at times in direct opposition to the management goals of the City of Trinidad. The rights and responsibilities of lineal descendants and the Yurok Tribe have been strengthened over recent decades with the recognition of ancestral and cultural resource protection rights of Native Americans through the passage of various federal and state cultural resources protection laws. These rights and responsibilities, and associated supporting regulations need to be incorporated

in management decisions that impact the TSA. In the past, this has not been the case. The Management Plan attempts to identify cultural resources problems and resolve some of the past mismanagement practices that have had threatened, and continue to threaten, these significant cultural and archeological resources within the TSA.

The Yurok Tribe Environmental Program, Cultural Resources Division, conducted a cultural resources inventory survey for the TSA between February and June 2006. The purpose of the survey was to identify the presence or absence of previously undocumented cultural resources within the TSA and assess their condition for the purposes of informing management recommendations made within the Management Plan. Several previously undocumented locations containing historic and archaeological resources were identified during the field survey. These areas are distributed throughout the entire TSA and extend beyond the location of Tsurai Village and cemetery as previously documented.

6.4 Recreational Resources and Access Trails

The topography and dense vegetation within the TSA have resulted in the need to establish and maintain trails to ensure safe public access to the beach area below the bluff. Large rocky outcrops and the natural shape of the beach below Tsurai make access to the beach difficult, if not impossible, in high tide. Several established trails exist to allow the public to access the beach at varying levels of difficulty. The conservation easement held by the California Coastal Conservancy over the TSA includes as a primary purpose; providing public coastal access on the property. Two types of trails have been identified in this study:

- beach access trails intended for public use; and

- site access trails intended to provide access to the village site and cemetery by the Tsurai Ancestral Society and the Yurok Tribe.

As previously noted, trails are an important component of the Trinidad area, particularly for the recreational use of residents and visitors.

Trails are highly significant components of traditional Yurok culture. Traditional Yurok trails are considered lineal sites that contribute to traditional cultural properties and in some cases have ceremonial significance. The traditional Yurok trail system connects the entire Yurok cultural landscape and ancestral territory. The Axel Lindgren Memorial Trail is a traditional Yurok trail and has both ceremonial and cultural significance to the Tsurai Ancestral Society and the Yurok Tribe. Two additional, lesser known trails exist in the TSA that have been used and maintained by the Tsurai Ancestral Society for the purposes of access and caring for the village site, specifically the cemetery. These trails are not intended for public use or access as they lead directly into the burial grounds and the remains of Tsurai Village. Detailed information about each trail is provided in the form of a matrix that analyzes conditions of each trail. (Appendix E). A discussion on trail issues is included in Section 7.3 of this document.

Beach access trails have recreational and aesthetic value to the general public, and also enable access to recreational areas and activities along the beach and within Trinidad Bay such as fishing, boating, kayaking, hiking, beachcombing, and simply enjoying the scenic beauty of the area. Trails and other recreational resources are a vital component of the local Trinidad economy as they attract tourism, which is currently the primary economy for the City. These resources are valued by local residents, local merchants and business owners, and by tourists who visit the City. The California Coastal Conservancy has a mandate to help promote beach access and retain trail access to California's coastal areas and beaches. The Management Plan attempts to identify ways to address resource protection concerns, while helping the City and the Coastal Conservancy maintain compatible beach access and recreational uses associated with the beach and coastal area.

Part 7: Tsurai Study Area Resource Management Issues

This section combines the archival and ethnographic research with information obtained through the scoping meetings held with the various stakeholders for the purpose of identifying the primary management issues to be addressed in future TSA management. The stakeholders include the City of Trinidad, property owners adjacent to the TSA, the Tsurai Ancestral Society, the Yurok Tribe, the California Coastal Conservancy, and the interested public. This section focuses on identifying specific management concerns, the processes or contributing factors, and areas of commonality and conflict between stakeholder groups over the management of the TSA. Detailed information from the individual scoping meetings is provided in the form of summary and a matrix that analyzes the content of and follows the outline used in all scoping meetings (Appendix C and D).

7.1 Erosion

Erosion in and around the TSA has multiple causes and manifestations. Each type of visible erosion problem identified by stakeholder groups was discussed in order to gather information and concerns on the issues, perceived causes, potential impacts, and suggested mitigation measures on the TSA and adjacent lands.

A. Bluff

Stakeholder groups identified the potential for erosion leading to failure of the bluff to be a serious concern. Bluff erosion concerns are based on the perception that erosion may lead to bluff failure, undermining adjacent properties, and impact the Tsurai Village site. Public safety concerns over potential bluff failure were also identified as an issue that needs to be addressed. Competing and conflicting opinions exist about the causes of bluff erosion (natural versus anthropogenic) and the risk of potential bluff failure. Bluff stability is a primary concern for the City and adjacent landowners who own property on the ocean edge of the coastal bluff. The Tsurai Ancestral Society and the Yurok Tribe are equally concerned with bluff stability and potential bluff failure that could damage or bury the village site and cemetery below.

B. Stream

The three streams that pass through the TSA and flow across the beach into Trinidad Bay are known as Alder Creek, Pepperwood Creek, and Parker Creek. The Tsurai Ancestral Society and the Yurok Tribe identified concerns about stream erosion due to the visible impacts observed over time on the village site and archeological deposits contained within the TSA. The swampy, saturated conditions of the village site and cemetery area are a concern to the Management Team as this condition has an adverse effect on the cultural resources, and hinders access to the area for cultural resource and other management purposes. The Tsurai Ancestral Society and the Yurok Tribe expressed concerns over the increased discharge and runoff from the City, the existence of the inboard ditch that delivers runoff directly onto the village, and the potential impacts on

the village site. All stakeholder groups expressed concern about potential causes and impacts (public health and environmental) of contaminant discharge entering the streams that flow onto the beach and into Trinidad Bay.

C. Beach

Erosion on the beach, specifically where the toe of the slope meets the beach is recognized as a natural process caused by wave action and tidal patterns of the Pacific Ocean. All stakeholders expressed various concerns about ongoing coastal erosion and its impacts on trails and beach access. Many expressed concerns about the safety and stability of the Axel Lindgren Memorial Trail, which travels down the steep slope to the beach. The bottom portion of this trail, which is constructed of interlocking cable-tie steps, has repeatedly washed out during winter months or high wave events, at times creating a hazard for those attempting to access the beach from this route. Even as recent as the winter storm events of January 2006, the lower portion of the ALMT washed out. In addition, cultural resources and human remains, contained within the village site, are continually eroding onto the beach as a result of wave action and often attracts curio-seekers and looters. The unique conditions of the Trinidad Bay and the beach, and the high-intensity of seasonal winter storm events, make mitigation of ocean-caused erosion problematic due to access, feasibility of long-term success, and expense.

D. Tsurai Village

All members of the Management Team expressed concern over the impacts of various causes of erosion on the cultural resources contained within the TSA. While some erosion is understood to be part of a natural process, other types are considered by some to be anthropogenic in nature and in need of remediation. The TAS and Yurok Tribe expressed concerns that the erosion of the bluff could lead to bluff failure and could potentially bury the village site, or force cultural resources onto the beach via a debris slide. The TAS and Yurok Tribe believe that saturation problems within the village site and cemetery are contributing to erosion at the base of the slope, resulting in the further loss of cultural resources. The Tsurai Ancestral Society, the City of Trinidad, and the Yurok Tribe consider the identification of causes of erosion and potential mitigation measures to minimize the impacts of erosion to be critical to proper management of the cultural resources contained within the TSA.

E. Bioturbation

The resident population of *Aplodontia*, or Mountain Beaver, within the TSA is believed by many stakeholders to be the primary cause of bioturbation leading to increased erosion and instability of the bluff and Tsurai Village site. Many cited observing evidence of this burrowing rodent throughout the TSA, particularly along banks, the toe of the slope, and throughout the village area. The Tsurai Ancestral Society believes that over-saturation of the village site and the TSA has encouraged the current population of *Aplodontia* to take up residence in the area. All stakeholders have expressed an interest in removing *Aplodontia* from the TSA to prevent further erosion resulting from bioturbation. There is

debate over the appropriate method for removal and how effective such actions would be if the issues that create desirable habitat for the species are not mitigated.

7.2 Cultural Resources

All parties involved in the scoping meetings expressed support for and commitment to preserving and protecting the cultural resources associated with the village of Tsurai. All parties recognized the ancestral and custodial roles, rights, and responsibilities of the Tsurai Ancestral Society and the Yurok Tribe with regard to cultural resources management decisions and actions within the TSA. Management decisions and actions with the potential to impact the cultural resources contained within the TSA have been the primary point of contention between all stakeholders, particularly between the City and the TAS and Yurok Tribe. All parties expressed an appreciation of the inherent value of these resources and a desire to help facilitate their protection and preservation. Priority concerns identified for the TSA include:

- amendment of Policy 69 of the City's Local Coastal Plan to include the Yurok Tribe and ensure improved consultation.
- protection and care of cemetery and graves;
- protection of archeological remains and burials from continued looting;
- long-term site preservation and village restoration;
- site protection and stabilization from erosion and other geomorphic processes;
- identifying the cause of and mitigating the impacts of site saturation;
- identifying sources of and mitigating fecal coliform and other potential contaminants detected in water bodies within the TSA;
- management and maintenance of public use trails within the TSA;
- protection and management of culturally significant natural resources within the TSA;
- vegetation management within the TSA with a priority given to cultural resources management; and
- culturally appropriate signage and interpretation of Tsurai Village.

7.3 Trails

Several recreational trails provide beach and coastal access from the City of Trinidad. The Coastal Conservancy is concerned with fulfilling its statutory and conservation easement requirements. The City of Trinidad is concerned with evolving its tourism-based economy with a strategy to promote and develop hiking trails, enabling access to scenic public views and the beach. The TAS and Yurok Tribe are concerned with the ALMT in particular, due to its origin and cultural significance. Adjacent property owners have concerns about trail easements, access, and impacts of pedestrian traffic near their properties. The public has an interest in retaining beach access and hiking trails for recreational purposes. A site visit for the purpose of observing trail conditions and aesthetics was conducted by Yurok staff. An initial trail assessment for trails within the TSA is provided in Appendix E and Figure 3 provides a map of the trail locations. A brief summary of issues specific to each trail within the TSA follows.

A. Axel Lindgren Memorial Trail (ALMT)

The ALMT is the traditional trail for Yurok people to access Tsurai Village. Issues and concerns surrounding this trail revolve around the access from the bluff, the reroute of the access around Civic Club property, and the continual seasonal erosion of the lower portion of the trail. All stakeholders expressed concerns about public safety with regards to this trail, as it is steep and unstable at the lower portion. All stakeholders desire that a handrail be installed along this trail to make it safer for public use. The TAS and Yurok Tribe expressed frustration with past City management actions that have impacted this trail, which is also a cultural resource as a traditional and ceremonial trail. The TAS and Yurok Tribe recounted numerous incidents of past conflict between Axel Lindgren II and the City over his determination to maintain this traditional trail to access the village site and care for the burials within the cemetery. The Coastal Conservancy wishes to keep the ALMT as the primary beach access trail and as such desires to keep it open to public use. The City has expressed frustration over their ability to manage and maintain the trail. All stakeholders agreed that the public should be educated on the cultural significance of the traditional trail and that as a ceremonial trail requires special management considerations beyond recreational uses.

B. Wagner Street Trail (a.k.a. Old Wagon Road or Bluff Trail)

The Wagner Street Trail begins at Wagner Street, heads south on an easement held by the Humboldt North Coast Land Trust that passes through two privately owned parcels (APN: 042-102-45 and APN: 042-102-30), where it crosses onto the TSA 12.5 acres and continues east along the bluff edge following the western side of private residences, where it merges with Parker Creek Trail before proceeding to Old Home Beach. This trail provides a scenic public view of Trinidad Bay, Trinidad Head, the ocean and the beach. Many residents prefer this trail to the ALMT due to the gradual slope, the view, and the beach access it provides via Parker Creek trail. This trail has been the site of controversy and litigation, due to the location of the trail, as well as the belief that the trail is contributing to erosion and instability of the bluff. Other issues over this trail include

vegetation management, public use and access, and City actions resulting in their management decisions as the landowner. The TAS would like to see the trail permanently closed. The Coastal Conservancy and the City would like to see the trail remain open to public use. Many members of the public prefer to see the trail remain open, while some adjacent landowners would like the trail permanently closed. Litigation over this trail resulted in a settlement agreement between parties that the trail remains open with specific restrictions on use, and that it be designate as a secondary (to the ALMT) beach access trail.

C. Parker Creek Trail

The Parker Creek trail begins in the parking lot of Murphy's Market, continues along Parker Creek and the southern portion of the TSA and continues to Old Home Beach. Many stakeholders prefer this trail because it follows a gentle grade and provides an easy access to the beach. Many stakeholders noted that this trail provides an enhanced user experience because it passes through a Redwood forested environment along Parker Creek before reaching the beach. Many expressed an interest in developing and enhancing this trail. The TAS and Yurok Tribe would like to see the trail developed as an alternate primary beach access trail. Issues surrounding this trail revolve around easements and the fact that the entrance via Parker Creek Road lies outside the TSA and Coastal Conservancy conservation easement. Additionally, portions of the lower section of this trail as it accesses the beach, cross onto private property, which again, are not within the Coastal Conservancy conservation easement. Stakeholders agreed that developing portions of this trail as an Americans with Disabilities Act (ADA) accessible trail could increase public use and provide an enhanced visitor experience that is currently not possible in the other TSA trails.

D. Site Access Trails (trails that lead into the Tsurai Village site)

All stakeholders agreed that trails leading into the village area, and veering from designated recreational trails, should not be public use trails or identified to the public. The preferred site access trail for the TAS crosses through private adjacent property. TAS has expressed a desire to work with the current landowner to negotiate permission to access the site via this property.

7.4 Natural Resources

All stakeholders agreed on the need to appropriately manage TSA environmental resources: flora, fauna, and aquatic resources. As identified in scoping meetings, past frustrations over management of natural resources within the TSA revolve over differences of opinion and priorities regarding vegetation management, water quality issues with the potential to discharge into the Trinidad Bay/Critical Coastal Area, erosion and slope stability, rodent infestations and their perceived cumulative and adverse effects to the site. All stakeholders agreed that the management of natural resources within the TSA must be consistent with state and local environmental laws and regulations. The TAS and Yurok Tribe expressed a desire to manage natural resources

within the TSA with the goal of restoration, including the selective removal of invasive species and re-introduction of culturally significant native species.

7.5 Interpretation

Currently there is little site interpretation for the TSA regarding history or the cultural significance of Tsurai Village and the surrounding cultural landscape. All stakeholders agreed that the cultural, environmental and historical significance of the TSA and Tsurai Village is important to helping educate the public about management needs and decisions regarding the TSA. Issues surrounding site conditions, site management, preservation and restoration, and public outreach and education include the need for interpretative and culturally appropriate signage, and the desire to find funding for site preservation and future restoration efforts.

7.6 Ownership

There are varying positions within the stakeholder groups over the future ownership of the TSA. The City, as current owner, has expressed a desire to keep the TSA in its ownership, yet acknowledges it may lack the financial or technical resources to adequately manage and protect the TSA or the significant resources contained within. The Coastal Conservancy will retain its conservation easement for natural, cultural, and recreational resources within the TSA regardless of ownership, but expresses the need to define the terms and conditions of easements (which are currently ambiguous). The TAS has expressed the desire to see the TSA ownership transferred to the Yurok Tribe as they feel the Tribe has the expertise and resources required for appropriate management and long-term protection and restoration. The Yurok Tribe expressed a willingness to assume ownership of the TSA and a desire to see this important cultural area properly managed and restored.

7.7 Stakeholders: Common Interests and Conflicts

A brief summary of areas of consensus and divergence, identified through the initial scoping process with stakeholder groups is provided below:

A. Areas of common interest to all stakeholders

All stakeholders affirmed the importance of Tsurai Village and the entire TSA as valuable recreational, cultural, and natural resources.

Consultation

- Management Team members agree that better communication and an improved Policy 69 consultation protocol are needed in order to include applicable and appropriate parties, identify problems, prevent conflict, and identify solutions for enhanced management.

Recreational Resources

- Trails are an important aspect of Trinidad's recreational resources and are needed to provide public access to the beach and coastal areas.

- Trail maintenance and repair are needed on a regular basis to keep trails open and safe for public use.

- Signs are needed to inform the public and direct people to the beach.

Cultural Resources

- Restoration and interpretation within the TSA will help educate the public, enhance and preserve the cultural resources, and provide an opportunity to learn about Tsurai and Yurok history.

- The public will benefit from village preservation and restoration.

Natural Resources

- Water quality problems need to be identified and resolved.

- Natural resources need to be managed in accordance with applicable environmental laws and regulations.

B. Areas of diverging or conflicting interest between stakeholder groups

High, medium, and low management priorities for the TSA differ among various stakeholders. The Coastal Conservancy's main priority is providing coastal access through trails, consistent with the protection of natural and cultural resources. The Tsurai Ancestral Society and the Yurok Tribe give highest priority to the protection of the village site, cemetery, and Yurok cultural resources within the TSA. The priorities of the City and residents tend to center on viewshed and recreation issues; however there is also a concern to help protect the Yurok cultural resources in the TSA.

Consultation

- Several attempts to amend Policy 69 to include the Yurok Tribe, define culturally appropriate management, and an enhanced consultation protocol have been made over the years by the Tsurai Ancestral Society and the Yurok Tribe but have been rejected by the City.

- The roles and responsibilities of the City and the rights of the TAS and Yurok Tribe have been the primary source of conflict between these parties over management decisions in the past. There are very differing opinions with regards

to what constitutes meaningful consultation and the geographical extent to which that consultation applies.

Erosion

- Causes of erosion and solutions to erosion problems are complex and opinions differ between stakeholders over the causes and potential impacts of erosion to the TSA, bluff stability, and village site and cemetery.

Recreational Resources

- Trail access at the top of the Axel Lindgren Memorial Trail is contentious and has also been the subject of litigation. The Tsurai Ancestral Society, the Yurok Tribe, and the Coastal Conservancy support the opening of the fence that blocks the path of the traditional trail. The City has supported the position of the Civic Club to keep the traditional trail access closed.

- The future of Wagner Street Trail (to keep open or close) is a very contentious issue, as indicated by the number of geo-technical studies, and past litigation.

Natural Resources

- Vegetation management, particularly with regard to viewshed issues is a point of conflict. While property owners, residents, and the City place a high value on ocean views from the bluff, the Tsurai Ancestral Society and the Yurok Tribe feel that vegetation management decisions affecting the TSA need to be based upon site protection, restoration, stabilization, and multiple points of view, including from the site looking up. Coastal Conservancy staff feels vegetation management for the TSA should focus on the restoration and re-introduction of native and culturally significant species, as well as stabilizing the bluff.

- The issue of water quality and what factors are contributing to the water quality problem, as well as the extent of the problem and who is responsible for remediation is a source of conflicting opinion.

Ownership

While all parties agree the cultural resources within the TSA have not been properly managed, there are conflicting opinions about future ownership and management.

- The Tsurai Ancestral Society and the Yurok Tribe believe the City has demonstrated poor stewardship of the TSA, and that the entire TSA should be transferred to the Yurok Tribe for appropriate management.

- The City supports a cooperative arrangement with shared ownership and responsibilities, including ownership of the village site by the TAS and/or the Yurok Tribe.

Part 8: Alternatives

The range of management alternatives for the TSA are presented in this section. These are based upon the research and findings presented in the previous sections of this report. The following Matrix presents the range of alternatives presented to the public for comment and input. The range of alternatives fall into three categories or management strategies: No Action, Preservation Emphasis, and Restoration Emphasis. A "No Action Alternative" would generally mean that no substantial management actions would be taken and the site would continue to experience the adverse effects resulting from neglect and external forces. A "Preservation Emphasis" would focus on preserving resources within the TSA from further deterioration, but provides little in regards to restoration of the site or proactive protection of cultural resources contained within the site. The "Restoration Emphasis" examines a range of management actions that would be taken (long term and short term) in order to restore the Village and cemetery, mitigate and reverse site damage, and enhance the public educational value and experience of this significant cultural area.

Public input on the range of alternatives presented in the following Resource Management Alternatives Matrix was sought on May 2, 2006 in a public scoping meeting held in the City of Trinidad. The public comments provided during the meeting and the two-week comment period are included in the Public Comment on Alternatives Section (9). Public input on the range of alternatives has been used to inform Management Team decisions on the recommendation and implementation sections of the Plan. The Matrix and that was presented to the public in the May 2, 2006 scoping meeting is presented in the following section.

Resource Management Alternatives Matrix

Resource: 8.1 Recreational	**Alternative One (No Action)**	**Alternative Two (Preservation Emphasis)**	**Alternative Three (Restoration Emphasis)**
A. Axel Lindgren Memorial Trail	The trail would be kept open year-round. ➢ Remains the primary beach access trail. ➢ No seasonal closures. ➢ No redirects, improvements, or repairs. ➢ Trail becomes hazardous for public use.	The trail would be kept open with seasonal/periodic closures during winter months. ➢ Trail used as a primary and/or secondary beach access trail depending on open/closed status. ➢ City to fund and perform regular maintenance and repairs. ➢ Annual repairs conducted to maintain current trail conditions. ➢ Move second or other bench(es) to a new location(s). ➢ No major improvements or redirects.	Permanent closure of the trail to public use ➢ Designate and develop an alternate primary beach access trail. ➢ Restore traditional entrance (top) to the trail through Civic Club/ Memorial Lighthouse site by opening fence. ➢ Close and re-vegetate current entrance (top). ➢ Remove second bench on trail. ➢ Remove all benches from trail ➢ Install handrail along east side of existing trail . ➢ Develop and fund a permanent trail maintenance program to make annual repairs to lower portion of trail. ➢ Engineer and redirect lower portion of trail to restore traditional route.

Resource: Recreational	Alternative One (No Action)	Alternative Two (Preservation Emphasis)	Alternative Three (Restoration Emphasis)
B. Wagner Street Trail (a.k.a. Old Wagon Road or Bluff Trail)	Remains secondary beach access trail. ➢ Daytime use only. ➢ No handicap/ADA access. ➢ Continued mowing and maintenance by City. ➢ Managed per terms of litigation settlement between (See Section 10.1(B)). ➢ No changes, improvements or repairs.	Maintain narrow width of footpath along entire trail. ➢ Re-vegetate along entire bluff ocean-side edge. ➢ Seasonal closure during winter months. ➢ Maintenance and repairs to be conducted on an as-needed basis.	Permanent closure of trail. ➢ Design and develop an alternate beach access trail. ➢ Re-vegetate entire bluff edge. ➢ Create permanent fund to perform annual repairs and maintenance to prevent riling and gullying of runoff and improve bluff stability.

Resource: Recreational	Alternative One (No Action)	Alternative Two (Preservation Emphasis)	Alternative Three (Restoration Emphasis)
C. Parker Creek Trail	Continued access from established entrance off of Wagner Street Trail. ➢ No clear public access easement to enter trail from Parker Creek Road. ➢ Continued access to beach over private land with no easement. ➢ ➢ Maintain current schedule of annual repairs and maintenance. ➢ Continued problem of runoff from inboard ditch onto adjacent private property and into Village site. ➢ No improvements, changes, or repairs	Negotiate and obtain appropriate easements for current access. ➢ Maintain current schedule of annual repairs and maintenance. ➢ Remain as secondary beach access trail. ➢ Install proper drainage system along trail.	Correct easement(s) for beach access portion of trail. ➢ Establish formal trail route to access Parker Creek Trail from town. ➢ Design and develop to become the primary beach access trail. ➢ Create access from Scenic Drive and develop as a scenic and forest trail. ➢ Increase the amount of trail footage in Trinidad area. ➢ Develop interpretive and educational signage. ➢ Install proper drainage system along trail. ➢ Develop portions of the trail to be ADA accessible. ➢ Enhance visitor experience and increase public access.

Resource: 8.2 Cultural	Alternative One (No Action)	Alternative Two (Preservation Emphasis)	Alternative Three (Restoration Emphasis)
Tsurai Study Area (entire 12.5 acre property)	Continued management by City per existing Policy 69. ➢ No formal 'program' for protection, preservation or management of cultural resources. ➢ Continued loss of irreplaceable cultural resources through illegal looting. ➢ Continued conflict between the City, Yurok Tribe, and TAS over management of cultural resources. ➢ Continued damage to village, cemetery and burials through site degradation. ➢ Continued or increased saturation and erosion of site.	Management of cultural resources to prevent additional damage or loss with no significant improvements or restoration. ➢ Improve and amend Policy 69 to include the Yurok Tribe. ➢ City funding of qualified professional staff from the Yurok Tribe to assume cultural resource management responsibilities. ➢ City to fund law enforcement training, and cultural resources site monitoring by Yurok Tribe to prevent further looting. ➢ Slope stabilization and de-saturation to prevent continued erosion.	Management of cultural resources to be assumed and funded by the Yurok Tribe. ➢ ➢ Proactive and intensive site stabilization efforts taken to stop and reverse damage to cultural resources caused by erosion. ➢ Development and implementation of a long-term site monitoring and site protection program. ➢ Long-term site restoration, including stream restoration, selective vegetation removal, removal of invasive species, re-introduction of culturally significant plant species, to open up cemetery, restore village site, and bring back the Brush Dance ceremony. ➢ Development of interpretive and educational program.

Resource: 8.3 Natural	Alternative One (No Action)	Alternative Two (Preservation Emphasis)	Alternative Three (Restoration Emphasis)
Tsurai Study Area (entire 12.5 acres)	No removal of invasive species or management for protection of native species. ➢ No restoration of natural hydrology in streams or creeks. ➢ No remediation of saturated conditions within the site. ➢ No water quality monitoring or mitigation of potential contamination. ➢ Continued discharge into protected bay ➢ No removal or eradication of *Aplodontia*. ➢ Continued overgrowth of invasive species. ➢ Continued in-stream and slope erosion. ➢ Continued saturation of village area.	Management of vegetation for the purposes of maintaining current conditions of natural resources within the TSA. ➢ City to conduct water quality monitoring program for water bodies within the TSA. ➢ City to fund and implement adequate storm drainage and runoff system to prevent discharge onto bluff and village site.	Restore natural hydrology of waterbodies within TSA. ➢ Prevent all discharge into Trinidad Bay/CCA ➢ Install appropriate drainage system along Parker Creek trail to redirect runoff from adjacent private property and village site. ➢ Restore open space to village area by selective vegetation removal/maintenance. ➢ Restore fish passage to Parker Creek. ➢ Develop and fund a long-term water-quality monitoring program for waterbodies within TSA and take remedial action to prevent contaminant discharge into Trinidad Bay. ➢ Remove resident population of *Aplodontia*. ➢ Selectively remove invasive species from TSA. ➢ Re-introduce culturally significant native species to the TSA. ➢ Develop vegetation management program for TSA with emphasis on enhancing natural environment.

Part 9: Public Comments on Alternatives

The following section summarizes the public comments that were received on the range of management alternatives presented in the May public scoping meeting. The Resource Management Alternatives Matrix was placed on the City's website, and distributed at the May 2, 2006 public meeting. Public comments were received at this meeting; and an additional two-week comment period was allowed to enable comments to be mailed or e-mailed to the Management Team. The following is a brief summary of the comments that were made during this public scoping period on the resource management alternatives for the TSA.

9.1 Recreational Resources

- Public comment stated that some trails might need to be closed for the long-term health of the entire site, particularly Wagner Street Trail. Other trails may be developed that would have less of an adverse impact on the site.

- There was consensus on the fact that there should be a variety of trails to the beach and that seeking additional routes in the future would be beneficial.

A. Axel Lindgren Memorial Trail (ALMT)

- Public comment centered on the value of the trail as a cultural resource, which may be enhanced with interpretation through signage or should be not remain open to the general public, but only for use by TAS, the Yurok Tribe, and "respectful local residents."

- Public comment discussed the need to maintain a natural and unobtrusive look to any work that is performed on stabilizing the lower portion of the trail, and should not include concrete.

- Public comment supported the restoration alternative as the ultimate goal, however, if funding is lacking, the preservation alternative should be the approach taken.

- Public comment suggested that the need for an additional trail may be necessary, due to the liability issues to the property owner due to the steep nature of the trail, as well as the possibility that erosion issues may never be able to be solved, regardless of human effort.

- Public comment also noted that many understand the importance of the trail to the Tsurai Ancestral Society and to the memory of Axel Lindgren II and respect the

distinct value of the this particular trail. For these reasons the trail should remain in use, even if only to members of the Yurok Tribe and the TAS.

B. Wagner Street Trail

- Comment varied in regards to this trail. Some expressed the desire to keep the trail open in its current state, because they enjoy the trail and believe there should be several trails extending from the bluff to the beach. Others thought the trail should be closed for the long-term protection of the site. A middle ground one individual recommended was to keep the trail open, but not to advertise the trail for public use in order to minimize use and, thus adverse impacts to site.

C. Parker Creek Trail

- A segment of the public expressed that development of the Parker Creek Trail should not be an avenue to closing the Wagner Street Trail, but rather simply an additional entrance.

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9.2 Cultural Resources

- The public strongly supported the view that the Yurok Tribe and/or the TAS should be the sole entities responsible for cultural resources management of the site. This is based on their intimate and extensive knowledge of the area and resources, which is derived from traditional ecological knowledge resulting from occupation since time immemorial. Allowing the Tribe and/or TAS to manage cultural resources would not only benefit these entities and the resources, but the entire community, as well as visitors.

- The public recognizes that the City has had a neglect management strategy for the TSA, which has had detrimental effects on cultural resources.

9.3 Natural Resources

- The public strongly opposes the extermination of the *Aplodontia* and expresses the desire to pursue other alternatives, such as screening over the cemetery if the animal is *proven* to be a highly destructive contribution to bioturbation in the cemetery and village site.

- The public supports the removal or invasive plant species and the revegetation of the site with native plants. Several people suggested contacting the California Native Plant Society or other such groups, as well as petition for community volunteers to help with revegetation efforts.

- In regard to vegetation management with the TSA, the public expressed a higher concern that vegetation management promote bluff, trail, and site stability, as well

as restoration of native species and be less concerned with bluff views. However, a segment believes that view access is a part of public access and should be considered as such.

- The public desires a protocol to deal with vegetation removal within the TSA that are obstructing bluff views. It should be noted, however, that this Management Plan can only deal with public "bluff views" as they are considered from trails and locations within the TSA and do not include views from private residences.

- Many people in the Public expressed that the vegetation is part of the natural environment and should be not be removed or topped, but rather pruned.

- There was consensus from the public that water saturation is the primary element negatively impacting all of the other issues, including bluff stability and site management and stability. Reducing the impact of water saturation and runoff will benefit all parties involved because it will alleviate many of the resultant factors at the heart of many contentious issues.

9.4 Ownership

Although ownership was not a topic included in the Resource Management Alternatives Matrix, many public comments centered on or touched on the issue of ownership. Thus, the issue of ownership is added here to the public comment.

- One public comment felt as though the protection and/or restoration of all resources, including recreational, cultural, and natural would be best achieved by transferring ownership to the Yurok Tribe.

- There was public comment stating that the City does not have the monetary resources, historical information, past practice, or cultural imperative to continue the management of this site.

- Many saw the transferring of the land to the Yurok Tribe or the Tsurai Ancestral Society as an opportunity for community partnership.

- The public strongly supports the transfer of the land to the Yurok Tribe. No public comment opposed the transfer or supported that the land remain the ownership of the City. One comment, however, stated that the transfer should occur over a five-year period in order to develop long-term relationships among the stakeholders, as well as demonstrate a viable long-term plan with adequate resources to successfully manage the TSA.

9.5 Other Issues

- Project funding and source of funds for project implementation was a concern of many people from the public.

Part 10: Findings

This section summarizes the findings of the research conducted, cultural survey, environmental assessment, initial stakeholder scoping sessions, and the public scoping meeting on alternatives. A formal records search and extensive archival research were conducted for the purposes of compiling information on the history of Tsurai, past ownership, and issues surrounding past management of the TSA. This information was used to prepare the historical context sections contained within this document. An initial environmental assessment was conducted for the TSA in order to identify potential environmental considerations under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) (See Appendix E). The findings of this research, as well as the positions of various stakeholder groups on the issues, including public comment on the possible project alternatives are presented in this section. The intent is to focus on findings of fact, rather than assertions or opinions about the history and management of the TSA. These findings have been reviewed by the Management Team and have informed the recommendation and implementation sections of the Plan. Once completed, the final draft will be provided to the public for review and a 30-day comment period before being submitted to the Coastal Conservancy for final approval, and then possible adoption by members of the Management Team.

Per the terms of the litigation settlement agreement signed by the Coastal Conservancy, the City, and the TAS in April 2005 the TMP process was agreed to as follows:

> The Conservancy and its grantee, the Yurok Tribe, will continue the Management Plan process and the Parties agree to cooperate and assist in that process. The Management Plan process will include an examination of specific issues currently affecting the City Property including but not limited to, the Wagner Street Trail. The Parties agree to use best effort to implement the recommendations of the Management Plan, including any coastal development permits that may be necessary for said implementation.

10.1 Recreational Resources

- The Coastal Conservancy retains a conservation easement through the City and Civic Club properties for recreational, cultural and natural resources. This conservation easement includes the preservation of public access and recreational uses, the protection of archeological resources, and the protection of natural resources within the TSA. The easement is not specific as to the location or size of public access trails or the particular resources to be protected; it encumbers the entire property.

- The Humboldt North Coast Land Trust holds land and trail easements adjacent to the 12.5 acres in order to provide access to the property across private property(s) and connect it with other city land.

- The Conservancy reserved its conservation easement over the entire 12.5-acre property deeded to the City in 1989. A portion of this property was later conveyed to the Civic Club. The Civic Club thus took title subject to the pre-existing easement in favor of the State.

- The Coastal Conservancy is mandated to provide for public access to public beach and coastal areas via public access trails. Views from public lands are considered a public resource, however, public view access does not include views from private residents outside of the TSA, but only from trails and locations within the TSA.

- There are several public trails that provide public views of the ocean and public beach access from the City of Trinidad.

- Access to scenic views from public lands is considered an important public resource. Trails are a way to enable access to views as well as to coastal areas and the beach.

- Visitors and residents utilize the beach and coastal areas for various forms of recreation.

- Public trails within the TSA require ongoing maintenance and annual repairs to ensure they are kept open and safe for public use. Maintenance needs vary year to year and are usually a result of the impact from natural processes (erosion) or anthropogenic causes (human use and activity).

- Trail maintenance is the responsibility of the property owner (City) except where the trail lies within a trail easement not on City property, such as that held by the Humboldt North Coast Land Trust.

- Management decisions regarding trail maintenance and repairs require consultation under Policy 69.

- The City believes it has the staff and expertise to maintain public access around and through the TSA.

- There should be a variety of trails to the beach and seeking additional routes in the future would be beneficial,

A. Axel Lindgren Memorial Trail (ALMT)

- The ALMT is a ceremonial trail and a traditional cultural property for the Yurok Tribe and the TAS. The ALMT is the traditional Yurok trail to the village of Tsurai.

- The trail is named in memory of Axel Lindgren II, Tsurai lineal descendant and founder of the Tsurai Ancestral Society. Mr. Lindgren was the primary advocate and caretaker of the village site, the cemetery, and the traditional trail for several decades.

- Per the terms of the litigation settlement agreement signed by the Coastal Conservancy, the City, and the TAS, "the parties will cooperate in an amendment of the Trinidad Local Coastal Plan to list the ALMT as a public access trail."

- The current trail is of cable-tie interlocking step construction and is very steep and of moderate intensity. The public trail extends from the bluff down to the beach.

- The trail requires continuous monitoring and possibly seasonal maintenance, particularly after winter storm events, by the property owner.

- The ALMT trail requires special consideration due to its status as both the designated primary beach access trail and as the Tsurai traditional and ceremonial trail.

- The entrance of the ALMT trail has been diverted and is not in its traditional path, due to the location of fencing around the Memorial Lighthouse over the objections of the TAS and the Yurok Tribe.

- Per the terms of the litigation settlement agreement signed by the Coastal Conservancy, the City, and the TAS, "all parties are to make the best effort to open a portion of the fence currently blocking the traditional trail (ALMT)".

- The City has obtained funding for the installation of a handrail along the ALMT. The handrail will make the trail safer for public use and may deter users from leaving the trail and entering the site.

- The TAS desires to have the trail kept open with seasonal/periodic closures during the winter months, as well as the removal of the second bench and development of an additional beach access trail.

- In addition to the entrance, the lower portion of the trail is also not in its traditional path.

- Rerouting the lower portion of the trail to its traditional path is a desire of the TAS.

- Rerouting the lower portion of the trail is possible, however, the area is highly saturated and the bluff in this area is also failing. In addition, this route would require extensive armoring of the surface with rock and the need of a bridge structure approximately 30-40 feet in length. Therefore, the project is possible, but would be costly.

- After the storm events of January 2006 that washed away the lower portion of the trail, rerouting the trail to its traditional path was considered. However, due to the estimated cost, the current lower section of the trail was restored with cable and steps.

B. Wagner Street Trail

- The trail has been the subject of past litigation, but the parties have now entered into settlement agreements that establish a boundary between the trail and certain adjacent private property(s); acknowledge the City's right to maintain a three-foot-wide trail on its property and to maintain permanent vegetation on the bluff edge; prohibit dumping over the bluff; and reinforce the provisions of an earlier settlement agreement designating the ALMT as the primary trail to the beach.

- Under provisions of the earlier agreement, the Wagner Street Trail is to be open during daylight hours only, and no dogs are permitted.

- Per the terms of the litigation settlement agreement signed in April 2005 by the Coastal Conservancy, the City, and the TAS, "the Wagner Street Trail will remain open for public use during the Management Plan process, subject to temporary closures, if any, needed to carry out the revegetation described below if such closures are approved in a coastal development permit".

- Per the terms of the litigation settlement agreement signed in April 2005 by the Coastal Conservancy, the City, and the TAS, "the staff of the Coastal Conservancy agree to apply for a Coastal Development Permit to revegetate the bluff adjacent to Wagner Street Trail with native vegetation in a manner that does not impede use of the Trail or promote erosion of the bluff. Subject to the approval of a Coastal Development Permit and authorization by the Conservancy's governing board, the Conservancy will fund, and the parties will cooperate in, revegetation of the bluff area."

C. Parker Creek Trail

- There is interest by many parties in evaluating the feasibility of developing and enhancing Parker Creek Trail.. Many feel that the development of this trail should not, however, be a means of closing the Wagner Street Trail.

- A portion of the Parker Creek Trail easement and the physical location of the Parker Creek Trail do not coincide. The Conservancy holds a blanket easement over the TSA for public access purposes, but this easement does not apply to any portions of the trail that are not located on City property. Per Oscar Larson & Associates (OLA) map, all of Parker Creek Trail does not lie within City property or within the easement held by Conservancy There may be public prescriptive

rights over those segments of the trail, however, established over many years of use.

- OLA conducted title research to determine if there was documentation that would have corrected the trail easement location to align the legal description of the trail with the actual location of the trail. None exists. Therefore, - if deemed necessary - there needs to be a correction of the easement to cover the actual trail location.

10.2 Cultural Resources

- Tsurai and the surrounding area are components of the Yurok cultural landscape and include places of profound historical, cultural and spiritual significance to Yurok people. Tsurai Village and the surrounding Trinidad area are central to Yurok creation stories and oral histories and retain cultural significance to contemporary Yurok people.

- The Trinidad area has come to have historical, cultural, and recreational significance to local residents and the people of California.

- Tsurai Village and the cemetery are sacred sites that should be protected in accordance with existing local, state, and federal law, as applicable.

- Tsurai Village and associated landscape components, and traditional resource use areas are traditional cultural properties to the Tsurai Ancestral Society and the Yurok Tribe.

- Tsurai village and the surrounding lands that served as the home for many generations of Yurok people was never sold, ceded, or given away.

- Tsurai people never abandoned Tsurai village. Tsurai descendants continued to utilize and care for the site and the cemetery, even after the last resident had been removed from the village in 1916.

- For many years, the Tsurai Ancestral Society, led by Axel Lindgren II, cared for this site, often in defiance of cease and desist orders from the City.

- The village of Tsurai is listed in the California Inventory of Historic Paces as CA-HUM-169. It was placed on the California Inventory of Historic Places in 1969 as State Historic Landmark # 838 “Old Indian Village of Tsurai”.

- The state historical monument located on the bluff at the corner of Ocean and Edwards Streets was established in 1970 upon designation of the village as a State Historic Landmark.

- In 1977 the Tsurai village was nominated to the National Register of Historic Places as CA-HUM-169.

- Archeological deposits and human burials, exist throughout the TSA, and extend into areas beyond the TSA.

- Natural processes, particularly wave-action, have an on-going impact to the bluff and lower portion of the slope, resulting in erosion of cultural resources contained within the TSA. On-going coastal erosion of the site results in the exposure of archeological resources, requiring continual monitoring and reburial.

- No previous comprehensive cultural resources survey meeting current professional standards has been conducted for the entire TSA. Past cultural resources surveys of the area have been limited in scope and analysis, tending to be for small portions of the TSA. An initial cultural resources survey was conducted by the Yurok Tribe Environmental Program in 2006 and identified previously undocumented cultural resources throughout the TSA in addition to areas in need of protection and stabilization.

- Cultural resource concerns of the Tsurai Ancestral Society and the Yurok Tribe for the TSA are not limited to archeological resources, but include traditional resource use areas (kelp beds, sea stacks, beach, plant gathering areas, hunting places, etc…) as well as ceremonial areas and sacred places (i.e. Trinidad Head).

- Concerns about water quality, site damage, looting, and trail maintenance have been ongoing concerns for the Tsurai Ancestral Society for decades, and have compounded since the City acquired the TSA in 1989. These concerns are recorded in the record of City Council meetings, City Planning Commission meetings, and a large body of correspondence.

- Viewsheds are cultural resources and are well-documented components of Yurok ceremonial practice both from the bluff to the ocean and from the beach inland.

- Ceremonial activities and cultural uses of the TSA by the Tsurai Ancestral Society and the Yurok Tribe are not aspects of the past; they are vital components of a living culture.

- Human remains are repatriated under NAGPRA or California public resources code and are reburied within the TSA. .

- Access to and management of the TSA for contemporary cultural uses remain a primary concern for both the Tsurai Ancestral Society and the Yurok Tribe.

- The TAS has a desire to negotiate village site access from the current adjacent property owner(s) for the sole discretionary purposes of the TAS and the Yurok Tribe.

- The Yurok Tribe has the qualified technical staff, traditional knowledge, and a desire to manage and restore the cultural resources within TSA in ways that are consistent with existing resource protection laws, and traditional Yurok values.

- Both the City and the Yurok Tribe have police forces qualified to respond to reports of illegal intrusions into the TSA and can work with Yurok Tribal staff to protect resources. Additional training of officers will be required.

10.3 Natural Resources

- Archival research indicates that the TSA was once an open area, containing some old growth trees, a traditional plank-house village, and a historic village component of European-style houses in the mid-1800s.

- The current saturated and overgrown conditions of Tsurai Village and the TSA are not historic but are a result of management decisions by past and present landowners.

- Oral history and archival research indicate that the area was once managed and maintained by Tsurai Village residents, possibly through prescribed burning (a traditional Yurok practice), resulting in the open, park-like quality of the Village and surrounding area.

- Water quality issues need to be investigated to identify potential causes, sources, and impacts in order to identify appropriate mitigation measures for protecting terrestrial, coastal, and marine resources in addition to public health.

- The City recently received an Onsite Wastewater Treatment System grant from the State Water Resources Control Board in order to create an inventory, assessment, and database of all septic systems within the City.

- Fecal coliform has been detected in Parker, Pepperwood, and Alder Creeks. The source of the fecal coliform is not yet known and needs to be identified.

- The City is conducting a water-quality monitoring program and intends to collect data and samples from streams flowing through the TSA in order to identify the scope and scale of water quality problems with the intent of identifying potential problems and sources for remediation.

- The kelp beds in Trinidad Bay are designated as an Area of Special Biological Significance, now designated a Critical Coastal Area (CCA). Contaminate discharge into Trinidad Bay that has the potential to threaten or endanger this protected and fragile ecosystem is prohibited under State water quality standards.

- The natural hydrology of Parker Creek has been significantly altered and it is now considered an “urban stream”. Restoring the lower portion of the Creek,

particularly the natural drainage system, would allow for anadromous fish to return to the stream, and could reduce the saturation of the village site, and erosion along the beach.

- The LACO (2004) study indicates that the increase in hardscaped (paved) areas within the City, as a result of urban development, has increased the volume of water directed over the bluff and discharged through these creeks, which in turn has increased the in-stream flow of these creeks, particularly Alder and Pepperwood Creeks.

- The local population of *Aplodontia* (Mountain Beaver) that are perceived to be contributing to site damage are not the same subspecies that are listed as threatened or endangered under the federal or California Endangered Species Act (ESA).

- The Yurok Tribe Environmental Program has conducted an initial environmental assessment under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) for the 12.5-acre TSA. These initial environmental assessment checklists are included, as well as summarized in Appendix E.

- Any future environmental management action or projects within the TSA may require further review under CEQA or NEPA.

10.4 Geomorphic Conditions

Several geo-technical studies have been conducted in an effort to identify the causes of erosion and potential for bluff failure, the latest being the study prepared by LACO and Associates (2004) (See Appendix F). The LACO report states that human weight (hikers) was an insignificant contribution to bluff failure.

> Nonetheless, the practice of siting a pedestrian trail along the outboard edge of a coastal bluff is generally ill advised due to the resulting soil compaction and the creation of bare soil areas, an increase in uncontrolled surface run-off over the bluff edge, and the required vegetation removal necessary to maintain the trail resulting in decreased root strength, and hence soil destabilization" (LACO 2004:18)

The LACO study recommendations are based upon subsurface extrapolations of surficial observations from numerous site visits to the TSA by qualified LACO geo-technical staff. A field visit with LACO to the TSA in January 2005 did confirm many of the observations and impacts detailed in the LACO (2004) report. The study serves as the only technical report focused on synthesizing past geo-technical studies, conducted for specific portions of the TSA and surrounding areas, and presenting that synthesis in conjunction with recent field observations by a qualified expert. Key findings and recommendations from the LACO report are summarized below (LACO 2004:19-22).

- The location of Tsurai Village along the mid-to-lower slope of an actively retreating coastline makes is particularly prone to slope instabilities exacerbated by poor land use management practices.

- Surface drainage and run-off emanating from neighboring and bluff top residences is the single greatest factor affecting slope stability at the site.

- During LACO's field investigation, several locations were identified where discharge of surface run-off is directly affecting Tsurai Village in an adverse manner.

- Uncontrolled surface run-off is easily mitigated with the emplacement of drainage collection structures, tightlines, and properly located points of discharge.

- An in-board ditch located on the lower driveway of an adjacent residence (APN 042-131-007) is directing significant volumes of surface run-off directly onto the village grounds. The construction of a drop inlet that delivers run-off back into Parker Creek is recommended to resolve this problem.

- Surface run-off collected from roofs, driveways, and patios of the local bluff top residences, and hardscaped areas does not appear to be routed to an appropriate drainage system, but rather discharges directly onto the bluff above the village. A collection and delivery system for this run-off should be constructed to route run-off into the City's existing storm drain network.

- The current access to the ALMT is sited on failing, sidecast fill material along the southwest corner of the Memorial Lighthouse grounds. The report recommends this access and fill be removed and the original access restored.

- A handrail should be installed on the ALMT to provide safer trail usage and direct pedestrian traffic. (The City will be installing the handrail during summer 2007.)

- Non-native vegetation and downed trees in and around Tsurai Village should be removed. Treated areas that leave exposed soils should be reseeded with native grass and/or shrubs.

- Vegetation should remain on slopes surrounding the village in order to provide soil root strength and slope stabilization.

- Woody debris observed in stream channels has resulted in the diversion of water onto the village site and cemetery (LACO 2004:20). Removing some of the woody debris from stream channels within the TSA may be beneficial, but some should remain to provide habitat for aquatic species.

- Trails that access the Tsurai Village site should be constructed with a layer of filter fabric or weed map and overlain with crushed base rock or wood chips.

They should be designed (crowned) to promote drainage of surface water towards the edges of the trail. Interlocking trail steps (cable-tie) similar to those in the ALMT should be placed where the pathways traverse steep sections of slope.

- Erosion control measures such as rock lined ditched, energy dissipaters at discharge points, and vegetative ground cover should be used wherever surface run-off has the potential to cause riling and gullying.

- Protective fencing with a low visual impact, such as redwood split rail, should be installed around Tsurai Village, the cemetery, and other sensitive areas to limit access and foot traffic.

- The practice of dumping yard waste, brush, and woody debris on the slopes of the bluff, particularly above Tsurai Village, should be stopped. Continual disposal of vegetation increases soil moisture, adds unnecessary overburden to the slopes, produces anaerobic soil conditions, and contributes to the invasion of non-native plant species, which have a tendency to out-compete native flora.

- Topping, girdling, and cutting down of trees on the steep slopes of Tsurai Village should not continue. Existing trees on the steeply sloped areas of the TSA provide a stabilizing effect resulting from root strength and rain interception by the canopy.

- The planting of native shrubs on the outboard edge of the Wagner Street Trail will provide stabilization and help control surface run-off.

- A robust monitoring program for the TSA should be established to identify sources of run-off and stream discharge, and sources of fecal coliform detected in streams within the TSA. The City of Trinidad should investigate the construction of a sanitary sewer system and wastewater treatment plant and implement a septic system testing/monitoring program for existing septic systems. Assessing and preliminary monitoring of the City's existing septic systems has commenced under an Onsite Wastewater Treatment grant.

- The on-going erosion of the toe of the bluff at the beach is not easily resolved. Riprap constructions are costly and unsightly and do not hold much promise to slow erosion. An alternative may be the installation of redwood log cribbing at specific locations where erosion of cultural resources is occurring.

10.5 Consultation Protocol

- The rights, roles, and responsibilities of the public, adjacent landowners, the City, TAS, the Yurok Tribe, and the Coastal Conservancy need to be clearly identified for TSA management purposes.

- The Coastal Conservancy holds the conservation easement for all cultural, natural, and recreational resources contained within the TSA.

- The City is the current landowner.

- The TAS has the right of consultation per Policy 69 of the City's General Plan.

- The Yurok Tribe, as a federally recognized tribal government, has rights of consultation as the primary culturally affiliated Tribe.

- The existing protocol for consultation, decision-making, and implementation activities within the TSA (Policy 69) is vague and ill-defined.

- Policy 69 needs to be improved and amended to include all members of the Management Team.

- Improving Policy 69 and the consultation protocol for management decisions within the TSA will help mediate issues that have led to conflict between various parties in the past.

10.6 Ownership

- The Yurok people never sold, ceded, or traded Tsurai or surrounding land.

- Tsurai and the surrounding land were claimed by the Spanish, in the name of the King and Queen of Spain in 1775.

- In 1850, non-Indian settlers, Robert A. Parker and Warner claimed the land from the water of Trinidad Bay to approximately one-mile inland, which included the village of Tsurai for the purposes of settlement, cultivation, and improvement.

- As early as 1920, the Little River Lumber Company and Hammond Lumber had fee title to the land concerning the TSA.

- The land was then parceled and separately purchased by Frank Langford (possibly 1912), Georgia Pacific and Neva Hallmark (1944), and Carl Langford (year unknown, but prior to 1920).

- In 1916, the last remaining Yurok resident of Tsurai was forcibly removed from the village.

- Axel Lindgren II leased a portion of the TSA from Hammond Lumber Company and Carl Langford in 1920.

- Carl Langford sold his parcel of land within the TSA to Ray and Isabelle Walker in 1947.

- Georgia Pacific Lumber Company and Neva Hallmark sold their parcels in 1966 to Ray and Isabelle Walker.

- Ray and Isabelle Walker then sold two of their three parcels to Rapose in 1968 and Belcher Abstract and Title Company in 1966.

- Rapose sold then divided the land into two parcels, keeping one and selling the other to Ertel in 1973.

- Belcher Abstract and Title Company divided their land into three parcels, each were sold on October 21, 1966 to Iverson, Groth, and Nash.

- The parcels comprising the 12.5-acre TSA remained in private ownership until 1978 when the California Coastal Conservancy acquired these parcels under Division 21 of the Public Resources Code.

- The TSA was acquired by the City of Trinidad in 1989 with funds provided by the California Coastal Conservancy from the Environmental License Plate Fund.

- The Coastal Conservancy retained and currently holds a conservation easement for providing coastal access and protecting the natural and cultural resources within the TSA.

- The City of Trinidad is the current owner of the entire TSA and as such is responsible for management and maintenance decisions and activities within the TSA.

- The TAS would like the entire TSA to be transferred to the Yurok Tribe.

- The Yurok Tribe has expressed a willingness to accept the transfer of ownership, if so determined as a result of negotiations.

- There is strong public support for the transfer of the TSA to the Yurok Tribe.

- Per the terms of the litigation settlement agreement signed by the Coastal Conservancy, the City, and the TAS in April 2005 transfer of City property to the Yurok Tribe is as follows:

> If the City, Conservancy, and the Yurok Tribe should agree to transfer a portion of City Property to the Yurok Tribe, the Parties agree to cooperate in effectuating said transfer, provided that the transfer is upon the following terms:
>
> a) Consistent with Government Code sections 37351, the City shall retain the beach and waterfront areas of the City Property subject to

the existing Conservancy easements. The City shall apply for and diligently seek a coastal development permit from both the City and the Commission, and any other necessary approvals including all applicable provisions of City ordinances, including General Plan Policy 69, to effect any division of this land.

b) Any transfer of title to the remaining area of the City property to the Yurok Tribe shall be subject to the Conservancy's existing easements for Native American and natural resources, open space, and public access, as designated in the final, approved Management Plan and/or as required as conditions of approval of a coastal development permit for the division of City Property provided for above. As a condition of any transfer, as covenants running with the land transferred to the Yurok Tribe, the Yurok Tribe shall agree to hold and manage the property transferred as provided in the final, approved Management Plan, and shall waive its sovereign immunity as to the City, Commission, and Conservancy with respect to enforcement of the easements on the property and the terms of the transfer agreement, as outlined in the transfer agreement.

c) The transfer of the property from the City to the Yurok Tribe shall also be subject to the following conditions:

i) the City, Commission, and Conservancy shall have obtained a final judgment in all litigation currently pending with John Frame over the Wagner Street Trail to which they are parties;

ii) the City, Commission, Conservancy, Tsurai, and the Yurok Tribe have all approved the Management Plan and/or approved all applicable permits necessary for the Management Plan;

iii) the Commission shall have approved a Coastal Development Permit for subdivision of the beach portion of the City Property, retained by the City, from the remainder of the City Property to be transferred to the Yurok Tribe; and

iv) the governing bodies of the City, the Conservancy, and the Yurok Tribe shall have duly authorized the transfer in accordance with the provisions of this Agreement and other applicable provisions of law.

- Government Code Section 37351 limits a City's ability to transfer waterfront areas except to the State for park purposes, unless a 4/5 vote by the city council determines that the property in question is not suitable for park or recreational use.

Part 11: Recommendations

The following section provides the recommendations for projects and actions regarding the TSA as a result of the Findings discussed previously (See Section 10). These recommendations will be reviewed and discussed by the Management Team. From this discussion, specific recommendations will be agreed upon and selected for implementation. Although it is understood that consensus among the Team is ideal, consensus is not always feasible. Therefore, determinations of implementation should be focused on what is best for the entire TSA, including protection of the recreational, cultural, and natural resources contained therein.

Key recomendations from the Management Team include:

- Installation of a handrail on the Axel Lindgren Memorial Trail to provide safer use of this primary beach access trail by the public;

- Development and installation of signs throughout the TSA to direct user traffic and protect environmental and cultural resources contained therein;

- Analysis and mitigation of the run off and saturation issues that are impacting the Tsurai Village site;

- Completion of a comprehensive botanical and vegetation survey of the TSA with recommendations for select vegetation removal to improve site conditions and assist in the removal of invasive species;

- Development of a Vegetation Management Plan with a protocol for reviewing and making decisions on management of vegetation within the TSA; and

- Continued collaboration between the Coastal Conservancy, City, Tsurai Ancestral Society, and Yurok Tribe on the future management of the TSA via the continuation of the Tsurai Management Team through implementation of the Management Plan.

11.1 Recreational Resources

The following are management recommendations for all trails within the TSA:

- The Coastal Conservancy's conservation and access easements over the entire TSA need to be clarified as to specific purpose, intent, and where appropriate, location.

- A trail monitoring and maintenance schedule should be devised and adhered to for each trail within the TSA by the property owner. The property owner should be the designated caretaker responsible to maintain all trails, including, but not

restricted to mowing, annual repairs to prevent riling and gullying, and other annual repairs as necessary.

- Efforts should be take to coordinate with the Humboldt North Coast Land Trust for maintenance of the trails over which they hold easements.

- Trail management decisions and schedule will continue to require consultation under Policy 69, unless the policy is revoked.

- Permanent or temporary trail closure may be considered if a trail becomes unsafe for public use.

- A comprehensive signage plan should be designed and developed for trails within the TSA to inform users on the degree of difficulty, direction of pedestrian traffic flow, interpretation of history and place, pertinent rules and regulations, and appropriate use of certain trails. A 1994 litigation settlement requires that the ALMT be designated as a primary beach access trail and other trails as secondary.

A. Axel Lindgren Memorial Trail (ALMT)

- The ALMT should be managed as a Traditional Cultural Property, an established historic property type under the National Historic Preservation Act.

- The ALMT should continue to be designated as the primary beach access trail according to settlement discussed at 10.1(B).

- The ALMT should be continually monitored and seasonally maintained , particularly after winter storm events, by the property owner when necessary.

- The Trinidad Civic Club should be contacted to proceed with negotiations to remove the fencing at the top of the trail that is altering the traditional entrance so that the traditional entrance may be restored for public use.

- The City should proceed with the installation of a handrail along the entire trail. .

- The second bench on the trail should be removed to deter misuse or impact to resources. The second bench should be removed and an alternative location explored as the handrail project is implemented.

- If funding is sought and found, the lower portion of the trail should be considered for rerouting into its traditional path.

- If the lower portion is rerouted, the current lower section should be decommissioned and returned to a natural state.

- Any construction for stabilizing the trail should be as natural and unobtrusive as possible, complementing the immediate surroundings.

B. Wagner Street Trail

- The requirements set forth in the settlement agreements in regard to this trail shall be maintained, including the establishment of a boundary between the trail and certain adjacent private property(s); the right of the TSA property owner to maintain a three-foot wide trail within the TSA boundaries and maintain permanent vegetation on the bluff edge; and prohibit dumping over the bluff.

- The provisions set forth in an earlier settlement agreement shall be maintained, including the designation of the ALMT as the primary beach access trail, that the trail remain open only during daylight hours, and that no dogs be permitted on the trail.

- Periodic closure of this trail may be necessary for repairs and maintenance.

C. Parker Creek Trail

- A feasibility study should be conducted to evaluate developing and enhancing the Parker Creek Trail. This may include the creation of an access route from Scenic Drive and/or formal route from the City and/or creation of an ADA-accessible riparian interpretive segment along the upper portion of Parker Creek.

- Public use easements should be pursued for those small segments of the trail that do not align with the legal description of current trail easements. As the public agency mandated with ensuring public access, the Conservancy should take the lead and make efforts to pursue public use easements.

11.2 Cultural Resources

- The TSA must be protected in accordance with existing local, state, and federal law, as applicable (See Appendix A).

- Vegetation management of the site should include management of cultural resources.

- A site-monitoring program should be developed in order to monitor, document, and deter site damage, erosion of cultural resources, and possible looting. The Yurok Tribe and the Tsurai Ancestral Society should lead the development of this program.

- Any reburials of cultural resources or human remains shall be led by the Tsurai Ancestral Society and the Yurok Tribe and should be kept confidential.

- Access to and management of the TSA for contemporary cultural uses by the Tsurai Ancestral Society and the Yurok Tribe should be respectfully acknowledged by the property owner and kept confidential by the TAS or the Tribe if desired.

- The TSA should approach the adjacent property owner(s) to negotiate the possibility of a formal agreement through their properties for Village site access by TAS.

- With the qualified technical capacity, traditional knowledge, and the desire to manage and restore the cultural resources within the TSA, the Yurok Tribe should be given the lead on cultural resources management, in conjunction with the Tsurai Ancestral Society.

- Both City and Yurok Tribal Police Forces should attend training(s) on cultural resources management law, as it relates to protection of the site, as well as protocol for inadvertent discoveries and illegal looting activities.

- The name "Indian Beach" should be redesignated as "Old Home Beach" and all signs and references should be changed accordingly.

- Cultural resources management decisions should reflect long-term cultural site restoration and use.

- The Yurok Tribe and the TAS should be given the lead in the management of cultural resources within the TSA.

11.3 Natural Resources

- Once the City completes its Onsite Wastewater Treatment System grant inventory and creates a database of all septic systems within the City, those results should be shared with the Management Team.

- If the City determines the source of fecal coliform detected in Parker, Pepperwood, and Alder Creeks, those findings should be shared with the Management Team.

- Once the City has completed its water quality-monitoring program, which includes collecting samples from streams flowing through the TSA, those findings should be presented to the Management Team.

- The property owner should continue to monitor possible contamination of the streams traversing the TSA into the protected Trinidad Bay, until the State water quality standards for this Critical Coastal Area are met.

- Mitigation measures should be taken to redirect the water flowing into the site through the inboard ditch.

- A proper drainage system along Parker Creek Trail should be installed in order to redirect runoff back into Parker Creek and restore the natural hydrology of the watershed, as well as divert water away from, rather than into, the village site.

- A screen or other such mechanism should be installed over the large culvert opening where Parker Creek flows under Groth Lane.

- The Parker Creek outlet pipe onto the beach should be redesigned according to current regulations in order to minimize the undercutting erosion that is occurring, and possibly allow for anadromous fish to return to the stream.

- A collection and delivery system for surface water runoff should be constructed to route runoff into the city's existing storm drain network. The City should seek funding to resolve this issue.

- The local population of *Aplodontia* should be left undisturbed at this time. The actual impact this species is having through bioturbation to the village site and cultural resources is undetermined and should be assessed by a qualified biologist. If the species if found to be a habitual and destructive animal to these resources, then removal should be considered.

- A comprehensive vegetation management study for the TSA should be conducted by a qualified professional and should include site specific recommendations for restoring the native ecology and developing a non-destructive selective vegetation management protocol for the entire TSA.

- Vegetation management should be consistent with cultural, natural, and recreational resources. Focus should be on site, bluff, and trail stability, as well as protection of cultural resources.

- Vegetation management decisions for the TSA will be reviewed and determined by consensus by representatives of the Tsurai Management Team.

- Some of the woody debris observed in stream channels resulting in water diversion onto the village site should be removed. However, some should remain in order to provide habitat for aquatic species.

- The practice of dumping yard waste, brush, and woody debris on the slopes of the bluff must be stopped.

11.4 Consultation

- Policy 69 should be amended to include consultation with the Yurok Tribe and cover the entire TSA.

- Any amendment to the City's General Plan must be consistent with the requirements of California SB 18 (2004). (See Appendix A).

11.5 Ownership

- Steps should be taken to transfer allowable portions of the 12.5 acre TSA to the Yurok Tribe consistent will applicable law and the terms of the settlement agreement signed by the City, the Coastal Conservancy, and the Tsurai Ancestral Society in April 2005.

12.0 Proposed Projects and Implementation

Implementation of the Tsurai Management Plan requires that funding be secured to conduct necessary studies and develop and implement specific projects to meet the goals of protecting and preserving significant cultural, natural, and recreational resources within the TSA. Some or all of the proposed project will require detailed environmental review under the California Environmental Quality Act (CEQA), or possibly the National Environmental Policy Act (NEPA) depending on project scope, funding source, and ownership status. Other projects may be exempt from CEQA review and therefore more readily implemented. Many projects will require issuance of a Coastal Development Permit, or other permits, prior to implementation, and therefore would require a longer timeline to implement. The projected costs associated with implementing each project are difficult to estimate and would require detailed scopes of work be developed, cost estimates obtained for all related tasks and will need to reflect availability (or lack thereof) of funding from a variety of funding sources which will vary depending on ownership of the TSA. Cost estimates provided in this section were based upon cost estimates at the time the Plan was completed. Projects presented without costs attached include a list of steps that would require funding in order to complete. The order of projects and implementation are presented here, not in order of priority, but consistent with the formatting of the rest of the document in its presentation of recreational, cultural, and natural resources in previous sections.

Key recommendations from the Management Team include:

- Installation of a handrail on the Axel Lindgren Memorial Trail to provide safer use of this primary beach access trail by the public;

- Development and installation of signs throughout the TSA to direct user traffic and protect environmental and cultural resources contained therein;

- Analysis and mitigation of the run off and saturation issues that are impacting the Tsurai Village site;

- Completion of a comprehensive botanical and vegetation survey of the TSA with recommendations for select vegetation removal to improve site conditions and assist in the removal of invasive species;

- Development of a Vegetation Management Plan with a protocol for reviewing and making decisions on management of vegetation within the TSA; and

- Continued collaboration between the Coastal Conservancy, City, Tsurai Ancestral Society, and Yurok Tribe on the future management of the TSA via the continuation of the Tsurai Management Team through implementation of the Management Plan.

12.1 Consultation/Notification

12.1.1 Revise Policy 69 in City's General Plan to add the Yurok Tribe and Coastal Conservancy to list of notified entities.

12.2 Recreations Resources: Trails and Access

Implementation projects intended to improve, enhance, and maintain access to public trails that provide beach access.

12.2.1 Install handrail on ALMT and remove/relocate lower trail benches.

Steps:

- Complete design of railing and evaluate potential bench locations.
- Complete CEQA compliance.
- Obtain permits, as necessary.
- Install railing.
- Remove or relocate bench(es).

Timeline – 9 months

Approximate cost:	City funds for materials and staff	$18,000
	Yurok cultural monitoring	$ 3,000
Funding source:	Park Bond Funds	

12.2.1 Re-establish traditional entrance to ALMT at top of trail.

Steps

- Reinitiate discussions with Civic Club to open fencing to allow passage across lighthouse grounds.
- Engineering evaluation of stability of, and recommendations for, western approach (ramps) to trail.
- Obtain Coastal Development Permit, if necessary, to open fencing.
- Open traditional entrance to ALMT.

Timeline – 1 – 2 years

Costs to be considered:

- Permitting fees.
- Engineering evaluation of western approach (ramp).
- Follow-up activities to engineering evaluation.

12.2.2 Conduct annual maintenance of lower portion of ALMT.

Steps

- Complete post-winter evaluation of trail conditions.
- Repair trail/steps, as needed.

Timeline – Annually in Spring.

Costs to be considered:

- City staff time
- Yurok staff time.
- Cultural monitoring
- Materials and supplies
- Repair labor

12.2.3 Develop Sign Plan and Signs/Interpretive Information.

Steps

- Develop signage that notifies recreational users of existing state codes that protect cultural resources within the TSA.
- Establish/name ALMT as primary trail, others as secondary/alternate.
- Signs/markers to name and indicate difficulty/length of trails.
- Interpretive (single location) sign for trails, cultural resources, and history of site.
- Publish pamphlets with trail information and local history.

12.2.4 Improve Parker Creek Trail

Steps

- Establish route from town to join Parker Creek Trail at its eastern junction with Old Wagon Road Trail (Wagner Street Trail).
- Develop new portion of Parker Creek Trail from its junction with Old Wagon Road Trail (Wagner Street Trail) northward along riparian corridor. Effort should include evaluation of feasibility of establishing new segment as designed for ADA-compliance, and development of riparian habitat interpretive signs.
- Evaluate impacts of current hydrology regime on trail (see Natural Resources, section 12.4.2).
- Secure proper trail easement alignments along lower portion of trail.

12.2.5 Develop trail maintenance program

Steps

- Conduct annual post-winter evaluation of trail conditions throughout the TSA.
- Create a post-disturbance (e.g., landslide) action plan for unplanned events.
- Selective vegetation control to keep trails clear and accessible.
- Conduct a safety review of trails with recommendations for improvements.
- Evaluate appropriate uses of existing trails and where possible, enhance visitor use and access.
- Repair and replace signs, as needed.

12.3 Cultural Resources

Implementation projects intended to protect and restore the cultural resources contained within the TSA.

12.3.1 Develop site-specific cultural resources management plan with specific recommendations and action plan for long-term restoration and management.

Estimated Cost: $50,000

12.3.2 Develop public awareness information regarding significance of site, appropriate signage and protective measures.
Estimated Cost: $5,000

12.3.3 Examine feasibility of restoring (partially or fully) village site conditions to enable reinstating traditional ceremonies/uses.

12.3.4 Work with City of Trinidad for training police staff in protection of cultural resources, and responding to incidents with cultural resources (e.g., looting, erosion/exposure of artifacts/remains)

12.4 Natural Resources

Implementation projects in this section are intended to improve, enhance, protect, and restore the natural resources within the TSA.

12.4.1 Mitigate and stop run off onto Tsurai Village site.
Steps

- Assess and evaluated causes of saturation and runoff.
- Develop a plan for mitigation of the problem,
- Install culverts along Parker Creek Trail to redirect Parker Creek flow away from in-board ditch on adjacent private property and return it to its natural flow pattern/path (e.g., to ocean).
- Redirect site run-on from adjacent private property to Parker Creek.

12.4.2 Restore natural vegetation and remove overgrowth and invasive species.
Steps:

- Introduce native plants/grasses along bluff and trail above the village site.
- Conduct a comprehensive vegetation management study for entire TSA with recommendations for future management.
- Identify and remove invasive species and overgrowth on the TSA using culturally appropriate methods.
- Identify vegetation for removal using sound science, site protection, and ecological restoration as the primary determinants of vegetation removal.
- Reintroduce and enhance habitat for native plant species.

12.4.3 Reduce waste and storm water run-on to village site.
Steps

- Develop and implement measures to eliminate discharge of city run-off (storm water and septic) onto and across the site and into Trinidad Bay.
- Review schematic of City's storm water system to identify tie-in points for diverting storm water.
- Evaluate city septic system to determine adequacy and potential seeping to groundwater that discharge onto the site.

- Improve septic / sewer systems throughout the City.

12.4.4 Conduct water quality assessment of onsite streams and seeps.

Steps

- Determine condition or presence of contamination, and if necessary, identify potential sources.
- Incorporate results and identify corrections in the City-wide water quality assessment program.

12.4.5 Assess impact to site resources / stability from resident population of *Aplodontia* (Mountain beaver). If warranted, conduct follow-up activities as appropriate.

Steps

- Contract a qualified biologist to conduct a field survey and impact study to determine if Aplodontia are having a significant adverse effect on the site and develop mitigation measures that may include removal and relocation of the species from the TSA.
  Estimated Cost: $10,000

12.5 Ownership

As a part of the discussion, revise the language of access and conservation easement held by Coastal Conservancy to more specifically address permitted and prohibited activities on the property for the purposes of protecting public access, and natural and cultural resources within the TSA.

Take steps to transfer allowable portions of the TSA to the Yurok Tribe and put that land into trust status through the Department of Interior, Bureau of Indian Affairs.

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Part 14: Appendices

APPENDIX A: Laws and Potential Applicability

The following section includes laws, codes, and/or regulations pertinent to the Tsurai Study Area (TSA). The laws were chosen through an exhaustive search, which included an online search on the websites maintained by the California State Coastal Conservancy, California Coastal Commission, California Department of Fish and Game, US Fish and Wildlife Service, USDA Forest Service, California Environmental Resources Evaluation System, the Federal Register, and the California Code. Purpose, jurisdictional authority, and general applicability determined the selection of specific sections of each law.

The laws are organized by power of jurisdiction beginning with Federal law, followed by California State law. Additionally, the laws have been organized to begin with environmental law, followed by law pertaining to cultural resource protection. Each law will include a section discussing the law and its general applicability. In addition, the reader will find a legal findings discussion specific for the TSA following the general legal discussion.

This section is for information purposes and should not be considered a legal interpretation, nor representative of the views of any of the parties included in the Management Team.

I. Federal Laws

1. Coastal Zone Management Act (CZMA)

A. The Law

The Coastal Zone Management Act became law on October 27, 1972 (PL 92-583, 16 U.S.C. 1451-1456) and has been amended eight times since. The purpose of the act is "to preserve, protect, develop, and where possible, to restore or enhance, the resources of the nation's coastal zone for this and succeeding generations" (16 U.S.C. 1452 Sec. 303 §§ 1). In order to accomplish this purpose, the responsibility of the federal government is "to encourage and assist the states to exercise effectively their responsibilities in the coastal zone through the development and implementation of management programs…(16 U.S.C. 1452 Sec. 303 §§ 2).

These management programs are required to support the ecological, cultural, historic, and aesthetic values of the coastal zone, as well as support the need for economic development (16 U.S.C. 1452 Sec. 303 §§ 2). In order to accomplish these requirements, the plans are to provide for:

- the protection of natural resources (16 U.S.C. 1452 Sec. 303 §§ 2 (a));
- to manage coastal development in a way that minimizes the loss of life and

> property (16 U.S.C. 1452 Sec. 303 §§ 2 (b)) and improves or safeguards the quality of coastal waters (16 U.S.C. 1452 Sec. 303 §§ 2 (c);

- to redevelop urban waterfronts and ports, to restore or preserve sensitive historic, cultural, or esthetic coastal features (16 U.S.C. 1452 Sec. 303 §§ 2 (f)); and

- to provide public access (16 U.S.C. 1452 Sec. 303 §§ 2 (e)).

After a State has created a management plan consistent with the purpose of this act and has included the necessary requirements (under 16 U.S.C. 1455 (d)), then it is submitted to the Secretary of Commerce for review and approval. The State has developed a management plan that is to be implemented through the Coastal Commission, Coastal Conservancy, and participating local governments. The City of Trinidad is such a local participating government that implements the Act through the City of Trinidad's Local Coastal Program.

B. General Applicability

This act applies to the "coastal zone," which is defined as any,

> coastal waters (including the lands therein and thereunder) and the adjacent shorelands (including the waters therein and thereunder), strongly influenced by each other and in proximity to the shorelines of the several coastal states, and included islands, transitional and intertidal areas, salt marshes, wetlands, and beaches…(16 U.S.C. 1453 Sec. 304 §§ 1).

The act goes on to define the coastal zone as extending,

> inland from the shorelines only to the extent necessary to control shorelands, the uses of which have a direct and significant impact on the coastal waters, and to control those geographical areas which are likely to be affected by vulnerable to sea level rise (16 U.S.C. 1453 Sec. 304 §§ 1).

2. Clean Water Act (CWA) (a.k.a. The Federal Water Pollution Control Act)

A. The Law

The purpose of the Clean Water Act (CWA) (33 U.S.C. 1251 Sec. 101-607), which originally passed in 1972, is to protect the quality of surface water. The goal of this act is to restore and maintain the chemical, physical, and biological integrity of the nation's waters (33 U.S.C. 1251 Sec. 101 (a)) so they may protect and support the "protection and propagation of fish, shellfish, and wildlife and provide for recreation in and on the water…(33 U.S.C. 1251 Sec. 101 §§ 2). In order to accomplish this goal, the CWA develops the implementation of programs focused on point source pollution, which in recent years has taken a more holistic watershed-based approach, in order to combat surface water pollution.

In order to implement programs, several steps must be taken.

- Water quality standards (WQS) consistent with the statutory goals of CWA must be established. The responsibility for establishing WQS is vested in the states and territories, however, the U.S. Environmental Protection Agency (EPA) must approve the standards adopted. In regards to tribes, the EPA must set WQS on Indian lands, as well as assign WQS authority to tribes. In order to be granted such authority, tribes must meet certain tests before assuming WQS programs.

- Once WQS have been established, then waterbodies are monitored to determine whether the WQS are being met.

    - Antidegradation programs are developed in order to maintain acceptable pollutant levels in these waterbodies. In addition, ambient monitoring is also conducted. States, tribes, and territories, as part of their WQS regulations, usually cover the antidegradation programs. Results of monitoring must be submitted by the proper state, tribe, or territory to the EPA and must be made available to the public.

- If a waterbody is determined to be impaired a 303(d) watershed planning and strategy is developed.

    - The most common strategy is the development of a Total Maximum Daily Load (TMDL), which is developed by the states, tribes, or territories and submitted to the EPA for approval. The TMDL determines what level of pollutant load, as well as the allocation of acceptable loads, would be consistent with meeting the WQS. Although the CWA provides no federal authority for requiring nonpoint sources to reduce their pollutant loadings, the Act does require states (and authorized tribes and territories) to develop TMDLs for waters where nonpoint sources are significant pollutant sources. These TMDLs do not create any federal regulatory authority, however, they become resourceful information.

In order to reduce pollutant loads deemed excessive, many strategies authorized by the CWA may be implemented, in addition to any other tools available from federal, state, and local governments and nongovernmental organizations.

- The National Pollutant Discharge Elimination System (NPDES) regulatory program: The CWA makes it illegal to discharge pollutants from a point source to the waters of the United States. Therefore, the NPDES requires that point sources must obtain a discharge permit, which may not exceed 5 years, from the proper governing authority (state, tribe, territory, or EPA), in order to set limits on the amount of certain pollutants that source can discharge at a particular time. If pollutant discharge levels are exceeded, then the responsible governing agency may enforce actions, such as injunction, fines, and imprisonment.

- Section 404 Program: Regulates the placement of dredged or fill material into waters of the United States. The primary component of concern here are wetlands, however, this strategy also may apply to intermittent streams, small perennial streams, rivers, lakes, bays, estuaries, and portions of the oceans. EPA and the U.S. Army Corps of Engineers jointly administer the permits with advisory concurrence from the U.S. Fish and Wildlife Service and the National Marine Fisheries Service. However, EPA can determine that Section 404 be handled by a state, tribe, or territory.

- Section 401(a): Requires that a federal agency must obtain from the state in which the proposed project is located, a certification that the discharge is consistent with the CWA, including attainment of applicable state ambient WQS before any permits may be issued.

- Section 319, Nonpoint Source Program: Nonpoint source pollution is the most significant source of pollution in the country. Since the CWA does not directly address nonpoint source pollutants this section provides funding opportunities to develop and implement management programs targeted at this source of pollution.

- Acquisition of funds provided in 1987 under the Clean Water State Revolving Fund (CWSRF). Under the CWSRF, EPA provides annual capitalization grants to states, which in turn provide low interest loans for a wide variety of water quality projects. Some funds are also provided to tribes and territories to be used as grants for municipal wastewater treatment projects.

Once strategies have been implemented and pollutants have been reduced, then only occasional monitoring is necessary. If strategies are unsuccessful, then other strategies are developed, implemented, and ambient monitoring continues until a strategy is found to be successful.

B. General Applicability

The Clean Water Act applies to "waters of the United States." As defined by the Act, these waters apply only to surface waters- rivers, streams, creeks, springs, lakes, estuaries, coastal waters, and wetlands. Not all surface waters are legally "waters of the United States," however, generally such waters include all interstate waters, intrastate waters used in interstate and/or foreign commerce and their tributaries, territorial seas at the cyclical high tide mark, and wetlands adjacent to each previous classification for delineation. Delineation of inclusive surface waters may be altered as new judicial findings are made and new regulations are issued. If so, the Act is modified in order to account for such alterations.

This Act does not deal directly with ground water or with water quantity issues. Rather, the Act deals with direct pollutant discharges into waterways, the finance of municipal wastewater treatment facilities, and the management of polluted runoff. This Act is primarily concerned with issues of point source pollution and does not directly address

nonpoint source pollution, except in the capacity of obtaining monitoring information. Point source pollution is defined as discrete conveyances, such as pipes or manmade ditches that discharge pollutants into waters of the United States. This includes not only discharges from municipal sewage plants and industrial facilities, but also collected storm drainage from urban areas, certain animal feedlots and fish farms, some types of ships, tanks trucks, offshore oil platforms, and collected runoff from many construction sites. Nonpoint source pollution is defined as pollution that comes from many diffuse sources. Nonpoint source pollution is caused by rainfall or snowmelt moving over and through the ground, which picks up and carries away natural and manmade pollutants, finally depositing them into waters of the United States. Loadings of pollutants from nonpoint sources enter waterbodies via sheet flow, rather than through a pipe, ditch, or other conveyance.

In California, the California Water Resources Control Board formulates and adopts state policy for water quality control in accordance with federal and state water quality laws. Beyond this, regional branches, cities, or counties may adopt more stringent regulations. The California Water Resources Control Board is also in charge of issuing the National Pollution Discharge Elimination System permits.

3. Antiquities Act and the California Coastal Monument Act (CCMA)

The Antiquities Act is the first federal legislation passed in 1906 for the express purpose of protecting and preserving the nation's cultural resources and provided for the creation of national monuments. Relevant sections for the creation of national monuments are cited below.

A. The Law

> Antiquities Act As Amended
> Proclamation of national monuments, reservation of lands, etc.
>
> The President of the United States is authorized, in his discretion, to declare by public proclamation historic landmarks, historic and pre-historic structures, and other objects of historic or scientific interest that are situated upon the lands owned or controlled by the Government of the United States to be national monuments, and may reserve as a part thereof parcels of land, the limits of which in all cases shall be confined to the smallest area compatible with proper care and management of the objects to be protected. When such objects are situated upon a tract covered by a bona fide unperfected claim or held in private ownership, the tract, or so much thereof as may be necessary for the proper care and management of the object, may be relinquished to the Government, and the Secretary of the Interior is hereby authorized to accept the relinquishment of such tracts in [sic]behalf of the Government of the United States (16 U.S.C.431 Sec. 2).

B. General Applicability

Under the authority of the Antiquities Act, the California Coastal National Monument (CCNM) was established by Presidential Proclamation on January 11, 2000. The CCNM is part of the National Landscape Conservation System and represents one of the most frequently views landscapes in the nation. The CCNM

> …consists of more than 20,000 rocks and small islands that spread along the entire length of the 1,100-mile California coastline, from Mexico to the Oregon border. The monument does not include any California's mainland but consists of 1,000 acres of rocks and islands that stand above mean high tide, within a vast 14,600-square-nautical-mile segment of the Pacific Ocean's continental shelf. Its unique location and physical conditions have created and irreplaceable array of fragile ecosystems and their component biological, physical, and cultural resources.
>
> The rocks and islands of the CCNM are public lands owned by the United States that are administered by the Secretary of the Interior through the Bureau of Land Management (BLM 2004).

The BLM has delegated the management of the CCNM to the California Department of Fish and Game for wildlife resources, with participation from the California Department of Parks and Recreation (BLM 2004). The California Department of Fish and Game designated the rocks and island within one-mile of the coast as the California Offshore Rocks and Pinnacles Ecological Reserve in 1988 (BLM 2004). This designation was made under California Code of Regulations, Title 14, Section 630 (BLM 2004).

4. National Endangered Species Act (ESA)

A. The Law

The Endangered Species Act was original passed in 1973 for the purpose of providing a

> means whereby the ecosystems upon which endangered species and threatened species depend may be conserved, to provide a program for the conservation of such endangered species and threatened species, and to take such steps as may be appropriate to achieve the purposes of the treaties and conventions set forth [previously]…(16 U.S.C. 1531 Sec. 2 (b)).

This purpose is to be implemented as policy by Congress in its authoritative direction of all Federal departments and agencies (16 U.S.C. 1531 Sec. 2 (c)). Moreover, the policy of Congress shall include the Federal cooperation with State and local agencies "to resolve water resource issues in concert with conservation of endangered species (16 U.S.C. 1531 Sec. 2 (2)).

Endangered and threatened species include any plant, fish, or wildlife deemed to be either endangered or threatened by the Secretary of the Interior, the Secretary of Commerce, or in regards to plant life, the Secretary of Agriculture. Once endangered and threatened species have been determined, a list is compiled and published in the Federal Register, which is reviewed and amended every five years. In addition, critical habitat is designated.

All endangered and threatened species may not be imported, exported, sold, bought, captured, transported, and otherwise be in the possession of an individual without the proper clearance granted under Sections 9 or 10 of the ESA. Severe civil and/or criminal penalties may be applicable if an individual is found to be in violation of the Act.

The development of implementation plans for the conservation and survival of endangered and/or threatened species is the responsibility of the Secretary of the Interior and the Secretary of Commerce. This includes programs of monitoring in cooperation with the states, recovery, and land acquisition.

B. General Applicability

The Endangered Species Act applies to any endangered or threatened plant, wildlife, or aquatic species. Endangered species are "any species which is in danger of extinction throughout all or a significant portion of its range…" excluding those species of the Class *Insecta*, which have been determined "to constitute a pest whose protection…would present an overwhelming and overriding risk to man" (16 U.S.C. 1531 Sec. 3 §§ 6). Threatened species "means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range" (16 U.S.C. 1531 Sec. 3 §§ 20).

Within the United States, the Secretary of the Interior and the Secretary of Commerce are authorized to cooperate with the states in order to ensure the adherence of this Act. Management agreements may be entered into between the State and the "Secretary for the administration and management of any area established for the conservation of endangered species or threatened species" (16 U.S.C. 1531 Sec. 6 (b)). In addition, a cooperative agreement can be reached between the Secretary and the State, which provides the proper State agencies the authority, to protect and conserve endangered and threatened species (16 U.S.C. 1531 Sec. 6 (c)). These agreements may include the federal allocation of funds to the State in order to run these conservation and protection programs (16 U.S.C. 1531 Sec. 6 (d)).

The list of endangered and/or threatened species is inclusive of the entire planet, therefore, the Act also includes the encouragement of foreign conservation programs. These efforts include entering into bilateral or multilateral agreements with foreign countries to provide for conservation, as well as the allocation of financial assistance for educational training of foreign personnel, research, and law enforcement (16 U.S.C. 1531 Sec. 8).

5. National Environmental Policy Act (NEPA)

A. The Law

The purpose of the National Environmental Policy Act (NEPA) (PL 91-190, 42 U.S.C. 4321 and 4331-4335) is to adopt a national policy focused on preventing and eliminating damage to the environment and biosphere, "to enrich the understanding of the ecological systems and natural resources important to the Nation; and to establish a council on Environmental Quality" (42 U.S.C. 4321 Sec. 2). This Act, which became law on January 1, 1970, takes into account the need to responsibly care for the environment, while continuing to "fulfill the social, economic, and other requirements of present and future generations of Americans" (42 U.S.C. 4331 Sec. 101 (a)). Such requirements include the preservation of historic, cultural, and natural heritage, as well as attaining the widest range of beneficial uses of the environment without degradation (42 U.S.C. 4331 Sec. 101 §§ b (4,3)).

B. General Applicability

This law applies whenever a federal project or a project on federal lands is undertaken. This law is applied by requiring the completion of Environmental Impact Statements (EIS). These Statements include:

- the environmental impact of the proposed action;
- any adverse environmental effects which cannot be avoided should the proposal be implemented;
- alternatives to the proposed action;
- the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity; and
- any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented (42 U.S.C. 4332 Sec. 102 (c)).

The EIS is to be done in consultation with the appropriate governmental agencies, such as the California Department of Fish and Game, the Federal Emergency Management Agency, and the State or Tribal Historic Preservation Officer. Once the EIS is completed then the most appropriate action is selected given the requirements of the Act.

6. National Historic Preservation Act (NHPA)

A. The Law

The National Historic Preservation Act (NHPA) (PL 89-665, 16 U.S.C. 470 et seq.) became law on October 15, 1966, but has been amended several times since. The

purpose of this procedural statute is to ensure the protection and preservation of the Nation's historic properties. Historic properties consist of objects, sites, buildings, structures, and districts. Moreover, Traditional Cultural Properties, a type of historic property, may be one or a combination of the other five types. However, for a property to be considered "historic" it must be at least fifty years old.

In order to protect and preserve the National historic properties, NHPA established the National Register of Historical Places, a listing of nominated historic properties, Traditional Cultural Properties, landmarks, or other properties by the Keeper of the National Register deemed to have historical significance by National Park Services. NHPA also established the Section 106 process, a procedural requirement that assesses federal undertakings affects on historic properties.

Moreover, NHPA:

- created an Advisory Council on Historic Preservation (ACHP), a federal agency with oversight of Section 106; establishes State Historic Preservation Officer (SHPO) responsibilities to protect historic properties throughout the State;

- allows Indian tribes the option of forming a Tribal Historic Preservation Office (THPO) in lieu of the SHPO;

- authorizes federal funding of historic preservation programs at the state and tribal levels;

- bestows Section 110 responsibilities on all federal agencies; and

- provides for the confidentiality of sensitive historic property information.

B. General Applicability

Section 106 applies in all federal undertakings and is regulated at 36 CFR Part 800. Regulations require that an Agency with a federal undertaking:

- establish an Area of Potential Effect (APE);

- consult with tribes on presence of historic properties within the APE;

- conduct archival, state and tribal preservation inventories, and National Register, requests as to the location of Historic Properties within or near the APE;

- determine and survey the APE in consultation with tribes;

- produce a professional report detailing the level of survey effort;

- determine eligibility of Historic Properties to the National Register;

- assess affects to any known historic properties;

- request the comment of the SHPO/THPO concerning the agencies determination and assessments;

- if, having determined a "no adverse affect' notify the ACHP;

- if having determined an "adverse affect" convene a group of interested parties and the SHPO/THPO (and invite the ACHP to participate) for the purposes of developing a Memorandum of Agreement (MOA) and Historic Preservation Management Plan that will address roles, responsibilities, and mitigations;

- a contract may be let to initiate an undertaking only after receiving concurring comments from a SHPO/THPO; or if upon receiving nonconcurring comment from a SHPO/THPO, secure the favorable, unfavorable or otherwise advisory comments from ACHP.

7. American Indian Religious Freedom Act (AIRFA)

A. The Law

The American Indian Religious Freedom Act (AIRFA) was passed on August 11, 1978 and has only been amended once (PL 95-341, 42 U.S.C. 1996 and 1996a). The purpose of this Act is to establish that the policy of the United States is

> to protect and preserve for American Indians their inherent right of freedom to believe, express, and exercise the traditional religions of the American Indian, Eskimo, Aleut, and Native Hawaiians, including but not limited to access to sites, use and possession of sacred objects, and the freedom to worship through ceremonials and traditional rites (42 U.S.C. 1996 Sec. 1).

Although the intent of this Act is admirable, it is purely a policy statement, therefore, one major flaw is that this Act does not create cause of action or judicially enforceable rights in favor of individual Indians (See *Attakai v. U.S.*, D.Ariz.1990, 746 F.Supp. 1395).

B. General Applicability

In order to reflect this purpose in federal policy, the Act requires that the Federal departments, agencies, and other entities responsible for administering relevant laws, reevaluate their policies and procedures by direction of the President and in consultation with Native American traditional religious leaders. Necessary changes should be made in order to "protect and preserve Native American religious cultural rights and practices" (42 U.S.C. 1996 Sec. 2).

8. Archaeological Resources Protection Act (ARPA)

A. The Law

The purpose of the Archaeological Resources Protection Act of 1979 (ARPA) (16 U.S.C. 470) is to ensure the protection of archeological resources on public and Indian lands. Archeological resources are "any material remains of past human life or activities which are of archaeological interest…"(16 U.S.C. 470bb Sec. 3 (1)). This may include pottery, rock paintings, graves, nonfossilized and fossilized paleontological specimens, and village sites. However, "[n]o item shall be treated as an archaeological resource under regulations…unless such item is at least 100 years of age" (16 U.S.C. 470bb Sec. 3 (1)).

This Act is concerned with the protection of archeological resources, therefore, the excavation, removal, or any other created damage without the proper permit will be found in violation of this Act and be subject to both criminal and civil penalties (16 U.S.C. 470ee Sec. 6, 16 U.S.C. 470ff Sec. 7). Key points of the Act are listed below.

- A permit may be obtained from the Federal land manager to any applicant who is qualified and planning an archaeological excavation for such activity and if the excavation is for the purpose of furthering archaeological knowledge in the public interest (16 U.S.C. 470cc Sec.4 (b)).

- Any archaeological resources that are excavated or removed, however, will remain the property of the United States (16 U.S.C. 470cc Sec. 4 (b) (3)).

- Nature and locational information of any archaeological resources found will remain confidential (16 U.S.C. 470hh Sec. 9).

- If the permit issued may result in any harm or destruction to any Indian religious or cultural site then, prior to issuing the permit, the Federal land manager must notify any Indian tribe, which may consider the site of cultural and/or religious significance (16 U.S.C. 470cc Sec. 4 (c)).

- If the archaeological site is on tribal land, then the permit may only be granted after obtaining consent form the Indian tribe or person owning or having jurisdiction over the land. In addition, any request from the tribe or individual must be included and adhered to, (16 U.S.C. 470cc Sec. 4 (4) (g) (2)) including any exchange or ultimate disposition of the resources (16 U.S.C. 470dd Sec. 5 (2)).

B. General Applicability

This Act applies only to archeological resources located on public and Indian lands. "Public lands," means lands owned and administered by the United States as part of the National Park system, the National Wildlife Refuge system, the National Forest system, all other lands held in fee by the United States, and lands under the jurisdiction of the

Smithsonian Institution (16 U.S.C. 470bb Sec. 3 (3)). "Indian lands," are all lands held in trust by the United States for any Indian tribe or person (16 U.S.C. 470bb Sec. 3 (5)).

Although a permit is required for most archeological excavation or removal, no permit shall be required for the excavation or removal by an Indian tribe or member located on Indian lands, except in the absence of tribal law regulating such activity (16 U.S.C. 470cc Sec. 4 §§ 4 (g)(1)).

9. Native American Graves Protection and Repatriation Act (NAGPRA)

A. The Law

The Native American Graves Protection and Repatriation Act (NAGPRA) (PL 101-601, 25 U.S.C. 3001 et seq.) was passed on November 16, 1990 for the purpose of providing guidelines to support the protection and repatriation of Native American remains, funerary objects, sacred objects, and other materials of cultural patrimony. Section 3 of the Act states that the "ownership or control of Native American cultural items which are excavated or discovered on Federal or tribal lands after November 16, 1990, shall be…" granted (with priority in order listed) to:

> (1) in the case of Native American human remains and associated funerary objects, in the lineal descendants of the Native American; or
>
> (2) in any case in which such lineal descendants cannot be ascertained, and in the case of unassociated funerary objects, sacred objects, and objects of cultural patrimony-
>
> > (A) in the Indian tribe or Native Hawaiian organization on whose tribal land such objects or remains were discovered;
> >
> > (B) in the Indian tribe or Native Hawaiian organization which has the closest cultural affiliation with such remains or objects and which, upon notice, states a claim for such remains or objects; or
> >
> > (C) if the cultural affiliation of the objects cannot be reasonably ascertained and if the objects were discovered on Federal lands that is recognized by a final judgment of the Indian Claims Commission or the United States Court of Claims as the aboriginal land of some Indian tribe-
> >
> > > (1) in the Indian tribe that is recognized as aboriginally occupying the area in which the objects were discovered, if upon notice, such tribe states a claim for such remains or objects, or
> > >
> > > (2) if it can be shown by a preponderance of the evidence that a different tribe has a stronger cultural relationship with the remains or objects than the tribe or organization specified in paragraph (1) (under subsection C), in the Indian tribe that has the strongest demonstrated relationship, if upon notice, such tribe states a claim for such remains or objects.

If the objects are not claimed, then the Secretary will consult with the Native American Graves Protection and Repatriation Review Committee, established under Section 8 of this Act, Native American groups, representatives of museums and the scientific community in order to establish the proper placement of the objects. In addition, if such items are intentionally removed, then they must be done so according to the Archaeological Resources Protection Act of 1979, which is described and discussed above.

This Act is not only concerned with the finding of Native American remains and other significant cultural items, but is also concerned with the repatriation of such objects that were taken prior to the establishment of NAGPRA. Section 5 and 6 requires that any federally funded museum or Federal agency that holds such items must make an inventory of those items, summarize the holdings, notify the appropriate Native American tribe or Native Hawaiian organization, and repatriate the remains or items where appropriate, which is regulated at 43 CFR part 10. Guidance is also provided for situations of inadvertent discovery and the illegal trafficking and sale of human remains.

B. General Applicability

NAGPRA applies to any Native American human remains, funerary objects, sacred objects, and other items of cultural patrimony that are found or located on federal or tribal land. This may include archeological sites, museums, and within federal agencies.

II. State Laws

1. California Coastal Act (CCA)

A. The Law

The California Coastal Act (CCA) (CA Pub. Res. Code Sec. 30000 et seq.) was enacted by the State Legislature in 1976 in a state response to the Federal Coastal Zone Management Act and in order to protect and preserve California's coastline. This includes:

- the protection and expansion of public access, restoration of environmentally sensitive habitats;
- protection of productive agricultural lands, commercial fisheries, and archeological resources;
- protection of scenic beauty;
- establishment of urban-rural boundaries to direct new housing and other development into areas with adequate services;

- expansion of existing industrial development in an environmentally sound manner; and

- the protection against loss of life and property.

This Act created a partnership between the State and local governments to manage, develop, and preserve resources along the coast through a planning and regulatory program. This was done through the development of the Coastal Commission and Local Coastal Programs (LCP).

The primary purpose of the Coastal Commission is to work with local governments to ensure that the policies of the Coastal Act are adhered to. In addition, the Commission is responsible for:

- issuing permits for new development on the immediate shoreline;

- hear appeals from permit decisions made by local governments;

- review all amendments to previously approved land use plans;

- review and act on all federal activities that affect coastal resources;

- periodically review each certified LCP;

- maintain a Coastal Resource Information Center;

- continue public education and involvement programs;

- issue permits for all offshore oil and gas development within the State's three-mile jurisdiction; and

- work with the state water quality control agencies to implement strategies to reduce pollution of coastal waters from nonpoint sources.

The LCPs are developed to carry out the partnership between the State and local governments and provide for local governments the responsibility of caring for their local coastlines. The fundamental components of a LCP are:

- to identify future developments;

- develop and implement a land-use plan; and

- determine the short and long-term conservation and use of coastal resources unique to that local area.

Once the Commission has approved a LCP, then the coastal permitting authority over most new development is transferred to the local government.

B. General Applicability

The California Coastal Act applies to the "coastal zone," which is defined as the "land and water area of the State of California from the Oregon border to the border of the Republic of Mexico" (CA Pub. Res. Code 30103(a)). In addition, all offshore islands, the land extending:

> inland to the first major ridgeline paralleling the sea or five miles from the mean high tide line of the sea, which ever is less, and in developed urban areas the zone generally extends inland less than 1,000 yards. The coastal zone does not include the area of jurisdiction of the San Francisco Bay Conservation and Development Commission…" (CA Pub. Res. Code 30103(a).

Permitting is necessary for any development in the coastal zone. Such permits may be acquired through the local government if they have been authorized by the Coastal Commission through the enactment of an approved LCP to issue certain permits. However, offshore oil permits and permits to develop on the immediate shoreline, defined as tidelands, submerged lands, and public trust lands remain the responsibility of the Commission. Many types of developments are exempt from the permitting process. This may include most repairs and improvements to a single-family home and the replacement of any structure destroyed by natural disaster.

2. California Marine Life Protection Act (MLPA)

A. The Law

> The 1999 Marine Life Protection Act (MLPA) mandated that the state design and manage an improved network of marine protected areas to, among other things, protect marine life and habitats, marine ecosystems, and marine natural heritage. Marine protected areas include marine reserves, marine parks and marine conservation areas (California Department of Fish and Game 2004).

The act outlines the creation of a commission that will adopt a master plan that guides the adoption and implementation of the Marine Life Protection Program.

The MLPA is cited in the California Fish & Game Code §§ 2850-2863. Relevant sections are listed below.

> § 2851. Legislative Findings
>
> The Legislature finds and declares all of the following:

(a) California's marine protected areas (MPAs) were established on a piecemeal basis rather than according to a coherent plan and sound scientific guidelines. Many of these MPAs lack clearly defined purposes, effective management measures and enforcement. As a result, the array of MPAs creates the illusion of protection while falling far short of its potential to protect and conserve living marine life and habitat.

(b) California's extraordinary marine biological diversity is a vital asset to the state and nation. The diversity of species and ecosystems found in the state's ocean waters is important to public health and well-being, ecological health, and ocean-dependent industry.

(c) Coastal development, water pollution, and other human activities threaten the health of marine habitat and the biological diversity found in California's ocean waters. New technologies and demands have encouraged the expansion of fishing and other activities to formerly inaccessible marine areas that once recharged nearby fisheries. As a result, ecosystems throughout the state's ocean waters are being altered, often at a rapid rate.

(d) Fish and other sea life are a sustainable resource, and fishing is an important community asset. MPAs and sound fishery management are complementary components of a comprehensive effort to sustain marine habitats and fisheries.

(e) Understanding of the impacts of human activities and the processes required to sustain the abundance and diversity of marine life is limited. The designation of certain areas as sea life reserves can help expand our knowledge by providing baseline information and improving our understanding of ecosystems where minimal disturbance occurs.

(f) Marine life reserves are an essential element of an MPA system because they protect habitat and ecosystems, conserve biological diversity, provide a sanctuary for fish and other sea life, enhance recreational and educational opportunities, provide a reference point against which scientists can measure changes elsewhere in the marine environment, and may help rebuild depleted fisheries.

(g) Despite the demonstrated value of marine life reserves, only 14 of the 220,000 square miles of combined state and federal ocean water off California, or six-thousandths of 1 percent, are set aside as genuine no take areas.

(h) For all of the above reasons, it is necessary to modify the existing collection of MPAs to ensure that they are designed and managed according to clear, conservation-based goals and guidelines that take full advantage of the multiple benefits that can be derived from the establishment of marine life reserves.

§ 2853. Program Goals

(a) The Legislature finds and declares that there is a need to reexamine and redesign California's MPA system to increase its coherence and its effectiveness at protecting the state's marine life, habitat, and ecosystems.

(b) To improve the design and management of that system, the commission, pursuant to Section 2859, shall adopt a Marine Life Protection Program, which shall have all of the following goals:

(1) To protect the natural diversity and abundance of marine life, and the structure, function, and integrity of marine ecosystems.

(2) To help sustain, conserve, and protect marine life populations, including those of economic value, and rebuild those that are depleted.

(3) To improve recreational, educational, and study opportunities provided by marine ecosystems that are subject to minimal human disturbance, and to manage these uses in a manner consistent with protecting biodiversity.

(4) To protect marine natural heritage, including protection of representative and unique marine life habitats in California waters for their intrinsic value.

(5) To ensure that California's MPAs have clearly defined objectives, effective management measures, and adequate enforcement, and are based on sound scientific guidelines.

(6) To ensure that the state's MPAs are designed and managed, to the extent possible, as a network.

(c) The program may include areas with various levels of protection, and shall include all of the following elements:

(1) An improved marine life reserve component consistent with the guidelines in subdivision (c) of Section 2857.

(2) Specific identified objectives, and management and enforcement measures, for all MPAs in the system.

(3) Provisions for monitoring, research, and evaluation at selected sites to facilitate adaptive management of MPAs and ensure that the system meets the goals stated in this chapter.

(4) Provisions for educating the public about MPAs, and for administering and enforcing MPAs in a manner that encourages public participation.

(5) A process for the establishment, modification, or abolishment of existing MPAs or new MPAs established pursuant to this program, that involves interested parties, consistent with paragraph (7) of subdivision (b) of Section 7050, and that facilitates the designation of MPAs consistent with the master plan adopted pursuant to Section 2855.

B. General Applicability

Legislation requires that the Department of Fish and Game develop a plan for establishing networks of marine protected areas in California waters to protect habitats and preserve ecosystem integrity, among other things. The following information provides a brief overview of the Marine Life Protection Act (MLPA).

The master plan is required to include recommendations for a preferred alternative network of MPAs with "an improved marine life reserve component" (Section 2853(c)(1)). The MLPA further states that "it is necessary to modify the existing collection of MPAs to ensure that they are designed and managed according to clear, conservation-based goals and guidelines that take full advantage of the multiple benefits that can be derived from the establishment of marine life reserves" (Section 2851(h)) (California Department of Fish and Game 2004).

3. Porter-Cologne Water Quality Control Act

A. The Law

The Porter-Cologne Water Quality Control Act (CA Water Code Sec. 13000 et seq.) was enacted in 1969 to implement the requirements of the Federal Clean Water Act by establishing the State of California as the entity responsible for ensuring the regulations and requirements of the Clean Water Act are being met within the waters of California. The State Water Resources Control Board was established in this Act, which is required to adopt state policy for water quality control, issue the necessary permits, monitor water quality, designate Areas of Special Biological Significance (ASBS), and is authorized to exercise any other powers delegated to the state by the Clean Water Act. In addition, nine Regional Boards, which were established in 1949 were maintained by this Act, which adopt and implement water quality control plans, which recognize the unique characteristics of each region with regard to natural water quality, actual and past, present, and future probable beneficial uses are designated, and water quality problems.

The Water Quality Control Plan for the North Coast Region is the local, regional function of both the Clean Water Act (33 U.S.C. 1251 Sec. 101-607) and the Porter-Cologne Water Quality Control Act (CA Water Code Sec. 13000 et seq.). The Dickey Act of 1949 established nine regional water pollution control boards. In the Porter-Cologne Water Quality Control Act, these boards were changed and their authority broadened. The board with authority over the area of Trinidad is the North Coast Regional Water Quality Control Board, which adopted their first comprehensive plan in 1971. The initial function of the Board was to design a water quality control plan unique to the local landscape, seek and consider public input on that plan, and submit the plan to the State Water Board for approval. The Regional Water Board implements plans to achieve water quality levels, monitor, issue permits, and enforce water quality regulations.

The Water Quality Control Plan for the North Coast Region applies to the waters within the North Coast Region, which is defined as:

> all basins including Lower Klamath Lake and Lost River Basins draining into the Pacific Ocean from the California-Oregon state line southerly to the southerly boundary of the watershed of the Estero de San Antonio and Stemple Creek in Marin and Sonoma Counties (CA Water Code Sec. 13200(a)).

This North Coast Region is then divided into two natural drainage basins, the North Coastal Basin and the Klamath River Basin, of which Trinidad is included in the latter.

B. General Applicability

The Porter-Cologne Water Quality Control Act applies to any water within the State of California, as well as applies equally to point and nonpoint source pollution.

4. California Endangered Species Act (CESA)

A. The Law

The California Endangered Species Act (CESA) (CA Fish Code Sec. 2050-2116) protects state-listed endangered and threatened species and mandates that endangered and threatened species may not be taken, imported, exported, or sold. In addition, habitat will be protected and purchased where available in order to provide the proper environment for endangered and threatened species. CESA also requires that projects do not negatively impact those species or their habitats. CESA often requires consultation with the California Fish and Game Department to determine whether a project will impact species, and to determine appropriate measures should a project be proposed within known or likely habitat for a species.

B. General Applicability

The CESA applies throughout the State of California. Inventory and maps have been compiled of areas of habitat containing endangered or threatened species by the California Department of Fish and Game. Although the primary purpose of CESA is to protect endangered and threatened species, such species may be allow to be the taken if the proper permits have been issued, or as provided in the Native Plant Protection Act (CA Fish Code Sec. 1904).

5. California Environmental Quality Act (CEQA)

A. The Law

The California Environmental Quality Act (CEQA) (Pub. Res. Code Sec. 15000 et seq. and implementing guidelines at Sec. Title 14 California Code of Regulations Chap. 3, Art. 1-20 and Sec. 15000 to 15387) is intended to develop and maintain a high-quality environment and specifically to identify significant environmental effects of actions,

avoid those effects where feasible, and mitigate those effects where feasible. CEQA requires that several determinations must be made for each proposed activity.

- It must first be determined whether the proposal meets the definition of a "project" under CEQA.
  - "Projects" are activities, which may potentially have a physical impact on the environment and may include the enactment of zoning ordinances, the issuance of conditional use permits, and the approval of tentative subdivision maps (Pub. Res. Code §15378).

- If it is determined that the proposed activity is a "project," then the project shall be evaluated to determine if it is exempt from CEQA.

- If the project is not exempt, an initial study shall be prepared to identify the environmental impacts of the project and determine if any of those impacts are significant.

- Based upon findings of significance, one of the following three documents shall be prepared;

  (1) a negative declaration if there are no significant environmental impacts;

  (2) a mitigated negative declaration if there are significant impacts which can be avoided or mitigated through project revision; or

  (3) an Environmental Impact Report (EIR) if there are significant impacts.

B. General Applicability

CEQA applies to any proposed projects that require California state or local government agency discretionary permit approval, including permitting, in order to be undertaken. This includes proposed development projects, as well as to effects on cultural resources.

6. California Public Records Act

A. The Law

The California Public Records Act (CA Government Code Sec. 6250 et seq.) establishes "that access to information concerning the conduct of the people's business is a fundamental and necessary right of every person in this state" (CA Government Code Sec. 6250). This accessible information includes all public records, except those deemed exempt, which are provided in detail in the Act.

When an individual or agency requests copies of public records, an exact copy shall be provided unless it is impractical to do so. Computer data shall be provided in a form determined by the agency that is receiving the request for documentation. Upon receiving a request for information, the agency shall have 10 days to determine whether they will comply with the request and shall immediately notify the person making the request of such determination and the reasons thereof (CA Government Code Sec. 6256).

Actions may be taken at this point to either extend the 10 day period, or bring action against the agency refusing the relinquished the desired information (CA Government Code Sec. 6256.1-6259).

B. General Applicability

The California Public Records Act is only concerned with public records, which is defined as,

> any writing containing information relating to the conduct of the public's business prepared, owned, used, or retained by any state or local agency regardless of physical form or characteristics. "Public records" in the custody of, or maintained by, the Governor's office means any writing prepared on or after January 6, 1975 (CA Government Code Sec. 6252 (d)).

There is some information considered exempt from public knowledge that may pertain to the issues of the Tsurai Management Plan within this Act.

- Temporary drafts, notes, or interagency or intra-agency memos that are not retained by the public agency in the ordinary course of business, provided that the public interest in withholding those records clearly outweighs the public interest in disclosure (CA Government Code Sec. 6254 (a)).

- Records pertaining to pending litigation to which the public agency is a party, until the pending litigation or claim has been finally adjudicated or otherwise settled (CA Government Code Sec. 6254 (b)).

- The contents of real estate appraisals or engineering or feasibility estimates and evaluations made for or by the state or local agency relative to the acquisition of property, or to prospective public supply and construction contracts, until all the property has been acquired or all the contract agreement obtained. However, the law of eminent domain shall not be affected by this provision (CA Government Code Sec. 6254 (h)).

- Records the disclosure of which is exempted or prohibited pursuant to federal or state law, including, but not limited to, provisions of the Evidence Code relating to privilege.

- Records of Native American graves, cemeteries, and sacred places maintained by the Native American Heritage Commission (CA Government Code Sec. 6254 (r)).

- Records that relate to archeological site information maintained by the Department of Parks and Recreation, the State Historical Resources Commission, or the State Lands Commission (CA Government Code Sec. 6254.10).

There are several exemptions to the California Public Records Act, however, if an exemption is waived for one member of the public, then the same exemptions are waived for all members of the public (CA Government Code Sec. 6254.5).

7. Traditional Tribal Cultural Places (SB 18)

A. The Law

The Traditional Tribal Cultural Places Bill (CA SB 18) was passed into law September 29, 2004. The Governor's Office of Planning and Research is developing implementing guidelines. The purpose of this Bill is to prevent severe and irreparable damage to, or assure appropriate access for Native Americans to Native American sanctified cemeteries, places of worship, religious or ceremonial sites, and/or sacred shrines that are located on public property. The California State Legislature recognizes that Native American cultural places are not always within tribal property, but this should in no way prevent them from being protected or accessed by Native American people.

In order to ensure such protection and access, this Bill requires that a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the Native American Heritage Commission be consulted when dealing with public property deemed to have a Native American cultural place. In addition, this Bill asserts that a state-mandated element be added to all local government plans requiring a city or county to consult with the appropriate California Native American tribe(s) prior to the adoption or amendment of the city or county's general plan for the purpose of preserving specified places, features, and objects that are located within the local government's jurisdiction. Such consultation must be done in a manner that respects both entities' separate and independent sovereignty. Consultation will determine the level of confidentiality, proper treatment, and need for management plans pertaining to specific locations. Lastly, this Bill allows for California Native American tribes to acquire and hold conservation easements. The information about and location of California Native American cultural places shall remain confidential and are not subject to California's Public Records Act.

B. General Applicability

The Traditional Tribal Cultural Places Bill applies to state public lands within the State of California.

8. Cultural Resources Protection: California Public Resources/Penal/Health and Human Safety Codes: Relevant Sections

I. Removal or Destruction; Prohibition (CA Pub. Res. Code Sec. 5097.5)

A. The Law

> No person shall knowingly and willfully excavate upon, or remove, destroy, injure, or deface, any historic or prehistoric ruins, burial grounds, archaeological or vertebrate paleontological site, including fossilized footprints, inscriptions made by human agency, rock art, or any other archaeological, paleontological or historical feature, situated on public land,

> except with the express permission of the public agency having jurisdiction over the lands. Violation of this section is a misdemeanor (CA Pub. Res. Code Sec. 5097.5 (a)).

B. General Applicability

This law pertains to all public lands within the State of California. "Public lands" means "lands owned by, or under the jurisdiction of, the state, or any city, county, district, authority, or public corporation, or any agency thereof" (CA Pub. Res. Code Sec. 5097.5(b)).

II. Felony Possession of Native American Human Remains and Artifacts (CA Pub. Res. Code Sec. 5097.99)

A. The Law

> No person shall obtain or possess any Native American artifacts or human remains, which are taken from a Native American grave or cairn on or after January 1, 1984, except as otherwise provided by law or in accordance with an agreement reached pursuant to subdivision (l) of Section 5097.94 or pursuant to Section 5097.98 (CA Pub. Res. Code Sec. 5097.99 (a)).
>
> Any person who removes, without authority of law, any Native American artifacts or human remains from a Native American grave or cairn with an intent to sell or dissect or with malice or wantonness is guilty of a felony…(CA Pub. Res. Code Sec. 5097.99 (c)).

Anyone who is found to be in violation of these laws is guilty of a felony and may be imprisoned.

B. General Applicability

This law applies throughout the State of California, regardless of land ownership.

III. Destruction, Defacement of Objects of Archaeological or Historical Interest (CA Penal Code Sec. 6221/2).

A. The Law

> Every person, not the owner thereof, who willfully injures, disfigures, defaces, or destroys any object or thing of archaeological or historical interest or value, whether situated on private lands or within any public park or place, is guilty of a misdemeanor (CA Penal Code Section 6221/2).

B. General Applicability

This law applies to all land within the State of California, including both private and public lands.

IV. Removal of Human Remains (CA Health Code Sec. 7050.5)

A. The Law

> Every person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor (CA Health Code Sec. 7050.5 (a)).
>
> However, such an action, in regards to Native American remains will be considered a felony under Section 5097.99 of the California Public Resources Code.

The law goes on to state that

> in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined that the remains are not subject to the provisions of the Government Code Sec. 27491…(CA Health Code Sec. 7050.5(b)).

This Government Code is concerned with the investigation of remains that are the possible result of a violent or sudden death. The Removal of Human Remains law concludes by stating,

> if the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (CA Health Code Sec. 7070.5 (c)).

The Native American Heritage Commission will provide Native American contact information to the coroner (or other parties to the discovery) for the purposes of consultations with Native American tribes and individuals concerning treatment of the remains with proper respect and dignity.

B. General Applicability

This law applies to any human remains found in or from any location other than a dedicated cemetery throughout the State of California. Such removal or

disturbance of human remains are against the law unless the action is due to Section 5097.94 (1) of the Public Resources Code, which allows for the assistance by "interested landowners in developing agreements with appropriate Native American groups for treating or disposing, with appropriate dignity, of the human remains and any items associated with Native American burials." In addition, this law does not apply to any person authorized to implement Section 5097.98 of the Public Resources Code, which is concerned with repatriating human remains thought to be Native American to the proper tribal group.

V. Repatriation (CA Pub. Res. Code Sec. 5097.991)

A. The Law

> It is the policy of the state that Native American remains and associated grave artifacts shall be repatriated (CA Pub. Res. Code Sec. 5097.991).

B. General Applicability

This policy extends throughout the State of California, including the collections of Museums and Universities.

VI. California Native American Graves Protection and Repatriation Act (CA Health Code Sec. 8010-8029)

A. The Law

The California Native American Graves Protection and Repatriation Act was passed in 2001 for the purpose of "provid[ing] a seamless and consistent state policy to ensure that all California Indian human remains and cultural items be treated with dignity and respect" (CA Health Code Sec. 8011(a)). This act is the State-equivalent to the Native American Graves Protection and Repatriation Act (25 U.S.C. Sec. 3001 et seq.), and was enacted in order to facilitate the implementation of some provisions of the federal act. This includes facilitating the inventory and return of remains and cultural items from public agencies and museums. In addition, the California NAGPRA creates a Repatriation Oversight Commission and can enforce penalties if public agencies and museums do not comply with NAGPRA.

B. General Applicability

The California Native American Graves Protection and Repatriation Act applies to all public agencies and museums in the State of California. In addition, this Act

> provides a mechanism whereby California tribes who are not federally recognized may file claims with agencies and museums for repatriation of human remains and cultural items (CA Health Code Sec. 8011 (f)).

VII. Native American Historical, Cultural, and Sacred Sites; Free Exercise of Religion; Cemeteries, Place of Worship on Ceremonial Sites (CA Pub. Res. Code Sec. 5097.9)

A. The Law

> No public agency, and no private party using or occupying public property, or operating on public property, under a public license, permit, grant, lease, or contract made on or after July 1, 1977, shall in any manner whatsoever interfere with the free expression of exercise of Native American religion as provided in the United States Constitution and the California Constitution; nor shall any such agency or party cause severe or irreparable damage to any Native American sanctified cemetery, place of worship, religious or ceremonial site, or sacred shrine located on public property, except on a clear and convincing showing that the public interest and necessity so require.

B. General Applicability

This law applies on public property within the State of California. However, this law shall not be construed to limit the requirements of the Environmental Quality Act of 1970. In addition, the public property of all cities and counties, except for all parklands in excess of 100 acres shall be exempt form this law. Nothing shall, however, nullify protections for Indian cemeteries under other statutes (CA Pub. Res. Code Sec. 5097.9)

III. Site specific Laws, regulations, and potential applicability

This section involves a discussion on how the pertinent laws defined in Appendix A involve the TSA.

1. Federal Laws

a) Coastal Zone Management Act (CZMA)

The TSA is wholly within the coastal zone and, therefore, the CZMA applies to federal activities within the TSA. The purposes of the CZMA apply to the TSA in many ways. In terms of protection of natural resources, the TSA does contain wildlife, vegetation, and aquatics. There is bluff failure, which causes site erosion and diminishes property. The TSA is near a pier, as well as is an area containing sensitive historic, cultural, and aesthetic features. In terms of public access, the TSA does include several trails as well, which the Coastal Conservancy holds an easement to for the purpose of providing public access to the beach.

b) Clean Water Act (CWA) (a.k.a. The Federal Water Pollution Control Act)

The waters in and around the TSA are subject to CWA and pollutants have been found in these waters. Within the TSA are three streams that flow into the Pacific Ocean at Trinidad Bay, which include Parker Creek, Pepperwood Creek, and Alder Creek. A

highly likely source of both point and nonpoint source pollution is believed to be inadequate septic systems and inadequate storm drainage within the City, resulting in contaminated discharge into Trinidad Bay.

The City has received a grant to monitor, inventory, assess, and create a database of the septic systems within the City. Data collected will allow all parties to understand the nature and scope of water quality problems and identify potential solutions to halt any negative impacts on the creeks within the TSA that flow into the bay. This issue affects the health and safety of not only the TSA, but also people using the beach and harvesting marine resources from the bay.

c) Antiquities Act and California Coastal Monument Act

The sea stacks and islands that populate the Trinidad Bay and surrounding areas, including areas outside the TSA, are protected as part of the CCNM and are also traditional resources for the Yurok people. Many of these hold spiritual or ceremonial significance to Yurok culture. As components of the Yurok cultural landscape, these areas are connected directly with activities associated with Tsurai village.

d) National Endangered Species Act (ESA)

It is not known at this time if species designating protection under the ESA exist within the TSA. If such species do exist, they would be afforded protection under the Act.

e) National Environmental Policy Act (NEPA)

This Act would apply if a federal project or undertaking were proposed within the TSA.

f) National Historic Preservation Act (NHPA)

NHPA applies to federal undertakings. If federal funds, federal permits, federal licenses, or federal lands or waters are involved, NHPA applies. Federal agencies, such as Federal Highway Administration (FHWA) and Housing and Urban Development (HUD), can delegate some aspects of the Section 106 process to state and/or local governments.

g) American Indian Religious Freedom Act (AIRFA)

The TSA is a religious place for the descendents of the village and also for the Yurok People. Both the Yurok Tribe and the Tsurai Ancestral Society intend to maintain such religious ways. Should any deferral agency become involved with the TSA, the agency should consult with Tsurai and Yurok leadership in evaluating its polices and procedures.

h) Archaeological Resources Protection Act (ARPA)

The TSA has archeological remains over 100 years old. ARPA would only apply if land were transferred to federal status. If land became Indian trust lands then ARPA would

apply until such time as the tribe adopts an appropriate ordinance. Such an ordinance currently exists in draft form for the Yurok Tribe.

i) Native American Graves Protection and Repatriation Act (NAGPRA)

The TSA contains Native American human remains and cultural items as defined in NAGPRA. NAGPRA eligible items from Tsurai held by federally funded museums and institutions are subject to repatriation to the Yurok Tribe under the law. NAGPRA provides for repatriation of human remains to lineal descendants and culturally affiliated Tribes.

2. State Laws

a) California Coastal Act (CCA)

The City of Trinidad, including the TSA is within the coastal zone and, therefore, the CCA applies. This ensures public access, as well as natural resource protection. The City of Trinidad adopted the first Local Coastal Program (LCP) ever approved by the State to a local government in 1978, giving the City of Trinidad coastal development permitting responsibilities.

Policy 69 is the specific policy in the Trinidad Local Coastal Plan (July 28, 1989) that deals with the protection of archeological resources within the Tsurai Study Area. The Policy states,

> Within the Tsurai Study Area, shown on Plate 1B, the State Historic Preservation Officer, in cooperation with the lineal descendants of Tsurai and the Northwest Indian Cemetery Protective Association, shall investigate and establish definitive boundaries around Tsurai. There shall be no disturbance, vegetative removal or construction, except for a protective fence around the burial ground, on lands designated as Open Space within the Tsurai Study Area without the approval of the lineal descendants of Tsurai, Trinidad Rancheria, City of Trinidad, and the State Historic Preservation Officer. Lands designated as Special Environment within the Study Area may be developed as provided in the Special Environment regulations provided the State Historic Preservation Officer is consulted and reasonable measures are required to mitigate any adverse impacts on this cultural resource.

As such, this site is covered by an Open Space and Special Environment land use plan and zoning district designations, which severely limit any new development on the site. The City of Trinidad has, on several documented occasions, ignored the consultation process of Policy 69. Policy 69 includes the requirement that all of the parties included in the Policy must approve any vegetation removal done within the TSA. There have been numerous instances where that City has failed to perform the necessary consultation when conducting projects within the TSA. The City has also taken actions toward amending Policy 69 to only require a “majority of the entities” approval to properly

adhere to Policy 69, rather than approval from all entities that is currently required (Trinidad City Council 1991:258-259).

b) California Marine Life Protection Act

The Kelp Beds at Trinidad Bay have been designated as an Area of Special Biological Significance under the provisions of the Marine Life Protection Act. The Act prohibits the pollution of protected areas. City runoff and contaminated discharge through the streams that pass through the TSA and into Trinidad Bay may be a violation of the provisions of the MLPA.

c) Porter-Cologne Water Quality Control Act

The State Water Resources Control Board designated the kelp beds at Trinidad Head as an Area of Special Biological Significance (ASBS) in 1974. This designation came under the several plans within the Porter-Cologne Water Quality Control Act. These plans include the Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Waters and Enclosed Bays and Estuaries of California and the Water Quality Control Plan for Ocean Waters of California. Within ASBS general regulations have been established. These regulations include the prohibition of discharge of elevated temperature wastes in a manner that would alter water quality conditions from those occurring naturally; the prohibition of discharge of discrete, point-source sewage or industrial process wastes in a manner that would alter water quality conditions from those occurring naturally; and the control of discharge of waste from nonpoint sources, including but not limited to storm water runoff, silt, and urban runoff.

The primary agency responsible for the care of the kelp beds at Trinidad Head is the State Water Resources Control Board. The secondary agencies responsible are the Regional Water Quality Control Board and the California Department of Fish and Game. These agencies are concerned with the care of the kelp beds and have not established harvesting regulations or fishing regulations in this area. In addition, the regulations accompanying the ASBS designation are not applicable to vessel wastes, the control of dredging, or the disposal of dredging spoil.

The kelp beds at Trinidad Head include an area directly offshore of the TSA, extending into Trinidad Bay. It is believed that both point and nonpoint source pollution flows within the TSA, the three creeks, and into the Bay (Trinidad Planning Commission 2001:A2-15).

d) California Endangered Species Act (CESA)

It is not conclusive whether there are any endangered or threatened species within the TSA. A biological survey needs to be completed before a proper assessment and determination may be made. CESA provides protection to species unique to California and not covered under the ESA. If CESA designated species are determined to exist within the TSA, they will be subject to protection under the Act.

e) California Environmental Quality Act (CEQA)

As long as the TSA remains in local or state ownership CEQA applies to any activities/projects proposed for the TSA. CEQA will apply to any projects undertaken on the TSA that involve approval or funding by state and local public agencies, regardless of ownership.

f) California Public Records Act

Cultural resources information is considered exempt for the California Public Records Act.

g) Traditional Tribal Cultural Places

The TSA is a sacred place, containing a Native American cemetery, religious and ceremonial sites. SB 18, as further clarified in forthcoming guidelines, would require the City of Trinidad to initiate on-going Native American consultation with regard to TSA and other culturally sacred places within its jurisdiction and amend the City's Local Coastal Program to incorporate the results of such consultation. The Yurok Tribe, per this bill, may also hold conservation easements on any prehistoric, archeological, cultural, spiritual or ceremonial places.

h) Cultural Resources Protection: California Public Resources/Penal/Health and Human Safety Codes: Relevant Sections

(1) Removal or Destruction; Prohibition (CA Pub. Res. Code Sec. 5097.5)

The illegal and unauthorized removal and destruction of cultural resources from the TSA has been a recurring problem spanning several decades. Under current ownership, this law prohibits such removal and destruction.

(2) Felony Possession of Native American Human Remains and Artifacts (CA Pub. Res. Code Sec. 5097.99)

There is a documented history of the illegal possession and extraction of Tsurai artifacts and human remains. Tsurai human remains were discovered in a residential closet in an abandoned house in the State of Washington. The coroner returned the remains to the Yurok Tribe for reburial. The remains were reburied at the site and no one was arrested.

(3) Destruction, Defacement of Objects of Archaeological or Historical Interest (CA Penal Code Sec. 6221/2)

This law applies to the TSA.

(4) Removal of Human Remains (CA Health Code Sec. 7050.5)

There have been instances where human remains were taken from the TSA as documented by the TAS, the Yurok Tribe, long-time residents, and local newspapers, as well as acknowledged by past and present Trinidad City Council members and Mayors. Trinidad's Police Department has routinely cooperated with the Yurok Tribe and other agencies in the proper handling of human remains from the site.

(5) Repatriation (CA Pub. Res. Code Sec. 5097.991)

Native American human remains taken from Tsurai have been repatriated to the Yurok Tribe and the Tsurai Ancestral Society, which were reburied within the TSA in July 2002 and September 2003.

(6) California Native American Graves Protection and Repatriation Act (CA Health Code Sec. 8010-8029)

This Act applies to items excavated and removed from the TSA under state permits. Such items are stored in state facilities and the Yurok Tribe is seeking the repatriation of those items.

APPENDIX B: Yurok Cultural Context

The traditional names for the Yurok people living on the upper region of the Klamath River, lower region of the Klamath River, and the coast within Yurok Ancestral Territory are the Petch-ik-lah, Pohlik-la, and Nr'r'nr people, respectively. However, they have come to be known collectively as the Yurok, which is a Karuk word meaning "downriver". Although all the villages within Yurok Ancestral Territory are culturally and jurisdictionally Yurok, there is a cultural and linguistic distinction between those Yuroks residing within river villages and those along the coast. Coastal Yuroks living south of the mouth of Redwood Creek (Orek) are commonly referred to as Nr'r'nr. Yurok people from Tsurai are one of several coastal Yurok communities that are known as Nr'r'nr people. The other villages that comprise the Nr'r'nr area, beginning to the north are Orek, Orau, Tsahpekw, Hergwer, Tsotskwi, Pa'ar, Oslokw, Keikem, Ma'ats, Opyuweg, Pinpa, and Sumeg.

The ancestral territory of the Yurok people is comprised of a narrow strip along the Pacific Ocean stretching north from the village on the Little River (Me'tsko or Srepor) in Humboldt County to the mouth of Damnation Creek in Del Norte County. In addition to the Yurok coastal lands, Yurok ancestral territory extends inland along the Klamath River from the mouth of the river at Requa (Re'kwoi) to the confluence of Slate Creek and the Klamath River (Yurok Tribe Art. 1, Sec. 1). Within this ancestral territory there are approximately seventy known villages, which are situated along the banks of the Klamath or along the ocean streams, lagoons, and bays (Kroeber 1925:8, Waterman 1920, Pilling 1978). Many of these villages were permanent settlements, particularly the villages where ceremonial dances were held, while others were only temporarily inhabited. Each village had its own geographical boundaries, as well as its own leaders who governed various sites and activities within the village. These sites included fishing and hunting spots, permanent home sites, seasonal sites, gathering areas, training grounds, and spiritual power sites (Lindgren 1991).

Although there were villages all along the river and coast, a village of great importance would have several other villages in close proximity in a concentrated area. An example of this is at the confluence of the Klamath and Trinity Rivers where there were three villages, which in the 1850s had a population of about 200 (Bearss 1982:1). The largest of these three villages was We'itspus, meaning "confluence." This village was of extreme importance because it held a World Renewal Ceremony, also known as the White Deerskin Dance. This is one of several important ceremonies in the Yurok religion as its purpose is to renew or maintain the health of the entire world. The location of the village of We'itspus is on the north bank of the Klamath River and directly across from We'itspus, on the other side of the river was the village of Rlrgr. The third village in this close proximity was located across the Trinity River from Rlrgr and known as Pek-tul.

Similarly in the middle course of the river is the village of Pecwan, located just downstream of Pecwan Creek from where the creek flows into the Klamath River. This

is a village of great importance and wealth because Pecwan was a location for another major ceremony, the Jump Dance, which continues to be performed today. The other villages in close proximity to Pecwan moving downstream on the northern bank are Qo'tep, Woxtek, and Woxhkero.

The final example of a concentration of River villages is at the mouth of the Klamath River. On the northern slope of the hill ascending above the mouth is the largest Yurok settlement of Re'kwoi. In 1852, Re'kwoi had 116 residents and is another location for a Jump Dance (Bearss 1982:2). Just across the river on the southern side is the village of Welkwa. This village is the site of the annual Salmon Ceremony, which is performed to remove the effect of the taboo on the run of spring salmon (Waterman 1920:228). The last village in close proximity to the village of Re'kwoi is Tse'kwel.

There are many other Yurok villages residing along the Klamath River, as well as along the coast of the Pacific Ocean. The villages on the coast are primarily concentrated around lagoons and ocean streams, areas providing access to abundant natural resources. An example of such a concentration is the many villages that are located around Big Lagoon. Beginning to the north and continuing south along the eastern shore of the lagoon were the villages of Pa'ar, Oslokw, Keihkem, Maats, Pinpa, and Opyuweg, which is sometimes referred to as Ok'eto. Opyuweg means, "where they dance" as this is another village where a Jump Dance was held (Waterman 1920:266).

Although various treaties were signed, they were not ratified by the United States Senate, an action required in order to make the treaties legally binding. Non-Indian incursions, settlement, and vigilantism continued and an Indian Agency and military fort were established on the River to mediate the conflict. This Agency was located on the south banks of the mouth of the Klamath River, in the area known as Waukel (also spelled Wo'kel and Waukell). Across the river from the Agency was the military fort, Fort Terwer. In spite of the establishment of these governmental posts gold prospectors, miners, farmers, and settlers continued to encroach on Indian lands, resulting in ongoing violent conflicts.

Although the 1851 Treaty of Peace and Friendship was never ratified, a landbase was established for the Yurok Tribe. On November 16, 1855 the Klamath River Reserve, also known as the Old Klamath Indian Reservation was created by Executive Order (pursuant to the Act of March 3, 1853, 10 Stat. 226, 238). This Order designated reservation lands one-mile on each side of the Klamath River; from the mouth of the river to Tectah Creek, which is approximately twenty miles upriver. The Klamath Reserve was established, not only for the Yurok, but also for several tribes because the intent was to consolidate people of other tribes on the Reserve as well. Many Tolowa were moved onto the Reserve, but soon returned to their homeland in Del Norte County (Bearss 1982:85).

Both Fort Terwer and the Indian Agency at Waukel were destroyed in the floods of 1861 and 1862 and the locations were abandoned (Bearss 1982:98, 112). The Smith River Reservation, occupied primarily by Tolowa, was created in 1862 to supplement the loss of agricultural lands as a result of the floods (Bearss 1982:113-114). In 1864 the Hoopa

Valley Indian Reservation, located along the Trinity River in Humboldt County was established by Executive Order by President Grant. The intent of the Hoopa Reservation was for relocating all northwestern California Indians to this reservation (Eidsness 1988:29; Bearss 1982:114, Nelson 1988:89).

The establishment of these reservations also did not halt the constant encroachment of non-Indian settlers, miners, entrepreneurs, ranchers, and gold prospectors. The area within the boundaries of the Klamath River Reserve was increasingly occupied by non-Indians despite the 1855 Executive Order and the 1877 Order from the Department of the Interior, explicitly ordering the evacuation of non-Indian settlers from the Reserve. Escalating conflict on the Klamath Indian Reserve resulted in the gradual displacement of Lower Klamath Yurok Indians further upriver during the 1860s and 1870s (Eidsness 1988:29; McBeth 1950:44).

In 1891, President Harrison issued an order to expand the existing Hoopa Valley Indian reservation to include lands one mile on each side of the Klamath River from the confluence of the Klamath and Trinity Rivers at Weitchpec to the Pacific Ocean, thereby including the Klamath Indian Reserve (Eidsness 1988:29). The land that joined the Hoopa Valley Indian Reservation and the Klamath River Reserve included the land one mile on each side of the Klamath River from Weitchpec to Tectah Creek. This land came to be known as the "Extension." Thus, the Hoopa Square, the "Extension," and the Klamath River Reserve all became inclusively known as the Hoopa Valley Indian Reservation. The General Allotment (or Dawes) Act was applied to the Hoopa Valley Indian Reservation "Extension" and allowed for the U.S. Government to surplus land, left after tribal allotments were granted, to non-Indian settlement. Subsequently, checkerboard ownership and a high percentage of land was lost to non-Indian ownership. On June 25, 1892, President Harrison signed a Congressional Bill to open the reservation to non-Indian settlement, "reserving to the Indians only such land as they require for village purposes" (McBeth 1950:48; Bearss 1982:127). The process of assigning Indian allotments within the reservation took two years and on May 21, 1894, the reservation land along the Klamath River was legally opened for non-Indian homesteading (McBeth 1950:48; Bearss 1982:128). As a result, many Yurok people were further displaced from their traditional villages along the Klamath River. Many Yurok relocated to the Hoopa Valley and elsewhere, and some continue to live there today.

The Yurok villages on the coast were not included in either the Klamath Indian Reserve or the Hoopa Valley Indian Reservation. Instead, along the coast, several rancherias were established. In 1914, the U.S. Congress passed an Act, "For the purchase of lands for the homeless Indians of California…" (38 Stat. 589 Chap. 222 Sec. 3, 1914). The purpose of this Act was to create a landbase for California Indians who were without one. From this federal act came several federal acts and executive orders, which established a landbase for California Indians on a case-by-case basis.

Three rancherias that are home to Yurok people along the coast were established and recognized as sovereign nations. The Resighini Rancheria was established for both Yurok and Tolowa people and is located on the river in Klamath. The Big Lagoon

Rancheria was established by Executive Order of the Secretary of the Interior on July 10, 1918 and is located on the southern shore of Big Lagoon. A final coastal rancheria home is located in Trinidad and is known as the Cher-Ae Heights Indian Community of the Trinidad Rancheria. This 60-acre rancheria was established in 1917 and is home to Yurok, Wiyot, and Tolowa People.

In 1958, through the California Rancheria Act, 44 California tribes were identified for termination, which officially ceased federal recognition of tribal status. However, the 44 California tribes chosen for termination did not include any of the three coastal rancherias home to Yurok people (PL 85-671, as amended by PL 88-419). In 1983, 17 northern California tribes were restored through the settlement of a class action suit, *Hardwick v. United States.* Through other individual cases, all but 12 of the originally terminated groups in California have been restored.

In 1988, when the Yurok Tribe separated from the Hoopa Valley Indian Reservation in government, landbase, and jurisdiction, the Rancherias at Resighini, Trinidad, and Big Lagoon were each given the opportunity to merge with the Yurok Tribe if the members of each rancheria voted to do so within 90 days after the enactment of the Hoopa-Yurok Settlement Act (PL 100-580, 102 Stat. 2924 Sec. 11 (b)). None of the rancherias chose to join the Yurok Tribe, but certain members of the rancherias who were culturally Yurok did enroll in the Yurok Tribe, which automatically dis-enrolled them from their previous rancheria.

APPENDIX C: Summary of Stakeholder Positions from Scoping Meetings

1. Cultural Resources

The cultural resource concerns of the Tsurai Ancestral Society and the Yurok Tribe are summarized below:

- Protection of cemetery and human remains. The current conditions at the site make this difficult to achieve as saturation, erosion, resultant exposure and dense vegetation throughout the site make monitoring and site stewardship difficult.

- Preventing erosion from multiple sources, as this damages the traditional trail, the village site, the cemetery, and exposes cultural resources on the surface of the site, within the streams, and on the beach.

- Public access to the village site needs to be restricted and discouraged to prevent looting and site damage until a further plan is developed.

- Restoring the traditional trail (Axel Lindgren Memorial Trail) is a primary concern, particularly at the top where it has been blocked and diverted due to the fencing on the side of the Civic Club Lighthouse Memorial. Trail maintenance needs to be part of a management strategy.

- Vegetation management decisions within the TSA should be dictated by what is best for stabilizing and protecting the site and the cultural resources within it. The current condition is not acceptable as it hinders access, provides cover for looters, and retains moisture that contributes to the swampy conditions within the site.

- Respect for and restoration of the cemetery is a primary concern. The area has been subject to decades of neglect by landowners. The cemetery should be protected, managed, and/or accessed only by the Tsurai Ancestral Society and the Yurok Tribe.

- Adequate consultation by the City on management decisions and activities that impact the cultural resources within the TSA needs to be achieved. In the past, the City, as outlined in Policy 69 of the City's General Plan/Local Coastal Program, has not always followed the established consultation protocol, which required consultation from designated stakeholders. The failure to comply with the consultation protocol has repeatedly resulted in site damage or conflict over management actions taken by the City.

- The cultural resources contained within the TSA have not been properly managed. This has been a recurring and ongoing problem and concerns over

mismanagement have increased since the City acquired the ownership of the TSA and assumed the responsibility for management (State Coastal Conservancy 1980; Tsurai Ancestral Society 1991; Tsurai Ancestral Society 2001; Trinidad City Council 1991; and Trinidad City Council 1995).

- There have been numerous instances where Policy 69 was not properly followed by the City, in spite of repeated and numerous attempts by the Tsurai Ancestral Society. (Tsurai Ancestral Society 2004; Tsurai Ancestral Society 2004a; Tsurai Ancestral Society 2004b; Trinidad City Council 1993; Trinidad City Council 1993a; Yurok Tribe 2004; Trinidad Planning Commission 2001; and Tsurai Ancestral Society 2005). Appropriate management of cultural resources can only occur if the City follows Policy 69 or if a new management strategy is determined. Failure by the City to appropriately manage or adequately consult or notify on proposed projects and management decisions that impact the TSA has resulted in site damage and conflict over management actions taken by the City.

- The Tsurai Ancestral Society and the Yurok Tribe consider the TSA to be part of the larger cultural landscape of Tsurai and the Yurok people. This cultural landscape includes sacred areas, such as Trinidad Head and traditional resource use areas within the coastal zone. Cultural resource management concerns are not limited to the TSA but extend throughout Trinidad.

- The Tsurai Ancestral Society and the Yurok Tribe have ancestral rights and responsibilities regarding the management of the village site and the burials contained within it. It is due to these rights and responsibilities that the two entities advocate for more control over management decisions that impact the cultural resources within the TSA.

- The Tsurai Ancestral Society has reviewed and approved all of the findings and recommendations contained within the geo-technical study conducted by LACO and Associates (2004) because they feel following these recommendations will help protect and preserve the cultural resources within the TSA.

- The Culture Committee of the Yurok Tribe has reviewed the issues and the management concerns expressed by the Tsurai Ancestral Society and voted unanimously to support and approve the recommendations endorsed by the Tsurai Ancestral Society for the purposes of this Management Plan and recommendations for proper cultural resources management of this important ancestral village (Yurok Tribe Culture Committee 2004).

2. Recreational Resources

Several recreational trails provide beach and coastal access from the City of Trinidad (See Figure 3) The Coastal Conservancy holds a conservation easement over the TSA that includes trails for the purpose of providing beach and coastal access for public use. Trinidad has evolved into a tourism-based economy with a strategy to promote and

develop hiking trails, enabling access to scenic views and the beach. Yurok ancestral lands contain a complex traditional trail system that retains cultural and spiritual significance to Yurok people. One of the trails within the TSA is a Yurok traditional trail. Adjacent property owners have concerns about trail easements, access, and impacts of pedestrian traffic near their properties. The public has an interest in retaining beach access and hiking trails for recreational purposes. A site visit for the purpose of observing trail conditions and aesthetics was conducted by Yurok staff. A trail matrix, organizing various trail information based upon observations from the site visit can be found in Appendix E. This section summarizes the concerns and issues identified through scoping meetings surrounding specific trails within the TSA.

A. Axel Lindgren Memorial Trail (ALMT)

The ALMT is the traditional Yurok trail to the village of Tsurai. The current trail is of cable-tie interlocking step construction and is very steep and of moderate intensity. The trail extends from the bluff down to the village and continues to the beach. The trail is named in memory of Axel Lindgren II, Tsurai lineal descendant and founder of the Tsurai Ancestral Society. Mr. Lindgren was the primary advocate and caretaker of the village site, the cemetery, and the traditional trail for several decades. The Yurok Tribe, with the advice of Mr. Lindgren, rebuilt the trail in 1997. Various stakeholder groups have different opinions about the issues surrounding this trail which are summarized below:

Tsurai Ancestral Society (TAS):

- The access to the top of the traditional trail has been altered by the installation of a fence by the Civic Club's Memorial Lighthouse. This has forced the top of the trail to be moved from its traditional path. The TAS would like to see the traditional path restored. This would include removing recent additions and vegetation. TAS asserts that the changes made to the trail by the Civic Club additions are increasing erosion to the bluff.

- A handrail extending down the entire trail should be installed to help make the trail safer, but also to discourage users from leaving the trail or entering the village site area.

- The second bench on the trail should be moved further down the trail or removed entirely. This bench is located at the level of the village site and is encouraging users to linger there and may encourage them to leave the trail and enter the village site.

- Continual erosion of the lower portion of the cable-step trail is an on-going problem. The last segment extending down the terrace toe is undermined by erosion, which becomes hazardous. This causes people to detour around the steps and off the trail, which creates further erosion. The lower segment of the

trail needs to be continually monitored, maintained, and repaired on a regular basis.

City of Trinidad:

- Recommended using vegetation and handrails to discourage trail users from leaving the trail.
- Recommends maintaining both the traditional trail and a separate public access from the parking lot at the Memorial Lighthouse.
- Agrees that continual erosion of the lower portion of the cable-step trail is an on-going problem. Permanent solutions have been proposed but need further study.

Adjacent Property Owners:

- Some indicate that the original path of the traditional trail has been well documented.
- The condition of the trail is a concern for safety issues, particularly at the bottom where it washes out every year and creates a hazard.
- Some question whether the cable-step construction was the best type of trail for this terrain. Some noted the cable clamps are rotating which makes the steps uneven.
- Assert that the City is responsible for trail maintenance and liable for hazardous conditions due to lack of maintenance.
- Support the installation of a handrail to make the trail safer for users.
- Recommend the trail be rebuilt in some sections to make it safer for use. Uneven steps, slippery ties, and the steep grade create hazards.
- Suggest considering redirecting the lower portion of the trail to reduce the erosion problem.

Interested Public:

- Feel that the trail needs a handrail.
- Recommend a regular trail maintenance program. The trail is not being maintained and for that reason is hazardous in places.
- Suggest that some of the trail needs to be replaced or rebuilt to make it safer for use.

- Recommend posting signs to warn users of hazards, and to also direct people to stay on it and not detour or leave the trail.

Coastal Conservancy:

- Supports the designation of the ALMT as the primary beach access trail.
- Recommend reviewing the use of this trail to assess future maintenance needs.
- Has taken the position of supporting repairs to this trail on an interim basis while the Management Plan is being prepared. Recognizes the need for a long-term, as opposed to short-term, solution to the erosion problems on the trail.
- Advocate pursuing "natural looking" solutions to resolving trail problems, as opposed to invasive and obtrusive ones. The aesthetic qualities need to be retained. Large concrete constructions may stabilize areas, but may not be consistent with the aesthetic qualities of the area.
- Support the restoration of the traditional trail to its original path, including the area impacted by Civic Club additions to the Memorial Lighthouse. Notes that it holds a public easement over the Civic Club property.

Yurok Tribe:

- Support the recommendations of the Tsurai Ancestral Society. This is a Yurok traditional trail and needs to be considered and managed as such.

B. Bluff Trail (Wagner Street Trail)

The Bluff Trail begins at Wagner Street, heads west on an easement through two privately owned parcels (APN: 042-102-45 and APN: 042-102-30), continues along the bluff edge following the western side of private residences, and merges with Parker Creek Trail before proceeding to Old Home Beach. This trail provides the public a view from the bluff of both the ocean and the beach, a gradual slope, and easy access to the beach. The trail is primarily used as a recreational trail, due to its aesthetic value, as well as an additional access to Parker Creek Trail. While the date of construction is unknown, archival maps indicate this was the Old Wagon Trail that led from the beach to the bluff. This trail has been the site of controversy, due to the location of the trail, as well as the possible erosional problems the trail is causing on the bluff and the village site. The trail has been the subject of litigation, but the parties have now entered into settlement agreements that establish a boundary between the trail and adjacent private property; acknowledge the City's right to maintain a three-foot-wide trail on its property and to maintain permanent vegetation on the bluff edge; prohibit dumping over the bluff; and reinforce the provisions of an earlier settlement agreement designating the ALMT as the

primary trail to the beach. Under provisions of the earlier agreement, the Bluff Trail is to be open during daylight hours only, and no dogs are permitted.
Tsurai Ancestral Society:

- Feel that this trail has the potential to impact the village and cemetery site below. Want the trail to be permanently closed.

- Recommend re-vegetating the trail, particularly on the bluff edge, to help reduce and prevent erosion.

- Recommend the development of alternate trails for beach access, specifically Parker Creek and Groth Lane Trails.

- Understands that the primary management issue is protecting the village site below the trail. Other trails allow for beach access and could be used instead of this trail.

City of Trinidad:

- Agrees with LACO study's determination that foot traffic on the trail has "no practical effect" on bluff stability (2004:18).

- Agrees on the need to identify the sources and impacts of surface runoff.

- Recognizes the need to keep the trail away from the edge of the bluff and to use vegetation to stabilize soils.

- Recognizes the need to educate adjacent landowners not to dispose of landscaping materials over the bluff.

Adjacent Property Owners:

- Note that several geo-technical studies have been conducted, some with conflicting opinions.

- Would like to see mitigation measures developed and implemented to slow erosion.

- Note that the trail has eroded significantly over the past 20 years, particularly at the entrance. It used to be over 20 feet wide, now it is only about 9 feet wide.

- Believe that the Coastal Commission ultimately controls any mitigation and actually has standards for trails (i.e. recommended width).

Interested Public:

- This is a very popular trail because of the public view from the bluff and the easy access it provides to the beach.
- Believe that litigation will determine the future management of this trail.
- Recommend keeping the trail as far away from the bluff edge as possible.

Coastal Conservancy:

- Would like to explore ways to maintain the Wagner Street Trail in order to retain the use of this trail for public views and beach access.
- Assert there needs to be compelling evidence that this trail is causing erosion and potential bluff failure in order to justify closing it.
- Note that the view provided by this trail is a unique characteristic that lends to its popularity and desirability.
- Would consider additional routes to access this trail if it is determined that the current access is vulnerable to erosion.

Yurok Tribe:

- Agrees with the position of the Tsurai Ancestral Society. To reiterate: advocates for interim closures, re-vegetation, and water runoff control, due to the primary concern of protecting the village below.

C. Parker Creek Trail

The Parker Creek Trail begins in the parking lot of Murphy's Market, continues along Parker Creek, and extends to Old Home Beach. This trail is located on the southern portion of the TSA and provides recreational beach access without impacting the village site. This trail follows a gentle grade and provides an easy access to the beach, through a forested environment along Parker Creek.

Tsurai Ancestral Society:

- Would like to see this trail developed and promoted as a primary beach access trail because it has the least potential impact on the village site.
- Consider this an acceptable alternative to Bluff Trail. Note it does not have impacts on the village site that have been identified with Bluff Trail, namely erosion onto the village due to necessary vegetation removal, abundance of surface groundwater, and to a lesser extent pedestrian use.

City of Trinidad:

- Consider it to be a useful secondary trail for beach access (1994 Stipulation Agreement.)

- Public access/easement issues must be studied and problems resolved to ensure this trails continued accessibility.

- Notes that portions of this trail are outside the TSA.

Adjacent Property Owners:

- Note that in the past, property owners along this trail have discouraged use by the public by removing trail signs and posting "Private Property" signs, even though it is a public trail.

- Recommend that this trail be improved and signs directing traffic be installed.

- Consider this trail to be a good beach access trail. It merges with the lower portion of Bluff Trail, which continues to the beach, so it could be an alternative to the Bluff Trail.

- Consider the forested aspects of the trail to be unique, as several other trails provide views of the ocean.

- Note there are no erosion issues associated with Parker Creek Trail.

Interested Public:

- The trail needs signage. Many visitors do not even know this trail exists, and it is easy to take a wrong turn when coming back up from the beach.

- Also note that in the past, property owners along this trail have removed signs and discouraged use, even though it is a designated public access trail.

- This trail provides a gradual and easy walk down to the beach.

- Note that a portion of this trail crosses onto private property. There needs to be an easement in order to keep it open, if one does not currently exist.

Coastal Conservancy:

- The Conservancy supports exploring the establishment of an easement over a route that would connect the town to Parker Creek Trail and serve as an alternate to the Wagner Street Trail.

- Notes that the forested environment of this trail is a unique quality and enhances user experience of the area.

Yurok Tribe:

- Agrees with the position of the Tsurai Ancestral Society. To reiterate: this trail impacts the village site the least.

- Suggest rerouting the Parker Creek Trail entrance away from residential areas by placing the trail wholly within parcel APN 042-111-03, the most northern and eastern parcel within the TSA.

D. Site Access Trails (trails that lead into the Tsurai Village site)

There are three site access trails that lead into the Tsurai village site. Of these, Doctor's Trail (a.k.a. Iverson Trail) enters the village site on the south off of Parker Creek Trail. This trail goes through the Sebring property to the Pepperwood tree within the village. An easement was never officially granted for this trail. Rather, a verbal agreement was made between Dr. Iverson (the previous landowner) and Axel Lindgren II that provided this village access. Both gentlemen have since passed away and the TAS would like to obtain written permission to continue using this access to the village, but do not want it to be used by the public. The TAS would like to seek a formal agreement with the current property owner of APN: 042-131-07, the Sebrings. The second trail is the Pepperwood Creek Beach Trail, which goes from the beach up into village site from the south and along the west side of the mouth of Parker Creek. A third trail accesses the village from the ALMT.

Tsurai Ancestral Society:

- Identify Doctor's Trail as their preferred trail to access the village and cemetery.

- Do not want Doctor's Trail to be promoted as a public trail, but for TAS and Yurok use as needed to care for the site and cemetery.

- Prefer that all other trails that access the village site be closed.

- Would like to develop a formal agreement with the current property owner for site access via this trail. Since it passes through private property, it requires permission. A verbal agreement had been in place with the previous owner (Dr. Iverson), but never was formalized.

- Groth Lane is the only vehicle access near the area. This is sometimes needed for accessing the site for TAS activities (reburials from repatriations, law enforcement purposes, etc.). Groth Lane is the vehicle access to the Sebring Property.

- Would like to use vegetation and hand railing to discourage the use of other foot trails into the village site.

City of Trinidad:

- Will take the lead from TAS and the Yurok Tribe on which are the designated site access trails.

- Note that Groth Lane is needed to access the site for law enforcement, water sampling, etc.

- Believe Groth Lane should be considered as another designated beach access route.

- Aware that an easement or formal agreement is needed to use Groth or Doctor's Trails to access the site, since they both pass through private property and require permission from the current property owner.

Adjacent Property Owners:

- Note that the current owner has installed a locked gate, so not only does it require permission, but also a key to access.

Interested Public:

- Note key and permission to access issue.

Coastal Conservancy:

- No current easements for these site access trails since they do not access the beach. (this would be inappropriate as it involves a separate agreement b/n the TAS and private property owner). Would support the entities involved (TAS, the Yurok Tribe, and private property owners) in entering into use agreements or easements.

- Discourages identifying these trails with signs as it may encourage inappropriate public access to the village site.

Yurok Tribe:

- Would like to negotiate access agreement with the current property owners.

3. Natural Resources

A. Vegetation

Tsurai Ancestral Society:

- Assert that vegetation management decisions need to be based upon what is best for or needed to protect the village site. Understands that views are important to property owners on the bluff, but do not think this should be the primary factor in vegetation management decisions within the TSA.

- Would like to see the area restored. Invasive and non-native species removed and native plants encouraged.

- Would like to selectively remove vegetation and replant with grass within the village site and cemetery. Suggest that the dense vegetation provides cover for looters, in addition, is helping retain moisture and contributing to the swampy nature of the site, which is not how it used to be.

- Would like to see traditional use plants re-introduced.

- Residents of Trinidad have been using the bluff and slope to dump lawn clippings from their properties. This should be stopped as it traps moisture on the bluff and leads to the spread of invasive species within the TSA.

- Feel the TSA should be excluded or exempt with conditions from the City's Vegetation Management Ordinance.

- TAS has been asking the City to manage the vegetation on the village and cemetery site since it acquired the land in 1989.

City of Trinidad:

- Is developing a 'Vegetation Protection Overlay Zone'. The TSA is excluded from the proposed zone.

- Contacted the Trinidad Civic Club about landscaping materials and since 2001 the Civic Club agreed to remove clippings from the Memorial Lighthouse grounds.

- Would like to enhance views from the bluff, but not if it compounds erosion problems on the TSA.

- Aware that no previous biological assessments have been conducted within the TSA and acknowledge that such a review would be needed before implementing any vegetation management plan to ensure it complies with CESA and CEQA.

- Believe that the TAS and Yurok Tribe should determine how to manage the vegetation on the village and cemetery areas and see the role of the City as one of helping implement those decisions.

Adjacent Landowners:

- Vegetation management should be considered as a way to help stabilize the bluff and reduce erosion.

- Many owners are willing to remove invasive species and re-plant with native species.

- Would like a protocol for how to manage vegetation on their properties.

- Feel views are important to their own properties. Many would like views or enhanced views, which would require trimming or topping trees.

Interested Public:

- Some would like to open up views from the bluff so they can see Trinidad Bay, the ocean, and peninsula. Scenic views are important to many.

- Selective thinning, topping, and removal of trees on the bluff and upper slope would enhance views, and could prevent trees from falling over and uprooting soil.

- Different vegetation types require different management techniques and should be addressed in the City's Vegetation Management Ordinance.

- Many support removing non-native, invasive species and re-introducing native species.

- A qualified arborist should be used to make specific recommendations on vegetation management.

- Vegetation is part of the natural resources of the area. Since resource protection is a goal of the Management Plan, it should reflect this.

- Some trees within the TSA are historic and are documented in the historic record, others have cultural and ceremonial value and should be protected.

- The natural and unique vegetation within the TSA should be enhanced and interpreted for visitors to enhance visitor experience of the area.

- Understand that vegetation management decisions within the village and cemetery area should reflect cultural resource protection goals.

Coastal Conservancy:

- Agreed to apply for permits to revegetate bluff adjacent to Wagner St. Trail in a manner that does not impede trail use or promote bluff erosion, and to cooperate with others in funding and implementing revegetation, as part of settlement agreement with TAS in *Frame v. City of Trinidad*, Humboldt County Superior Court Case No. DR 98 0359.

- Would like the TMP to identify and clarify what is appropriate vegetation management for the village and cemetery.

- The TMP should identify a process if it recommends any specific vegetation management for the TSA.

- Resource protection goals for the TSA should take precedence over applications of the City's Vegetation Management Ordinance in cases of conflict.

- Natural resource protection is part of the Coastal Conservancy mandate.

Yurok Tribe:

- Agrees with the position of the Tsurai Ancestral Society. To reiterate: remove and replace invasive non-native with native plants, clear out the village center, and replant with grass, and avoid dumping lawn clippings down the bluff.

- Issues of viewshed should be considered from both the beach and the bluff. While it may be desirable to have unfettered views from the bluff looking out over the ocean and down to the beach, people on the beach looking up may not want to see City development.

B. Water Resources

Tsurai Ancestral Society:

- Water quality issues, specifically seepage from failing septic systems within the City are a serious concern for TAS. The bluff and site below have been saturated with sewage-contaminated water. Fecal coliform has been detected in streams that exit the TSA and flow onto the beach. The site is swampy and smells like a sewer. TAS has been asking the City to resolve this issue for decades.

- LACO reported (2004:13-14) that none of the three samples tested were over the North Coast Basin Plan water quality limits, although the tests did not establish exactly what the coliform levels were in two of the samples. There are no test results submitted that support the statement "high levels of fecal coliform."

- Other runoff issues from the City need to be corrected as inadequate drainage for runoff is visibly discharging runoff onto the bluff, further compounding the saturation problems and accelerating erosion.

- The streams that flow through the TSA have not been kept clear of debris. This was done traditionally and was also done by Axel Lindgren II when he was caring for the site. Since 1989, the City has not maintained the streams, which have now been obstructed by debris. This is causing them to divert and in some cases, flow directly onto the village site. TAS would like to see these streams maintained to prevent this problem from continuing.

- TAS would like the City to acknowledge that the failed septic problem and the lack of an adequate runoff discharge system have a detrimental effect on the village site.

City of Trinidad:

- The City is aware that there is a water quality problem that has been detected in the streams that pass through the TSA and flow into the Bay. They have received a grant from the State Water Resources Control Board and the Environmental Protection Agency to monitor discharge and determine if there are failing septic systems in the City, to upgrade older systems, and to develop a program of regular maintenance to ensure good water quality. This study is currently in progress.

- Believes that they data show significant improvement in the quality of water runoff in recent decades.

- City has been selected as a pilot project in the Critical Coastal Area and Areas of Special Biological Significance programs.

- Specifically included the TSA in the Onsite Wastewater Treatment Systems monitoring plan.

Adjacent Property Owners:

- Express concerns about water quality problems from failing septic systems.

- Suggest designing and engineering solutions be explored to help mitigate and resolve the problem of failing septic systems.

- Recommend promoting low-flow systems within the City to reduce discharge and gray water.

Interested Public:

- Some are aware that the problem of failing septic systems was identified several years ago and are concerned that it has not been resolved.

- Some point out that there has been very limited testing over time, but what has been done suggests the septic problem is not as bad as it was 20 years ago.

- Contamination of water in streams, flowing onto beaches, and into the protected Bay is a public health issue that many are concerned about and want to see resolved.

Coastal Conservancy:

- The Coastal Conservancy is very concerned about bluff saturation caused by runoff and potentially faulty septic systems within the City.

- Contamination of the streams that flow through the TSA and into the Bay are a grave concern for the Coastal Conservancy because it is impacting a valuable coastal resource.

Yurok Tribe:

- The City's fecal discharge into the Yurok village site is abhorrent.

4. Interpretation and Restoration

A. Signage

Tsurai Ancestral Society:

- Would like to see "Indian Beach" signage replaced with "Old Home Beach".

- Would like to see a commemorative plaque installed on the Axel Lindgren Memorial Trail.

- Supports installing interpretive signage to educate the public on Tsurai Village and Yurok culture.

- Interpretive information on Tsurai and Yurok culture should be prepared and approved by the Tsurai Ancestral Society and the Yurok Tribe.

City of Trinidad:

- Would defer to the Tsurai Ancestral Society and the Yurok Tribe on interpretive information to be included in signage.

- Would like signs to both interpret the area and identify trails within the area, including TSA.

Adjacent Property Owners:

- Believe the use of both directional and interpretive signs is a good idea.

Interested Public:

- Recommend creating interpretive signs not just for the village, but also for the coastal and natural resources unique to the area and within the TSA.

- Trails should be well marked to direct traffic to and from the beach.

Coastal Conservancy:

- Supports the use of signs to direct people to acceptable areas and to the beach.

- Notes that settlement agreements (1994 and 2005) require signage designating ALMT as primary beach access and other trails as secondary access

- Would like to see more signage for the Parker Creek Trail in both directions.

Yurok Tribe:

- Finds Native American interpretation to be one way to educate people and counter racism.

C. Village Site Restoration

Tsurai Ancestral Society:

- Supports the idea of site restoration, but notes that the primary concern is site stabilization and protection.

- Would consider restoration of the village similar to what has been done at Sumeg, in Patrick's Point State Park.

- Would like to see the Brush Dance restored someday.

City of Trinidad:

- Supports the idea of site restoration and feels it is ultimately up to the Tsurai Ancestral Society and the Yurok Tribe to determine what is appropriate.

Adjacent Property Owners:

- No specific comments provided on this issue.

Interested Public:

- Support the restoration of the village site if decided by the Tsurai Ancestral Society and the Yurok Tribe.
- Many would like to learn more about Tsurai and Yurok culture.
- Many would like to see the Brush Dance restored to the village.
- Many see the educational potential of restoring the village.

Coastal Conservancy:

- Supports environmental restoration of the entire TSA including the removal of invasive species, re-introduction of native and culturally significant species, as well as cultural resources.
- Recognizes that some restoration efforts would be for Tsurai Ancestral Society and Yurok Tribe cultural needs, not necessarily for the public.

Yurok Tribe:

- Agrees with the Tsurai Ancestral Society.

D. Visitation/Access

Tsurai Ancestral Society:

- Want the burial grounds to be respected as a cemetery as opposed to promoting recreational use in this area. Do not feel that access or visitation by the public should be encouraged.
- Would like to have controlled and limited access to the village site if restored. Would consider interpretive tours.
- Fencing the cemetery and sensitive areas of the site would discourage public access.
- Would like the City to notify TAS in advance if access to the site is needed.
- Prefer that site access trails be re-vegetated and the handrail installed on the Axel Lindgren Memorial Trail to discourage site access by the public.

City of Trinidad:

- Would like a defined protocol on who to contact when site access is needed.
- Note that site access for vehicles may be needed for law enforcement purposes.

None of the other stakeholder groups provided comment on site access issues.

5. Other Management Issues and Concerns

Tsurai Ancestral Society:

- Asserts that the City has not followed the consultation protocol under Policy 69 of the City's Local Coastal Plan in the past. Would like to see Policy 69 updated to include consultation with the Yurok Tribe.
- Would like the findings of a recent geo-technical study (from LACO) for the TSA be included in the Management Plan and recommendations.
- Does not feel the City has demonstrated good stewardship of the village since 1989 and would like to see the TSA transferred to the Yurok Tribe.

City of Trinidad:

- Want a cooperative shared relationship between all parties in implementing the recommendations of the management plan.
- Propose ownership of the village site by the TAS or Yurok Tribe.
- Confident that the City can continue to maintain public access while the Yurok Tribe and TAS manage cultural resources.

Adjacent Property Owners:

- No additional concerns identified.

Interested Public:

- Consider the TSA as culturally and environmentally significant resource and an important part of local history.
- Recommend establishing a cultural week in order to educate local residents and the public about Tsurai and Yurok history and culture.

- Some see the future management of the TSA as a potential for collaboration, education, and reconciliation for the entire community.

- A member of the City Council proposed a tri-government management team (State, Tribal and City) to regularly meet on management of the TSA.

- Public health and safety are primary concerns for the TSA, whether it is trail conditions, solid waste, or water quality.

- Restoring the cultural and natural resources within the TSA benefits everyone.

Coastal Conservancy:

- Feels that the concern about costs is valid, but should not limit what is considered for the Management Plan or future management of the TSA.

- Is committed to the protection of recreational, cultural, and natural resources within the TSA and providing safe public access to the beach and coastal areas.

- All environmental issues should be examined and resolved where feasible.

- Property should be managed to protect recreational, cultural and natural resources and to resolve conflicts between these objectives regardless of ownership. Believes that discussions about future ownership are valid nonetheless and should be considered in the Management Plan.

Yurok Tribe:

- Agrees with the Tsurai Ancestral Society. Advocates for the transfer of the TSA to the Yurok Tribe for proper management and restoration.

APPENDIX D: Scoping Meetings Matrix

Abbreviation Index:
TG= Tom Gates, Yurok Tribe
AL= Adjacent Landowners
ALMT = Axel Lindgren Memorial Trail
CT= City of Trinidad
TAS= Tsurai Ancestral Society
PM= Public Meeting
KS= Kate Sloan, Yurok Tribe Environmental Program
TMP = Tsurai Management Plan

Issue	Tsurai Ancestral Society	City of Trinidad	Adjacent Property Owners	Interested Public	California Coastal Conservancy	Yurok Tribe
Erosion	-Consider the problem to be due primarily to runoff causing slope instability and erosion. - Need to correct runoff problem from paved areas onto site- redirect runoff. -Concerned about slope failure being accelerated by lighthouse development, evidence of slope failure is visible.	-Would like to see a geo-technical study of the entire TSA to identify the causes of erosion and bluff failure. -Problem of conflicting geo-technical studies and findings. -Recommend an adaptive management strategy (i.e.: try and	-Recognize some erosion is a natural process, while some is being caused by human activity or development. - Consider planting vegetation on the bluff and slope that has a deep root system to help stabilize the soils and reduce erosion.	- See rodents (i.e.: mountain beavers) as a contributing factor to erosion problems. - Armoring the beach/toe of the slope to stop erosion is not only unsightly, but also can accelerate erosion in adjacent areas (i.e.: Santa Cruz/Monterey	- Bluff saturation is a concern for the CC not just due to erosion, but also due to water quality issues and the protection of coastal resources.	- Causes of erosion need to be identified and where found to be due to human activity, need to be corrected in order to protect the village site.

	- Recommend channeling runoff into creeks . This could be against the law due to septic contamination -May want to filter runoff or put in a settling pond -Mountain beavers are accelerating erosion problems due to burrowing. They need to be removed or exterminated.	see what works and what doe not). -City is concerned about the cost of stabilizing the site. Who pays? -Believe rodents (i.e. mountain beavers) are a major contributing factor to erosion and need to be removed. - City is currently conducting a septic system and water quality monitoring program to identify the sources of bluff saturation and stream contamination.		area). - If the failing septic systems and runoff from the city are saturating the slope and causing erosion and possible bluff failure, it needs to be corrected. - Mitigation efforts, such as rock gabiens, armoring, retaining walls require permitting and approval from the Coastal Commission.		

Bluff	- Believe that failure is due to septic seepage and runoff something needs to be done to stabilize. -Recommend taking any action required to stabilize bluff to protect site. - Options to stabilize should be explored.	- Past geo-technical studies have competing and sometimes conflicting conclusions about the causes of bluff failure. -City offered access to City records on site history and past geo-technical studies for writing the TMP (*note this offer was not honored and was later rescinded by the City)	- Some consider vegetation as a problem. Specifically, alders on the upper slopes. Vegetation could be used strategically to stabilize the slope and bluff. - Believe failing septic systems are a significant source of bluff erosion. -Bluff erosion and slope failure have been ongoing, but in past 15-20 years, it has caused portions of the Wagner Street trail to shrink from 20 feet wide to about 8 feet wide. -Mitigating bluff failure will slow the natural process of erosion and will protect the Village	- Find ways to stop seepage from septic systems that is saturating the bluff. - Need to look into sewer system for the City. -Consider actions like promoting and requiring low flow water appliances. - More information needed on causes and solutions.		

			site and properties situated on the bluff. Taking no action is not going to stop erosion, bluff failure or protect the site or private residences.			

Stream	- Clean out debris in streams in order to channel runoff and prevent runoff and seepage into the site and cemetery. - Axel Sr. used to clean out debris to keep streams open, but this is really the responsibility of the landowner (i.e.: City) - Concerned about erosion from streams but believe the real stream issue is water quality related (i.e.: septic seepage) - Odor and sampling indicate that raw sewage is flowing through streams, this is adding to the runoff and erosion problem but also is a public health issue. TAS uses the stream water for ceremonial purposes.	- Will be doing water quality monitoring on streams with wastewater treatment grant. - A 1990 study by Busch & Co. was conducted but recommendations were never pursued. Should consider revisiting this study and its recommendations				

Ocean	- Ocean erosion is clearly a problem due to natural causes. -Would like to explore possible stabilization methods (i.e.: rock gabiens, retaining wall, rip-rap, revegetation) but only if it would not accelerate natural erosion.	- City would be satisfied with a 20-year solution, such as riprap or gabiens instead of trying to have a final solution that costs millions of dollars because; who will pay for it?	- Consider mitigating erosion at the toe of the sloped similar to Luffenholtz Beach. (i.e.: constructing a log and cable or gabien system to stabilize the toe of the slope.)	- Recommend that rock gabiens be used to slow erosion at toe of slope (i.e.: those below the former Iverson property)		
Cultural Resources	- Exposed artifacts found on the beach a recurring problem. These should be left alone or TAS should be notified and they will rebury on site. - Mountain beaver problem is exposing artifacts on the site and along the beach. Would like to see this problem resolved. - Very concerned with looting which is an on-going problem. Law enforcement and education are needed. A	- Differentiates between CR that have washed onto beach and those exposed in the village. - See this area as a function of the Tribe or TAS who needs to take a position as "experts" on ways to handle CRs and make recommendations to the City on what to do. - Sees the City's function as implementing	- The Tsurai Village site is a significant cultural resource for the entire community. - Yurok people have the priority rights in deciding what is best for the site. - Increased tourism will likely bring increased impacts to cultural resources and should be considered in future	-Could put a railing around the site with signs to deter people/inform people they shouldn't be in there. - Could pass a City Ordinance to allow for the prosecution if someone is found in the site without authorization. - Others see the best way to protect it is to not identify it via signs.	- Need a definitive statement on what constitutes "harm" to CR in plan as it remains undefined in CC easement language. -Provide explicit examples of what actions should be avoided (e.g. cutting across site on	- CRs are the primary concern for the Yurok Tribe. Management decisions need to be based on how best to protect the village and cemetery. -Supports the TAS in it's efforts and recommendations re: cultural resources protection

	site monitoring program would be a good idea. - Overgrowth of vegetation has provided cover that obscures looting activities within the site.	whatever the Tribe decides, including surveillance, enforcement, program to trap and remove rodents, and monitoring as examples. - City does not, however, have the monetary resources or people to take on full responsibly of implementing whatever plan the Tribe decides, City wants it to be cooperative.	management plans.	- Possibly look to state or national park solutions to managing Indigenous cultural sites as models. - Have one cultural week a year for local Indigenous Peoples to educate/exchange ideas with community. - TAS should decide how much access they want the public to have to the village site and then act accordingly. - Policy 69 suggests the cemetery be fenced. - Past concerns over looting and protecting the site	unmarked trails, excavation, and unapproved planting) and what actions should not impact site (e.g. hiking on trails ONLY and guide-led interpretive walks)	

				have led to allowing the site to become overgrown, to discourage people from going in there. - A comprehensive cultural resources survey of the entire TSA would help locate and identify CRs for future management. - Some hope to see restoration and re-introduction of the Brush Dance. - The cultural resources could be restored not as tourist attractions, but as part of cultural preservation for Yurok and Tsurai people.		

Exposed Cultural Resources/ Human Remains	-A continual problem. TAS is very concerned about protecting burials and exposed remains. - -Erosion is contributing to the outwash of remains onto the beach below. - It is important that the City follow the protocol and inform TAS upon discovery so they can be properly reburied on site as soon as possible.	-Two types: 1) Those due to erosion and visible on beach; 2) Those on the site and in the ground. -Sees it as a monitoring issue for the Tribe and TAS. - Would like to see the site protected and for people to stay out of it.				
From Erosion	- Some erosion is natural, but others, like that caused by runoff and rodents should be resolved to help stabilize the site and prevent CRs from eroding onto the beach. - If artifacts are found then they should be reburied by TAS or the Yurok Tribe as soon as possible.	- Geotech study may help provide insight into causes and solutions. - Sees the roles of TAS and Yurok Tribe as primary in deciding what needs to be done.				

From Looting	-Very concerned about this ongoing problem. - Consider site and veg management to open up the area so it is more visible and easily monitored. Dense vegetation serves to obscure the activities of looters. -Monitoring on a regular basis is recommended to track and prevent looting. - Educate local law enforcement on the looting issue and the fact that it is a criminal act. - Interested in a stewardship or monitoring program to monitor and prevent looting. - Would like to use wire mesh to cap the site, over lay it with imported fill dirt, reseed, and that	- Deter site access and foot traffic by use of trail and railings. - Consider identifying site boundaries in order to prevent access and keep people out. - A monitoring program and support of Law Enforcement in order to protect the site and deter looting. - Recommend a monitoring program- could use HSU or Tribe or interested citizens.		- Others agree with the wire mesh to prevent looting, but also prevent soil slipping.		- Looting needs to be stopped.

	would help prevent looting and open up the site to be more like a cemetery.					
From Rodents	-Recommend that rodents be removed from the site area because they erode the site, leading to the exposure of artifacts, which encourages looting and collecting.	- Rodents are a problem. - Possibly a rodent-proof fence around the area with the highest concentration of cultural materials - City could help implement the removal of the rodents.		- Definitely a contributing problem re: erosion. - No one had a problem with removing rodents. Are not an Endangered Species. - Recommend relocation (trap and remove) over extermination.		- Remove or exterminate.

Reburial	-Would like to continue to handle reburials on site per traditional practice by TAS.	- City would like a clear protocol on how to handle discovery of human remains. - Put the proper protocol in the police department manual. - Perhaps even public education on protocol (i.e. brochure).				
Vegetation Management	- Recommend that all veg management be determined by what is best or what is needed to stabilize and protect the site. -Don't want trees removed if geo-tech studies says it will harm site. - Viewshed issues are not a priority of TAS, protecting the site is. - Would like to see invasive species removed and culturally significant	- Developed a Draft Vegetation Ordinance that was tabled until City Council devised a plan for nuisance abatement and enforcement since vegetation is seen by some as a nuisance and enforcement issue. -Stated the ordinance does not include the study area and primarily deals with viewshed issues (Note: Copy of draft veg ordinance <u>does</u>	-Vegetation management should be considered as a way to stabilize the bluff and slope and protect the site. - Willing to remove non-native species from property and replant with native species. -Residents would like a protocol or process on how to treat vegetation on their properties.	- Some would like trees to be topped or removed to enhance view of the ocean, the bay, and the sea stacks. View of the actual beach is not a goal and likely not practical. - Thinning trees may make them less prone to blow down. -Consider removing non-native species.	- Would like TMP to address what is or is not appropriate veg. Management. - Would like the TMP to have clear plan for any recommended types of veg management. -Address City Veg Ordinance and site management	- Agrees with TAS that vegetation management decisions need to be based on what is best for protecting and stabilizing the site.

	plants, native species reintroduced throughout study area.	include the study area) - City would like a veg plan that enhances views but does not compound erosion or site problems. - City to provide a copy of the draft of veg. Ordinance. -Biological/ environmental assessment needs to be done, to provide a botanical and animal species inventory. - City's interest in veg maintenance is onsite protection of CR, maintain public access, and remove invasive species. - City has drafted a vegetation ordinance but has nuisance		- Consider removing taller trees that are prone to blow down (pines and alders) - Recommend different treatments for different types of vegetation (trees, hedges, etc) for City Veg ordinance. - Use an arborist to determine which trees to trim versus remove. - If resource protection is part of the goal of the CC and TMP, then veg management plans should reflect this. - Consider how leaving trees on the TSA (or removing them) will impact resource protection goals.	differences or potential conflicts.	

		abatement issues as vegetation would be treated as an abatement issue.				

On site	- Would like all vegetation management to be dictated by what is best for protecting (and stabilizing) the site and allowing access to the cemetery by TAS for caretaking. - The TAS has been asking the City to help clear out the overgrowth in the cemetery area since 1989. - TAS would like some vegetation cleared to enable access, dry out the site, and provide the ability to monitor the site to protect it from looting.	- See veg management as depending on the vision for the site - See the vision for the site as a decision made by the TAS and the Yurok Tribe. City would help implement. - The TSA is included within the City's draft vegetation management plan.	- Vegetation management is a viewshed issue for adjacent property owners as views are obstructed by vegetation on the TSA. - Alders and other vegetation on the site, particularly on the slope above the village site are creating an overburden, retaining moisture and increasing potential bluff failure risks. Consider removing the alders and other vegetation that is impacting the bluff and site below.	- Would like trees on site to be topped or trimmed to provide views. -- Historical records and photographs show the TSA used to be open with a few large trees. Traditional use of fire (prescribed burning) probably helped maintain this. Invasive species now have changed the landscape. Consider removing non-native invasive species. - Historical records also indicate that there are culturally significant trees on site that warrant consideration (bay trees, pepperwood trees, California Laurel, Oregon		- Should be determined by what is best for protecting and preserving the cultural resources within the TSA.

				Myrtle). - Understand that the Pepperwood trees are highly significant historically and culturally for Yurok culture. - Restoring the natural vegetation and promoting the cultural plants and trees would enhance the interpretive value for the public.		
Viewshed Issues	-TAS priority is to protect the site, any veg management should be dictated by what best protects the site. This is the only priority- not the viewshed issues of adjacent landowners.	- Draft veg. ordinance talks about protecting viewshed, but the City feels there is a balance between viewshed and what's best for the site in terms of halting erosion and looting (e.g. limbing rather than removing trees) - As a stakeholder,	- Views are important to adjacent landowners. - Request a process or protocol for requesting trimming of vegetation on-site to enhance views. - Viewshed	- City's General Plan provides for view protection from private residences.		

		the City doesn't have any view issues but realizes that views are important to adjacent landowners. -City has included viewshed issues in draft vegetation management plan. -Vegetation management plan is on hold until the TMP is completed. - Planning Commission holds views from private residences as important. City's General Plan and the TMP should reflect that.	protection, in the form of removing trees ready to fall already may be in line with protecting the environment, the slope, and village, which is below.			

Trails	- See Parker Creek Trail as least invasive to village site would like to see foot traffic utilize this beach access over others that do impact the site. - Would like to see Groth Lane and Parker Creek trails developed and promoted for public use over other trails within the TSA.		- Trails should be safe and accessible. If trails become hazardous, they should be posted and/or closed. - Trail maintenance is the City's responsibility. - Consider implementing a seasonal trail rotation so that unstable trails can be closed during wet season. -Multiple trails provide several beach access alternatives. Beach access is not dependent on a single trail.	- Trails are an important part of the Trinidad community and economy. They encourage tourism. - Adequate trail maintenance is vital. Safe and user friendly trails will attract users. - A trail maintenance program needs to be established. - Vegetation management on trails is an issue. - Proper trail maintenance will encourage people to stay on them and not leave the designated trails. People detour around the trails in areas where they	-Access to coastal areas is a CC mandate. Access includes access to views, not just the beach. -Willing to explore alternatives for beach access. - CC would like to see as many access alternatives as possible to preserve the maximum coastal access consistent with other considerations of the easements (natural and cultural resources included)	- Agree with TAS recommendations and concerns.

				are hazardous (i.e.: the lower portion of the Traditional Trail). - Use trails to direct visitors to where you want them to go and away from areas you want them to stay out of.	- Would like to see both Parker Creek and Groth Trails used because of scenic value and ease of beach access.	
Axel Lindgren Memorial Trail	- Would like to see the traditional trail restored at the top. Remove recent Civic Club installation of railing and bushes, concrete where it changed the traditional path -The trail is steep and should have a handrail along entire length. Prefer it be placed on one side, to deter people from leaving the trail and going into the site and cemetery area.	- Thought the issue of entrance was solved between TAS and the Civic Club, direct access fine as long as westerly entrance by parking lot remained, but not sure if formal agreement was made. - Could structure the veg. around the trail to prevent people from going into the site, perhaps installing a handrail.	- The original path at the top of the traditional trail is well documented. - The trail is hazardous as it is. The ties are moving (rotating) and the bottom of the trail is eroding and hazardous. -The uneven steps are dangerous with no hand railing in place. Consider	- The trail is very steep and needs a handrail. - Grass grows rapidly on steps of the trail and must be maintained, but pulling it contributes to erosion problems -Steps/railroad ties may need to be reset in order to make it safer. - Someone needs to	- Supports this trail as being designated as the primary trail to the beach and the review of the use of the traditional trail (top to bottom). - The CC has taken the position of making repairs on an interim basis while the TMP is being developed.	- This is a traditional Yurok trail and as such, the TAS and Yurok tribe want to see it protected and restored.

	- Hand rail idea: Pressure-treated cedar core with three-span type cable with holes drilled in the posts and then split- redwood top rail. -Move the second bench further down the trail so that people are not encouraged to stop at the same location as the site and cemetery. -Erosion at the bottom of the trail is a recurring problem. Need to explore options for stabilizing the trail so that it is not dangerous. People leave the trail and are impacting the area on either side because it is unsafe.		rebuilding with consistent platforms and rises, crib and rock steps using only cable and ties at the lower portion. - Consider redirecting the lower portion of the trail so that it does not continually erode.	take care of it. If the City can't do it, someone else needs to. - Consider posting signs to warn if hazardous, or to direct people off certain areas. -	- Would like to see solution at the bottom be something "natural" and not obtrusive looking (i.e.: Malibu Beach concrete). - The CC holds the trail easement through the Civic Club property (Memorial Lighthouse)	
Wagner Street Trail (a.k.a. Old Wagon Road Trail or Bluff Trail)	- Concerned this trail causes erosion and should probably be closed until it is determined that it is not accelerating bluff failure	- No consensus, need a geological study to inform decision. - May have to wait until litigation directs	- Many past geo-technical studies have been conducted. Consider mitigation to slow the erosion	- Litigation issues will ultimately determine what happens to this trail.	- Interested in exploring the maintenance of this trail for access.	- Agrees with TAS on closing this trail.

	or threatening the site. If it is, it should be permanently closed. - Would like to see it re-vegetated because perceive it as a major erosion problem -Consider promoting alternate trails to access the beach over this trail. - TAS believes the primary issue with this trail is site protection (of village below) and not public access as there are more than one trail to access the beach.	decision on this trail. - Trail is important because of gradual slope, good for elderly. It is a public access issue.	and bluff failure. -Has eroded significantly over past 20 years. Now only about 8 feet wide at the access, which is directly above the site. - Conditions of Local Coastal Program have made implementing mitigation measures more complicated. - Many people prefer this trail because of the view and the gradual slope for accessing the beach. - Consider using native vegetation to stabilize the slope below the trail. -Coastal access standard zones	- Efforts should be made to keep the trail as far away from the bluff edge as possible.	- There would have to be *compelling* evidence that foot traffic is impacting erosion on the bluff to close this access. - Supports the designation of this trail as a formal trail onto/around the site.	

			recommend a specific width of trail, re-vegetating the western side of the trail would make the trail access much narrower than the standard. -The trail is part of an historic access road to the beach and is consistently open, accessible and easy to use.			
Parker Creek Trail	- Is a gradual trail that provides beach access. - TAS promotes the use of Parker Creek Trail because it has the least impact on the village site.	-Could be an alternate access to the beach. - Trail is outside the study area, but as an access alternative it could be important.	- This trail begins behind the Market and then merges with the Bluff trail and then proceeds to the beach. - In the past, dogs and property owners have discouraged use of this trail. Even though the CC retained easement for access, property	- This trail needs signage, particularly at the trail head by the store or near View Street. Lack of signage prevents people from knowing it is even there. Signage is also needed to direct people coming up from the beach.	- Concerned that if this trail is designated as a formal trail that it would encourage traffic into the internal area of the site, which may be problematic. - Explore trail easement/forma l site access	

			owners have posted "No Trespassing" signs and removed trail marker signs. - No erosion issues with Parker Creek trail or access. - Parker Creek trail does not provide the ocean views that Bluff trail does. It is a forested trail. - Improving Parker Creek trail could enhance it's use as a primary beach access trail.	- The trail is an easy way to access the beach, fairly level and gradual slopes make it easy to use, esp. for the elderly.	through the new property owner's (not Halverson's) property. This would be for Tribal use ONLY and probably not signed or named for general public to see.	
Site Access Trails	-Doctor's trail is the TAS preferred access the village site for TAS purposes. -Would like to close all other site access trails and use the Doctor's Trail to access the site, but discourage public from using it.	- Groth Lane trail needs to be defined as a possible public access; a secondary trail with beach access, but with no site access. Would need an easement, esp. for enforcement purposes.	- Doctor's trail is on private property with a private drive and gate.	- Doctor's trail passes over private property. New owners may not even be aware of easement and access issues. -Doctor's trail is currently blocked by a locked gate.		- A formal agreement for site access should be made between City, Yurok Tribe, TAS, and property owners.

	-Access via Doctor's trail in the past was through a verbal agreement, but the property has new owners now. Would like formal agreement for access. - Groth Lane is also a trail access that TAS would like to see developed for public use. - Use re-vegetation and handrail to close the two other site access trails and to discourage people from using them to access the site.	- Beach access is the primary concern for all trails. - The TAS and Tribe should inform City on what site access trails should be kept opened or closed, and how.		You not only need permission, you need a key.		
Trail Signage	- Use signs that say, "Stay on trail, sensitive area." rather than state that it's a burial site. - Would like signage for the Axel Lindgren Memorial Trail at the trailhead.	- City wrote a grant for signs with TAS, but were not put in because of litigation. -Suggest MP come up with best idea for signs and then, with concurrence from the City would implement the signs based on litigation	- Consider posting signs to tell people to stay out of the site.	- Parker Creek and Groth Lane trails need signs to direct traffic. - Interpretive signs for both natural and cultural resources.	- Include interpretation to the naming and history of each trail. - Consider installing interpretative signage about Tsurai at the head of the	

		settlement. - Have no problem with changing "Indian Beach" sign to "Old Home Beach" the action just needs to be brought forward formally.			Axel Lindgren Memorial trail. - Would like to see better signage on Parker Creek and Groth Lane trails so that people knew where to go.	

Interpretation	- TAS would be interested in developing interpretation of the village and area to tell the story of Tsurai through signage, brochures, and possibly guided tours.	- Would defer to the Yurok Tribe and TAS	-Would enjoy learning more about the history of Tsurai. See it as an important educational component and should be included in the TMP.			- Agree with TAS
Signage	- Would like to see different wording on commemorative plaque: "Old Home Beach" to replace "Indian Beach" - Interested in interpretive signage for educational purposes, ex: Sumeg Village	- Would defer to the Tribe and TAS but believe interpretive signs would be good tools to inform the public and protect the site while promoting and directing beach access.	-Signs would be a good idea, but need specifics on where and what for.	- Could have natural resources and vegetation as a part of the interpretive signage. - In the past, signs have been installed on Parker Creek trail but property owners did not like them and took them down. - Suggest that signs not be used to identify site location. If you don't want people to know where it is, don't tell them.	- Signs for trails should be used to direct people. Agrees that Parker Creek Trail needs to be marked from both directions.	

Print/Web	- Interested in developing informative brochures to tell history of Tsurai and its significance to Yurok people and TAS.	- Police dept. and Chamber of Commerce have websites and access to website development. Info on village and history could be a good project for Museum Society and TAS to do jointly and put on Chamber of Commerce website as a link			- Add interpretation/ history of site on City of Trinidad and/or Humboldt County's websites	
Site Restoration	-Site protection, specifically of the cemetery and eroding cultural deposits is the primary concern. -Village restoration would be considered, possibly a plank house. - TAS would like to see the Brush Dance restored. - One of the reasons TAS is so concerned about water quality is that one	Would defer to Tribe and TAS on what to do re: the long term vision and future management of the site, including restoration.		- Support the idea of restoring the site for cultural uses and for educational purposes.	- Re: environmental restoration CC would like to see removal of invasive plants and replacement with native and/or historical and/or culturally significant plants. - Suggests that restorations plans include	- Support site restoration and reintroduction of Brush Dance in the future.

	of the streams is used for Tsurai ceremonies and right now it can't be used because it is contaminated.				cultural use-only efforts where the TAS and Yurok people could use the area for cultural purposes, not. nec. for the Public	
Visitation	-The cemetery is not a public use area, it should be treated as a cemetery	-City would appreciate a protocol for site visitation, especially for monitoring and water quality sampling purposes. -City would like to know who to contact for site access.				
Cultural Site Management	- TAS and Yurok Tribe have sole authority in determining what is appropriate management of cultural resources within the site.	Would defer to Yurok Tribe and TAS on how to manage cultural resource issues on the site and study area.	-Recognize that Yurok and Tsurai descendents know best how to manage the cultural resources in the site.			- Agrees with TAS.

Vegetation	-Vegetation management should only be dictated on what is best to protect the CRs and stabilize the site. -Dense vegetation over the site is a problem. It makes access and monitoring difficult and provides cover for looters.			- Many would like to enhance or create views from the bluff by thinning, topping, or removing trees.		
Village Site Restoration	- Would like to see the village restored in the future and someday have a Brush Dance there	- Don't have full consensus on if full village restoration would be possible, but don't object to the plausibility.	- Considered to be a good idea- has an educational aspect as well as a tourist attraction. - One outcome of village restoration would be increased visitors and increased impacts, should be considered in any restoration plans.	- Many support the idea and are excited to learn more about Tsurai and Yurok history and living culture. - Member of Trinidad Museum Society would like to see site restored for educational purposes to be used as a lab.	- Would support village restoration as long as it doesn't exclude public access. - This doesn't mean that public should have access to the cultural site, but they would like to see the main objective be the natural and coastal restoration before cultural	

					restoration - Would TAS create provisions for what could occur within restored village?	
Issues, Concerns, and Visions for the Future	- Would like to see the land transferred to the Yurok Tribe to be co-managed with TAS. - Believe the City has not honored its stewardship obligations or followed the consultation protocol in Policy 69. - Runoff, and septic contamination is a primary concern for site stability and public safety reasons. It must be resolved. - Seepage from the City septic systems and runoff has saturated the bluff and created a swamp	- Wastewater treatment grant will monitor water quality within the 12.5-acres and soil, however, grant in initial stages. - Monitoring will provide data to then create MP on when to pump or replace certain septic systems - Concerned with historical context section. Wants "non-biased" historical interpretations supported by research to be used in final Management Plan.	- Recognize that Tsurai/Yurok retain their rights spiritually, culturally, and traditionally - Recommend developing a strategy to lower septic/seepage impacts on slope (e.g. low flow appliances, rain barrel to capture water for gardening, etc…). - Could have "Hot tips for Homeowners" brochure at City	- The aesthetic qualities and scenic beauty of the Trinidad area are important community resources. -Recommend developing a cultural week to educate the public about the village and Tsurai/Yurok culture. - Natural resources are significant and should also be included in interpretation.	- Concerned with saturation from the bluff side, particularly with septic is a concern because of quality of the water draining to a coastal resource - CC willing to participate in seeking resources to implement the TMP recommendations. - CC would like	- The primary goal of the Yurok Tribe is the appropriate protection, restoration, and preservation of the village site and cemetery. - Supports the transfer of the TSA to the Yurok Tribe. - The Yurok Tribe Culture Committee voted unanimously in support of the TAS goals for

	within the site. This is not how it used to be. It is a direct result of the seepage from failed septic systems. - Water quality issues impact the site and everyone who uses the beach since the contaminated water flows onto the beach where people recreate. It also flows directly into the bay, which is bad for the natural resources. - Damage to the village site caused by seepage and failed septic needs to be seriously addressed and resolved by the City. The City has never accepted responsibility for the impacts of failing septic to the site, yet TAS has been asking the City to take action for years. - Bluff failure is a big concern. Causes need to be identified and action	- City has concerns about the TMP becoming a political tool re: ownership.	Hall that discusses water saving techniques.	- Recreational resources and uses of trails to access the beach for boating, kite flying, fishing, are important to residents and visitors. - Water quality issues, particularly failing septic systems, were identified over 8 years ago as critical problems, yet nothing was done. - The City knows there is a water quality problem. Hopes to develop a solution. Is currently conducting water quality testing (including water within the TSA) and hopes this will help identify causes	to see a vision come from the process and the TMP that considers all parties' interests fairly and produces feasible and responsible recommendations for the protection of the site. Specifically, protection of access, cultural and natural resources, for future generations. - CC has funded the TMP and could possible be a future funding source for implementing parts of the TMP. They	the future management of the site. -The Culture Committee voted unanimously in favor of three resolutions regarding the TSA: 1) Support the position of the TAS on these issues. 2) Support the transfer of land to the Yurok Tribe. 3) Establish a formal agreement between TAS and the Yurok Tribe for future management of the TSA.

	to prevent failure should be taken. -TAS has given priority to protecting the cemetery. They would like it to be treated as a cemetery not as a recreational area or a park. -Would like the geo-technical study to be completed by LACO and the findings adopted and incorporated into the TMP			and solutions. -Consider a tri-government cooperative relationship: Tribe, City, and State to identify and resolve problems. - Many ideas presented will cost money to implement. Suggest finding funding sources to help make these things happen. - Tsurai village is a cultural resource that is valued not just by TAS or the Yurok Tribe but by the Trinidad Community as well. - Consider the educational potential of the village site and	could also support via recommendations funding proposals to other agencies. - The costs of implementation should not limit what is considered though they will definitely place limits on what can be done. Ideas should not be disregarded outright simply because of cost.	

				restoration. It could be an outdoor classroom for teachers and students to learn about Tsurai. The site has been neglected and this resource is being lost. If all join together, they can teach, learn, and protect. - Some feel that they are not supposed to go to the site. - TAS would like to see the land transferred to the Yurok Tribe. Feel the Yurok Tribe are the best ones to own and manage the TSA. Past experience has shown that previous and current landowners have		

				not properly managed the site. The Yurok Tribe has demonstrated both ability and interest in doing what is best for Yurok cultural resources. - The TMP and the process could represent a new era of cooperation and collaboration between Yuroks, TAS, and the greater Trinidad Community. - The cultural heritage of the region should be important to all parties and a common ground for the future. - City has concerns about the TMP becoming a		

				political tool re: ownership. - CC does not see any suggestions as "off the table" ownership of the TSA has been discussed and is a legitimate topic of discussion in the TMP. - CC expressed concerns regarding public health and natural resource impacts as a result of fecal coliform contamination of the streams in the TSA from failing septic systems is a big concern for the CC. The public uses this area, kids play in those streams, and the public needs to be made aware that it is a problem.		

				- Someone commented that they thought fecal coliform contamination issue used to be worse than it is today. - City is conducting a comprehensive study that will include designing a better sewer system. It is funded by the EPA and the State Water Quality Control Board. It is not limited to testing though this is the first phase of data collection. - Other types of contamination, i.e.: solid waste issues also need to be addressed.		
Consultation Protocol	-Policy 69 needs improvement and changes.	- City is aware of TAS concerns over consultation protocol	- Residents would like a better understanding of			- Yurok Tribe agrees with TAS.

	- Problem with current consultation protocol (Policy 69) is that the City does not follow it. -Would like formal consultation protocol well defined and followed by all parties.	(Policy 69). - Would like to have open and defined channels of communication between TAS and City for access and management purposed. - Would like formal scheduled meetings between all the parties in Management Team to promote communication and conflict resolution on management of the site and study area.	the consultation protocol and the best way to follow it.			

APPENDIX E: Tsurai Study Area Trails Matrix

Attributes	Axel Lindgren Memorial Trail	Wagner Street Trail	Parker Creek Trail
Approximate Length in Feet	400 feet	475 feet	1000 feet
Number of steps	180 steps	None	86 steps
Type of Construction	Cable and step carriages with intermittent natural path Post and rebar steps Two benches	Natural path	Natural post and rebar One bench
Signage	Four signs	Two signs	Three signs
Uses	Public recreational access between Memorial Lighthouse and beach. Historic trail Yurok ceremonial and traditional trail	Public recreational trail connecting from the City, along the bluff, and connecting with Parker Creek Trail Historic road	Public recreational access between residential area and the beach
Views	Coastal Ocean Vegetation, both native and non-native	Coastal Ocean	Forested, including Redwood

Maintenance	Weed eating Minor repairs to lower steps needed yearly Monthly monitoring Install handrails Average repairs every 3 years Upper portions relocated to original path to prevent erosion and possible slope failure	Mowing of three-foot wide path Nightly closure Possible re-vegetation Water erosion control to stabilize bluff and prevent bluff failure. Yearly monitoring	Weed eating Minor repairs to steps Yearly monitoring Average repair every three years
Estimated Cost Range	• Upper portions: $5,000 - $20,000 • handrail: $10,000 - $20,000 • Lower carriage: $3,000- $5,000/year	• interim closure signs/gate and re-vegetation: • $5,000/yr	$500 - $3,000
Other considerations	High maintenance and repair costs Current condition is hazardous	Erosion Potential bluff failure Nightly Closure Boundary issues	Lacks easement from adjacent property owner(s)

APPENDIX F: Copy of the Preliminary National Environmental Policy Act and California Environmental Quality Act Checklists and Summary

Brief Overview of Findings- All supporting documentation for findings is on file with the Coastal Conservancy and the Yurok Tribe Environmental Program.

1. AESTETHICS: There is a possibility that the aesthetics could be impacted, depending on the proposed project.

2. AGRICULTURAL RESOURCES: The site is not located on or directly adjacent to farmland that is categorized as prime, unique or of state or local importance. In addition, none of the recommended projects will convert agricultural land to a non-agricultural use.

3. AIR QUALITY: No recommended project will have the potential to emit significant emissions of air pollution. All State Ambient Air Quality Standards for the location are classified as attainment, except for Particulate PM10, which is nonattainment. However, the North Coast Unified Air Quality Management District is continually taking measures to reduce emissions of PM10 and bring ambient levels of PM10 down to below the state requirement. The Federal Ambient Air quality Standards have all been met in the site location. In addition, no asbestos has been identified at the site.

4. BIOLOGICAL RESOURCES INCLUDING THREATENED AND ENDANGERED SPECIES: It is uncertain whether there are any threatened or endangered species present within the TSA until a full biological assessment is performed and/or consultation is completed with the U.S. Fish and Wildlife Service. However, regarding such species, the Arcata Field Office of the U.S. Fish and Wildlife Service has determined there are several terrestrial and aquatic animals identified as threatened, endangered, and/or candidate species within the U.S. Geological Survey 7.5' Topographic Quadrangle for Trinidad. Thus, these species are not necessarily present within the TSA and may require an assessment and/or consultation to determine presence. Following is a current list of these species, including their present status (E = endangered, T=threatened, C=candidate), as well as identifying whether Critical Habitat has been designated for each species (P= Proposed, Y=Designated, N=None Designated) within the Trinidad Quadrangle. Fish species include tidewater goby (*Eucyclogobius newberryi*) (E, P); Northern California steelhead (*Oncorhynchus mykiss*) (T, Y); and California coastal chinook salmon (*Oncorhynchus tshawytscha*) (T, Y). Reptile species include the loggerhead turtle (*Caretta caretta*) (T, N); green turtle (*Chelonia mydas (incl. agassizi*) (T, N); leatherback turtle (*Dermochelys coriacea*) (E, Y); and the olive (Pacific) ridley sea turtle (*Lepidochelys olivacea*) (T, N). Bird species are the marbled murrelet (*Brachyramphus marmoratus*)(T, P); western snowy plover (*Charadrius alexandrinus nivosus*)(T, P); Western yellow-billed cuckoo (*Coccyzus americanus*)(C, N); bald eagle (*Haliaeetus leucocephalus*)(T, N); brown pelican (*Pelecanus occidentalis*)(E, N); short-tailed albatross (*Phoebastris albatrus*)(E, N); northern spotted owl (*Strix occidentalis*

caurina)(T, Y); and Xantus's murrelet (*Synthliboramphus hypoleucus*)(C, N). Lastly, mammal species include the sei whale (*Balaenoptera borealis*) (E, N); blue whale (*Balaenoptera musculus*) (E, N); fin whale (*Balaenoptera physalus*) (E, N); Steller (northern) sea-lion (*Eumetopias jubatus*) (T, Y); humpback whale (*Megaptera novaengliae*) (E, N); and sperm whale (*Physeter macrocephalus*) (E, N) (Arcata Field Office, USFWS Document Number 169073485-123940).

There are no identified wetlands on or adjacent to the project site. However, the TSA lies adjacent to Trinidad Bay, which includes Kelp Beds that were designated as an Area of Biological Significance (ASBS), now re-designated as Critical Coastal Areas (CCAs). In regards to migratory and native fish habitat, the assessment determined by California Department of Fish and Game, California Cooperative Fish and Habitat Data Program (CalFish), finds that Coho, Chinook, and Steelhead fishes are only *historically* or *possibly* located within the streams of the TSA. Moreover, Cutthroat has been determined as *probable* within the TSA. Therefore, the streams within the TSA are not considered *critical* habitat to the survival of these fish species in accordance with federal and state Endangered Species Acts, however, may be considered habitant of potential concern in regards to assessing cumulative impacts required by NEPA.

5. CULTURAL RESOURCES: No location within the TSA is included on the National Register of Historic Places. However, the TSA includes the Tsurai Village, which is both on the California Register of Historic Places and the California Historical Landmarks lists. There are both archaeological and historic resources within the TSA, including a cemetery. Therefore, some of the projects that have been recommended will need to be mitigated, if not avoided, depending on their possible impact to the Tsurai Village. The finding of no historic properties affected, no adverse effect, or an adverse effect, is contingent on the scope of the project.

6. GEOLOGY AND SOILS: There is an earthquake fault line approximately 1500 feet from the northeast corner of the TSA, and continuing in a northeast/west direction. This fault, however, does not bisect the TSA (See TAB 9) and the TSA is not within a Fault Hazard (Special Studies) Zone (LACO 2004: 15). In regards to liquefaction, LACO "estimate[d] a moderate probability of liquefaction to occur at this site due to the silty sandy soils present and saturated conditions which currently persist through much of the year at Tsurai Village" (LACO 2004: 14). Soil erosion is a concern within the TSA; therefore, this concern must be taken into consideration when any project is considered. LACO (2004) has determined that the "single greatest factor contributing to the destabilization o the coast bluff" is the addition of water to the subsurface (LACO 2044: 12).

7. HAZARDS AND HAZARDOUS MATERIALS: Project site is not located within one mile of a National Priorities List, CERCLA, or equivalent state listed site. Moreover, there are no nearby toxic or solid waste landfill sites. There are also no underground storage tanks located on the project site.

8. HYDROLOGY AND WATERS: No considered project will adversely effect water quality within the TSA, as defined by the North Coast Regional Water Quality Control Board Basin Plan. However, stormwater drainage may become an issue that must be considered, depending on the proposed project. Area of consideration has not been included in the area of study by the Federal Emergency Management Agency's Flood Insurance Rate Map (FIRM). However, it may be concluded that the TSA is not in an area of flood concern as the directly adjacent lands are located in Zone C, which are "Areas of minimal flooding." Moreover, the U.S. EPA, does not indicate any Special Flood Hazard Areas or Moderate Flood Hazard Areas with the TSA.

9. LANDUSE AND PLANNING: Portions of the TSA are zoned as "Open Space" and "Special Environment" within the City of Trinidad's General Plan and, thus, have particular requirements associated. Moreover, certain actions within the TSA are subject to Policy 69 of Trinidad's Local Coastal Plan. Lastly, there are no applicable habitat conservation plan or natural community conservation plans.

10. MINERAL RESOURCES: No project could have an adverse effect on mineral resources of local, state, or regional importance.

11. NOISE: No project should have an increased impact on ambient noise levels. In addition, the project area is not located near an arterial roadway or railroad.

12. POPULATION AND HOUSING: No project should adversely effect population or housing.

13. PUBLIC SERVICES: No project should have an adverse effect on public services, including fire, police, schools, parks, or other public facilities.

14. RECREATION: No project should have an adverse effect on recreational facilitates.

15. TRANSPORTATION/TRAFFIC: No project should have an adverse effect on issues of transportation or traffic.

16. UTILITIES AND SERVICE SYSTEMS: No project should have an adverse effect on utilities or service systems.

17. COASTAL ZONE MANAGEMENT: The TSA is located in the Coastal Management Zone, therefore, a permitting process would have to be adhered to or could be found exempt, depending on the scope of the project. In addition, if the project were determined a *federal undertaking*, then the project could be found exempt under the provisions of Section 304(a) of the federal Coastal Zone Management Act of 1972, as amended.

18. SOLE SOURCE AQUIFERS: Project site will not affect a sole source aquifer.

19. WILD AND SCENIC RIVERS: This site is approximately 41 miles from the closest Wild and Scenic River (the lower Klamath River) and, therefore, will not adversely affect a river that has been designated as Wild and Scenic.

20. ENVIRONMENTAL JUSTICE: The proposed site is suitable for its proposed use and will not be negatively impacted by adverse environmental conditions. However, the assessment of whether a project will disproportionately adversely effect low income or minority populations is contingent on the scope and purpose of the project.

National Environmental Policy Act (NEPA) STATUTORY WORKSHEET[1]

PROJECT NAME and DESCRIPTION - Include all contemplated actions which logically are either geographically or functionally part of the project:

Tsurai Study Area (TSA), consisting of 12.5 acres located along the Pacific Ocean in Trinidad, CA. The purpose of this Statutory Worksheet is to assess environmental concerns within the Study Area in accordance with the National Environmental Policy Act [40 CFR Part 6]. There is no proposed project for this area at this time. Rather this worksheet has been completed to assess the possible environmental concerns if a "federal undertaking" is ever proposed.

DIRECTIONS - Write "**A**" in the Status Column when the project, by its nature, does not affect the resources under consideration; OR write "**B**" if the project triggers formal compliance consultation procedures with the oversight agency, or requires mitigation (see Statutory Worksheet Instructions). Compliance documentation must contain verifiable source documents and relevant base data. Attach reviews, consultations, special studies as needed.

Compliance Factors:

Environmental and Cultural Laws pertaining to the National Environmental Policy Act	Status A / B	Compliance Finding and Documentation
Farmland Protection Policy Act [7 CFR 658]	A	The site is not located on or directly adjacent to farmland that is categorized as prime, unique or of state or local importance. In addition, none of the recommended projects will convert agricultural land to a non-agricultural use. (TAB 1)
Clean Air Act - [Sections 176(c), (d), and 40 CFR 6, 51, 93]	A	No recommended project will have the potential to emit significant emissions of air pollution. All State Ambient Air Quality Standards for the location are classified as attainment, except for Particulate PM10, which is nonattainment. However, the North Coast Unified Air Quality Management District is continually taking measures to reduce emissions of PM10 and bring ambient levels of PM10 down to below the state requirement. The Federal Ambient Air quality Standards have all been met in the site location. No asbestos has been identified at the site. North Coast Air Quality Facts, North Coast Unified Air Quality Management District North Coast Unified Air Quality Management District Particulate Matter (PM10) Attainment Plan (TAB 2)
Endangered Species Act [50 CFR 402]	A/B	Until a complete biological assessment and/or consultation for a specific project is undertaken, it is unknown whether there are threatened and/or endanger species within the TSA. It is known,

[1] This NEPA Statutory Worksheet is not to be used for the purposes of NEPA compliance, but is only to provide a preliminary assessment of the possible environmental concerns within the Tsurai Study Area.

		however, that there are several identified threatened, endangered, and/or candidate species within the U.S. Geological Survey 7.5' Topographic Quadrangle for Trinidad, by the U.S. Fish and Wildlife Service. Thus, these species are not necessarily present within the TSA and may require a biological assessment to determine presence. Following is a current list of these species, including their present status (E = endangered, T=threatened, C=candidate), as well as identifying whether Critical Habitat has been designated for each species (P= Proposed, Y=Designated, N=None Designated) within the Trinidad Quadrangle. Fish species include tidewater goby (*Eucyclogobius newberryi*) (E, P); Northern California steelhead (*Oncorhynchus mykiss*) (T, Y); and California coastal chinook salmon (*Oncorhynchus tshawytscha*) (T, Y). Reptile species include the loggerhead turtle (*Caretta caretta*) (T, N); green turtle (*Chelonia mydas (incl. agassizi*) (T, N); leatherback turtle (*Dermochelys coriacea*) (E, Y); and the olive (Pacific) ridley sea turtle (*Lepidochelys olivacea*) (T, N). Bird species are the marbled murrelet (*Brachyramphus marmoratus*)(T, P); western snowy plover (*Charadrius alexandrinus nivosus*)(T, P); Western yellow-billed cuckoo (*Coccyzus americanus*)(C, N); bald eagle (*Haliaeetus leucocephalus*)(T, N); brown pelican (*Pelecanus occidentalis*)(E, N); short-tailed albatross (*Phoebastris albatrus*)(E, N); northern spotted owl (*Strix occidentalis caurina*)(T, Y); and Xantus's murrelet (*Synthliboramphus hypoleucus*)(C, N). Lastly, mammal species include the sei whale (*Balaenoptera borealis*) (E, N); blue whale (*Balaenoptera musculus*) (E, N); fin whale (*Balaenoptera physalus*) (E, N); Steller (northern) sea-lion (*Eumetopias jubatus*) (T, Y); humpback whale (*Megaptera novaengliae*) (E, N); and sperm whale (*Physeter macrocephalus*) (E, N). U.S. Fish and Wildlife Service, Arcata Fish and Wildlife Office, Species Entry Portal Accessed from: http://www.fws.gov/arcata/specieslist/default.htm Accessed on: 3/21/07 Specific Search Document Number 169073485 U.S. Fish and Wildlife Service, Environmental Conservation Online System, Critical Habitat Mapper http://ecos.fws.gov/ecos_public/index.do;jsessionid=D6D26EE21C2018E81798D2A2A54EA599. Accessed 4/13/06. Zoom map extent to Trinidad, CA.

		There are six species that are of special concern for the California Department of Fish and Game within or adjacent to the TSA, none of these species are currently listed as Threatened or Endangered. These six species include: 1) fork-tailed storm-petrel (*Oceanodroma furcata*), 2) coast cutthroat trout (*Oncorhynchus clarkii clarkii*), 3) Tracy's romanzoffia (*Romanzoffia tracyi*), 4) Pacific gilia (*Gilia capitata ssp. pacifica*), 5) Oregon coast Indian paintbrush (*Castilleja affinis ssp. litoralis),* and 6) running-pine (*Lycopodium clavatum*). California Department of Fish and Game Natural Diversity Data Base 41124A2, dated April 7, 2006. Designed for use with USGS Quadrangle: Trinidad, CA. Overlay includes all CNDDB Element Occurrences within this map extent. Accessed 4/12/06. (TAB 3)
Wetland Protection [Executive Order 11990]	A	There are no identified wetlands on or adjacent to the project site. National Wetlands Inventory Data and Map http://wetlandsfws.er.usgs.gov/NWI/download.html Accessed 4/6/06 California Resources Agency, Wetlands Information System, Current Management, Publicly Managed Fresh-Water Wetlands Last Modified 8/18/98 http://ceres.ca.gov/wetlands/introduction/wetlands_management.html Accessed 4/6/06 (TAB 6)
Historic Preservation [36 CFR Part 800]	A/B	No location within the TSA is included on the National Register of Historic Places. However, the TSA includes the Tsurai Village, which is both on the California Register of Historic Places and the California Historical Landmarks lists. There are both archaeological and historic resources within the TSA, including a cemetery. Portions of the area have been previously excavated by Heizer and Mills (1952), however, the cemetery and other archaeological resources still remain. The Yurok Tribe Environmental Program, Cultural Resources Division, is conducting a preliminary cultural resources survey to determine the extent of the site. Therefore, some of the projects that have been recommended will need to be mitigated, if not avoided, depending on their possible impact to the

		Tsurai Village. The finding of no historic properties affected, no adverse effect, or an adverse effect, is contingent on the scope of the project. (TAB 8)
Floodplain Management [24 CFR 55, Executive Order 11988]	A	Area of consideration has not been included in the area of study by the Federal Emergency Management Agency's Flood Insurance Rate Map (FIRM). However, it may be concluded that the TSA is not in an area of flood concern as the directly adjacent lands are located in Zone C, which are "Areas of minimal flooding." FIRM Humboldt County, CA Panel 450 of 1900 Community-Panel Number 060060 0450 B Effective Date July 19, 1982 Accessed 3/5/06 Moreover, the U.S. EPA, Window to My Environment Mapping Webpage does not indicate any Special Flood Hazard Areas or Moderate Flood Hazard Areas with the TSA. http://134.67.99.109/wme/myWindow.asp Accessed 4/7/06 Humboldt County Community Development Services District has also mapped the TSA as outside the 100 and 500-year flood zones. (TAB 11)
Coastal Zone Management Act [Sections 307(c), (d)]	A	The TSA is located in the Coastal Management Zone, therefore, a permitting process would have to be adhered to or could be found exempt, depending on the scope of the project. In addition, If the project were determined a federal undertaking, due to jurisdiction, under the provisions of Section 304(1) of the federal Coastal Zone Management Act of 1972, as amended, "excluded from the coastal zone are lands the use of which is by law subject solely to the discretion of or which is held in trust by the federal government, its officer or agent." California Coastal Commission Coastal Zone Map, Trinidad, CA Map 10 in conformance with maps adopted by the California Coastal Commission pursuant to Section 30103(b) of the California Coastal At of 1976 (California Public Resources Code Section 30000 et. seq.) Assessed 3/12/06 (TAB 13)

Sole Source Aquifers **[40 CFR 149]**	A	Project site will not affect a sole source aquifer. U.S Environmental Protection Agency, Sole Source Aquifers in EPA Region 9. http://www.epa.gov/safewater/swp/ssa/reg9.html Accessed 4/6/06 (TAB 14)
Wild and Scenic Rivers Act [Sections 7(b), and (c)]	A	This site is approximately 41 miles from the closest Wild and Scenic River (the Klamath River) and, therefore, will not adversely affect a river that has been designated as Wild and Scenic.
Environmental Justice [Executive Order 12898]	A	The proposed site is suitable for its proposed use and will not be negatively impacted by adverse environmental conditions. Assessment of whether a project will disproportionately adversely effect low income or minority populations is contingent on the scope and purpose of the project.
Clean Water Act [33 U.S.C. 1251 et seq.]		None of the proposed projects will have an adverse effect on water quality as defined by the North Coast Regional Water Quality Control Board Basin Plan. http://www.waterboards.ca.gov/northcoast/programs/basinplan/bpdocs.html. Accessed 4/13/06.
Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund) [42 U.S.C. 9601 et seq.] **and The Superfund Amendments and Reauthorization Act (SARA);** **[**42 U.S.C.9601 et seq.]		Project site is not located within one mile of a National Priorities List, CERCLA, or equivalent state listed site. Moreover, there are no nearby toxic or solid waste landfill sites. There are no underground storage tanks located on the project site. U.S. EPA National Priorities List sites website http://www.epa.gov/superfund/sites/npl/ca.htm Accessed 4/7/06 California Department of Toxic Substances Control Database Hazardous Waste and Substances Site List (Cortese List) http://www.dtsc.ca.gov/SiteCleanup/Cortese_List.cfm Accessed 4/7/06 (TAB 10)

Preparer's Signature _____ Date _____

California Environmental Quality Act (CEQA) Checklist

Preliminary Assessment[2]

I. PROJECT INFORMATION

1. Project title:
   Preliminary CEQA Assessment for the Tsurai Study Area (TSA)

2. Lead agency name and address:
   Yurok Tribe Environmental Program
   15900 Highway 101 N.
   Klamath, CA 95548

3. Contact person and phone number:
   Megan Rocha, Environmental Coordinator
   (707) 482-1822

4. Project location:
   Tsurai Study Area (TSA), consisting of 12.5 acres located along the Pacific Ocean in Trinidad, CA in Township 8 North, Range 1 West, Section 26 of the U.S.G.S. 7.5' Trinidad, Humboldt County, California Quadrangle. The Assessor Parcel Numbers that comprise the TSA are Humboldt County parcels APN: 042-102-42, APN: 042-091-05, APN: 042-102-41, APN: 042-102-40, and APN: 042-102-39.

5. Project sponsor's name and address: (See #2 & #3)

6. Custodian of the administrative record for this project (if different from response to item 3 above.):
   Kathleen Sloan, Assistant Director
   Cultural Resources Division, Yurok Tribe Environmental Program

7. Identification of previous EIRs relied upon for tiering purposes and address where a copy is available for inspection.)
   None applicable.

II. PROJECT DESCRIPTION

1. Description of project: (Describe the whole action involved, including but not limited to physical characteristics, site, later phases of the project, and any secondary, support, or off- site features necessary for its implementation and site selection process. Attach additional sheets if necessary.

[2] This CEQA Checklist is not to be used for the purposes of CEQA compliance, but is only to provide a preliminary
assessment of the possible environmental concerns within the Tsurai Study Area.

This checklist is being completed as a preliminary assessment of the possible environmental concerns with the TSA in order to inform the Trinidad Management Plan Team and Interested Public, as well as inform those future projects that may be recommended by the Tsurai Management Plan. There is no project at this time.

2. Project Objectives:
To assess possible environmental concerns according to CEQA within the TSA.

3. Surrounding land uses and environmental setting: Briefly describe the project's surroundings:
The TSA is comprised of 12.5 acres along the Pacific Ocean coastline and within the City limits of Trinidad. There are three trails that extend through the TSA, providing recreational beach access. In addition, there is a replica lighthouse on the northern bluff, which is both a memorial to those lost at sea and a tourist destination. Within the TSA are resources of cultural significance, including archaeological remnants of the Yurok village of Tsurai and burial, as well as plants and uses of current cultural significance. The TSA is largely overgrown with both native and invasive species and is also heavily saturated. There are three streams running through the TSA into the Trinidad Bay, which has been designated as an Area of Special Biological Significance (ASBS).

4. Discretionary approval authority and other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement.)
The California Coastal Conservancy holds a conservation easement over the entire TSA. The California Coastal Commission, depending on the project, may require a permit. City zoning restrictions must also be adhered to, in addition to consultation through Policy 69.

III. ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by a project, as indicated by the checklist on the following pages.

	Aesthetics		Agriculture Resources		Air Quality
X	Biological Resources	X	Cultural Resources	X	Geology/Soils
	Hazards & Hazardous Materials		Hydrology/Water Quality		Land Use/Planning
	Mineral Resources		Noise		Population/Housing
	Public Services		Recreation		Transportation/Traffic
	Utilities/Service Systems		Mandatory Findings of Significance		

IV. DETERMINATION: (To be completed by the Lead Agency)

On the basis of the initial evaluation that follows:

X
I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

X
I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

X
I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

I find that the proposed project MAY have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. A TIERED ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, no further environmental document is required. FINDINGS consistent with this determination will be prepared.

Signature Date

V. IMPACT QUESTIONS

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Determination Contingent on Project – Possible Likelihood of Impact
1. AESTHETICS -- Would the project:					
a) Have a substantial adverse effect on a scenic vista?	_____	_____	_____	_____	___X___
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	_____	_____	_____	_____	___X____
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	_____	_____	_____	_____	___X____
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	_____	_____	_____	__X___	_____
2. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:					

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Determination Contingent on Project – Possible Likelihood of Impact
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	_____	_____	_____	TAB 1 __X___	_____
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	_____	_____	_____	___X__	_____
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	_____	_____	_____	___X__	_____
3. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:					
a) Conflict with or obstruct implementation of the applicable air quality plan?	_____	_____	_____	TAB 2 __X___	_____
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	_____	_____	_____	__X___	_____

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Determination Contingent on Project – Possible Likelihood of Impact
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	_____	_____	_____	TAB 2 __X___	_____
d) Expose sensitive receptors to substantial pollutant concentrations?	_____	_____	_____	__X___	_____
4. BIOLOGICAL RESOURCES -- Would the project:					
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	_____	_____	_____	_____	See Discussion Below TAB 3 __X___
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?	_____	_____	_____	See Discussion Below TAB 4 & 5 ___X___	_____

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Determination Contingent on Project – Possible Likelihood of Impact
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	_____	_____	_____	TAB 6 ___X__	_____
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	_____	_____	_____	See Discussion Below TAB 5 ___X___	_____
e) Conflict with any local applicable policies protecting biological resources?	_____	_____	_____	___X__	_____
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other applicable habitat conservation plan?	_____	_____	_____	TAB 7 ___X__	_____
5. CULTURAL RESOURCES – Would the project:					
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	_____	_____	_____	_____	See Discussion Below TAB 8 __X___

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Determination Contingent on Project – Possible Likelihood of Impact
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5?	_____	_____	_____	_____	See Discussion Below __X___
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	_____	_____	_____	__X___	_____
d) Disturb any human remains, including those interred outside of formal cemeteries?	_____	_____	_____	_____	See Discussion Below ___X__
6. GEOLOGY AND SOILS -- Would the project:					
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:	_____	_____	_____	See Discussion Below TAB 9 ___X__	_____
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.	_____	_____	_____	___X___	_____

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Determination Contingent on Project – Possible Likelihood of Impact
ii) Strong seismic ground shaking?	_____	_____	_____	___X___	_____
iii) Seismic-related ground failure, including liquefaction?	_____	_____	_____	_____	See Discussion Below ___X___
iv) Landslides?	_____	_____	_____	_____	See Discussion Below ____X____
b) Result in substantial soil erosion or the loss of topsoil?	_____	_____	_____	_____	See Discussion Below __X___
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	_____	_____	_____	_____	__X___
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	_____	_____	_____	__X___	_____

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Determination Contingent on Project – Possible Likelihood of Impact
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	_____	_____	_____	_____	__X___
7. HAZARDS AND HAZARDOUS MATERIALS – Would the project:					
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	_____	_____	_____	__X___	_____
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	_____	_____	_____	__X___	_____
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	_____	_____	_____	__X___	_____
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	_____	_____	_____	TAB 10 ___X__	_____

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Determination Contingent on Project – Possible Likelihood of Impact
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	_____	_____	_____	___X__	_____
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	_____	_____	_____	___X__	_____
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	_____	_____	_____	___X__	_____
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	_____	_____	_____	__X___	_____
8. HYDROLOGY AND WATER QUALITY -- Would the project:					
a) Violate any water quality standards or waste discharge requirements?	_____	_____	_____	_____	__X___

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Determination Contingent on Project – Possible Likelihood of Impact
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	_____	_____	_____	__X___	_____
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	_____	_____	_____	_____	__X___
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	_____	_____	_____	_____	__X___
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	_____	_____	_____	_____	__X___
f) Otherwise substantially degrade water quality?	_____	_____	_____	__X___	_____

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Determination Contingent on Project – Possible Likelihood of Impact
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	_____	_____	_____	TAB 11 __X___	_____
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	_____	_____	_____	__X___	_____
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?	_____	_____	_____	__X___	_____
j) Inundation by seiche, tsunami, or mudflow?	_____	_____	_____	See Discussion Below __X___	_____
9. LAND USE AND PLANNING - Would the project:					
a) Physically divide an established community?	_____	_____	_____	___X__	_____

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Determination Contingent on Project – Possible Likelihood of Impact
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	_____	_____	_____	_____	See Discussion Below __X___
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	_____	_____	_____	TAB 7 __X___	_____
10. MINERAL RESOURCES – Would the project:					
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	_____	_____	_____	TAB 12 __X___	_____
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	_____	_____	_____	__X___	_____
11. NOISE – Would the project result in:					
a) Exposure of persons to or generation of noise levels in excess of standards established in any applicable plan or noise ordinance, or applicable standards of other agencies?	_____	_____	_____	__X___	_____

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Determination Contingent on Project – Possible Likelihood of Impact
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	_____	_____	_____	__X___	_____
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	_____	_____	_____	__X___	_____
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	_____	_____	_____	__X___	_____
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	_____	_____	_____	__X___	_____
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	_____	_____	_____	__X___	_____

12. POPULATION AND HOUSING – Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Determination Contingent on Project – Possible Likelihood of Impact
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	_____	_____	_____	__X___	_____
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	_____	_____	_____	__X___	_____
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	_____	_____	_____	__X___	_____
13. PUBLIC SERVICES					
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
Fire protection?	_____	_____	_____	__X___	_____
Police protection?	_____	_____	_____	__X___	_____

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Determination Contingent on Project – Possible Likelihood of Impact
Schools?	_____	_____	_____	__X___	_____
Parks?	_____	_____	_____	__X___	_____
Other public facilities?	_____	_____	_____	__X___	_____
14. RECREATION --					
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	_____	_____	_____	___X__	_____
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	_____	_____	_____	__X___	_____
15. TRANSPORTATION/TRAFFIC -- Would the project:					
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?	_____	_____	_____	__X___	_____

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Determination Contingent on Project – Possible Likelihood of Impact
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	_____	_____	_____	__X___	_____
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	_____	_____	_____	__X___	_____
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	_____	_____	_____	__X___	_____
e) Result in inadequate emergency access?	_____	_____	_____	__X___	_____
f) Result in inadequate parking capacity?	_____	_____	_____	_____	See Discussion Below ___X__
g) Conflict with applicable policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	_____	_____	_____	___X__	_____

16. UTILITIES AND SERVICE SYSTEMS – Would the project:

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Determination Contingent on Project – Possible Likelihood of Impact
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	_____	_____	_____	__X___	_____
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	_____	_____	_____	___X__	_____
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	_____	_____	_____	___X__	_____
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	_____	_____	_____	___X__	_____
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	_____	_____	_____	___X__	_____

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Determination Contingent on Project – Possible Likelihood of Impact
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	_____	_____	_____	___X__	_____
g) Comply with applicable federal, state, and local statutes and regulations related to solid waste?	_____	_____	_____	___X__	_____
17. MANDATORY FINDINGS OF SIGNIFICANCE --					
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	_____	_____	_____	TAB 3 ___X___	_____
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	_____	_____	_____	_____	__X___

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact	Determination Contingent on Project – Possible Likelihood of Impact
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	_____	_____	_____	__X___	_____

18. Fish and Game Determination

Based on the information above, there is no evidence that the project has a potential for a change that would adversely affect wildlife resources or the habitat upon which the wildlife depends. The presumption of adverse effect set forth in 14 CCR 753.5 (d) has been rebutted by substantial evidence.

___ Yes (Certificate of Fee Exemption)

___ No (Pay fee)

VI. NARRATIVE DISCUSSION OF CHECKLIST EVALUATION (Unless discussion of impacts is integrated in Section V. 1-16)

4. BIOLOGICAL RESOURCES

a) It is unknown at this time whether there will be an impact to listed threathend and endangered species. Preliminary research determined there are several terrestrial and aquatic animals that have been identified as threatened, endangered, and/or candidate species within the U.S. Geological Survey 7.5' Topographic Quadrangle for Trinidad, by the U.S. Fish and Wildlife Service. Thus, these species are not necessarily present within the TSA and may require a biological assessment to determine presence. Following is a current list of these species, including their present status (E = endangered, T=threatened, C=candidate), as well as identifying whether Critical Habitat has been designated for each species (P= Proposed, Y=Designated, N=None Designated) within the Trinidad Quadrangle. Fish species include tidewater goby (*Eucyclogobius newberryi*) (E, P); Northern California steelhead (*Oncorhynchus mykiss*) (T, Y); and California coastal chinook salmon (*Oncorhynchus tshawytscha*) (T, Y). Reptile species include the loggerhead turtle (*Caretta caretta*) (T, N); green turtle (*Chelonia mydas (incl. agassizi*) (T, N); leatherback turtle (*Dermochelys coriacea*) (E, Y); and the olive (Pacific) ridley sea turtle (*Lepidochelys olivacea*) (T, N). Bird species are the marbled murrelet (*Brachyramphus marmoratus*)(T, P); western snowy plover (*Charadrius alexandrinus nivosus*)(T, P); Western yellow-billed cuckoo (*Coccyzus americanus*)(C, N); bald eagle (*Haliaeetus leucocephalus*)(T, N); brown pelican (*Pelecanus occidentalis*)(E, N); short-tailed albatross (*Phoebastris albatrus*)(E, N); northern spotted owl (*Strix occidentalis caurina*)(T, Y); and Xantus's murrelet (*Synthliboramphus hypoleucus*)(C, N). Lastly, mammal species include the sei whale (*Balaenoptera borealis*) (E, N); blue whale (*Balaenoptera musculus*) (E, N); fin whale (*Balaenoptera physalus*) (E, N); Steller (northern) sea-lion (*Eumetopias jubatus*) (T, Y); humpback whale (*Megaptera novaengliae*) (E, N); and sperm whale (*Physeter macrocephalus*) (E, N) (Arcata Field Office, USFWS Document Number 169073485-123940).

Although there are six species that are of special concern for the California Department of Fish and Game within or adjacent to the TSA, none of these species are currently listed as Threatened or Endangered. These six species include: 1) fork-tailed storm-petrel (*Oceanodroma furcata*), 2) coast cutthroat trout (*Oncorhynchus clarkii clarkii*), 3) Tracy's romanzoffia (*Romanzoffia tracyi*), 4) Pacific gilia (*Gilia capitata ssp. pacifica*), 5) Oregon coast Indian paintbrush (*Castilleja affinis ssp. litoralis),* and 6) running-pine (*Lycopodium clavatum*). Moreover, it has been determined that the *Aplodontia* species evident within the TSA is not the endangered *Aplodontia rufa nigra* (Point Arena Mountain Beaver), but rather, the non-protected *Aplodontia rufa humboldtana* (Humboldt Mountain Beaver).

b) The TSA lies adjacent to Trinidad Bay, which includes Kelp Beds that were designated as an Area of Biological Significance (ASBS) in 1974. Despite this designation, which was created to protect the Bay's natural environment from pollutants, both recreational and commercial fishing, including kelp harvesting are allowed in Trinidad Bay. When the State began to designate Critical Coastal Areas (CCA) in 2002, in an effort to protect coastal areas by improving degraded water quality and to provide additional protection from nonpoint source pollution to marine areas with a recognized high resource value, ASBS' automatically were included as CCAs. In 2005, the Statewide CCA Committee chose one CCA in which to do perform a pilot project in each of the four regions, as well as one for the San Francisco Bay. The Trinidad Bay Kelp Beds were chosen for one of the pilot projects and the City of Trinidad is working with relevant State agencies and organizations to create an Integrated Coastal Watershed Management Plan to address the pollution concerns of the Trinidad Kelp Beds. Due to the Bay's protected status, projects that may contribute to nonpoint source pollution may be denied. (See TAB 4).

b & d) In regards to migratory and native fish habitat, the assessment determined by California Department of Fish and Game, California Cooperative Fish and Habitat Data Program (CalFish), finds that Coho, Chinook, and Steelhead fishes are only *historically* or *possibly* located within the streams of the TSA. Moreover, Cutthroat has been determined as *probable* within the TSA. Therefore, the streams within the TSA are not critical habitat to the survival of these fish species. (See TAB 4).

5. CULTURAL RESOURCES:

No location within the TSA is included on the National Register of Historic Places. However, the TSA includes the Tsurai Village, which is both on the California Register of Historic Places and the California Historical Landmarks lists. There are both archaeological and historic resources within the TSA, including a cemetery. Portions of the area have been previously excavated by Heizer and Mills (1952); however, the cemetery and other archaeological resources still remain. The Yurok Tribe Environmental Program, Cultural Resources Division, is conducting a preliminary cultural resources survey to determine the extent of the site. Therefore, some of the projects that have been recommended will need to be mitigated, if not avoided, depending on their possible impact to the Tsurai Village. The finding of no historic properties affected, no adverse effect, or an adverse effect, is contingent on the scope of the project.

6. GEOLOGY AND SOILS:

a) In regards to earthquake fault lines near or within the TSA, the *Engineering Geologic Assessment of Tsurai Village with Recommendations for Future Management*, performed by LACO Associates (2004: 5), and supported with previous documentation states,

> The project site and surrounding areas occupy a portion of the southwest dipping forelimb of the Trinidad anticline that formed in response to repeated movement along the Trinidad fault. An onshore segment of the Trinidad fault, commonly referred to as the Andersen Ranch fault, is designated by the State of California as being active, and is the closest recognized active fault to the project area (California Division of Mines and Geology, 2000). The onshore segment of the fault is likely located along the northern boundary of the Trinidad town site at the base of the slope below the Saunders' residence and projects through the city's cemetery. The Trinidad fault consists of a northwest striking, northeast dipping thrust fault (Coppersmith *et al*, 1982). The Andersen Ranch fault segment intersects the coastal bluff at Andersen Ranch about 1.5 miles north of Tsurai Village, where it clearly deforms marine terrace sands and gravels of Late Pleistocene age. Rust (1982) identified an additional potential fault segment located between Little Trinidad Head and Trinidad Head that projects offshore toward Pewetole Island continuing northwest to Elk Head. Although poorly defined, this fault segment may be responsible for the warped marine terrace surfaces observed above Trinidad State Beach and Elk Head. The upper bound earthquake considered likely to occur on the Trinidad fault has an estimated moment magnitude of 7.3 (CDMG, 1996). Ground accelerations of 0.06 to 0.70 g (60 to 70 percent of the force of gravity), or more, may be expected to occur on this site as a result of the regional design basis earthquake (Petersen *et al*, 1999; California Geological Survey, 2003).

Thus, there is an earthquake fault line approximately 1500 feet from the northeast corner of the TSA, and continuing in a northeast/west direction. This fault, however, does not bisect the TSA

(See TAB 9) and the TSA is not within a Fault Hazard (Special Studies) Zone (LACO 2004: 15). In regards to liquefaction, LACO "estimate[d] a moderate probability of liquefaction to occur at this site due to the silty sandy soils present and saturated conditions which currently persist through much of the year at Tsurai Village" (LACO 2004: 14).

b) Soil erosion is a concern within the TSA; therefore, this concern must be taken into consideration when any project is considered. "The coastal bluff area around Trinidad Bay has a higher potential for slope failure, in general, than many areas of Humboldt County due to (among other factors) the step slopes, locally intense precipitation events, exposure to northwest winter swells refracting around Trinidad Head, and easily-erodible Franciscan mélange bedrock underlying the poorly consolidated marine terrace deposits (LACO 2004: 10). LACO (2004) has determined that the "single greatest factor contributing to the destabilization o the coast bluff" is the addition of water to the subsurface (LACO 2044: 12).

8. HYDROLOGY AND WATER QUALITY:

j) Tsunamis have occurred historically within Trinidad Bay, however, no project that is proposed will dramatically increase the likelihood that people will be located in an area during a tsunami event.

9. LAND USE AND PLANNING:

b) Portions of the TSA are zoned as "Open Space" and "Special Environment" within the City of Trinidad's General Plan and, thus, have particular requirements associated. Moreover, according to Policy 69 of Trinidad's Local Coastal Plan,

> There shall be no disturbance, vegetative removal or construction, except for a protective fence around the burial ground, on lands designated as Open Space within the Tsurai Study Area without the approval of the lineal descendants of Tsurai, Trinidad Rancheria, City of Trinidad, and the State Historic Preservation Officer. Lands designated as Special Environment within the Study Area may be developed as provided in the Special Environment regulations provided the State Historic Preservation Officer is consulted and reasonable measures are required to mitigate any adverse impacts on this cultural resource.

Therefore, these policies must be adhered to when considering any project within the TSA.

15. TRANSPORTATION/TRAFFIC:

f) If the project were to develop a trail within the Parker Creek corridor or promote Parker Creek Trail as the primary trail after obtaining legal access rights, then parking could cause a potential problem that would need to be resolved.

APPENDIX G: LACO Study of TSA (Text only- no figures)

ENGINEERING GEOLOGIC ASSESSMENT OF TSURAI VILLAGE WITH RECOMMENDATIONS FOR FUTURE MANAGEMENT

Prepared for the Tsurai Ancestral Society

Post Office Box 62, Trinidad, California 95570

LACO ASSOCIATES Project No. 5612.00

November 2004

1.0 INTRODUCTION

This report presents the results of LACO ASSOCIATES' (LACO's) engineering geologic investigation and review conducted at Tsurai Village and surrounding use areas in Trinidad, California. The site is listed as Number 838 on the California State Historical Landmarks registry and formerly consisted of a pre-European to early 20th century permanent Native American community. The Tsurai Village study area encompasses a total of 12.5 acres of land currently owned by the City of Trinidad. The project area is located in the NE ¼ of Section 26 and SE ¼ of Section 23, T. 8 N., R. 1 W., Humboldt Baseline and Meridian, of the Trinidad 7.5-Minute Series Topographic Quadrangle. The project location is shown on the attached location map (Figure 1, Note that Figures are not included in the Management Plan, but can be found in the original LACO document), assessor's parcel map (Figure 2), earthquake fault hazards map (Figure 3), aerial site photographic map (Figure 4), and site photograph taken from Trinidad Head (Figure 5).

The heart of Tsurai Village is located on the lower slope of the coastal bluff above Old Home Beach, commonly referred to today as Indian Beach, approximately 25 to 40 feet above the high tide line. According to the late Axel R. Lindgren, lineal descendant of Tsurai, the village originally contained 12 family houses, a sweat house, brush dance pit, a modern-day dance hall, water hole, graves, and trails. The structures were constructed of hand-split redwood planks partially built below ground level (Heizer and Mills, 1952), and were located west of Parker Creek and east of Pepperwood Creek. The Tsurai chose this location "because of its stability, natural protection from storms, food quantity, water quality, and the beautiful view offered as they grind their food and chipped-out stone tools and weapons." Currently, physical evidence indicating the ancestral presence of Tsurai consist of the exposure of human remains and shell mound middens within the coastal bluff toe slope between Pepperwood Creek and Alder Creek. In addition, it is

LACO's understanding that sacred burial grounds are present throughout the 12.5 acre site.

The last inhabitants of Tsurai Village moved from the site in 1916 due mainly to pollution of their water source by garbage dumped off the bluff edge by residents of the Sea Breeze Hotel, situated approximately at the present location of the Frame residence. In an early 20th century photograph taken from Trinidad Head looking southeast towards Tsurai Village, several bluff top areas used as garbage chutes are evident in the right-half of the photo, directly above the last remaining Tsurai home sites. To this day, much garbage remains on the site. During the following years the area was grazed by livestock up until 1943. For the next half century, with no maintenance by man or livestock, Tsurai Village went from a green pasture dotted by conifers to a landscape overgrown with elderberry, nettle, alders, and willows. More recently, English ivy and Himalayan berry have begun to thrive, possibly as a result of bluff top residents disposing of yard waste on the slopes above Tsurai Village. Sadly, the current jungle-like condition of the site has invited vandals and grave robbers in search of Tsurai artifacts and sacred human remains.

In 1979 the property was purchased by the Coastal Conservancy to hold until area park land could be established. The property was eventually purchased by the City of Trinidad in 1989 with the Coastal Conservancy retaining a conservation easement to protect access, and cultural and natural resources. Ironically, in the following few years the City of Trinidad attempted to blockade the traditional trail that accesses Old Home Beach from the coastal bluff. The traditional trail, now officially known as the Axel Lindgren Memorial Trail, has since become permanent with the addition of constructed steps and will soon include a handrail for safer use.

2.0 SCOPE OF THIS INVESTIGATION

LACO was retained to provide an engineering geologic assessment of the general stability of Tsurai village and surrounding areas. Our scope of work included the following: (1) research, review, and summarization of the available existing geotechnical reports prepared by others; (2) limit-equilibrium slope stability modeling and assessment of the coastal bluff which has potential to adversely affect Tsurai Village as a result of slope instabilities; (3) provide recommendations for future management of the site geologic and geotechnical hazards; (4) provide recommendations addressing vegetation control, surface run-off control, and erosion control resulting from increased use of the site, and; (5) discuss the potential geologic and geotechnical implications of

maintenance of Tsurai Village, access trails, and surrounding use areas. Potential primary geologic hazards affecting the project site include, but may not be limited to, slope instability due to coastal erosion, surface erosion due to uncontrolled runoff emanating from upslope residential hardscaped areas and bare areas resulting from vegetation removal, slope failure induced by strong earthquake ground shaking, tsunami inundation, and year-round high groundwater conditions resulting from densely spaced residential septic systems and diversion of run-off from a neighboring property.

3.0 PROPOSED PROJECT IMPROVEMENTS AND ISSUES OF CONCERN

The Tsurai Ancestral Society is considering improvements and potential development of a ceremonial site at Tsurai Village. Improvements being considered consist of the following:

- Removal and control of non-native vegetation in and around Tsurai Village;
- Revegetation of Tsurai Village with native plant species;
- Emplacement of drainage structures to control surface run-off being delivered from a neighboring property which is exacerbating year-round saturated soil conditions at Tsurai Village;
- Emplacement of erosion control measures to minimize potential erosion resulting from increased use of the site;
- Construction of protective fencing around Tsurai Village and burial grounds;
- Removal and re-routing of the portion of the Axel Lindgren Memorial Trail (Traditional Trail) currently sited on failing sidecast fill to its original alignment through the Trinidad Lighthouse grounds;
- Construction of a hand rail and maintenance of the Axel Lindgren Memorial Trail that accesses Old Home Beach, and;
- Installation of signage to educate public about history and significance of Tsurai Village.

In addition to the desired improvements, LACO has also addressed in this report the following issues of concern raised by the Tsurai Ancestral Society:

- Erosion concerns related to foot traffic along the Wagner Street Trail;
- Dumping of yard waste on the slopes above Tsurai Village by local bluff top land owners;
- Topping and cutting down of trees on Tsurai Village by the local bluff top land owners, resulting from their desire for unobstructed views;

- Control of surface runoff draining onto the slopes above Tsurai Village which originates from the roofs, driveways, and patios of the local bluff top residences, and;
- Contamination of the springs in and around Tsurai Village, used as traditional water sources, with effluent from failing and overloaded septic systems.

4.0 GEOLOGIC SETTING

Tsurai Village is located within the northern Coast Ranges Geologic Province. The northern Coast Ranges Geologic Province in northwestern California is a seismically active region in which large earthquakes may be expected to occur during the economic life span of any developments on the subject property. Field investigation and published mapping (Rust, 1982; Stephens, 1982; Carver and Burke, 1989) indicate the project area to be underlain by uplifted and gently southwest tilted late Pleistocene marine terrace sediments in depositional contact with underlying central belt Franciscan Formation bedrock. Pleistocene marine terrace deposits consist of alternating sequences of gravels with sand and poorly graded sands capped by silty sands and silts of probable dune origin. The underlying Franciscan Formation consists primarily of mélange containing large, disparate blocks of resistant metamorphosed basalts (oceanic crust), chert, and sandstone within a matrix of highly sheared argillites containing abundant clay ("blue goo") with minimal internal strength.

The marine terrace surface, which comprises the landform occupied by the City of Trinidad, has been correlated with the Patrick's Point terrace located further north along the coast. This terrace surface was probably formed during the interglacial sea-level high stand that dates to about 82,000 years ago (Rust, 1982). Rust also reported two additional younger terrace surfaces present at elevations below the Patrick's Point terrace along the margins of Trinidad Bay. The depositional contact of the marine terrace sands and bedrock abrasion platform is generally located about a third of the way upslope as viewed from Old Home Beach. The bedrock abrasion platform at this location generally consists of Franciscan Formation mélange as described above.

Franciscan Formation mélange is particularly prone to slumping due to its relatively low internal shear strength and direct exposure to wave and tidal action. Continual removal and landward retreat of the toe slope ultimately results in destabilization of the mid-slope areas. As the toe slope retreats and becomes over-steepened, lateral spreading of the clay-rich mélange in the seaward direction ensues resulting in slumping of the overlying

marine terrace deposits. The edge of the coastal bluff crest above Tsurai Village is characterized by coalescing, arcuate shaped head scarps having likely formed in response to shallow, translational/rotational debris slides. Consequently, the upper portions of the bluff becomes increasingly steep over time resulting in bluff crest retreat which has the potential to deliver sediment to the slopes below, including Tsurai Village. Presently, settlement and cracking of concrete is readily observable around the Trinidad Lighthouse which may be a precursor to future slope instability at this location. Based on conversations with the Lindgren brothers of the Tsurai Ancestral Society, a recent debris slide (less than 25 years ago) originating along the bluff crest occurred west of the lighthouse near Van Wycke Street, resulted in sediment delivery to the slopes below. Presently, the headscarp and transportational midslope at this location are vegetated with invasive English ivy and are completely devoid of trees and shrubs which attest to the recency of slide activity.

Tsurai Village is located on what appears to be a remnant of a former Late Pleistocene-aged marine terrace surface. The isolated benched slope the village site occupies may correlate with younger terraces noted by Rust (1982) to the east along Trinidad Bay. Alternatively, the topographic bench may be a back-tilted slope remnant having formed in response to deep seated translational/rotational landsliding of a portion of the coastal bluff. Based on the elevation of the site, and the occurrence of marine terraces surrounding Trinidad Bay at similar elevations, it is quite possible that the village is situated atop a marine terrace remnant that may have once extended further southward into Trinidad Bay. Continual tide and wave erosion of the toe slope along the back edge of Old Home Beach has since undermined the slope resulting in past and present coastal retreat.

The project site and surrounding areas occupy a portion of the southwest dipping forelimb of the Trinidad anticline that formed in response to repeated movement along the Trinidad fault. An onshore segment of the Trinidad fault, commonly referred to as the Andersen Ranch fault, is designated by the State of California as being active, and is the closest recognized active fault to the project area (CDMG, 2000). The onshore segment of the fault is likely located along the northern boundary of the Trinidad town site at the base of the slope below the Saunders' residence and projects through the city's cemetery. The Trinidad fault consists of a northwest striking, northeast dipping thrust fault (Coppersmith *et al*, 1982). The Andersen Ranch fault segment intersects the coastal bluff at Andersen Ranch about 1.5 miles north of Tsurai Village, where it clearly deforms

marine terrace sands and gravels of Late Pleistocene age. Rust (1982) identified an additional potential fault segment located between Little Trinidad Head and Trinidad Head that projects offshore toward Pewetole Island continuing northwest to Elk Head. Although poorly defined, this fault segment may be responsible for the warped marine terrace surfaces observed above Trinidad State Beach and Elk Head. The upper bound earthquake considered likely to occur on the Trinidad fault has an estimated moment magnitude of 7.3 (CDMG, 1996). Ground accelerations of 0.60 to 0.70 g (60 to 70 percent of the force of gravity), or more, may be expected to occur on this site as a result of the regional design basis earthquake (Petersen *et al*, 1999; CGS 2003).

5.0 SITE INVESTIGATION

To assess site conditions within the project and surrounding areas, several visits were conducted by a registered geologist and certified engineering geologist from LACO during the months of February through August. Site visits were generally conducted during inclement weather, which included periods of heavy precipitation and high surf, to witness firsthand creek flows, surface runoff, and active erosional processes. Additional site visits were conducted during the summer months to observe changes in stream discharge. No subsurface excavations or borings were installed due to the sensitivity of the site which includes buried remains and artifacts from the original inhabitants of Tsurai Village. Extensive review of the voluminous body of literature including consultant's and state agency reports published during the past 15 years. Archival photos and recent aerial photos of Tsurai Village were also examined to compare present-day coastal bluff features with those at the turn of the century. A limit-equilibrium slope stability analysis was performed by Dr. Ronald Chaney, geotechnical engineer, to assess the overall stability of the coastal bluff, and the effect foot traffic along Wagner Street Trail and an elevated water table has on the stability of the bluff.

5.1 PREVIOUS INVESTIGATIONS

During the past 15 years, numerous geologic evaluations have been conducted assessing the general stability of the coastal bluff above Tsurai Village, particularly in the vicinity of the Wagner Street Trail and Trinidad Lighthouse (Busch Geotechnical Consultants, 1990, 1995, 2002, 2003a, 2003b; LACO ASSOCIATES, 1994a, 1994b; SHN, 1996; Taber Consultants, 2003; Chaney *et al*, 2004). The Wagner Street Trail, which provides public access to the Parker Creek Trail and Old Home Beach, has been a source of a contentious lawsuit between local homeowner John Frame and the City of Trinidad. The Coastal Conservancy has also been recently named a defendant in the lawsuit due to their

ownership of the easement along which the Wagner Street Trail is aligned. To date, two slope inclinometers have been installed by Taber Consultants along Wagner Street to a maximum depth of 78 feet below ground in order to measure any potential deep seated landsliding. In addition, a total of 44 shallow tiltmeters at 11 sites, and 29 surveyed grid pins have been installed by Busch Geotechnical Consultants (Busch) south of the Frame residence along the outer edge of the coastal bluff in order to measure and quantify low magnitude slope movements and soil creep along the Wagner Street Trail. A detailed analysis of the tiltmeter observations has been provided in the Busch report, dated April 2003.

In summary, Taber Consultants (2003) reports that the slope inclinometers, located within Wagner Street, do not indicate appreciable lateral displacement to the depths explored (78 feet below grade). The measurements recorded suggest that the marine terrace deposits below the upper five feet of the soil profile are relatively stable and do not show signs of incipient large-scale (or deep-seated) bluff movement. However, the upper five feet of the soil profile, consisting mostly of native topsoil composed of silt and fine sand, is considered highly susceptible to settlement, slumping, and erosion. The pattern of outward tilting demonstrates this slope to be fragile and subject to shallow (translational) bluff failures.

Additionally, Taber Consultants state that repeated impacts of foot traffic in conjunction with active animal burrowing along the Wagner Street Trail are having detrimental effects to the bluff, resulting in accelerated settlement, erosion, and slumping. It is their opinion, “that the potential for future failures along the edge of bluff is substantially increased as a result of foot traffic and other surface influences. Such failures could result in significant hazard to public safety, create erosional gullies leading downslope and deliver sediment/debris onto the subjacent Tsurai site.”

Busch states that based on surveyed grid pin measurement, up to 0.25 feet (3 inches) of settlement and 0.14 feet (less than 2 inches) of south directed lateral movement (toward Trinidad Bay) was measured along the Wagner Street Trail access during the approximate 33-month observation period. Three tiltmeters indicated that the trail area near the outer slope break along the bluff top is experiencing rapid-rate soil creep due to the affect of gravity on soils loosened by burrowing rodents. Two tiltmeters indicated a slowly back-tilting (slumping) mass of soil that is decoupled (detached) from the soil mass on which the other tiltmeters sit. The trail monument and access area is purportedly

on this decoupled soil mass. Collectively, the slope monitoring devices indicate "slow" to "rapid-rate" shallow soil creep to be occurring in the vicinity of the Wagner Street Trail. Based on these observations, Busch concludes that active slope failure is occurring in the vicinity of the Frame residence and Wagner Street Trail, and rates of movement are likely to increase in the future. Busch also states "that in the human time-scale, the failure of a decoupled soil mass at the Wagner Street Trail access is imminent" (April, 2003).

6.0 FACTORS AFFECTING LANDSLIDE HAZARDS

The "factor of safety" is a term commonly used to describe the potential for slope failure. The factor of safety (F_S) is defined as the ratio of the shear strength of coastal bluff material to the driving shear stress. Accepted engineering practice is to ensure that the factor of safety (F_S) exceeds 1.2 for the weakest failure surface. Slopes where F_S equal one are at incipient failure. F_S less than one indicates failure. Slope failure using limit-equilibrium methods is defined as the condition where the shear strength of the bluff material is exceeded by the driving shear stress generated by both the internal and externally applied loads. Efficient and widely accepted limit-equilibrium methods by Janbu and Bishop can be analyzed using the FORTRAN computer model, STABL. When provided with the site's geometry, lithology, mechanical soil properties, loads, and groundwater conditions, STABL can quickly evaluate F_S for numerous potential failure surfaces transecting several lithologic units (Seigel, 1975). The slope stability conditions presented in this report were analyzed with STABL using both Bishop's and Janbu's methods with circular slip surfaces, and Janbu's method with a randomly generated failure surface (Turner and Schuster, 1996).

The most common landslide triggering mechanism is water, both the degree to which a slope or portion of slope has become saturated and the cumulative effects of successive wetting and drying on soil structure. The resulting conclusion is that groundwater and surface runoff have significant destabilizing effects on presently stable slopes that would have F_S greater than one under drained conditions. The shear strength can be effectively reduced to zero by tension cracks that form as a result of soil shrinking and swelling caused by repeated cycles of wetting and drying. Tension cracks can also accelerate failure by channeling water directly to the slip surface (failure plane) or may pose an even greater risk when allowed to fill with water, whereby the resulting hydrostatic head exerts force in all directions.

The driving shear stress may be increased due to the weight added when water displaces air in soil pore spaces (Terzaghi *et al*, 1996). The net result is a destabilized slope where the buoyant force exerted on soil particles due to increased groundwater pore pressure reduces the intergranular stresses, therefore reducing the resisting shear strength. Aside from seasonal fluctuations in groundwater elevation, the controllable causes of a rising groundwater surface include the following: 1) infiltration of runoff from impervious surfaces such as roofs, patios, and driveways; 2) discharges from leachfield septic systems; 3) over-irrigation of landscaping, and; 4) reduced evapotranspiration resulting from vegetation removal.

Strong earthquake ground shaking resulting from local and regional seismic events may also initiate landslides. Many of the bluffs along the Northern California coast, including those around Trinidad Bay and north to Patrick's Point, are the result of repeated seismic-related uplift, whereby the rate of tectonic uplift outpaces the rate of coastal bluff retreat. The vertical and lateral accelerations produced during a seismic event impart kinetic energy to a soil mass and will trigger slope failure. Numerous instances of slope failure were documented following the 1992 Petrolia earthquake and may be expected to occur during future seismic events. The likely worst-case scenario for coastal bluffs in the Trinidad area would be for a large seismic event to occur during, or immediately following, an unusually wet winter.

6.1 SITE CONDITIONS AND SLOPE FAILURE PROCESSES

The geology along most of the Northern California Coast, including Trinidad Bay, is characterized by relatively low-strength bedrock of the Jurassic- to Cretaceous-aged Franciscan Formation, overlain by poorly consolidated and uplifted Pleistocene-aged marine terrace deposits. High rates of precipitation coupled with steep topography, frequent earthquakes, large winter-time ocean swells, and extreme tides have resulted in high erosion rates and the occurrence of ongoing slope failures. Based on existing topography and morphologic features, it can be demonstrated that prehistoric landslides were common to this area. Historic land use practices, including road and residential construction, excessive landscape irrigation, leachfield discharge, and human alteration to natural drainage patterns have commonly exacerbated pre-existing slide-prone areas.

Coastal sites are typically subjected to multiple processes that conspire to keep slopes from reaching equilibrium and hence, stable configurations (*i.e.* the natural angle of repose). These processes include active tectonic uplift of the coastline, erosion of the toe

slope by surf and tides, and bluff-top erosion caused by precipitation and surface runoff. Added loads resulting from man-made structures and improperly placed fill materials can also place slopes at additional risk by increasing the driving forces leading to destabilization. Additional frequent man-made causes of slope failure are poorly designed or inadequately maintained drainage networks. As a result, groundwater elevations are raised and the effective shear strength of the soil reduced, which increases the driving force while dramatically decreasing F_S.

Toe-slope erosion occurs when wave action or tidal currents transport colluvium or low-strength bedrock away from the base of a slope or bluff. Despite the relatively low strength of unconsolidated colluvium derived from failed mélange or marine terrace deposits, a significant mass at the slope toe can buttress the slope and limit the potential for, or size of, a rotational failure until the mass is transported away by wave and tidal action. Therefore, erosion of the toe slope tends to decrease F_S over time. Unlike some sites where toe erosion occurs very slowly or not at all, slopes with rapid toe erosion cannot reach equilibrium and will continue to fail as long as the erosion continues. This process can be witnessed along several sites within Trinidad Bay, particularly along the toe slope below Tsurai Village along the back-edge of Old Home Beach.

Improperly controlled surface run-off can incise gullies perpendicular to the slope, which will tend to reduce F_S in a manner similar to toe erosion. Bluff erosion and retreat increases the gully flow line gradient which eventually leads to further slope destabilization. Subsequent runoff down the gully will transport newly deposited sediment into the swash zone and away from the bluff. While slope erosion itself causes coastal bluffs to retreat slowly, the resulting landslide volume can easily be as large, or larger, than the volume of material that is removed by erosion from the face of the bluff (Barlow, 1980). For this reason, if a slope is to be stabilized, it is equally important to control surface runoff in such a manner that eliminates formation of gullies (Larson and Slosson, 1997).

Increased groundwater surface elevations exert destabilizing effects on slopes by increasing the load on the slope (driving forces) and decreasing the soil strength (resisting forces). Additionally, rapidly increased piezometric head created within water-filled tension cracks or other zones of high vertical permeability create lateral hydrostatic forces that can push a block of soil toward failure. Although groundwater elevations vary seasonally with precipitation, factors such as leaky water mains, excessive landscape

irrigation, improperly drained runoff from impermeable surfaces such as roofs and patios, and wastewater effluent from undersized and closely spaced leachfields can result in locally increased groundwater elevations, thereby decreasing F_S. Furthermore, increased groundwater elevations result in increased spring flow and slope incision, thereby accelerating slope failure by the aforementioned gully failure processes.

Many of the slopes in coastal Humboldt County, particularly along the west facing coastal bluffs south and north of the project area, show evidence of active coastal retreat. Slope failure has occurred along several sections of bluff during recent wetter-than-average winters when coupled with spring tides (new and full moon phases) and strong ground swells originating from the Gulf of Alaska. The coastal bluff area around Trinidad Bay has a higher potential for slope failure, in general, than many areas of Humboldt County due to (among other factors) the steep slopes, locally intense precipitation events, exposure to northwest winter swells refracting around Trinidad Head, and easily-erodible Franciscan mélange bedrock underlying the poorly consolidated marine terrace deposits.

Previous coastal bluff stability evaluations (Tuttle, 1981; Chaney and Tuttle, 1988; LACO ASSOCIATES, 2001) indicate that bluff recession typically occurs episodically, with large events occurring every half-century or so involving coastal retreat on the order of tens of feet. Evidence of past slope failure is observable along the entire Trinidad area coast, from Moonstone Beach northward to the Big Lagoon community. Aerial photographic interpretation of historic photos dating from 1942 to 1998, indicate significant bluff retreat has occurred along this section of coast. West of the Agate Beach campground, about 120 feet of bluff retreat has occurred between 1948 and 1996 yielding an average bluff retreat rate of approximately 2.5 feet per year. At Agate Beach campground, in the vicinity of the day-use parking area, approximately 42 feet of bluff retreat has occurred since 1956. According to park personnel, the majority of bluff retreat took place over a 12-hour period during a 1986 storm event. The average annual rate of bluff retreat at this location is therefore about one foot per year.

At the community of Big Lagoon, about 100 feet of bluff retreat has occurred between 1942 and 1998. Of this total, 60 feet of bluff was eroded during February 1998 due to high storm surf and tides. The average annual rate of bluff retreat at Big Lagoon between 1942 and 1998 is estimated to be 1.8 feet per year.

The rates of beach and bluff migration in the vicinity of Tsurai Village were determined by evaluating historic drawings, maps, survey records, and photographs depicting the location of the coastline relative to identifiable offshore rocks and onshore structures (Tuttle, 1981; Chaney and Tuttle, 1988). Neither the beach nor bluff at the site was observed to have changed significantly over the period of time dating back to 1851, the date of an early pencil drawing of Trinidad and its surroundings (Tuttle, 1981). However, it was noted that some areas had accreted while others had retreated. The portion of Old Home Beach directly downslope of Tsurai Village was noted to have retreated approximately 5 to 10 feet. Field observations confirm that this portion of bluff is actively retreating.

Following the winter storms of 2004, freshly exposed shell middens and ancestral human remains were actively being exhumed by wave and tidal action. However, based on Tuttle's observations and the ongoing occupation of Tsurai Village up until the early twentieth century, it appears that the coastal bluff at the subject site has been relatively stable over the last 150 years, and quite probably longer. The relatively low rates of coastal retreat at Old Home beach, compared to the Patrick's Point and Big Lagoon areas, are likely the result of its southerly exposure and protection from the brunt of large winter-time northwest swells by Trinidad Head.

6.2 SLOPE STABILITY ANALYSIS METHODOLOGY

The lithologic information, soil properties, topographic profiles, and field observations of the Tsurai Village bluff were input into the WinStabl, a pre- and post-processor for the STABL slope analysis program. The idealized models were developed based on the stratigraphy exposed in the bluff face. The values of the various material properties used are based on a combination of engineering judgment and laboratory test results of coastal bluff materials collected elsewhere in Humboldt County. Slope stability conditions were analyzed using both Bishop's and Janbu's methods with circular slip surfaces, and Janbu's method with a randomly generated failure surface. The F_S for the slope was calculated in a completely drained condition and also using three groundwater surface profiles. Additionally, F_S was calculated under seismic loading conditions. Slope stability analysis was performed for a slope transect extending from Wagner Street down to the Old Home beach. Predicted limiting failure planes with estimated material properties are included as Figure 6.

Results of the analysis indicate that loading of the bluff from trail users has no practical effect on the calculated value of F_S for the subject slope. However, increases in the groundwater surface elevation have a dramatic effect on the calculated value of F_S at this site. The worst case scenario reduces F_S by almost half. The application of seismic loading to the slope model further reduces the predicted value of F_S. In summary, addition of water to the subsurface is likely to be the single greatest factor contributing to the destabilization of the coastal bluff. High groundwater conditions coupled with strong earthquake ground shaking has the highest probability of producing a mass wasting landslide event. It is highly likely that ongoing development of the City of Trinidad has resulted in increases in the groundwater surface elevation due to the numerous, closely spaced leachfields present.

7.0 TSURAI VILLAGE GROUNDWATER CONDITIONS

Several springs that feed the small creeks adjacent to Tsurai Village are located along the upper portions of the coastal bluff. The elevations of these emergent water sources likely indicate the minimum groundwater surface elevation at these locations. A recent, unrelated site investigation conducted by LACO, approximately 500 feet west of the lighthouse along Edwards Street, indicated the groundwater surface to be greater than 20 feet below ground surface. This appears to be consistent with the elevation of the springs feeding the local creeks on the slopes adjacent to Tsurai Village.

At the time of LACO's site visits to Tsurai Village during the winter and spring months, the ground surface in and around the village was saturated with localized channels of flowing water. It is improbable that such saturated conditions existed during past occupation of the village site as indicated by the fact that the Tsurai built their long houses partially below ground level. It is unlikely that the elevated groundwater conditions at this site are the result of natural causes, but rather are caused by increased water usage due to ongoing development within the City of Trinidad.

It has been noted by the Tsurai descendants that in the past the creeks would typically cease flowing across the surface of Old Home Beach during the summer and fall months. They report that the local creeks nowadays generally flow year-round down to the beach and to the ocean's edge. During our recent site visits in the late summer months, we too observed substantial stream flow across the surface of Old Home Beach, despite the lack of any precipitation during the preceding three to four months. At this time stream flow was of such volume as to create well defined channels, 2 to 3 feet deep and 4 to 5 feet

wide within the beach sands. The channel bottom consisted of a coarse cobble lag deposit typically observable during the winter months only. The observations and the anecdotal evidence spanning a 40 to 50 year period provided by the Tsurai descendants indicate the groundwater elevation beneath the City of Trinidad to have risen as a result of ongoing development.

The most notable cause for the observed saturated conditions at Tsurai Village is an inboard ditch that captures and redirects surface runoff originating from the neighboring property to the east. The driveway that serves the residence consists of a cut bank in the hillside that has intercepted the groundwater surface. Seepage from the cut bank and surface runoff from the driveway is captured by the inboard ditch and delivered across the residence's western property boundary directly onto the village site.

In April 2003, samples of groundwater sources traditionally used for ceremonial purposes were collected by the Tsurai Ancestral Society and submitted to North Coast Laboratories (NCL) to test for the presence or absence of total and fecal coliform. Two samples (Samples 1 and 2) were collected directly from springs located along the upper slopes, thereby precluding the possibility of animal derived coliform. One additional sample (Sample 3) was collected from a flowing creek along Old Home Beach. Samples were submitted to NCL for testing. Results reported with a greater than symbol (>) indicate concentrations that are beyond the detection limits of the test. Copies of the analytical laboratory results are attached. Sample 1, collected from the spring below the lighthouse adjacent to the Traditional Trail, indicated a total coliform and fecal coliform count of >23.0/100 ml and 5.1/100 ml of sample, respectively. Sample 2, collected from the spring below the Tsurai Monument near the corner of Edwards and Wagner Street, indicated a total and fecal coliform count of 6.9/100 ml and <1.1/100 ml (absent). Sample 3, collected from a creek flowing onto Old Home Beach, indicated a total coliform count of >23.0/100 ml and fecal coliform count of >23.0/100 ml. It should be noted that these results represent a minimum for the constituents tested for and indicate the presence of total and fecal coliform.

The North Coast Basin Plan water quality objectives state that the median 30-day level (based on 5 samples per 30 days) for fecal coliform should not exceed 50 parts per 100 ml (50/100 ml). As sampling occurred during April 2003, a month of record precipitation in Humboldt County, it is likely that the reported minimum concentrations were diluted as a result of increased subsurface groundwater flow.

8.0 LIQUEFACTION HAZARD

Liquefaction is the loss of soil strength, resulting in fluid mobility through the soil. Liquefaction typically occurs when uniformly-sized, loose, saturated sands or silts are subjected to repeated shaking in areas where the groundwater is less than 30 feet below the surface. In addition to the necessary soil and groundwater conditions, the ground acceleration must be high enough and the duration of the shaking must be sufficient for liquefaction to occur. Based on LACO's limited-scope site investigation, we estimate a moderate probability of liquefaction to occur at this site due to the silty sandy soils present and saturated conditions which currently persist through much of the year at Tsurai Village. There also exists a potential for lateral spreading and/or slumping to occur due to the lack of subjacent support along the seaward edge of the site.

8.1 SURFACE DRAINAGE HAZARDS

Uncontrolled surface drainage and runoff originating from residences and City streets bordering the 12.5-acre site poses a significant hazard to Tsurai Village. Presently, a continuous asphalt berm runs from Wagner Street to Van Wycke Street. To the west, at Van Wycke Street where the berm ends, runoff is redirected from Edwards Street onto this side street along its outboard edge where it flows unimpeded over the bluff edge. Shallow translational/rotational failures of the type observed along the crest of the coastal bluff, indicated by coalescing arcuate headscarps, also have the potential to occur on the slopes above Tsurai Village due to concentrated surface runoff derived from hardscaped surfaces of the residences along Wagner Street, some of which appear to drain directly on the slopes above Tsurai Village, contributing excessive volumes of runoff.

Runoff derived from the downspouts draining resident rooftops, particularly the Frame residences, appears to be collected by landscape-type drainage inlets, transported through flexible pipe, and discharged onto the slopes below, directly above Tsurai Village. A slot drain that collects surface runoff on the paved roadway accessing Wagner Street Trail also is likely to discharge concentrated runoff to the slopes below. It is unclear where the discharge points are actually located due to the heavy brush and landscape yard waste present along the slopes below the residences. Concentrated discharge, if allowed to remain uncontrolled, renders the slopes above Tsurai Village particularly susceptible to future erosion and potential failure.

As stated above, the most notable contributor of surface runoff to Tsurai Village is the Sebring property located due east of Tsurai Village. The inboard ditch that captures and redirects surface runoff, originating from this neighboring property to the east, consists of a cut bank that has intercepted the groundwater surface. Seepage from the cut bank and surface runoff from the driveway is captured by the inboard ditch and delivered across the residence's western property boundary directly onto the village site. Saturation of the village grounds, in conjunction with wave and tidal action undermining the toe slope, is, in our opinion, accelerating the rate of downslope soil creep resulting in exhumation of ancestral human remains and middens.

8.2 FLOODING

Tsurai Village is not within a flood prone area due to its location along the mid- to lower-slope of the coastal bluff. The hazard of flooding due to high flows within the local creeks surrounding the site is therefore considered low to negligible. However, the large volume of woody debris within these creeks has resulted in the accumulation of sediment within the confines of their channels which increases the potential for saturated conditions to exist at the site. Saturation of the ground surface in and around Tsurai Village remains an ongoing problem due to the unnatural diversion of surface run-off and groundwater from the neighboring residence to the east.

8.3 SEISMIC HAZARDS

There are two primary areas of concern for evaluating seismic hazards for a site. These are: (1) potential for ground rupture due to placement of the structure on or near an active fault, and (2) the anticipated magnitude and peak acceleration of the postulated seismic event. In response to the first area of concern, the site is not located within a Fault Hazard (Special Studies) Zone.

The Trinidad fault, at its closest, is located less than 1400 feet east of Tsurai Village and is the nearest recognized active fault to the site. The Trinidad fault is considered capable of generating an upper bound earthquake with a maximum moment magnitude (M_O) of 7.3 (ICBO-CDMG, 1998). A preliminary estimate of the median peak ground acceleration which may occur at the site in response to the regional upper bound design basis earthquake is 0.6 to 0.7 g (60 to 70 percent of the gravitational acceleration) (Petersen *et al*, 1999; CGS, 2003).

Given the level of potential ground shaking associated with the Trinidad fault, it is probable that earthquake-induced landsliding could occur along the coastal bluff above Tsurai Village. The actual level of risk of earthquake-induced landsliding is dependent on a number of variables including the proximity of the epicenter, the depth of the hypocenter, the duration of the shaking, soil type and density, and the soil moisture conditions at the time of the event.

Ongoing research into the seismicity of the Pacific Northwest has shown that the Cascadia Subduction zone is capable of generating major earthquakes which would affect this site. The Cascadia Subduction zone marks the boundary between the North American plate and the subducting Gorda and Juan De Fuca plates. The Cascadia Subduction zone, which extends from offshore of Cape Mendocino in Humboldt County, California to Victoria Island in British Columbia, is considered capable of generating an upper bound earthquake with a moment magnitude of 8.3 on its southern Gorda segment (Petersen *et al*, 1996). Based on Japanese tsunami records, the Cascadia Subduction Zone has recently been interpreted to have ruptured over its entire length in the year 1700 A.D. in a 9.0 M_o earthquake event (Satake *et al*, 2003). The potential for tsunami inundation to occur at this site as a result of a major earthquake along the Cascadia Subduction zone is considered low (CDMG, 1995).

The site is located in California Building Code (CBC) Seismic Zone 4. Design and construction of any structure(s) proposed for this site should be done in accordance with these data and Chapter 16 of the 2001 edition of the CBC which should help to reduce the seismic hazards (risks to human life and property) at this site.

9.0 DISCUSSION AND CONCLUSIONS

Based upon LACO's field investigation and review of existing geotechnical investigations, it appears that the coastal bluff occupied by Tsurai Village is subjected to long-term erosional processes occurring at relatively slow rates punctuated by episodic debris slide events. Rotational slumping of the coastal bluff toe slope, resulting from ongoing wave and tidal action, also contributes to destabilization of the upslope areas. The coastal bluff as a whole generally appears stable in its present configuration and is unlikely to undergo catastrophic slope movement. Factors which may ultimately contribute to localized slope instability in and around Tsurai Village are:

- The diversion, concentration, and improper discharge of surface runoff onto the slopes above and on Tsurai Village, originating from hardscaped surfaces such as rooftops, driveways, and patios;
- an increase in the groundwater elevation, and spring and creek flow volume due to excessive landscape irrigation, densely spaced and undersized septic leachfields, and the addition of new leachfields resulting from continual development;
- disposal of landscape yard waste and the girdling and topping of trees on the slopes above Tsurai Village;
- continual destabilization of the coastal bluff toe slope resulting from wave and tidal processes, and;
- strong earthquake ground shaking.

Historical drawings from early European explorers indicate the slopes in and around Tsurai Village to have remained largely unchanged since the late 1700's. According to Tsurai oral history, it is quite likely that Tsurai Village has been inhabited for many millennia prior to initial contact with Spanish explorers and Russian fur traders. This being the case, it is not unreasonable to assume that rates of coastal retreat at this location are very low and will likely continue to be so in the near future. However, the exhumation of ancestral human remains and middens by current erosional processes indicates that coastal retreat is actively occurring, albeit at rates unlikely to produce catastrophic slope movements.

Previous geotechnical investigations, which included the installation of slope inclinometers within deep boreholes (approximately 78 feet below grade) indicate no "appreciable lateral displacement to the depths explored" to be occurring in the areas underlying Wagner Street. This suggests that the bluff below the upper five feet of the soil profile is relatively stable (Taber Consultants, 2003). Along Edwards Street, there is also a general lack of evidence that would suggest deep-seated failure planes are present. However, in the vicinity of the Trinidad Memorial Lighthouse, differential settlement of the concrete areas is evident, probably indicating that shallow slumping is occurring at this location.

The Wagner Street Trail, located along the outermost edge of the coastal bluff, is susceptible to differential settlement and erosion due to the lack of vegetative cover and considerable foot traffic in conjunction with the low-density soils present. The Tsurai

descendants indicate that this trail was at one time 16 to 20 feet wide. It is now approximately 8 to 10 feet wide as a result of slow, but steady, bluff retreat. It has been reported by Taber Consultants that longitudinal cracks paralleling the bluff face are present near the trail edge. Fractures such as those observed are typical in coastal bluff settings due to the lack of subjacent support and the effects of gravity. Without the proper vegetative cover, fractures such as these may infill with surface runoff and channel water into the subsurface, thereby exacerbating potential instability.

Limit-equilibrium slope stability modeling and assessment of the coastal bluff indicates that increased loading due to trail usage has no practical effect on the calculated value of F_S for the subject slope, as discussed earlier. Continued trail usage is therefore unlikely to cause catastrophic slope failure as result of loading due to foot traffic. Nonetheless, the practice of siting a pedestrian trail along the outboard edge of a coastal bluff is generally ill advised due to the resulting soil compaction and the creation of bare soil areas, an increase in uncontrolled surface run-off over the bluff edge, and the required vegetation removal necessary to maintain the trail resulting in decreased root strength, and hence soil destabilization.

The single greatest factor that could adversely affect slope stability at Tsurai Village is an increase in the groundwater surface elevation. Slight increases in groundwater elevations result in significant decreases in the calculated value of F_S. The worst case scenario reduces F_S by almost half. Increases in the groundwater surface elevation resulting in year-round high groundwater conditions are primarily related to the densely spaced network of private on-site waste water disposal fields (leachfields). Information regarding Trinidad septic permits, dated April 1997, indicates that a majority of systems were installed in the 1970's and 1980's. Typically these existing systems that serve two- and three-bedroom residences consist of 50 feet or less of leachline, which is undersized by today's standards. As a result, point discharge of effluent on the tightly spaced city parcels, particularly those that contain commercial businesses, can contribute significant amounts of water to the subsurface. In a 1989 report prepared by the Coastal Commission to the City of Trinidad, it was noted by the Humboldt County Division of Environmental Health, "that water seepage with an odor problem is occurring along a bank along Edwards Street. While no particular septic system has yet been identified, source appears to be wastewater effluent. The County Health Department believes that the problem is probably due to localized and high density wastewater loads." The report further states that, "high density wastewater loads causing seeps from a bank do indicate a site's or

area's carrying capacity is being reached and the limited ability of the site to accommodate new or rehabilitated development..."

10.0 RECOMMENDATIONS

The location of Tsurai Village along the mid- to lower-slope of an actively retreating coastline make it particularly prone to slope instabilities exacerbated by poor land use management practices. Surface drainage and run-off emanating from neighboring and bluff top residences is the single greatest factor affecting slope stability at this site. Fortunately, the uncontrolled discharge of surface run-off is easily mitigated with the emplacement of drainage collection structures, tightlines, and properly located points of discharge. During LACO's field investigation, several locations were identified where discharge of surface run-off is directly affecting Tsurai Village in an adverse manner. Mitigation of these problem areas will not only benefit Tsurai Village, but will also benefit bluff top landowners by minimizing the potential for slope instabilities to occur. The following recommendations are intended to reduce, but may not eliminate completely, the noted geologic hazards present.

1) Sebring property (assessor's parcel number 042-131-007): The inboard ditch located alongside the lower driveway accessing this residence is directing significant volumes of surface run-off directly onto the village grounds. It appears that a majority of the driveway is located within the Coastal Conservancy access easement. It is recommended that a drop inlet be constructed at the residence's western property line. The drop inlet should be drained via a minimum 8-inch pipe that delivers the surface run-off back into Parker Creek or a suitable outlet point well below the residence. The use of a small excavator will be required to install the drop inlet and piping.

2) Currently, surface run-off collected from the roofs, driveways, and patios of the local bluff top residences appears to be discharged via flexible pipe directly onto the slopes below the Wagner Street Trail and above Tsurai Village. It is recommended that run-off emanating from these hardscaped areas be collected and delivered back onto Wagner Street to permit drainage to the City's existing storm drain network. To do so may require individual landowners to install a collection sump with pump. This measure will, in our opinion, have a much greater effect in stabilizing the slopes below the residences and above Tsurai Village than will closure of the Wagner Street Trail.

3) The asphalt curb running alongside the outboard edge of Edwards Street should be continued along Van Wycke Street. Presently, it appears that all surface run-off controlled by the curb is discharged onto Van Wycke Street where it flows uncontrollably over the coastal bluff edge. This concentration of run-off, particularly during intense precipitation events, has the potential to saturate and/or erode the hillside and induce slope failure.

4) Access to the Axel Lindgren Memorial Trail should be re-routed back to its original location through the grounds of the Memorial Lighthouse. The existing upper trail access, sited on failing sidecast fill material alongside the southwest corner of the lighthouse grounds, should be abandoned and the fill removed to prevent the need for ongoing maintenance. A handrail along the east edge of the trail should be constructed to provide for safer trail usage and to discourage users from hiking off trail.

5) Non-native vegetation and downed trees comprising the thick understory directly in and around Tsurai Village should be removed to provide for access and site use. On the slopes surrounding the site, as much vegetation as possible should remain to provide for soil root strength and slope stabilization. Bare soil areas created by vegetation removal should be seeded with native grasses and/or shrubs. Removal of the dense stand of alder and willow trees on flat ground and low gradient slopes may also occur, if desired, and is not expected to have detrimental effects on the site. It may also be beneficial to clear the local stream channels of the vast amounts of woody debris. However, some woody debris should remain to provide habitat for aquatic species.

6) Pathways to be used for access to the site should be constructed with a layer of filter fabric or weed mat, and overlain with crushed base rock or wood chips. The pathways should be slightly crowned to promote drainage of surface water toward the edges of the walking trail. Interlocking trail steps, similar to those constructed along the Axel Lindgren Memorial Trail, should be emplaced where the pathways traverses steep sections of slope. Alternatively, cable steps may also be used where deemed necessary. Crushed base rock should be placed between the treads and large, angular cobbles should be placed alongside the outside edges of the steps to stabilize the adjacent ground surface.

7) Common erosion control measures such as rock lined ditches, energy dissipaters at discharge points, and vegetative ground cover should be used wherever surface run-off has the potential to cause rilling and gullying.

8) Protective fencing with a low visual impact, such as redwood split rail, should be installed around Tsurai Village, the burial grounds, and other sensitive areas to limit access and foot traffic.

9) Dumping of yard waste, brush, and woody debris on the slopes above Tsurai Village by local bluff top land owners and city personnel should not be allowed to continue. Continual disposal of vegetation increases soil moisture, adds unnecessary overburden to the slope, produces anaerobic soil conditions, and contributes to the invasion of non-native plant species which have a tendency to out-compete native flora.

10) Topping, girdling, and cutting down of trees on the steep slopes above Tsurai Village by the local bluff top land owners should also not be allowed to continue. The trees present on the steeply sloped areas provide a stabilizing effect resulting from root strength and rain interception by the canopy.

11) The Wagner Street Trail should be vegetated with native shrubs along its outboard edge to provide stabilization and to control surface run-off emanating from the compacted soil resulting from trail usage. The edge of the bluff should be periodically monitored to evaluate the rate of erosion and bluff top retreat. Closure of the trail should occur if and when the trail becomes dangerously narrow.

12) The City of Trinidad should investigate the possibility of constructing a sanitary sewer system and a wastewater treatment plant. In the meantime, the City should be encouraged to implement a city-wide program whereby individual septic tanks are pumped no less than once every five years. Septic tanks that serve commercial businesses, particularly vacation rentals that experience high volume usage during the summer months, should be pumped every three years at a minimum. Residences utilizing outdated septic leach pits should be required to install an adequately sized septic tank and leachfield that meets current County standards.

13) Bi-annual water sampling of the creeks and springs around Tsurai Village should be conducted, with testing for total and fecal coliform, enterococcus, and e. coli, following Water Quality Control Board and California Department of Health Services standards. Sampling and testing should occur during both the wet and dry season to determine the maximum concentrations present.

14) The ability to stabilize the coastal bluff toe slope directly below Tsurai Village is problematic. It has been recommended by others in the past that rip-rap be placed along the back edge of Old Home Beach to stabilize the slope. However, the installation of rip-rap generally results in accelerated erosion along the adjacent areas that remain unprotected. Consequently, the entire toe slope, from the rock outcrop near the foot of the Parker Creek Trail to the rock outcrops at the western edge of Old Home Beach, would require rip-rapping. Such an endeavor would likely be cost prohibitive and also unsightly. An alternative may be the installation of redwood log cribbing solely at the location where buried remains are being exhumed and exposed in the face of the toe slope. The log cribbing would serve to partially stabilize this area as well as prevent further excavation and desecration of the site by grave robbers.

11.0 LIMITATIONS

This report has been prepared for the exclusive use of the Tsurai Ancestral Society and appropriate public authorities for specific application to the project site. LACO ASSOCIATES (LACO) has endeavored to comply with generally accepted engineering geologic practice common to the local area. LACO makes no other warranty, express or implied.

The analyses and recommendations contained in this report are based on data obtained from specific locations where field observations were conducted and only at the time they were conducted.

The recommendations included in this report are based in part on assumptions of subsurface conditions that may only be extrapolated from surficial observations. LACO cannot preclude that changes in subsurface conditions may occur in the future as a result of changing site conditions resulting from unpredictable strong seismic events, variable ocean conditions, and intense precipitation events.

Do not apply any of this report's conclusions or recommendations to sites other than those described above. Also note that LACO is not responsible for any claims, damages, or liability associated with any other party's interpretation of the field data or reuse of this report for other projects or at other locations without our express written authorization.

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13.0 LIST OF FIGURES

Figure 1: Location Map
Figure 2: Assessor's Parcel Map
Figure 3: Fault Hazards Map
Figure 4: Aerial Photographic Site Map
Figure 5: Site Photograph
Figure 6: Slope Stability Analysis

13.1 LIST OF ATTACHMENTS

Attachment 1: Analytical Laboratory Results

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APPENDIX H: Public Comments on Draft TMP and Management Team Responses

Commenter and Comments	Management Team Response
Donna Haddock- Civic Club: Pg. 26 • Deed is a "correction deed" • City did not transfer land to Civic Club was gift from Hallmarks	We have been unable to obtain any information to prove or refute the information included in the TMP. Numerous requests to the City to provide information have remained unanswered.
Pg. 27 • Tsurai versus Civic Club should be included	TAS did not sue the Civic Club, the Civic Club intervened, but the court case was dismissed.
Pg. 56-58 and 67 • Dispute history of ownership of Civic Club property. • Civic Club disputes that the Conservancy holds an easement or that the property was ever part of the 12.5 acres.	Dean Heyenga said he would provide the information for this case, but declined to do so in spite of numerous requests to the City. These issues have been addressed through legal channels and are outside the scope of the TMP. No documentation has been provided by the City or the Civic Club to support these assertions, in spite of numerous requests to the City.
Pg. 71 • Civic Club fence was not constructed to close the traditional trail, but out of insurance liability reasons.	City minutes show that the fence was put up to block an "illegal" trail. Pg. 71 para 3 is not a statement about history or the past, but a recommendation for the future.
Jim Popenoe: • Resolve inconsistencies in presenting vegetation history	Comment noted and we will cross reference historic conditions to current conditions section.
• Recommends a comprehensive veg study of entire 12.5 acre TSA	Comments are pertinent to a comprehensive vegetation survey, study and management plan.
• Believes TAS and Yurok	So noted.

Tribe need to be given the lead on veg management and restoration.	
• Responsible veg management and removal are long-term processes that require commitment and vision spanning generations.	Agreed, so noted. Environmental review of the entire TSA for restoration efforts will affirm this.
• Tsunami and earthquake history	Will make change on tsunami history.
• Resource Management Alternatives Matrix	Matrix was not intended to be an either/or. A range of alternatives were presented for the purpose of public scoping on selecting a final set of recommendations, which is what it was designed to do.
• Policy 69 should be strengthened	The TMP does not amend Policy 69 but it makes recommendations about strengthening Policy 69. Changes to Policy 69 will be reviewed and revisited at the time of an update of the General Plan.
• Appendix C- Scoping	Scoping has many meanings. The purpose of holding scoping meetings with stakeholder groups was to identify issues and concerns specific to each group for the purpose of drafting the TMP, findings, and recommendations.
• Appendix D- Scoping	The TMP document describes the stakeholder groups and how they were selected.
• Appendix F- LACO study	Comments noted. Saturation is a primary and immediate concern for site management and may need to occur prior to long-term site restoration efforts are undertaken.
• Plan organization, headings, etc.	So noted.
J. Bryce Kenny	
• Supports transfer to Tribe	So noted

• Concerns about views from private residences	While views are important, views from private residences are not part of the TMP or the 12.5 acres. TMP is being revised to present a better-developed veg management strategy within a framework of restoration that includes a veg study with professional recs. Viewshed will be considered as part of overall management of entire 12.5 acre TSA.
• Funding concerns over how the site will be restored and managed.	These details would be negotiated in any land transfer.
• How would ownership transfer impact the recs in the TMP.	Members of the management will consider for adoption or approval the final TMP and its recommendations. The Tribe has been an active participant in the development of the TMP and remains committed to seeing the TMP and its recommendations implemented.
• Questions the need to clarify conservancy's easement	TMP attempts to clarify the history of the issues surrounding property boundaries and easement.
• Would trail monitoring and maintenance be handled by Tribe if transferred?	Yes
• Sign program should not become visual pollution.	Agreed
• Questions what is "traditional"	What is considered "traditional" to Native Americans can only be determined by Native Americans and is not in the purview of the TMP.
• Wagner Street Trail should stay open	So noted.
• Supports the Conservancy obtaining a conservation/access easement for Parker Creek.	So noted.
• Appendix A is vague about applicability	This section is intentionally general due to the fact that specifics and applicability depend on ownership. Existing law remains the framework for

	ownership. Existing law remains the framework for protecting cultural and archeological sites and resources.
• How would law enforcement apply if TSA transfer to Tribe.	Jurisdictional authority for law enforcement would need to be clarified in any negotiation of land transfer.
• Likes the name of Indian Beach	TAS prefers Old Home Beach (see other responses)
• Water quality and sampling issues	City is currently sampling water quality and is seeking additional funds to identify septic contaminations as a source of pollution. The City is developing water monitoring programs to identify water quality problems.
• Veg management should include views from private residences	While views are important, views from private residences are not part of the TMP or the 12.5 acres. TMP is being revised to present a better-developed veg management strategy within a framework of restoration that includes a veg study with professional recs. Viewshed will be considered as part of overall management of entire 12.5 acre TSA.
• SB 18 and applicability if Tribe owns TSA	Yes, SB 18 applies to any amendment of the General Plan and not limited to the site itself.
• Western approach to the top of ALMT and is it needed if the fence is opened?	Comment is unclear. The TMP recommends that an engineering evaluation be conducted to evaluate stability of that area.
• Does not think directional/flow signs are appropriate	Comment noted, bullet deleted. Was intended to provide information for users on trail selection.
Gail Babot	
• concerns over ownership and management of trails- whoever owns must manage trails	Purpose of TMP is not to enhance views from private residences but the management of 12.5 acres. The Management Team acknowledges that views are important to residents and that veg on property does impact views from private residences, but veg management priorities must be

• viewshed is important and should be preserved for residences on the bluff, as well as tourists. • ownership issue needs to be resolved; transfer of cemetery and village	determined by what is best for the site as a whole. Appropriate site management will likely result in removal of vegetation that may improve views but this is not the purpose of the TMP. Agree that trails should be maintained to provide safe access While views are important, enhancing views from private residences are not part of the TMP or the 12.5 acres. The TMP recommends that a vegetation study be conducted by a qualified professional. Viewshed issues will be considered as part of overall management of entire 12.5 acre TSA. The easement held by the Conservancy should be re-written to include more specificity on easements, roles, and responsibilities. The easement stays with the land, regardless of ownership. The TMP is a necessary step in proceeding with the negotiations for transfer of land per the settlement signed by the City. Details of transfer would be negotiated at a later date.
Janis Saunders • supports the transfer of village and cemetery to Yurok Tribe. • Wants Wagner Street trail kept open • Prefers the name "Indian Beach"	 So noted. So noted. TAS prefers "Old Home Beach". TAS has requested new signage.
Glenn W. Saunders • Supports Tribe taking over village and cemetery • repatriation and recovery of artifacts taken from site	 Comment is unclear about maintenance Reminder that the conservation easement remains regardless of ownership. The Yurok Tribe and the TAS actively work together on these issues.

• Lighthouse trail should not be moved	So noted.
• Wagner Street trail in perpetuity	TMP will include option for periodic closure for maintenance as needed. Su will check with Marcia.
• Alder's should be permitted to be topped and trimmed to enhance views for residences on the bluff.	While views are important, views from private residences are not part of the TMP or the 12.5 acres. TMP is being revised to present a better-developed veg management strategy within a framework of restoration that includes a veg study with professional recs. Viewshed will be considered as part of overall management of entire 12.5 acre TSA.
• Public comment period is questioned.	Environmental reviews under NEPA or CEQA mandate public scoping and comment periods. These will allow for public comment
• Axel Lindgren Sr. versus II	Reference is intended to refer to Axel Lindgren Sr.- will be corrected in the document
Robert Hallmark	
• Question about sovereign immunity	Easements remain with the land and any transfer would include these easements. The settlement language requires a limited of waiver of sovereign immunity.
• Supports transfer to the Tribe with conditions.	So noted.
City of Trinidad	
• Correction information on ASBS, CCA and LCP.	Changes and corrections will be made in revised draft.

• Laws and applicability- concerns about lack of specificity in applicability.	The section was intentionally drafted to be general, as applicability of laws is dependent on ownership status and proposed projects.
• Lack of City specific information in TMP document.	The City was provided over 3 years to allow access to records and information for the TMP, but in spite of numerous requests, refused to do so.
• Questions the alternatives matrix and whether public input was incorporated from scoping meeting.	The alternatives matrix was developed to allow the public to comment and select a preferred alternative. During the public scoping meeting, additional information was included into the matrix based on comments received and was projected on screen for the public to review. The public comment supported a restoration emphasis over the other two alternatives, and the focus of the recommendations and implementation was completed with that focus in response to public comment.
• Thinks that consultation protocol was not developed in the TMP and should be.	The existing consultation protocol is Policy 69. If the City adopts the recommendations in the TMP, this protocol will be amended.
• Vegetation and views from private residences off the TSA need more consideration.	While views are important, views from private residences are not part of the TMP or the 12.5 acres. TMP is being revised to present a better-developed veg management strategy within a framework of restoration that includes a veg study with professional recs. Viewshed will be considered as part of overall management of entire 12.5 acre TSA.
• Concerns about land transfer and future ownership and management of TSA.	The TMP is a required step in proceeding with the negotiations for transfer of land per the settlement signed by the City. Details of transfer would be negotiated at a later date. In the settlement, the City has agreed to move forward on transfer of the land to the Yurok Tribe. Current conditions are the result of City ownership and management of the TSA.

• Requests the creation of a TSA advisory committee.	The City Council appointed two (2) representatives to serve on the Tsurai Management Team. The Team has worked as a group to develop the TMP and the recommendations contained therein. Who the City appoints to serve on the Team is entirely up to the City. This is a question for City planners to direct to their own City Council. The Management Team will remain in place for the implementation of the Plan.
Billie and John Crowley: • Supports transfer to Tribe, concerned about City Council's opposition. •	So noted.
Kathleen Duncan: • See Haddock comments- identical.	See Haddock responses
Merrill Stiver: • Land transfer should only be 5 acres, not 12.5 acres.	The TSA is 12.5 acres. The 5 acres is not the TSA but is referred to in the City's General Plan. A survey of the 12.5 acre confirms that cultural resources are contained throughout the entire property.
Tom Odom: • supports site restoration and tribal management • would like an agreement between Yurok and Civic Club on AMLT • viewshed for residence- City should assert more control over views	So noted So noted- is consistent with TMP and LACO recs and the settlement. While views are important, views from private residences are not part of the TMP or the 12.5 acres. TMP recomments a veg study with professional recs. Viewshed will be considered as part of overall management of entire 12.5 acre TSA. A veg management team to evaluate decisions will include the City.