Chapter 13
ARCHAEOLOGICAL, HISTORICAL, AND CULTURAL RESOURCES

13-1. INTRODUCTION

This chapter presents a description of the existing conditions in the Shorezone area with respect to archaeological, historical, and cultural resources and identifies potential environmental impacts on these resources that could result from each of the five alternatives.

Cultural resources include prehistoric resources (before written history), Native American resources (associated with ancestors of living Native Americans), and historic resources (after European contact and settlement). Prehistoric resources are physical properties resulting from human activities that predate written records and are generally identified as isolated finds or sites. Prehistoric resources can include village sites, temporary camps, lithic scatters (stone tools), roasting pits/hearths, milling features, petroglyphs (rock art), rock features, and burials. Native American resources are sites, areas, and materials important to living Native Americans for religious, spiritual, or traditional reasons. Historic resources can include archaeological remains and architectural structures. Submerged cultural resources (historical and cultural resources in the marine environment) may include prehistoric remains, inundated cities, harbors, shore installations, and ship and aircraft wrecks.

The Washoe Indians consider Lake Tahoe a sacred place. Historically, it was a provider of food and their most important gathering point each year. The Lake and neighboring valleys on the eastern edge of the Sierra were the heart of Washoe lands.

As one author described Lake Tahoe:

> It is the center of the Washo (sic) world, geographically and socially. Washo mythology and folklore centers around the lake. Even today, almost every bay, inlet, and stream mouth has a legendary or mythological association. On the edge of the lake grew the dangerous and semi-sacred wild parsnips. From the great rock where the shamans had a secret hiding place to the other end of the lake there is, according to Washo belief, a roadway of white sand on which a powerful shaman could walk without drowning. And...it was the lake and its environs which the Washo defended most vigorously against intruders. (Downs, 1965)

The first recorded Euro-American visitors to Lake Tahoe were John C. Fremont and his expedition's topographer, Charles Preuss, who saw Lake Tahoe from Red Lake Peak on February 14, 1844. For the next 15 years, Lake Tahoe remained relatively undisturbed by the great westward migration. This was because the two best routes through the Basin required a double-crossing of mountains over the Carson range east of the Basin and over the main Sierra crest to the west.

Discovery of the Comstock Lode in 1859 and the huge demand for lumber to which it gave rise created the key event in Euro-American history in the Tahoe Basin. What began at Glenbrook as a mixed sawmill-farming operation for local use in the early 1860s, became a highly competitive industrial struggle among several large lumber firms for control of the
Lake Tahoe Shorezone Ordinance Amendments Draft EIS – July 2004
Page 13-2

Basin’s timber stands ten years later. The Carson and Tahoe Lumber and Fluming Company, formed in 1873, with headquarters at Glenbrook, emerged as the largest operator. Its holdings around the Basin, either owned outright or leased, at one time totaled approximately one-fifth of the Region’s land area. Much of this land was close to, or included, extensive stretches of Shorezone. Other large lumber companies in the area included Sierra Nevada Wood and Lumber Company, Donner Lumber and Boom Company, and the Pacific Wood, Lumber, and Flume Company, and they all attempted to acquire as much timber land as possible. By the end of the principal mining period on the Comstock in 1888, most of the prime accessible lumber in the Basin had been logged.

At the end of the mining period some logging still occurred in the Basin but the post-Comstock period saw a mixture of activities supporting the increasingly important resort industry. Emphasis on development shifted from the slopes of the Tahoe Basin to the Shorezone itself as resort and estate owners used the Lake for intra-basin transportation. The Shorezone became the focus of seasonal resort development during this time.

In the 1930s, roads to the Tahoe Basin from California were paved, and for the first time, Lake Tahoe became accessible to automobile tourism and public recreation. During this time the exclusiveness of the old luxury hotels declined and the trend toward middle-class accommodations began. Still, in 1947, the essential character of the preceding 60 years at Lake Tahoe had not been greatly altered. The caption under a magazine picture of South Stateline that year described the area as one where tall, graceful evergreens lined both sides of the highway. Today, South Stateline supports high-rise casinos; the tall trees are long gone.

The relatively rustic Basin of the early 1950s, which was beginning to prepare itself for a moderate increase in the number of families who desired weekend and summer cottages at the Lake, was rapidly and irrevocably altered by the building of large casinos at South Stateline, Nevada. The simultaneous development of large ski resorts changed use patterns at Lake Tahoe from summer-only to two season operations.

Development around the shoreline of Lake Tahoe has, in large part, been controlled by a relatively small number of owners. Even though the Basin had been stripped of its usable timber during the Comstock period, the lumber companies ownership pattern made large parcels of land available. After cutting the timber, lumber companies often sold the land very cheaply, particularly on the California side of the Basin. Vacationers bought many small lakeside lots and built second homes on them. This could have been the pattern that developed for the shoreline of the entire Region, but the existence of large estates and the public acquisition of lands prevented it. Today, the East and West Shores, although not undisturbed, are not as cluttered by subdivisions as are the North and South Shores because many of the old large estates were acquired by California, Nevada, and the Forest Service for public use. Ironically, many of the large parcels of land in public ownership owe their existence indirectly to the large blocks of land that remained after the destruction of the timber stands during the Comstock Era. (TRPA and USFS, 1971.)

REGULATORY CONSIDERATIONS

Tahoe Regional Planning Agency

However, cultural and historical concerns are addressed in the Cultural Subelement, Conservation Element, of the Goals and Policies. Goal #1 states that TRPA shall “identify and preserve sites of historical, cultural, and architectural significance within the Region.” The policies for this Subelement are:
Historical or culturally significant landmarks in the Basin shall be identified and protected from indiscriminate damage or alteration; and

Sites and structures designated as historically, culturally, or archaeologically significant shall be given special incentives and exemptions to promote the preservation and restoration of such structures and sites.

Section 29.5 of the TRPA Code reiterates the goals of providing for the recognition, protection, and preservation of the Region's significant historical, archaeological, and paleontological resources, and sets standards for resource protection, discovery, evaluation, and management. Upon discovery of a site, object, district, structure, or other resource, potentially meeting the criteria of Section 29.5, TRPA shall consider the resource for designation as a historical resource and would consult with the appropriate state historic preservation officer (SHPO). If the resource is primarily determined to be eligible for designation as a historical resource by the applicable SHPO, TRPA would consider formal designation under Code Sections 29.4 and 29.5. Resources are designated as historical by TRPA according to the following procedure in Section 29.4:

1) Nominations for designation are made in the form of a report with sufficient information to evaluate a resource pursuant to Section 29.5;

2) TRPA reviews and approves a designation using the nomination report and comments from the SHPO and other interested parties; and

3) If a resource is determined to be not significant and therefore not designated as a historical resource, TRPA may withdraw a designation based on a request by TRPA, the SHPO, a property owner, or a land management agency.

Eligibility for historical designation is covered in Code Subsections 29.5.A through 29.5.E, as cited below:

29.5.A: Resources Associated with Historically Significant Events and Sites:
Resources shall exemplify the broad cultural, political, economic, social, civic, or military history of the Region, the states, or the nation, or be associated with events that have made a significant contribution to the broad patterns of history, including regional history. Such resources shall meet one or more of the following criteria:

1) Association with an important community function in the past;

2) Association with a memorable happening in the past; or

3) Contain outstanding qualities reminiscent of an early stage of development in the Region.

29.5.B: Resources Associated with Significant Persons:
Resources that are associated with the lives of persons significant in history, including regional history, such as:

1) Buildings or structures associated with a locally, regionally, or nationally known person;

2) Notable examples, or best surviving works, or a pioneer architect, designer, or master builder; or

3) Structures associated with the life or work of significant persons.

29.5.C: Resources Embodying Distinctive Characteristics:
Resources that embody the distinctive characteristics of a type, period, or method of construction, that possesses high artistic values, or that represent a significant and
distinguishable entity but whose components may lack individual distinction, are eligible. Works of a master builder, designer, or architect also are eligible. Resources may be classified as significant if they are a prototype of, or a representative example of, a period style, architectural movement, or method of construction unique in the Region, the states, or the nation.

29.5.D: State or Federal Guidelines:
Archaeological or paleontological resources protected, or eligible for protection, under state or federal guidelines, are eligible.

29.5.E: Prehistoric Sites:
Sites where prehistoric archaeological or paleontological resources that may contribute to the basic understanding of early cultural or biological development in the Region are eligible.

Federal Agencies

National Register of Historic Places
Federal protection is legislated by: a) the National Historic Preservation Act (NHPA) of 1966 as amended by 16 U.S.C. 470; b) Archaeological Resource Protection Act of 1979; and c) the Advisory Council on Historical Preservation. These laws and organizations maintain processes for determination of the effects on historical properties eligible for the National Register of Historic Places (NRHP). The formal criteria (36 CFR 60.4) for determining NRHP eligibility are as follows:

1) The property is at least 50 years old;
2) It retains integrity of location, design, setting, materials, workmanship, feeling, and associations; and
3) It possesses at least one of the following characteristics:
   a. Association with events that have made a significant contribution to the broad patterns of history.
   b. Association with the lives of persons significant in the past.
   c. Distinctive characteristics of a type, period, or method of construction, or represents the work of a master, or possesses high artistic values, or represents a significant, distinguishable entity whose components may lack individual distinction.
   d. Has yielded, or may be likely to yield, information important to prehistory or history.

USFS - Lake Tahoe Basin Management Unit

Within the Tahoe basin, the LTBMU is the largest land holder, approximately 75% of the land base. Consequently, many of the historic and archaeological resources are found within their ownership. In administering the national forest land, LTBMU adheres to the National Historic Preservation Act legislations (described immediately above) in addition to coordinating with the Washoe Tribe and the TRPA. LTBMU additionally takes management direction form their Regional Forest Plan in regards to historic and archaeological resource protection.
State Agencies

California Environmental Quality Act

CEQA provides significance criteria for historic and prehistoric cultural resources. Appendix K of the CEQA Guidelines characterizes significant impacts as those causing damage to an "important archaeological resource," which is defined as follows:

1) Associated with an event or person of:
   - Recognized significance in California or American history; or
   - Recognized scientific importance in prehistory.

2) Can provide information that is both of demonstrable public interest and useful in addressing scientifically consequential and reasonable historical or archaeological research questions.

3) Has special or particular qualities, such as oldest, best example, largest or last surviving example of its kind.

4) At least 100 years old and possesses substantial stratigraphic integrity.

5) Involves important research questions that historical research has shown can be answered only with archaeological methods.

California Register of Historical Resources

California Public Resources Code, Section 5024.1 established the California Register of Historical Resources in 1992. A resource may be listed as an important resource if it meets any of the NRHP criteria, stated above.

Nevada Office of Historic Preservation

The Nevada State Historic Preservation Officer plays an advisory role to TRPA during project review of structures 50 years or older. TRPA staff request comment in such circumstances and often coordinate with the SHPO on required study and mitigation measures. Additionally, TRPA consults with the SHPO during the scoping process for all EISs and submits these documents for comment during the public comment period.

13-2. EXISTING ARCHAEOLOGICAL, HISTORICAL, AND CULTURAL RESOURCE CONDITIONS AND TRENDS

A number of books and publications are available regarding the history of Lake Tahoe. These resources, among others, describing archaeological, cultural, and historical sites, contributed to a cultural and historical planning guide for the Tahoe Region developed in 1971, Cultural and Historical Significance of the Lake Tahoe Region. This publication included maps showing known archaeological, ethnographic, and historical sites. Over 100 sites were identified and mapped. Over the years, sites were dropped or added based on their significance according to additional local, state, and federal surveys and inventories of the historical resources of Lake Tahoe. The result is the TRPA Historic Resource Map, adopted in 1987 and revised in 1989. This map identifies 74 sites that are culturally, or historically, significant with 37 such sites in the Shorezone of Lake Tahoe. Even today, cultural, historic, and archaeological sites are being identified that were not included in the original 1987 map or 1989 revision.

Currently, TRPA recognizes 56 sites located on littoral parcels that are culturally, historically, (37 sites) or archaeologically (19 sites) significant (see Figure 13-1). The 1987 TRPA
Historic Resource Map established the basis for identification of these sites. Additional information came from a 1989 report, *Historic Resources of the Nevada Side of the Tahoe Basin* (prepared for the TRPA by Alpengroup, 1989), documented Forest Service sites, and the TRPA Cultural/Historical file that contains up-to-date information about new sites. The majority of these sites are in or near urbanized areas, since early inhabitants of the area occupied the same parts of the Region that current inhabitants find attractive.

Of the 53 sites included on Table 13-1, seven are listed on the National Register of Historic Places. They are: Lake Shore House at Glenbrook, Tahoe Meadows, Tahoe City Outlet Gates and Gatekeepers Cabin, Watson Log Cabin, Phipps-Hellman-Ehrman Estate, Vikingsholm, and Lakeside House.

Not listed on the National Register of Historic Places, but still of special interest, especially for the Washoe Indians, is Cave Rock, a large rock located on the East Shore of Lake Tahoe in Douglas County. Cave Rock is a place of historic legend, and cultural and spiritual significance to the Washoe people.

Beginning in the early 1990s, Cave Rock became internationally known as an extreme, technically demanding location for sport rock climbing and a number of climbing routes were developed on the rock. In 1993, Nevada Division of State Parks submitted plans to TRPA to expand the boat ramp at the base of Cave Rock. The Washoe expressed concerns regarding that project, considering the cumulative effects of the present activities and additional development at Cave Rock. At that time, the Washoe noted they once could in engage in traditional activities there in relative isolation and without interference (LSA Associates, Inc., 1998). In response to their concerns, TRPA and the Nevada SHPO required Nevada State Parks to submit a resource protection and enhancement plan.

The Cave Rock Heritage Resources Protection Management Plan was completed in 1998 by LSA Associates, Incorporated. LSA found Cave Rock to be eligible for the National Register of Historic Places as a Traditional Cultural Property, a Historic Transportation District, and an Archaeological Site. The U.S. Forest Service, owner of the land encompassing Cave Rock consulted with the National Registrar of Historic Places. The National Registrar concurred with the significance findings and formally determined Cave Rock eligible for listing under the above-cited categories. In 2003, the USFS, LTBMU issued a Forest Order to provide for the enforcement of a rock climbing closure of Cave Rock, in an effort to preserve the site as a Traditional Cultural Property and Archaeological Site.

In 1988, the Forest Service’s Lake Tahoe Basin Management Unit conducted an informal shoreline inventory of all sites that could possibly be deemed culturally, historically, or archaeologically significant. A total of 252 sites were identified. Contents of the sites ranged from a single rock mortar or basalt flake to historical docks or pilings. At the time of this writing, intensive examination and documentation regarding the significance of each site, except for Cave Rock, have yet to be completed (Dexter, 1995, Shade, 1999).
Figure 13-1
Littoral Parcel Historic Sites
Lake Tahoe Shorezone Ordinance Amendments EIS

Source: TRPA Historic Resources Map, 1987
Table 13-1. Archaeological, Historical, and Cultural Sites On Littoral Parcels

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<table>
<thead>
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<tbody>
<tr>
<td>1</td>
<td>Old Tahoe Hot Springs (Brockway) Hotel</td>
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<tr>
<td>2</td>
<td>Mouth of Watson Creek</td>
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<td>3</td>
<td>Dollar Point</td>
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<td>4</td>
<td>Matt Green House</td>
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<td>5</td>
<td>Mouth of Burton Creek</td>
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<td>6</td>
<td>Watson Log Cabin*</td>
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<td>7</td>
<td>Common’s Beach</td>
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<td>8</td>
<td>Mouth of Truckee River</td>
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<td>9</td>
<td>Gatekeepers Cabin</td>
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<td>10</td>
<td>Tahoe Tavern</td>
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<td>11</td>
<td>Mouth of Ward Creek</td>
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<td>12</td>
<td>Mouth of Blackwood Creek</td>
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<td>13</td>
<td>Kaiser Estate</td>
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<td>14</td>
<td>McKinney Station</td>
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<td>15</td>
<td>Sugar Pine Point State Park</td>
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<td>16</td>
<td>Bellevue Hotel Site-Hellman Mansion*</td>
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<td>17</td>
<td>Meeks Bay</td>
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<td>18</td>
<td>Rubicon Bay</td>
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<td>19</td>
<td>Indian Special Function Site</td>
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<td>20</td>
<td>Vikingsholm*</td>
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<td>21</td>
<td>Mouth of Cascade Creek</td>
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<td>22</td>
<td>Mouth of Taylor Creek</td>
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<td>23</td>
<td>Tallac Point</td>
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<td>24</td>
<td>Tallac Estates</td>
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<td>25</td>
<td>Camp Richardson</td>
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<td>26</td>
<td>Truckee Marsh</td>
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<td>27</td>
<td>Tahoe Bigler House</td>
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<td>28</td>
<td>Lake Valley Lumber Pier and RR</td>
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<tr>
<td>29</td>
<td>Tahoe Meadow*</td>
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<tr>
<td>30</td>
<td>Lakeside House*</td>
</tr>
<tr>
<td>31</td>
<td>Mouth of Edgewood Creek</td>
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<tr>
<td>32</td>
<td>4-H Camp</td>
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<tr>
<td>33</td>
<td>Hobart Logging Camp – Nevada Beach</td>
</tr>
<tr>
<td>34</td>
<td>Historical Homes</td>
</tr>
<tr>
<td>35</td>
<td>Round Hill Pines Resort</td>
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<tr>
<td>36</td>
<td>Historical Homes</td>
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<tr>
<td>37</td>
<td>Historical Homes</td>
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<tr>
<td>38</td>
<td>Pioneer Lumber Camp (Zephyr Cove)</td>
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<td>39</td>
<td>Mouth of South Zephyr Cove Creek</td>
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<td>40</td>
<td>Historical Homes</td>
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<tr>
<td>41</td>
<td>Cave Rock Tunnel</td>
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<td>42</td>
<td>Historical Homes</td>
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<tr>
<td>43</td>
<td>Logan House</td>
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<tr>
<td>44</td>
<td>Lake Shore House, Glenbrook*</td>
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<tr>
<td>45</td>
<td>Mouth of Slaughterhouse Canyon Creek</td>
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<tr>
<td>46</td>
<td>Carson-Tahoe Railroad</td>
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<tr>
<td>47</td>
<td>Skunk Harbor</td>
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<tr>
<td>48</td>
<td>Flume and Trestle Runs</td>
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<tr>
<td>49</td>
<td>Whittell Lodge</td>
</tr>
<tr>
<td>50</td>
<td>Hobarts Summer Home</td>
</tr>
<tr>
<td>51</td>
<td>Sierra Nevada Wood and Lumber Company Saw Mill</td>
</tr>
<tr>
<td>52</td>
<td>Sierra Nevada Wood and Lumber Company Saw Mill</td>
</tr>
<tr>
<td>53</td>
<td>Mouth of Incline Creek</td>
</tr>
<tr>
<td>54</td>
<td>Mouth of First Creek</td>
</tr>
<tr>
<td>55</td>
<td>Historical Homes</td>
</tr>
</tbody>
</table>

*On the National Register

TRENDS

Since the time that documented identification of cultural, historic, and archaeological sites began in Tahoe, a national interest has grown in the protection of irreplaceable historic and pre-historic resources. As a result, concerns regarding these resources are being taken more seriously, the number of laws enacted to protect these resources has increased, thorough surveys are being conducted in conjunction with projects, and additional sites are being identified.

In 1971, TRPA identified 36 significant historic, cultural, and archaeological sites in the Shorezone. By 1989, that number had increased to 39. Currently, TRPA recognizes 54 sites in the Shorezone as historically, culturally, or archaeologically significant. This represents a 50 percent increase in the number of sites identified and documented in the Shorezone of Lake Tahoe since 1971.

Subsection 29.6.D of the TRPA Code states that, “historic resources shall not be demolished, disturbed, or removed, unless TRPA finds that: 1) The action would not be
detrimental to the historic significance of the resource; 2) The action is pursuant to a recovery plan approved by the applicable state historic preservation officer; or 3) It is the only feasible alternative to protect the health and safety of the public” (TRPA, 1986). TRPA staff estimates that approximately one to two projects per year involve the consideration of this subsection. Considering only Shorezone projects, roughly one project application every five years triggers these requirements.

Shorezone activities that have the potential to "demolish, disturb, or remove" historical resources include:

- the construction of new piers or boat ramps;
- expansion of existing piers and boat ramps;
- placement of buoys, docks, and floating platforms;
- activities associated with changing water levels (such as dredging and pier expansions);
- recreational uses (such as those associated with concessionaires and general beach use);
- public service projects (such as water intake lines); and
- any upland development associated with these activities.

These activities have the potential to disturb Washoe Indian campsites as well as historic Shorezone remnants of the Comstock period from the 1900s to 1950s. Resources that could be impacted include artifacts or remnants located above the ground as well as artifacts or remnants located below the ground that have not yet been discovered or unearthed.

Trends for new Shorezone structures reflect Code limitations related to prime fish habitat and needs related to fluctuating lake levels. Very few new pier or buoy permits have been granted under the existing Code; the annual average for pier structures is one, and only three buoy permits per year. Repairs or modifications to existing piers, many occurring during the high water conditions of the last few years, average 19 annually. The low water years of the late 1980s and early 1990s prompted an increase in dredging applications, although new dredging is not allowed under the current Code unless it shows a benefit to water quality. Applications for maintenance dredging, which may be issued, encompass sites that have been disturbed in the past, unlike new dredging, and present fewer concerns related to historic artifacts.

Between 1994 and 2003, an average of 21.6 permits per year for Shorezone structures were issued by TRPA. Approximately 50% of these annual permits are for significant structural modifications; however, very few permits are issued for strictly new structures.

Perhaps the greatest potential impact to existing cultural, historical, or archaeological sites in or near the Shorezone is upland development that may occur in association with Shorezone development, especially new development. Upland areas are used for access to Shorezone areas and upland area use would increase if Shorezone activities increase. Disturbances caused by this type of development have the potential to significantly change the character of existing historical sites. Although upland development is not the focus of this DEIS, it is important to consider that upland areas would be impacted.

Trends for other Shorezone activities cannot be specifically demonstrated or predicted with existing TRPA data, either because such activities are occurring without permits (as is the
case, for example, with some concessionaire activities and buoy placements), or permits are not required (as is the case with general beach use).

13-3. SUMMARY OF PROJECT ALTERNATIVES

As discussed in Chapter 2 of this EIS, the different alternatives would have varied effects on Shorezone development at Lake Tahoe.

ALTERNATIVE 1 – NO PROJECT ALTERNATIVE

This alternative would continue current practices for the review of Shorezone projects under the existing TRPA Code of Ordinances.

ALTERNATIVE 2 – PROPOSED PROJECT ALTERNATIVE

This alternative would result in revisions to the Shorezone provisions of the Code of Ordinances based on the consensus agreements of the Shorezone Partnership Group, direction from the Shorezone Policy Committee, and TRPA staff revisions for consistency, streamlining, and environmental adequacy. The general goal of this proposal is to assure all littoral parcels are eligible to apply for a pier and sufficient buoys to access the lakes of the Region; that all related impacts would be mitigated; and that all applicable environmental thresholds would be attained. The prohibition on the location of Shorezone structures in prime fish habitat would be eliminated under this alternative. This alternative would also include a new scenic review system and would introduce the concept of private, quasi-public, and public structures to provide the basis for design standards and deviation from those standards.

ALTERNATIVE 3 – NO FISH HABITAT RESTRICTIONS ALTERNATIVE

This alternative would continue all Shorezone provisions of the current TRPA Code, except that the prohibitions on Shorezone structures located in fish habitat areas would be eliminated, including stream setbacks. In addition, this alternative would allow littoral parcel owners, who also have the availability of a multiple-use facility, to apply for their own private Shorezone structure.

ALTERNATIVE 4 – PUBLIC STRUCTURES ALTERNATIVE

This alternative would remove the prohibition on locating Shorezone structures in prime fish habitat. The prohibition of Shorezone structures within 200 feet of a stream mouth would remain unchanged. However, in order to promote thresholds, this alternative allows new or expanded structures for public facilities (open to the general public) only. No new or expanded private structures are allowed.

ALTERNATIVE 5 – REDUCED DEVELOPMENT ALTERNATIVE

This alternative would prohibit the construction of private single-use Shorezone structures. Under this alternative, only multiple use structures would be permitted and would require a 2:1 structure reduction mitigation for private multiple use and quasi-public structures, and a 1:1 structure reduction mitigation for public multiple use structures.
Table 13-2 provides a summary of the overall total buildout numbers for the five alternatives.

<table>
<thead>
<tr>
<th>Structure Type</th>
<th>Alternative 1</th>
<th>Alternative 2</th>
<th>Alternative 3</th>
<th>Alternative 4</th>
<th>Alternative 5 (2:1 Reduction)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Piers</td>
<td>839*</td>
<td>1,196*</td>
<td>1,399*</td>
<td>788*</td>
<td>733</td>
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<tr>
<td>Buoys</td>
<td>5,826</td>
<td>8,110</td>
<td>10,462</td>
<td>6,517</td>
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<tr>
<td>Ramps</td>
<td>128*</td>
<td>72*</td>
<td>706*</td>
<td>50*</td>
<td>37</td>
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<tr>
<td>Floating</td>
<td>174</td>
<td>83</td>
<td>1,256</td>
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<td>18</td>
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<tr>
<td>Slips</td>
<td>3,019</td>
<td>3,019</td>
<td>3,019</td>
<td>2,899</td>
<td>2,620</td>
</tr>
</tbody>
</table>

*Totals do not include new extensions/expansions.

13-4. STANDARDS OF SIGNIFICANCE

TRPA is required by the Compact to regulate activities within the Tahoe Region that may substantially impact the environment. The criteria for determining historical, cultural and archeological significance are based on the National Historic Preservation Act (NHPA - federal policy), the Nevada Comprehensive Preservation Plan, the California Environmental Quality Act (CEQA), TRPA Code of Ordinances, Chapter 29, Historic Resource Protection, and TRPA Goals and Policies, Cultural Subelement Policies, Goal #1, Policies 1 and 2. Pursuant to these plans and policies, historic, cultural and archeological sites, including discovered, undiscovered, and unearthed resources, shall be identified and preserved from indiscriminate damage, alteration, demolition, disturbance or removal.

The evaluation of potential impacts to these resources is based on an alternative’s potential to conflict with existing or proposed land uses in the Shorezone area. In this analysis, an alternative is considered to have a significant impact on archaeological, historical, or cultural resources if it would result in loss of a site, disturbance, demolition, or removal of any known resource from a site, or disturbance, demolition, or removal of any unknown resource from a site.

SUMMARY OF POTENTIALLY SIGNIFICANT IMPACTS

Direct and Indirect Impacts

Direct impacts to historical, cultural and archeological resources include the loss of a site and the disturbance, demolition, or removal of any resource from a site. Direct impacts are caused by construction of new piers or boat ramps, expansion of existing piers and boat ramps, placement of buoys, docks, and floating platforms, activities associated with changing water levels, recreational uses, public service projects, and any upland development associated with these activities. These activities have the potential to disturb Washoe Indian campsites, as well as historic Shorezone remnants of the Comstock Era and from the 1900s to 1950s. The resources that will be impacted include artifacts or remnants located above the ground as well as artifacts or remnants located below the ground that have not yet been discovered or unearthed.

Indirect impacts also occur when a visitor’s experience is altered due to direct impacts. For example, a new pier or boat ramp located in the vicinity of a historical, cultural or archeological site will compromise the character or nature of the site, thereby reducing the visual quality. Similarly, impacts from upland development including the presence of, or
ground disturbance from, parking areas, walking trails, or storage buildings will also affect the visitor's experience at a site. Such impacts are considered to be significant.

While impacts from new piers and boat ramps or expansions appear obvious, less clear are the impacts of buoys, or floating platforms on the above-and-below-ground resources associated with these sites. It is possible for an anchor that holds a buoy or platform in place to be dropped on some previously unknown or unearthed remnant, potentially demolishing or disturbing the resources. However, because there have not been sufficient studies performed to determine whether buoys or floating platforms have a ground-disturbing impact on historical, cultural, or archeological sites, potential impacts from these Shorezone activities will not be analyzed. It is important to remember that these structures may have impacts, not only from ground disturbance but also from their presence at potentially significant historical sites. Impacts from the placement of buoys, docks, and floating platforms are significant.

It is important to remember that these structures may have impacts, not only from ground disturbance but also from their presence at potentially significant historical sites. Impacts from the placement of buoys, docks, and floating platforms are significant.

Water level impacts are associated with low water and high water. In low water conditions, activities include pier extensions, dredging, and general beach use due to increased beach area. All of these activities have the potential to impact historic, cultural, and archaeological sites because the ground is either being disturbed or manipulated, or the activities are occurring in the vicinity of potentially historically significant sites. Because the activities associated with low water conditions are occurring more frequently, the potential for disturbance to historical sites increases. Impacts that occur in low water conditions are significant. In high water conditions, the impacts to historical sites do not appear to be as great as in low water conditions. When beach areas are reduced and there is less need to dredge or extend piers, it results in a lesser degree of disturbance. However, the potential for disturbance to occur still exists, even in high water conditions, and is significant in terms of compromising the overall collection of historical resources found in the basin.

General recreational uses, such as concessionaires and beach activities (jet-skis, parasailing, balloons), as well as public service projects, such as water intake lines, will cause ground disturbance both in the water and out of the water. As stated earlier, even if the ground is not being disturbed or manipulated, there will still be impacts to historical sites just from the presence or occurrence of activities in, on, or around these sites. The overall character or nature of the site risks compromise. One example is Cave Rock. Impacts to this site now occur primarily from activities (e.g., boats, jet skis, rock climbing) that do not physically change the structure of Cave Rock, but disturb or compromise its character or are inconsistent with its cultural significance. Impacts from general recreational uses or human activity in or near the Shorezone are significant.

Included at the sites in the Shorezone that are considered to contain archeological, historical and cultural resources, there are above- and below-ground remnants of Washoe Indian fishing campsites that include bedrock mortars, and Shorezone remnants from the Comstock Era and from the 1900s to 1950s, such as docks and pilings. Additional resources exist in upland areas located near the Shorezone. Activities that would impact the character of historical, cultural or archeological resources, either through direct ground disturbance or manipulation, or from their presence include:

- The construction of new piers or boat ramps;
- Expansion of existing piers and boat ramps;
- Placement of buoys, docks, and floating platforms;
- Activities associated with changing water levels (such as dredging and pier expansions);
Recreational uses (such as those associated with concessionaires and general beach use);  
Public service projects (such as water intake lines); and  
Any upland development associated with these activities.

These activities cause the following potentially significant impacts:

- Loss of any one of the sites;
- Disturbance, demolition or removal of any known resource from a site;
- Disturbance, demolition or removal of any unknown or unearthed resource from a site.

**Loss of Any One of the Sites**

Historic, cultural, and archaeological sites are unique in character in terms of the specific history associated with each site. For example, each site differs in size and in the resources contained within it; however, all the sites shown in Figure 13-1 are determined to be significant in some respect. As stated previously, since documented identification of historic, cultural, and archaeological sites began in the Tahoe Region, there is a growing national interest in the protection of irreplaceable historic or prehistoric resources as evidenced by the increase in legislation to identify and protect these resources.

Impacts on a regional level are the same as disturbing sites on a local level. Loss of any one of the sites is significant in terms of compromising the overall collection of resources in the Region. The loss of several sites clearly indicates a lack of regard and concern for the history associated with the individual sites as well as the history that has contributed to the Tahoe Region that we know today. Table 13-3 indicates the number of potentially impacted sites with each alternative. The loss of any one of the sites would be significant.

Additionally, no research currently exists to determine whether buoys or floating platforms/docks have a ground-disturbing impact on historic, cultural or archeological sites, or on undiscovered or unearthed resources on those sites. Future studies to determine this and, if necessary, to recommend actions needed to protect and preserve historic, cultural and archeological sites would be beneficial for the long-term preservation of such sites, regardless of the alternative ultimately selected.

| Table 13-3. Number of Sites Potentially Impacted by Pier and Boat Ramp |
|---------------------------------|------------------|
| Construction                  | Sites          |
| Alternative 1                 | 14 Properties  |
| Alternative 2                 | 20 Properties  |
| Alternative 3                 | 37 Properties  |
| Alternative 4                 | 6 Properties   |
| Alternative 5                 | **             |

Source: TRPA GIS, 2004  
** The number of sites potentially impacted by pier and boat ramp construction cannot be determined due to the unknown geographical distribution of demolished and/or new piers or boat ramps.

**Disturbance, Demolition or Removal of Any Known Resource From a Site**

Activities occurring in the Shorezone that have the potential to disturb historic, cultural, and archaeological sites or resources, include any activity that causes ground disturbance, or is located in an area of potentially historical significance. These activities include new pier or boat ramp construction, pier or boat ramp expansions, placement of buoys or floating
platforms, changing water levels, recreation uses, including concessionaires and general beach use, and public service projects, such as water intake lines. These types of activities would directly impact sites in and near the Shorezone. Upland sites would be affected by upland development associated with Shorezone uses.

Construction or expansion of piers or boat ramps has an obvious impact on sites with known aboveground resources, as the ground must be manipulated in order for construction or expansion to occur. This provides the potential for the resources associated with these sites to be disturbed, demolished, or removed. Disturbance, demolition or removal of any known resource from a site is significant.

One must also consider the impacts from the mere presence of these structures. Piers or boat ramps located in the vicinity of a potentially significant historic, cultural, or archaeological site would compromise the character or nature of the site. Table 13-4 indicates new Shorezone structures that fall within 100 meters of a known site.

<table>
<thead>
<tr>
<th>Alternative</th>
<th>Number of Structures</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>54</td>
</tr>
<tr>
<td>2</td>
<td>83</td>
</tr>
<tr>
<td>3</td>
<td>186</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>5 **</td>
<td></td>
</tr>
</tbody>
</table>

Source: TRPA GIS 2004

** The number of new Shorezone structures within 100 meters of a known site cannot be determined due to the unknown geographical distribution of demolished and/or new Shorezone structures.

The current Code establishes procedures for additions or modifications to existing historical resources, as well as those for demolition of those resources. In general, these provisions may require expert evaluation of the proposed action in relation to historic resources. To approve demolition, TRPA may require development of a historic resource recovery plan reviewed and commented on by the State Historic Preservation Officer of the respective state. In practice, these provisions are not well understood and sometimes cause considerable controversy. Often a project applicant devotes a great deal of time and money to project design without knowing about the presence of a historic resource. Additionally, the time necessary to consult with outside experts substantially delays projects with little real benefit for the resource realized.

**Disturbance, Demolition or Removal of Any Unknown or Unearthed Resource From a Site**

Construction would potentially impact resources below the ground that were not previously known or unearthed. This includes construction of new piers or boat ramps, expansion of existing piers and boat ramps, placement of buoys, docks, and floating platforms, activities associated with changing water levels, recreational uses, public service projects, and any upland development associated with these activities. Disturbance, demolition or removal of any unknown or unearthed resource from a site is significant.

Code Section 29.3 establishes a procedure for identification and evaluation of potentially eligible sites or resources found during another activity, such as grading. As noted above, this provision is not well known and relies on the initial judgment of the on-site crew to trigger the procedure.
13-5. POTENTIAL IMPACTS AND REQUIRED MITIGATION MEASURES

ALTERNATIVE 1 – NO PROJECT ALTERNATIVE

With the No Project Alternative TRPA would continue to review Shorezone projects under the current Code of Ordinances. This alternative does not allow new Shorezone structures in mapped or field verified fish spawning or feed and cover habitats, or within 200 feet of designated spawning streams. The TRPA may permit new structures in marginal fish habitats.

The evaluation criteria described above provides the basis for determining the significance of impacts to historic resource preservation. The following impacts have been determined to be significant when evaluated against the specific criteria described.

Except for remnants from Washoe Indian fishing campsites that include bedrock mortars, and remnants from the Comstock Era and from the 1900s to 1950s that include historical docks and pilings, all other historical sites shown in Figure 13-1 are located near the Shorezone in upland areas around Lake Tahoe.

Analysis of this alternative compares all significant historical resources located in or near the Shorezone of Lake Tahoe to the parcels eligible for new or expanded Shorezone development. Most disturbances from new pier construction would occur in Douglas County and on the South Shore. In addition, areas that would be disturbed by new boat ramp construction occur in Incline Village, on the South Shore and in Douglas County. A total of 14 parcels around the Lake potentially would be impacted from new pier and boat ramp construction. Up to 54 structures would be constructed within 100 meters of a known site, impacting up to 14 historic sites. It is important to note that more than one parcel may be associated with individual sites.

Relative to the other alternatives, Alternative 1 is in the middle in terms of the number of known sites impacted and number of sites within 100 meters of potential new Shorezone structures. There is a greater risk to known resources from Alternative 1 than Alternatives 4 and 5, but less risk than from Alternatives 2 and 3.

While impacts from all other Shorezone activities and associated upland development are not quantified here, the impacts explained above would still occur at documented sites as well as at sites that are potentially significant but have not been included here for analysis purposes.

Significant Archaeological, Historical, and Cultural Impacts

13.1.1 Impact: The No Project Alternative could result in the loss of any known or unknown historic, cultural or archaeological sites from modifications to existing structures. Indiscriminate damage, alteration, demolition, disturbance, and removal of a site, or known or unknown resources from a site due to the expansion, relocation, or modification of a pier, boat ramp, buoy, or floating dock/platform, would be in direct conflict with TRPA plans and policies. Loss of resources would create significant impacts on archaeological, historical, and cultural resources.

Mitigation Measure 13.1.1a: TRPA shall implement a mitigation fee for Shorezone structures that will be used to increase public awareness of historical resources in the Tahoe Region.
This shall include awareness of the types of resources potentially present and the types of activities that create potential adverse impacts. Groups to be targeted include subject property owners, designers, and contractors.

**Mitigation Measure 13.1.1.b**: TRPA shall setbacks from existing Washoe sites, or other Washoe sites that are discovered and determined to be potentially significant. The setbacks shall apply to structures, uses and certain activities in the Shorezone, which are determined by TRPA, or a qualified archaeologist, and/or the Washoe tribe as posing a threat to the resource.

**Mitigation Measure 13.1.1.c**: At documented Archaeological (Washoe) sites, TRPA in coordination with the Washoe Tribe, would send educational materials to property owners geared toward encouraging sensitivity and responsibility in protecting resources associated with these sites. Additionally, TRPA shall include information pertaining to the legal ramifications of removing, destroying or otherwise altering the condition and location of such sites and their contents.

Implementation of these mitigation measures would reduce this potential significant impact to a level that is less than significant.

**13.1.2 Impact**: The No Project Alternative could result in the disturbance, demolition or removal of any known resource from a site.

This alternative would allow the construction of new structures, public and private, as set forth in the TRPA Code, Chapter 52. New construction would create potential for degradation, demolition or removal of a known site or resource in direct conflict with the TRPA plans and policies. Existing Code provisions offer procedures for identification, evaluation and protection of resources. Loss of historic resources is a significant impact on archaeological, historical, and cultural resources.

In order to mitigate impacts on archaeological, historical, and cultural resources **Mitigation Measures 13.1.1.a through 13.1.1.c** presented above for Impact 13.1.1 shall be implemented.

**Mitigation Measure 13.1.2.a**: TRPA shall, when deemed appropriate, require that signs be placed in or around documented historical sites in conjunction with project approval and construction (not including Washoe sites) to educate the general public about the importance of the resources and their sensitivity to disturbance.

Implementation of these mitigation measures would reduce this impact to less than significant.

**13.1.3 Impact**: The No Project Alternative could result in the disturbance, demolition or removal of any unknown or unearthed resource from a site.

This alternative allows recreational use of the Shorezone, including Shorezone parcels that contain unknown or unearthed sensitive historic resources. Increased use would lead to indiscriminate and unintentional damage in many cases. Loss of historical resources is in violation of TRPA policies noted previously and would create a significant impact on archaeological, historical, and cultural resources.

In order to mitigate this potentially significant impact, **Mitigation Measures 13.1.1.a through 13.1.1.c and 13.1.2.a** shall be implemented.

Implementation of these mitigation measures would reduce this potential significant impact to a level that is less than significant.
Beneficial Archaeological, Historical, and Cultural Impacts

There would be no beneficial impacts on archaeological, historical, and cultural resources with the No Project Alternative.

ALTERNATIVE 2 – PROPOSED PROJECT ALTERNATIVE

The Proposed Project would eliminate the prohibition on Shorezone structures located in prime fish habitat except for stream mouth setbacks. The TRPA Code of Ordinances would be revised based on the recommendations from the Shorezone Partnership Group, Shorezone Policy Committee, and the TRPA staff. The goal of Alternative 2 is to assure that: 1) all littoral parcels are eligible to apply for a pier and sufficient buoys to access Regional lakes; 2) all impacts can be mitigated; and 3) all applicable environmental thresholds would be attained. Chapter 2 provides more project description detail for this alternative.

Under this alternative, all significant historical resources located in or near the Shorezone of Lake Tahoe are compared to the parcels eligible for new or expanded Shorezone development. Most disturbances from new pier construction and new boat ramp construction would occur in Douglas County and the South Shore. A total of 20 parcels around the Lake potentially would be impacted from new pier and boat ramp construction. Up to 83 structures would be constructed within 100 meters of a known site. It is important to note that more than one parcel may be associated with individual sites.

Relative to the other alternatives, Alternative 2 possesses a greater risk of upset than Alternatives 1, 4 and 5; however, it would produce fewer impacts to known resources than with Alternative 3.

While impacts from all other Shorezone activities and associated upland development are not quantified here, those impacts may still occur at documented sites, as well as at sites that are potentially significant but that have not been included here for analysis purposes.

Alternative 2 includes amendments to Chapter 29, Historic Resource Protection, of the TRPA Code. These amendments include:

- A program for signage, when and where appropriate, alerting recreationists to sensitive sites to avoid inadvertent damage shall be installed.
- Establishing setbacks from known Washoe sites, or other Washoe sites that are discovered during construction and determined to be significant.

Significant Archaeological, Historical, and Cultural Impacts

13.2.1 Impact: The Proposed Project could result in a loss of any known or unknown historic, cultural or archaeological sites from modifications to existing structures. Indiscriminate damage, alteration, demolition, disturbance, and removal of a site, or known or unknown resources from a site due to the expansion, relocation, or modification of a pier, boat ramp, buoy, or floating dock/platform, would be in direct conflict with TRPA plans and policies.

In order to mitigate impacts on archaeological, historical, and cultural resources Mitigation Measures 13.1.1.a and 13.1.1.c presented above for Impact 13.1.1 shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.
13.2.2 Impact: The Proposed Project Alternative could result in the disturbance, demolition or removal of any known resource from a site.
This alternative would allow the construction of new structures, public and private, as set forth in the TRPA Code, Chapter 52. New construction would create potential for degradation, demolition or removal of a known site or resource in direct conflict with TRPA’s plans and policies. Existing Code provisions offer procedures for identification, evaluation and protection of resources. Loss of historic resources is a significant impact on archaeological, historical, and cultural resources.

In order to mitigate impacts on archaeological, historical, and cultural resources Mitigation Measure 13.1.1.c presented above for Impact 13.1.1 shall be implemented.

13.2.3 Impact: The Proposed Project Alternative could result in the disturbance, demolition or removal of any unknown or unearthed resource from a site.
This alternative allows recreational use of the Shorezone, including parcels that contain unknown or unearthed sensitive historic resources. Increased use would lead to indiscriminate and unintentional damage in many cases. Loss of historical resources is in violation of TRPA policies noted previously and would create a significant impact on archaeological, historical, and cultural resources.

In order to mitigate this potentially significant impact, Mitigation Measures 13.1.1.a and 13.1.1.c shall be implemented.

**Beneficial Archaeological, Historical, and Cultural Impacts**

There would be no beneficial impacts on archaeological, historical, and cultural resources with the Proposed Project Alternative.

**ALTERNATIVE 3 – NO FISH HABITAT RESTRICTIONS ALTERNATIVE**

With Alternative 3, all provisions of the TRPA *Code of Ordinances* would still apply, although the prohibition on Shorezone structures located in prime fish habitat and stream mouth setbacks would be eliminated. Chapter 2 provides more details concerning this alternative.

Under this alternative, all significant historical resources located in or near the Shorezone of Lake Tahoe are compared to the parcels eligible for new or expanded Shorezone development. Most disturbances would occur from new pier construction and would occur in Rubicon Bay and on the South Shore, with Douglas County and Dollar Point close behind. In addition, the areas disturbed by new boat ramp construction would occur at Dollar Point, Rubicon Bay, and in Douglas County. A total of 37 parcels around the Lake would be impacted from new pier and boat ramp construction. Up to 186 structures would be constructed within 100 meters of a known site. It is important to note that more than one parcel may be associated with individual sites.

Alternative 3 possesses the greatest risk of upset to known historic, cultural and archaeological resources.

While impacts from all other Shorezone activities and associated upland development are not quantified here, those impacts that were explained previously may still occur at documented sites as well as at sites that are potentially significant but that have not been included here for analysis purposes.
Significant Archaeological, Historical, and Cultural Impacts

13.3.1 Impact: The No Fish Habitat Restrictions Alternative could result in the loss of any one of the sites from modifications to existing structures. This alternative would rely on existing Code protections to avoid historic resource impacts due to new structures and modifications of existing structures. This alternative would endanger more sites compared to the other alternatives, as it allows a higher level of Shorezone development. This would result in a significant impact on archaeological, historical, and cultural resources.

In order to mitigate impacts on archaeological, historical, and cultural resources Mitigation Measures 13.1.1.a through 13.1.1.c presented above for Impact 13.1.1 shall be implemented. Implementation of this mitigation measure would reduce this impact to less than significant.

13.3.2 Impact: The No Fish Habitat Restrictions Alternative could result in the disturbance, demolition or removal of any known resource from a site. This alternative would allow the construction of new structures, public and private, as set forth in the TRPA Code, Chapter 52. New construction would create potential for degradation or loss of known or unknown sites or resources in direct conflict with the plans and policies stated earlier in this chapter. Existing Code provisions would offer procedures for identification, evaluation and protection. Loss of a known historic resource would result in a significant impact.

In order to mitigate impacts on archaeological, historical, and cultural resources Mitigation Measures 13.1.1.a through 13.1.1.c and 13.1.2.a presented above for Impacts 13.1.1 and 13.1.2 shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.

13.3.3 Impact: The No Fish Habitat Restrictions Alternative could result in the disturbance, demolition or removal of any unknown or unearthed resource from a site. This alternative would allow for increased recreational use of the Shorezone, including parcels that contain sensitive historic resources. Increased use would lead to indiscriminate and unintentional damage in many cases. The potential for degradation leading to loss of a site would be high in Shorezone areas due to increased erosion potential resulting from increased access. Loss of an unknown or unearthed historical resource would be in violation of TRPA policies and result in a significant impact on archaeological, historical, and cultural resources.

In order to mitigate impacts on archaeological, historical, and cultural resources Mitigation Measures 13.1.1.a through 13.1.1.c and 13.1.2.a presented above for Impacts 13.1.1 and 13.1.2 shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.

Beneficial Archaeological, Historical, and Cultural Impacts

There would be no beneficial impacts on archaeological, historical, and cultural resources with the No Fish Habitat Restrictions Alternative.

ALTERNATIVE 4 – PUBLIC STRUCTURES ONLY ALTERNATIVE

The Public Structures Only Alternative would remove the prohibition on locating Shorezone structures in prime fish habitat, but continue to prohibit the development of structures within
200 feet of stream mouths used for fish migration. Only structures that allow general public access would be permitted. Chapter 2 provides more detail about this alternative.

Under this alternative, all significant historical resources located in or near the Shorezone of Lake Tahoe are compared to the parcels eligible for new or expanded Shorezone development. Most disturbances from new pier and new boat ramp construction would occur in Douglas County and on the South Shore. A total of 6 parcels would be impacted from new pier and boat ramp construction. Up to 10 structures would be constructed within 100 meters of a known site. It is important to note that more than one parcel may be associated with individual sites.

This alternative would endanger fewer sites than Alternatives 1, 2, and 3, as it would restrict new structures to public access facilities only and contemplates fewer structures developed overall.

While impacts from all other Shorezone activities and associated upland development are not quantified here, those impacts that were explained previously may still occur at documented sites as well as at sites that are potentially significant but that have not been included here for analysis purposes.

**Significant Archaeological, Historical, and Cultural Impacts**

13.4.1 Impact: The Public Structures Only Alternative could result in the loss of any historic, cultural or archaeological sites from modifications to existing structures. Indiscriminate damage, alteration, demolition, disturbance, and removal of a site, or known or unknown resources from a site due to the expansion, relocation, or modification of a pier, boat ramp, buoy, or floating dock/platform, would be in direct conflict with TRPA plans and policies.

In order to mitigate impacts on archaeological, historical, and cultural resources Mitigation Measures 13.1.1.a through 13.1.1.c presented above for Impact 13.1.1 shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.

13.4.2 Impact: The Public Structures Only Alternative could result in the disturbance, demolition or removal of any known resource from a site. This alternative would allow the construction of new structures, public and private, as set forth in the TRPA Code, Chapter 52. New construction would create potential for degradation, demolition or removal of a known site or resource in direct conflict with the TRPA plans and policies. Existing Code provisions offer procedures for identification, evaluation and protection of resources. Loss of historic resources is a significant impact on archaeological, historical, and cultural resources.

In order to mitigate impacts on archaeological, historical, and cultural resources Mitigation Measures 13.1.1.a through 13.1.1.c and 13.1.2.a presented above for Impacts 13.1.1 and 13.1.2 shall be implemented.

13.4.3 Impact: The Public Structures Only Alternative could result in the disturbance, demolition or removal of any unknown or unearthed resource from a site. This alternative would allow increased recreational use of the Shorezone, including parcels that contain sensitive historic resources. Increased use would lead to indiscriminate and unintentional damage in many cases. The potential for degradation leading to loss of a site is high in Shorezone areas due to increased erosion potential resulting from increased access. Loss of unknown or unearthed historical resources would be in violation of TRPA policies noted previously and would create a significant impact on archaeological, historical,
and cultural resources.

In order to mitigate impacts on archaeological, historical, and cultural resources Mitigation Measures 13.1.1.a through 13.1.1.c and 13.1.2.a presented above for Impacts 13.1.1 and 13.1.2 shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.

**Beneficial Archaeological, Historical, and Cultural Impacts**

There would be no non-significant impacts on archaeological, historical, and cultural resources with the Public Structures Only Alternative.

**ALTERNATIVE 5 – REDUCED DEVELOPMENT ALTERNATIVE**

Based on the Fish Study Recommendations, TRPA would remove the prohibition on locating structures in prime fish habitat. However, in order to mitigate existing and additional development this alternative would only allow new private multiple-use structures where there is a net reduction in total permitted structure numbers (2:1 reduction) and new public structures where there is no increase in total permitted structure numbers (1:1 reduction). The Proposed Ordinances for Alternative 2 would be adopted to support the Reduced Development Alternative.

Under this alternative, all significant historical resources located in or near the Shorezone of Lake Tahoe are compared to the parcels eligible for new or expanded Shorezone development. Most disturbances from new pier construction would occur in Douglas County and on the South Shore. The number of known resources affected and the number of resources within 100 meters of a known resource cannot be determined due to the unknown geographical distribution of demolished and/or new Shorezone structures. Additionally, because of the requirement for removal of private structures for the development of a new one, there is a greater potential for resource disturbance. Demolition of existing structures may upset an unknown resource. Therefore, for Alternative 5, a new structure built is only half of the story, due to the requirement for structure removal.

**Significant Archaeological, Historical, and Cultural Impacts**

13.5.1 Impact: The Reduced Development Alternative could result in the loss of any historic, cultural or archaeological sites from modifications to existing structures. This alternative would rely on existing Code protections to avoid historic resource impacts due to multi-use structures, as well as and modifications of existing structures. However, the required reduction of structures under this alternative has the potential to result in the loss of sites from the demolition of existing private, single use piers. This would result in a significant impact on archaeological, historical, and cultural resources.

In order to mitigate impacts on archaeological, historical, and cultural resources Mitigation Measures 13.1.1.a and 13.1.1.c presented above for Impact 13.1.1 shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.

13.5.2 Impact: The Reduced Development Alternative could result in the disturbance, demolition or removal of any known resource from a site. This alternative would allow the construction of new structures, public and private, as set forth in the TRPA Code, Chapter 52. New construction would create potential for degradation, demolition or removal of a known site or resource in direct conflict with the TRPA plans and policies. Existing Code provisions offer procedures for identification,
evaluation and protection of resources. Loss of historic resources is a significant impact on archaeological, historical, and cultural resources.

In order to mitigate impacts on archaeological, historical, and cultural resources Mitigation Measure 13.1.1.c presented above for Impact 13.1.1 shall be implemented.

Impact 13.5.3: The Reduced Development Alternative could result in the disturbance, demolition or removal of any unknown or unearthed resource from a site. This alternative would allow increased recreational use of the Shorezone, including Shorezone parcels that contain sensitive historic resources. Increased use would lead to indiscriminate and unintentional damage in many cases. The potential for degradation leading to loss of a site is high in Shorezone areas due to increased erosion potential resulting from increased access. Loss of unknown or unearthed historical resources would be in violation of TRPA policies noted previously and would create a significant impact on archaeological, historical, and cultural resources.

In order to mitigate impacts on archaeological, historical, and cultural resources Mitigation Measures 13.1.1.a and 13.1.1.c presented above for Impact 13.1.1 shall be implemented. Implementation of these mitigation measures would reduce this impact to less than significant.

Beneficial Archaeological, Historical, and Cultural Impacts

There would be no non-significant impacts on archaeological, historical, and cultural resources with the Reduced Development Alternative.