

## 5.3.2 Biological Resources

This section describes the biological resources on and in the vicinity of the project site, and addresses potential impacts on biological resources that could result from implementation of the General Plan revision and construction and operation of the proposed pier rebuild project. The analysis includes the methods used for assessment, potential impacts associated with implementing the proposed project alternatives, and mitigation measures proposed to address significant impacts. The effects resulting from General Plan implementation under all of the alternatives described herein would be the same regardless of ownership of the Plaza parcels.

The existing conditions and significant resource values related to biological resources are summarized in Section 2.2.2, Biological Resources, in Chapter 2, Existing Conditions, of this document. A more detailed description of the existing biological resource conditions at the project site and a summary of pertinent regulations are included in the Resources Inventory and Existing Conditions Report, available on the KBSRA website ([www.parks.ca.gov/PlanKBSRA](http://www.parks.ca.gov/PlanKBSRA)) and at CSP and TRPA offices during normal business hours through project approval hearings. Relevant project goals and guidelines are summarized in Chapter 4, The Plan. CSP Standard and Special Project Requirements included in the Plan that apply to biological resources are in Section 4.7, CSP Standard and Special Project Requirements.

Several biological resource issues were initially evaluated but not further analyzed. The following summarizes those issues and rationale for not analyzing them in further detail.

The project site is highly disturbed by commercial/urban and recreational uses and its potential to support special-status animal species is limited. Of the 10 special-status wildlife species that could occur on or near the project site (CSP 2016), three species are known or have a moderate potential to occur: waterfowl, osprey, and bald eagle. "Waterfowl" is a TRPA special-interest group of species that occurs on the project site. In KBSRA, Lake Tahoe and its beach provide suitable foraging and resting habitat for several common waterfowl species during summer and winter. However, waterfowl are not expected to nest in KBSRA due to high levels of disturbance. Bald eagle and osprey are designated by TRPA as special-interest species. Bald eagle is also federally protected by the U.S. Fish and Wildlife Service (USFWS) under the Bald and Golden Eagle Protection Act. Neither of these species nests within KBSRA. Ospreys may forage in Lake Tahoe in the vicinity of KBSRA; and bald eagle could also occasionally forage in the project area throughout the year, particularly during winter when the abundance of bald eagles in the Tahoe Basin is greatest. However, KBSRA does not provide suitable nesting habitat for any of these species, and only waterfowl are expected to regularly use the project site for foraging or resting. Additionally, waterfowl that currently use KBSRA are habituated to high levels of disturbance associated with recreation and urban uses; and, over the long term, implementation of the General Plan revision and pier rebuild project are not expected to disturb or degrade habitat for these species substantially above existing levels. Therefore, the project is not expected to substantially affect any special-status wildlife species and this issue is not analyzed further.

As discussed above for special-status animal species, the project site is highly disturbed by commercial/urban and recreational uses. This disturbance limits the potential of the site to support nesting migratory birds and common raptors protected under the Migratory Bird Treaty Act (16 USC 703) and Section 3503 of the California Fish and Game Code. While the project site has limited suitability for nesting birds, construction and tree removal in the upland portion of the project site may cause loss of common migratory bird and raptor nests. However, General Plan revision Goal RES 4 provides for the protection of nests of migratory birds and raptors; associated Guidelines RES 4.1 and

RES 4.2, and the CSP Standard and Special Project Requirements (Section 4.7), require pre-construction monitoring for migratory bird and raptor nests, and nesting-season restrictions or buffers to avoid loss of any nests found. Through implementation of this General Plan revision goal and associated guidelines, and CSP Standard and Special Project Requirements, the loss of migratory bird and raptor nests would be avoided, and this impact was determined to be less than significant and is not discussed further.

Impacts of projects in the Tahoe Basin relative to invasive weeds and aquatic invasive species (AIS) are thoroughly addressed in the Regional Plan Update EIS, Impact 3.10-5 (TRPA 2012:3.10-55–3.10-60). According to that analysis, construction from development and redevelopment projects would involve temporary ground-disturbing activities in disturbed and native habitat types, which could in turn be colonized by non-native, invasive weed species from outside the Tahoe region. In addition, watercraft use of Lake Tahoe resulting from development or activities could facilitate the spread of aquatic invasive species if boats are exposed to these species in other water bodies and are not sufficiently cleaned and sanitized before entering Lake Tahoe. Also, watercraft that travel from other locations within Lake Tahoe where AIS (e.g., Asian clam) occur may cause the intra-lake spread of these species to KBSRA. However, any new development would be required to comply with Section 64.4, Revegetation, and Section 63.4, Aquatic Invasive Species, of the TRPA Code of Ordinances; Goals and Policies that prohibit release of non-native species; and other regulations. Additionally, General Plan revision Goal RES 1 and its associated guidelines (Guidelines RES 1.1, 1.2, and 1.3) require that new introductions of AIS be prevented and the spread of AIS controlled; Chapter 8 (“Shorezone Protective Structures and BMPs”) of the TRPA BMP Handbook (TRPA 2014) requires BMPs to prevent establishment and spread of AIS and terrestrial invasive species; and CSP Standard and Special Project Requirements include measures designed specifically to prevent or reduce the risk of establishment and spread of upland and aquatic invasive species. Through implementation of these regulations, goals and guidelines, and standard and special project requirements, project implementation would comply with the TRPA Code provisions for invasive species, and this impact was determined to be less than significant and is not discussed further.

Construction of future improvements in the upland portion of the project site under the General Plan revision is anticipated to result in the removal of approximately 37 trees. This tree removal would be limited to the footprints of proposed parking, walking and shared-use paths, and structures. Tree removal would not occur within old growth habitat, remove riparian vegetation, or occur in areas outside of permitted development footprints. Additionally, the amount of tree removal required would not constitute “substantial” tree removal as defined under Section 61.1.8 of the TRPA Code. Specific provisions for tree removal in the Tahoe Region are provided in the TRPA Code (Chapter 61, and Chapters 36, 33, 62), and all tree removal for trees greater than 14 inches diameter at breast height (dbh) requires review and approval by TRPA. With limited exception, Section 61.1.4, Old Growth Enhancement and Protection, of the TRPA Code prohibits the removal of trees greater than 30 inches dbh. If any tree greater than 30 inches would require removal and is approved by TRPA, project approvals and permits would specify the compensation required for the loss. Therefore, tree removal would be consistent with relevant ordinances and this issue is not addressed further. Additionally, tree removal or other vegetation disturbances would not substantially reduce the size, continuity, or integrity of any common vegetation community or habitat type or interrupt the natural processes that support common vegetation communities in the project site. Also, because the project site is already highly disturbed and fragmented by commercial/urban and recreational uses, project-related disturbances on the biological functions of common habitats are not considered substantial.

None of the project alternatives evaluated herein would be constructed within an area covered by an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state conservation plan. Therefore, project implementation would not conflict with the provisions of an adopted conservation plan and this issue is not evaluated further. Additionally, KBSRA is not positioned within any known important wildlife movement or migratory corridors. Because the project site is subject to high levels of human disturbance and isolation of habitat patches because of commercial and residential development, presence of major road corridors, and recreational uses, it is not likely to function as an important corridor and this issue is not addressed further.

## Environmental Impacts and Mitigation Measures

### Analysis Methodology

The analysis of potential impacts to biological resources from project implementation is based on the data review, resource mapping, and technical studies referenced in Section 2.2.2, Biological Resources, of this document and the Resources Inventory and Existing Conditions Report. The information obtained from these sources was reviewed and summarized to understand existing conditions and to identify potential environmental effects, based on the significance criteria identified below. In determining the level of significance, the analysis assumes that the proposed project would comply with relevant federal, state, and regional laws, regulations, and ordinances.

Potential impacts of the project on biological resources can be classified as either temporary or permanent. Temporary impacts generally include ground or lake-bottom disturbances associated with temporary construction activities, including: removal of existing structures; construction staging; minor cut and fill that would be restored to existing conditions after project completion; potential construction disturbances assumed to occur within 10 feet of permanent project features; and noise, ground vibration, airborne particulate (dust) generated, and turbidity caused by construction activities.

Permanent impacts generally include effects associated with conversion of land use and cover (e.g., permanent vegetation removal) or permanent disturbance of the lake bed as a result of: earthwork/excavation, new paving for the shared-use path and parking facilities, landscaping, and installation of new structures. In addition, permanent impacts include long-term changes to recreational uses that can result in disturbances to wildlife and vegetation.

### Significance Criteria

#### CEQA Criteria

In accordance with Appendix G and Section 15065 of the State CEQA Guidelines, the proposed Kings Beach State Recreation Area General Plan Revision and Pier Rebuild Project would result in a significant impact related to biological resources if it would do any of the following:

- ◆ have a substantial adverse effect, either directly or through habitat modification, 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 Wildlife (CDFW) or USFWS;
- ◆ have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by CDFW or USFWS; or

- ◆ have a substantial adverse effect on federally protected waters of the United States, including wetlands, as defined by Section 404 of the Clean Water Act (CWA) through direct removal, filling, hydrological interruption, or other means;

The State CEQA Guidelines (Section 15064.5) define “substantial adverse change” as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings.

### TRPA Criteria

The biological resources criteria from the TRPA Initial Environmental Checklist were used to evaluate the biological resource impacts of the alternatives. Impacts to biological resources would be significant if the project would:

- ◆ remove riparian vegetation or other vegetation associated with critical wildlife habitat, either through direct removal or indirect lowering of the groundwater table;
- ◆ remove stream bank and/or backshore vegetation, including woody vegetation such as willows;
- ◆ introduce new vegetation that would require excessive fertilizer or water, or would provide a barrier to the normal replenishment of existing species;
- ◆ change the diversity or distribution of species, or number of any species of plants or animals;
- ◆ reduce the numbers of any unique, rare, or endangered species of plants or animals; or
- ◆ deteriorate existing fish or wildlife habitat quantity or quality.

## Environmental Impacts

### Impact 5.3.2-1: Disturbance and loss of prime fish habitat

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The removal of existing structures under Alternatives 2, 3, and 4 may temporarily disturb TRPA-designated prime fish habitat. However, potential impacts would be minimized by implementation of project-specific best management practices (BMPs) that are required for project permits and approvals and CSP Standard and Special Project Requirements included in The Plan (Section 4.7). Alternative 2 would place the rebuilt pier within prime fish (feed and cover) habitat, resulting in the loss or degradation of 4,930 square feet of prime fish habitat. Alternatives 3 and 4 would place the pier outside of, and not remove, prime fish habitat; Alternative 4 additionally includes extending the existing motorized boat ramp near, but outside of, prime fish habitat. Alternatives 2, 3, and 4 could result in changes in localized watercraft activity but would not increase overall watercraft activity on Lake Tahoe and would not substantially change watercraft activity or disturbance within prime fish habitat. Taken together, the impacts to prime fish habitat under Alternatives 3 and 4 would be **less than significant**. However, the permanent removal or degradation of prime fish habitat under Alternative 2 would be **significant**. Implementation of Mitigation Measure 5.3.2-1 would reduce the impact to a **less-than-significant** level for the pier rebuild component of Alternative 2.

Because Alternative 1 would not result in changes to the General Plan, removal of existing structures, construction of the rebuilt pier, or changes in watercraft use or resulting disturbance, this alternative would have **no impact** on prime fish habitat.

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Lake Tahoe within the eastern portion of KBSRA contains TRPA-designated prime fish habitat. Prime fish habitat on the project site is composed of both spawning habitat (small cobbles and gravels) and feed and cover habitat (larger-diameter cobbles and boulders used both for foraging and refuge). The existing pier and the existing boat ramp within KBSRA are both located in marginal fish habitat. Fish habitat in the project area is described in more detail in Section 2.2.2, Biological Resources, in Chapter 2, Existing Conditions, and the Resources Inventory and Existing Conditions Report.

## Alternative 1: No Project

### General Plan Revision

Alternative 1 is a continuation of existing conditions under the current General Plan. Therefore, no Plan-related disturbances or changes in resource management would occur, and there would be **no impact** to prime fish habitat under Alternative 1.

### Pier Rebuild Project

Under Alternative 1, the existing pier and boat ramp in KBSRA would remain in place and no pier construction would occur. No changes to the operations of these existing structures would occur under the no project alternative, and no project-related removal or degradation of existing fish habitat would occur. Therefore, there would be **no impact** to prime fish habitat due to construction under Alternative 1.

## Alternative 2: Eastern Pier Alternative (Proposed Project)

### General Plan Revision

TRPA's designation and protection of prime fish habitat are based on characteristics of the lakebed's physical substrate. With the General Plan revision under Alternative 2, except for the pier rebuild project (discussed separately, below), the proposed development and operations of upland and shorezone features, land use changes, and shifts in visitor use patterns are not expected to disturb the lakebed substrate within prime fish habitat. Therefore, the General Plan revision under Alternative 2 would result in **no impact** to prime fish habitat.

### Pier Rebuild Project

The existing pier and boat ramp in KBSRA are located outside of prime fish habitat. Under Alternative 2, the existing pier and boat ramp would be removed. A 10-foot-wide non-motorized lake access point would be constructed above the high-water line. Although removal of the existing pier and boat ramp would occur outside of prime fish habitat (see Exhibit 2.2-4 in Chapter 2, Existing Conditions), temporary impacts to nearby prime fish habitat could occur. Temporary impacts could include noise and vibration from work below the water surface, and siltation due to disturbance of the lakebed and shoreline.

The removal of existing structures would be performed during the winter (October through May). Therefore, the potential for construction-related noise and vibration to disturb fish spawning activity within spawning habitat located away from the existing structures in the eastern portion of the project area would be reduced.

To avoid substantial construction-related impacts to water quality, the removal of the existing structures would be performed using standard water quality BMPs such as turbidity curtains, which would decrease the likelihood that siltation or elevated aluminum concentrations from bottom disturbance during the process of removing these structures would degrade adjacent prime fish habitat. In addition, to reduce the likelihood of habitat degradation caused by introducing aquatic invasive

species, equipment would be inspected, and aquatic invasive species removed prior to entering the work area (see discussion at the beginning of this section and Section 4.7, CSP Standard and Special Project Requirements).

The construction of the eastern pier would occur within prime fish habitat (feed and cover) and result in 4,930 square feet of permanent habitat loss or disturbance from the placement of 16 pier pilings and shading from the floating pier section (Table 5.1-1). Shading produced by the pier, particularly at low lake levels when the floating pier is closest to the lake bed, could reduce periphyton growth and result in degradation of prime fish habitat through reduced productivity (Conservancy 2016). Guideline RES 2.1 of the General Plan states, "Design the pier rebuild project to avoid spawning habitat, minimize effects on feed and cover habitat, and to meet or exceed prime fish habitat mitigation requirements." Without appropriate compensatory actions to meet this mitigation standard, project-related loss of prime fish habitat would be substantial.

The construction of the eastern pier would also cause temporary disturbance of prime fish habitat that would be similar to that discussed previously for removal of the existing pier and boat ramp. Also, as discussed for removal of the existing structures, BMPs would be required during construction that would minimize temporary impacts.

During low lake levels, the beaching of watercraft could occur within prime fish habitat substrates. The beaching of both motorized and non-motorized watercraft within spawning habitat was observed to result in the destruction of fish eggs in Lake Tahoe (Alan and Reuter 1996). However, because the spawning habitat identified within the project site is located away from the proposed eastern pier and non-motorized launch facility, Alternative 2 is not expected to result in an increase in the beaching of watercraft in spawning habitat.

The removal of the existing boat ramp is anticipated to result in a reduction of motorized watercraft activity within adjacent prime fish habitat during lake levels when the existing boat ramp is usable. However, the eastern pier would support temporary mooring of motorized watercraft at the pier for passenger loading and unloading purposes, after which motorized watercraft may anchor adjacent to the eastern pier in feed and cover habitat. Anchoring already occurs at KBSRA and a longer pier by itself is not expected to substantially increase the amount of anchoring that would occur such that there would be a substantial increase in the amount of disturbance of feed and cover habitat. The eastern pier would likely increase the motorized watercraft use within feed and cover habitat during lake levels when both the existing pier and boat ramp are unusable. The eastern pier and the lake access point would be accessible to non-motorized watercraft; however, the project site is currently accessible to non-motorized watercraft and no substantive change in non-motorized use or any resulting disturbance to prime fish habitat are expected. While Alternative 2 would result in a change in localized watercraft use patterns, it is not anticipated to result in substantial changes in the overall level of boat activity on Lake Tahoe and disturbance to adjacent prime fish habitat.

### Impact Summary

Under Alternative 2, the removal of the existing pier and boat ramp and construction of the eastern pier would temporarily disturb prime fish habitat. These temporary impacts would be minimized by project-specific BMPs that are required to receive the necessary permits and approvals for the project and implementation of CSP Standard and Special Project Requirements. The placement of the eastern pier would result in removal and degradation of up to 4,930 square feet of feed and cover habitat. Operation of the eastern pier and lake access point may change localized watercraft use patterns within KBSRA, although the overall watercraft use of the area is not anticipated to result in substantial changes in the

overall level of disturbance or result in impacts to prime fish habitat. The permanent loss or degradation of prime fish habitat due to pier construction under Alternative 2 would be **significant**.

### Alternative 3: Central Pier Alternative

#### General Plan Revision

TRPA's designation and protection of prime fish habitat are based on characteristics of the lakebed's physical substrate. With the General Plan revision under Alternative 3, except for the pier rebuild project (discussed separately, below), the proposed development and operations of upland and shorezone features, land use changes, and shifts in visitor use patterns are not expected to disturb the lakebed substrate within prime fish habitat. Therefore, the General Plan revision under Alternative 3 would result in **no impact** to prime fish habitat.

#### Pier Rebuild Project

Under Alternative 3, the existing pier and the existing boat ramp would be removed, and a non-motorized lake access point would be constructed above the high-water line. The resulting impacts on prime fish habitat would be similar as those discussed for Alternative 2, above.

The construction of the central pier would occur outside of prime fish habitat, and therefore would not remove or degrade prime fish habitat from the installation of pier pilings or shading (Table 4.6-1). Feed and cover habitat is directly adjacent to the proposed pier and would be subject to the same temporary impacts, and the same BMPs and CSP Standard and Special Project Requirements would be implemented, as discussed for the removal of the existing pier under Alternative 2.

Alternative 3 is likely to result in similar motorized and non-motorized use patterns overall and potential beaching of watercraft as discussed for Alternative 2. However, because the central pier would not be constructed within prime fish habitat, a small reduction in motorized activity within prime fish habitat could occur.

Because prime fish habitat would not be removed or substantially degraded during construction and operation of the central pier, the potential impacts to prime fish habitat under Alternative 3 would be **less than significant**.

### Alternative 4: Western Pier Alternative

#### General Plan Revision

TRPA's designation and protection of prime fish habitat are based on characteristics of the lakebed's physical substrate. With the General Plan revision under Alternative 4, except for the pier rebuild project (discussed separately, below), the proposed development and operations of upland and shorezone features, land use changes, and shifts in visitor use patterns are not expected to disturb the lakebed substrate within prime fish habitat. Therefore, the General Plan revision under Alternative 4 would result in **no impact** to prime fish habitat.

#### Pier Rebuild Project

Under Alternative 4, the existing pier would be removed and replaced by a new pier on the western side of the park, near the event center. The potential impacts of pier removal on prime fish habitat would be the same as those discussed for Alternative 2, above.

The construction of the western pier would occur outside of prime fish habitat, and therefore would not remove or degrade prime fish habitat from the installation of pier pilings or shading (Table 4.6-1). Feed and cover habitat is more distant from the western pier associated with Alternative 4 than with Alternative 2 and would be subject to the same temporary impacts, and the same BMPs and CSP Standard and Special Project Requirements (Section 4.7) would be implemented, as discussed for the removal of the existing pier under Alternative 2.

Alternative 4 includes an extension of the existing motorized boat ramp, which would increase the time in which the boat ramp is accessible, and improve navigation near the boat ramp during periods of low lake levels. The proposed ramp extension, which is at a conceptual level of design (see Exhibit 5.1-12 in Chapter 5, Environmental Analysis), is located near, but outside of, prime fish habitat (see Exhibit 5.1-12 in Chapter 5, Environmental Analysis). If Alternative 4 is selected, further design of the extended motorized boat ramp would continue to avoid construction within prime fish habitat. Potential construction- and operations-related effects of the ramp extension on nearby prime fish habitat would be similar to those discussed for the pier rebuild project (near prime fish habitat) in Alternative 2.

Construction and operation of the western pier and extended boat ramp may result in localized changes in watercraft activity but would not increase overall watercraft activity on Lake Tahoe. However, the western pier is located away from the prime fish habitat at the eastern end of KBSRA, such that any changes in motorized boating activity and disturbance within prime fish habitat associated with the western pier is not likely to be substantial. While the extended boat ramp may periodically increase the motorized watercraft use within and adjacent to feed and cover habitat during lake levels when the existing ramp is unusable, it is not anticipated to result in substantial changes in the overall level of disturbance to adjacent prime fish habitat. Because KBSRA is currently accessible to motorized and non-motorized watercraft, no substantial effects on prime fish habitat as a result of watercraft use are expected under Alternative 4. Additionally, because the spawning habitat identified within the project site is located away from the proposed western pier, Alternative 4 is not expected to result in an increase in the beaching of watercraft in spawning habitat during low lake levels. Taken together, the potential impacts to prime fish habitat under Alternative 4 would be **less than significant**.

### *Mitigation Measures*

#### **Mitigation Measure 5.3.2-1: Compensate for Loss of Prime Fish Habitat**

This mitigation measure would apply to the pier rebuild project under Alternative 2.

- ◆ If Alternative 2 is implemented, to compensate for the removal of up to 4,930 square feet of prime fish habitat (feed and cover) as a result of constructing the eastern pier, 7,395 square feet of in-kind feed and cover habitat shall be created or restored in the surrounding area through the development and implementation of a Compensatory Fish Habitat Replacement and Monitoring Plan. This amount of habitat creation or restoration equates to a 1.5 to 1 compensation ratio. The created/restored habitat would adjoin the existing feed and cover habitat at lake bottom elevations similar to those of habitat removed or degraded by installation of the eastern pier. The plan will be developed and implemented in coordination with applicable regulatory agencies, including CDFW, Lahontan RWQCB, USACE, USFWS, and TRPA. Additionally, the plan will be coordinated and consistent with terms and conditions of other required permits. Applicable permits expected for the project include a Clean Water Act Section 404 permit from USACE, Clean Water Act Section 401 Water Quality Certification from Lahontan RWQCB, and a Fish and Game Code Section 1602 Lake and Streambed Alteration Agreement from CDFW.

The Compensatory Fish Habitat Replacement and Monitoring Plan will include design, implementation, and monitoring requirements for creating/restoring 7,395 square feet of feed and cover habitat and achieving no net loss of fish habitat function, and shall include:

- identification of a specific habitat creation/restoration site that adjoins the existing feed and cover habitat in the area, and criteria for selecting the site;
- specifications for habitat substrate type and size-class distribution, material sources, and construction/installation methods;
- in-kind reference habitats for comparison with compensatory fish habitat/substrate (using performance and success criteria) to document success;
- monitoring protocol, including schedule and reporting requirements;
- ecological performance standards, based on the best available science and including specifications for habitat substrate condition and fish use of the created/restored area;
- corrective measures if performance standards are not met;
- responsible parties for monitoring and preparing reports; and
- responsible parties for receiving and reviewing reports and for verifying success or prescribing implementation or corrective actions.

#### *Significance after Mitigation*

Mitigation Measure 5.3.2-1 requires the creation/restoration of 7,395 square feet of feed and cover habitat in coordination with CDFW, Lahontan RWQCB, USACE, USFWS, and TRPA, to compensate for the loss or degradation of 4,930 square feet of prime fish habitat under Alternative 2. The created/restored habitat would adjoin the existing feed and cover habitat at lake bottom elevations similar to those of habitat removed or degraded by installation of the eastern pier. Implementation of this measure would result in an overall increase in prime fish habitat within KBSRA. Therefore, Impact 5.3.2-1 for the pier rebuild project under Alternative 2 would be reduced to a **less-than-significant** level.

#### Impact 5.3.2-2: Potential effects on Lahontan cutthroat trout and other special-status fish

No special-status fish species are expected to use aquatic habitat (Lake Tahoe) in KBSRA. However, because Lahontan cutthroat trout (LCT) has been reintroduced into Lake Tahoe, and lake habitat within KBSRA is hydrologically connected to occurrences of LCT in the Lake Tahoe watershed, the species is considered for all alternatives. Under all action alternatives (Alternatives 2, 3, and 4), the General Plan revision would result in physical improvements to KBSRA that may result in stormwater discharge. Because the General Plan revision requires that stormwater discharge standards be met or exceeded, proposed upland improvements would not affect special-status fish such as LCT, if the species is present. The removal of the existing pier structures under Alternatives 2, 3, and 4 have a low probability of resulting in the harm or harassment of LCT. Alternatives 3 and 4 would rebuild the pier outside of prime fish (feed and cover) habitat and would not directly disturb substrate that may provide potential habitat for LCT; Alternative 4 additionally includes extending the existing motorized boat ramp near, but outside of, prime fish habitat. Alternative 2 would place the rebuilt pier within feed and cover habitat; however, Mitigation Measure 5.3.2-1 (for Impact 5.3.2-1) requires the creation/restoration of feed and cover habitat and would result in a net increase in potential habitat for LCT. Alternatives 2, 3, and 4 would result in no substantial change in watercraft activity disturbance

within LCT habitat. Taken together, the impacts to LCT and other special-status fish under Alternatives 2, 3, and 4 would be **less than significant**.

Because Alternative 1 would not result in changes to the General Plan, removal of existing structures, pier construction, or changes in watercraft use or resulting disturbance, this alternative would have **no impact** on LCT or other special-status fish species.

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LCT is listed as threatened under the ESA. In KBSRA, Lake Tahoe provides habitat for fish but LCT and other special-status fish species (e.g., Lahontan Lake tui chub) are not known or expected to occur in the project site. The potential for LCT to use lake habitat within KBSRA is considered low based on: the types, extent, and quality of habitat on the project site; the overall rarity of the species in the watershed and proximity of the project site to known occurrences of the species; and the regional distribution and abundance of the species. Additionally, no spawning habitat for LCT is present in the project site. However, because LCT has been reintroduced into Lake Tahoe, and lake habitat within KBSRA is hydrologically connected to occurrences of LCT in the Lake Tahoe watershed, the species is considered for all alternatives below.

### Alternative 1: No Project

#### General Plan Revision

Alternative 1 would be a continuation of the existing KBSRA General Development Plan and would not stimulate redevelopment projects within KBSRA, modify land uses, or result in an increase in construction activities within the park. Therefore, Alternative 1 would have **no impact** on Lahontan cutthroat trout.

#### Pier Rebuild Project

Alternative 1 would not modify or move the existing Kings Beach Pier and would therefore have **no impact** on aquatic habitat and Lahontan cutthroat trout resulting from pier construction or operation.

### Alternative 2: Eastern Pier Alternative (Proposed Project)

#### General Plan Revision

The proposed General Plan revision would allow for the future development of recreation facilities and administrative and restroom facilities, and reconfiguring of the existing parking lot in the upland portion of the project site. Construction and operation of future projects implemented under the General Plan revision may generate stormwater discharge and erosion that could degrade fish habitat within the project area, through impaired water quality (e.g., sedimentation and other pollution). Potential effects of construction and operation of future projects on water quality are described in Section 5.3.7, Hydrology and Water Quality.

Each completed project would be required to comply with the same TRPA stormwater management protections applied to existing facilities, including infiltration BMPs (TRPA Code Section 60.4.6) and control of pollutant sources. Therefore, with the exception of the pier rebuild, which is evaluated separately, operation of the new and modified facilities proposed by the Alternative 2 General Plan revision would not adversely affect fish habitat or LCT, if the species was present.

Although construction activities have the potential to adversely affect water quality and fish habitat, all projects would implement and be required to comply with stringent TRPA and Lahontan RWQCB water quality protections. Temporary construction BMPs would be implemented as required through existing regulations, such as Chapters 33 and 60 of the TRPA Code of Ordinances. Additionally, the

General Plan revision includes Guideline RES 7.1 to meet or exceed TRPA's stormwater management requirements for construction or redevelopment of facilities (see Chapter 4, The Plan). Chapters 33 and 60 of the TRPA Code of Ordinances require the installation of temporary construction BMPs as a condition of project approval. BMPs would be implemented and required to meet the installation and use standards described in the TRPA Best Management Practices handbook (TRPA 2014). As described in Section 5.3.7, Hydrology and Water Quality, BMPs applicable to protecting water quality and fish habitat would include, but not be limited to:

- ◆ Temporary erosion control BMPs (e.g., silt fencing, fiber rolls, drain inlet protection) installed and maintained to prevent the transport of earthen materials and other waste from a construction site.
- ◆ Mandatory pre-grading inspections by regulatory agencies at the construction site to ensure proper installation of the temporary construction BMPs prior to the initiation of construction activities.
- ◆ Requirements to limit the area and extent of all excavation to avoid unnecessary soil disturbance.
- ◆ Requirements to winterize construction sites by October 15 to reduce the water quality impacts associated with winter weather. Winterization typically includes installation of erosion controls, vegetation protection, removal of construction debris, site stabilization, and other measures.
- ◆ Dust control measures to prevent transport of materials from a project site into any surface water or drainage course. Dust control measures typically include sweeping, watering, covering of disturbed soils and stockpiles, vehicle washing, and other measures.
- ◆ Requirements to remove surplus or waste earthen materials from project sites, as well as requirements to stabilize and protect stockpiled material.
- ◆ Stabilization of drainage swales disturbed by construction activities with appropriate soil stabilization measures (e.g., revegetation, rock armoring) to prevent erosion.
- ◆ Temporary BMPs to capture and contain pollutants from fueling operations, fuel storage areas, and other areas used for the storage of hydrocarbon-based materials. These may include spill prevention plans and other measures.
- ◆ Temporary BMPs to prevent the tracking of earthen materials and other waste materials from project sites to offsite locations, including stabilized points of entry/exit for construction vehicles/equipment, designated vehicle/equipment rinse stations, and sweeping operations.
- ◆ Regular inspection and maintenance of temporary BMPs.

As described in Section 5.3.7, Hydrology and Water Quality, Lahontan RWQCB requires the development of a project-specific SWPPP prior to the start of any project involving ground disturbance. The SWPPP would describe the site, construction activities, proposed erosion and sediment controls, means of waste disposal, maintenance requirements for temporary BMPs, and management controls for potential pollutant sources other than stormwater runoff. In addition, the SWPPP would require the implementation of a hazardous materials spill response plan, which would reduce the potential of directly and indirectly effecting water quality through construction-related hazardous material spills. Water quality controls outlined in a SWPPP must be consistent with TRPA requirements (including Chapter 4.5 of the TRPA BMP Handbook), the federal antidegradation policy, and maintain designated beneficial uses of Lake Tahoe.

Collectively, implementing these protections would prevent project-related degradation of water quality and fish habitat within Lake Tahoe. All future projects implemented under the proposed General Plan revision would be subject to existing laws and regulations requiring erosion and sediment controls, and implementation and maintenance of permanent and temporary BMPs to capture, detain, and infiltrate or otherwise control and properly manage stormwater runoff. Because regulatory protections are in place to minimize erosion and transport of sediment and other pollutants, future projects under the General Plan revision would not degrade water quality or fish habitat within Lake Tahoe. Therefore, if LCT was present in KBSRA, potential impacts on the species would be **less than significant**.

#### Pier Rebuild Project

Under Alternative 2, the existing pier and boat ramp would be removed and a rebuilt pier would be constructed, as discussed in Impact 5.3.2-1, Disturbance and Loss of Prime Fish Habitat. The removal of the existing structures and construction of a rebuilt pier has the potential to cause harm or harassment of LCT should the species be present during construction. However, LCT has not been documented and has a low likelihood of occurrence in the project area. This low likelihood of occurrence is due to the presence of predatory lake trout in Lake Tahoe, lack of spawning habitat, and the distance from KBSRA to the nearest known populations of LCT in the Tahoe Basin (Fallen Leaf Lake, approximately 22 miles southwest of KBSRA). Although LCT is not expected to occur in KBSRA, coordination or consultation with USFWS would be undertaken for this project. Should any consultation result in a Biological Opinion (BO), the project would be subject to the BO's conservation measures that would further reduce the likelihood of harm or harassment to LCT.

The removal of the existing pier and boat ramp, and construction of the eastern pier, would result in both permanent and temporary impacts to fish habitat, as discussed in Impact 5.3.2-1, Disturbance and Loss of Prime Fish Habitat. Fish habitat affected by the proposed pier rebuild project includes feed and cover habitat potentially suitable for LCT. However, as discussed in Impact 5.3.2-1, BMPs would be implemented to minimize or avoid construction-related impacts such as increased turbidity and aquatic invasive species; and, through implementation of Mitigation Measure 5.3.2-1 for the pier rebuild element of Impact 5.3.2-1, the creation/restoration of feed and cover habitat would exceed the area removed for pier pilings and degraded by shading. Also, as discussed in Impact 5.3.2-1, watercraft-related effects on fish habitat would not change substantially.

Under Alternative 2, the potential for project implementation to harm or harass individual LCT is low, temporary impacts to potential LCT habitat would be avoided or minimized, and, through implementation of Mitigation Measure 5.3.2-1 for the pier rebuild element of Impact 5.3.2-1, the amount of created/restored fish habitat would exceed that removed or degraded by the project. Therefore, the potential impact of Alternative 2 on LCT would be **less than significant**.

### Alternative 3: Central Pier Alternative

#### General Plan Revision

With Alternative 3, the proposed improvements in the upland portion of the project site, and the potential effects on fish habitat as a result of construction and operation, would be similar to those described for Alternative 2, and the same regulatory protections would apply. For the same reasons described for Alternative 2, the Alternative 3 General Plan revision is anticipated to have **no impact** on LCT.

#### Pier Rebuild Project

Under Alternative 3, the existing pier and boat ramp would be removed and a rebuilt pier would be constructed, and a non-motorized lake access point would be constructed above the high-water line,

as discussed in Impact 5.3.2-1, Disturbance and Loss of Prime Fish Habitat. The removal of the existing structures and construction of the rebuilt pier has the potential to cause harm or harassment of LCT should the species be present during construction; however, as discussed for Alternative 2, the likelihood that LCT would occur during pier removal and construction is low.

The removal of the existing pier and boat ramp, and construction of the central pier, would result in temporary impacts to fish habitat, as discussed in Impact 5.3.2-1. As discussed in Impact 5.3.2-1, BMPs would be implemented to minimize or avoid construction-related impacts such as increased turbidity and aquatic invasive species. Also, as discussed in Impact 5.3.2-1, watercraft-related effects on fish habitat would not change substantially.

Because the potential for Alternative 3 to harm or harass individual LCT is low and temporary impacts to LCT habitat would be minimized or avoided, and recreation-related disturbances on fish habitat or populations over the long term would not change substantially, the potential impact of Alternative 3 on LCT would be **less than significant**.

#### Alternative 4: Western Pier Alternative

##### General Plan Revision

With Alternative 4, proposed improvements in the upland portion of KBSRA, and the potential effects on fish habitat as a result of construction and operation, would be similar to those discussed for Alternative 2, and the same regulatory protections for stormwater management would apply. For the same reasons described for Alternative 2, the Alternative 4 General Plan revision is anticipated to have **no impact** on LCT.

##### Pier Rebuild Project

Under Alternative 4 the existing pier would be removed and a rebuilt pier would be constructed, and the existing motorized boat ramp would be extended, as discussed in Impact 5.3.2-1, Disturbance and Loss of Prime Fish Habitat. The removal of the existing structures, construction of the rebuilt pier, and construction of the boat ramp extension has the potential to cause harm or harassment of LCT should the species be present during construction; however, for the same reasons discussed for Alternative 2, the likelihood that LCT would occur during pier removal and construction, and construction of the boat ramp extension, is low.

The removal of the existing pier and construction of the western pier, and extending the existing boat ramp, would result in temporary impacts to fish habitat, as discussed in Impact 5.3.2-1. As discussed in Impact 5.3.2-1, BMPs would be implemented to minimize or avoid construction-related impacts such as increased turbidity and aquatic invasive species. Also, as discussed in Impact 5.3.2-1, watercraft-related effects on fish habitat would not change substantially.

Because the potential to harm or harass individual LCT is low and temporary impacts to LCT habitat would be minimized or avoided, and recreation-related disturbances on fish habitat or populations over the long term would not change substantially, the potential impact of Alternative 4 on LCT would be **less than significant**.

##### Mitigation Measures

No mitigation measures are required.

### Impact 5.3.2-3: Disturbance or loss of jurisdictional waters and other sensitive habitats

Under Alternatives 2, 3, and 4, construction and operation of future projects implemented under the General Plan revision may generate stormwater discharge and erosion that could degrade aquatic habitat including jurisdictional waters (Lake Tahoe) within the project area, through impaired water quality (e.g., sedimentation and other pollution). Additionally, the pier rebuild project would require the removal of 26 existing pier pilings within Lake Tahoe. Rebuilding the pier would require driving 27 to 38 new piles, depending on alternative, to a depth of 6 to 8 feet below the surface of the lakebed. Alternative 4 additionally includes extending the existing motorized boat ramp, which would disturb the lake/shoreline substrate. Existing TRPA, federal, and state policies and regulations protect sensitive habitats and require that compensation for unavoidable project-related losses or degradation of jurisdictional waters and other sensitive habitats is achieved in a manner that results in no net loss. Therefore, through compliance with existing regulations, which is a requirement of project approval and permitting, the disturbance or loss of jurisdictional waters and other sensitive habitats under Alternatives 2, 3, and 4 would be a **less-than-significant** impact.

Alternative 1 would be a continuation of the existing KBSRA General Development Plan and would not stimulate redevelopment projects within KBSRA, modify land uses, or result in an increase in construction activities within the park. Therefore, Alternative 1 would have **no impact** on jurisdictional waters or other sensitive habitats.

The primary sensitive habitats in KBSRA are Lake Tahoe and its lakebed, and prime fish habitat. (Prime fish habitat is addressed separately in Impact 5.3.2-1, Disturbance or loss of prime fish habitat.) Lake Tahoe is subject to jurisdiction by the U.S. Army Corps of Engineers (USACE) and Lahontan RWQCB under Section 404 of federal CWA and the state's Porter-Cologne Act, and subject to regulation by CDFW under Sections 1600 et seq. of the California Fish and Game Code.

#### Alternative 1: No Project

##### General Plan Revision

Alternative 1 would be a continuation of the existing KBSRA General Development Plan and would not stimulate redevelopment projects within KBSRA, modify land uses, or result in an increase in construction activities within the park. Therefore, Alternative 1 would have **no impact** on jurisdictional waters or other sensitive habitats.

##### Pier Rebuild Project

Alternative 1 would not modify or move the existing Kings Beach Pier and would therefore have **no impact** on jurisdictional waters or other sensitive habitats resulting from pier construction or operation.

#### Alternative 2: Eastern Pier Alternative (Proposed Project)

##### General Plan Revision

Under Alternative 2 the proposed General Plan revision would allow for the future development of recreation facilities and administrative and sanitary facilities, and reconfiguring of the existing parking lot in the upland portion of the project site. As described previously for Impact 5.3.2-1, Disturbance or loss of prime fish habitat, and Impact 5.3.2-2, Effects on Lahontan cutthroat trout and other special-status fish, except for the pier rebuild project (discussed separately, below), the proposed development and operations of upland and shorezone features, land use changes, and shifts in visitor use patterns are not expected to disturb aquatic habitat or the lakebed substrate within Lake Tahoe. However, construction and operation of future projects implemented under the General Plan revision

may generate stormwater discharge and erosion that could degrade aquatic habitat including jurisdictional waters (Lake Tahoe) within the project area, through impaired water quality (e.g., sedimentation and other pollution).

Each completed project would be required to comply with the same TRPA stormwater management protections applied to existing facilities, including infiltration BMPs (TRPA Code Section 60.4.6) and control of pollutant sources. Therefore, with the exception of the pier rebuild, which is evaluated separately, operation of the new and modified facilities proposed by the Alternative 2 General Plan revision would not adversely affect waters of the U.S. or other sensitive habitats.

Although construction activities have the potential to adversely affect water quality and sensitive aquatic habitats, all projects would be required to comply with stringent TRPA and Lahontan RWQCB water quality protections. Temporary construction BMPs would be required through existing regulations, such as Chapter 33 of the TRPA Code of Ordinances. Additionally, the General Plan revision includes Guideline RES 7.1 to meet or exceed TRPA's stormwater management requirements for construction or redevelopment of facilities (see Chapter 4, The Plan).

Because regulatory protections are in place to minimize erosion and transport of sediment and other pollutants, future projects under the General Plan revision would not degrade water quality or sensitive aquatic habitats. Therefore, potential impacts on waters of the U.S. or other sensitive habitats would be **less than significant**.

#### Pier Rebuild Project

The Alternative 2 pier rebuild project would require the removal of 26 existing pier pilings within Lake Tahoe, which is a jurisdictional water and sensitive habitat. Rebuilding the pier at the eastern location would require driving 27 new piles to a depth of 6 to 8 feet below the surface of the lakebed. The disturbance required for the installation of the piles would be limited to the area of the pile footprint. The total footing area of pilings for the eastern pier and permanent disturbance to the lakebed would be approximately 71 sq. ft. The footing area of pier pilings for the existing Kings Beach Pier, which would be removed under Alternative 2, is also 71 sq. ft. Therefore, full implementation of Alternative 2 would result in no change in total footing area of pilings within Lake Tahoe. The project also includes the creation/restoration of 7,395 square feet of prime fish (feed and cover) habitat, which would temporarily disturb the lakebed.

The disturbance or loss of jurisdictional wetlands and other waters during construction would be minimized, and habitat compensation would be provided to meet the no-net-loss standard, through the CWA Section 404 permitting process. Impacts to riparian, wetland, and other sensitive habitats would also be minimized, avoided, or mitigated, as needed, through the permitting processes required by CWA Section 401 and CDFW Code Section 1600 *et seq.* The proposed creation/restoration of prime fish habitat would also be conducted in coordination with the USFWS, TRPA, USACE, Lahontan RWQCB, and CDFW as part of permitting and would be subject to the terms and conditions of those permits.

For unavoidable losses or degradation of jurisdictional waters of and other sensitive habitats, habitat compensation requirements of the existing regulations and policies must meet a no-net-loss standard. Therefore, through compliance with existing regulations, which is a requirement of project approval and permitting, the disturbance or loss of jurisdictional waters and other sensitive habitats under Alternative 2 would be a **less-than-significant** impact.

## Alternative 3: Central Pier Alternative

### General Plan Revision

With Alternative 3, the proposed improvements in the upland portion of the project site, and the potential effects on sensitive habitats as a result of construction and operation, would be similar to those described for Alternative 2, and the same regulatory protections would apply. For the same reasons described for Alternative 2, the disturbance or loss of jurisdictional waters and other sensitive habitats under Alternative 3 would be a **less-than-significant** impact.

### Pier Rebuild Project

The Alternative 3 pier rebuild project would require the removal of 26 existing pier pilings within Lake Tahoe, which is a jurisdictional water and sensitive habitat. Rebuilding the pier at the central location would require driving 33 new piles to a depth of 6 to 8 feet below the surface of the lakebed. The disturbance required for the installation of the piles would be limited to the area of the pile footprint. The total footing area of pilings for the central pier and permanent disturbance to the lakebed would be approximately 88 sq. ft. (compared to 71 sq. ft. with Alternative 2). The footing area of pier pilings for the existing Kings Beach Pier, which would be removed under Alternative 3, is 71 sq. ft. Therefore, full implementation of Alternative 3 would result in a net increase of 17 sq. ft. in total footing area of pilings within Lake Tahoe (compared to no change with Alternative 2).

The disturbance or loss of jurisdictional wetlands and other waters during construction would be minimized, and habitat compensation would be provided to meet the no-net-loss standard, through the CWA Section 404 permitting process. Impacts to riparian, wetland, and other sensitive habitats would also be minimized, avoided, or mitigated, as needed, through the permitting processes required by CWA Section 401 and CDFW Code Section 1600 *et seq.*

For unavoidable losses or degradation of jurisdictional waters and other sensitive habitats, habitat compensation requirements of the existing regulations and policies must meet a no-net-loss standard. Therefore, through compliance with existing regulations, which is a requirement of project approval and permitting, the disturbance or loss of jurisdictional waters and other sensitive habitats under Alternative 3 would be a **less-than-significant** impact.

## Alternative 4: Western Pier Alternative

### General Plan Revision

With Alternative 4, the proposed improvements in the upland portion of the project site, and the potential effects on sensitive habitats as a result of construction and operation, would be similar to those described for Alternative 2, and the same regulatory protections would apply. For the same reasons described for Alternative 2, the disturbance or loss of jurisdictional waters and other sensitive habitats under Alternative 4 would be a **less-than-significant** impact.

### Pier Rebuild Project

The Alternative 4 pier rebuild project would require the removal of 26 existing pier pilings within Lake Tahoe, which is a jurisdictional water and sensitive habitat. Rebuilding the pier at the western location would require driving 38 new piles to a depth of 6 to 8 feet below the surface of the lakebed. The disturbance required for the installation of the piles would be limited to the area of the pile footprint. The total footing area of pilings for the western pier and permanent disturbance to the lakebed would be approximately 101 sq. ft. (compared to 71 sq. ft. with Alternative 2, and 88 sq. ft. with Alternative 3). The footing area of pier pilings for the existing Kings Beach Pier, which would be removed under Alternative 4, is 71 sq. ft. Therefore, full implementation of Alternative 4 would result in a net increase

of 30 sq. ft. in total footing area of pilings within Lake Tahoe (compared to no change with Alternative 2 and an increase of 17 sq. ft. with Alternative 3). Alternative 4 additionally includes extending the existing motorized boat ramp, which would disturb the lake/shoreline substrate. However, the design of the proposed ramp extension is conceptual and the amount of disturbance has not been quantified.

The disturbance or loss of jurisdictional wetlands and other waters during construction would be minimized, and habitat compensation would be provided to meet the no-net-loss standard, through the CWA Section 404 permitting process. Impacts to riparian, wetland, and other sensitive habitats would also be minimized, avoided, or mitigated, as needed, through the permitting processes required by CWA Section 401 and CDFW Code Section 1600 *et seq.*

For unavoidable losses or degradation of jurisdictional waters of and other sensitive habitats, habitat compensation requirements of the existing regulations and policies must meet a no-net-loss standard. Therefore, through compliance with existing regulations, which is a requirement of project approval and permitting, the disturbance or loss of jurisdictional waters and other sensitive habitats under Alternative 4 would be a **less-than-significant** impact.

#### *Mitigation Measures*

No mitigation measures are required.

#### Impact 5.3.2-4: Disturbance or loss of Tahoe yellow cress

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Under Alternatives 2, 3, and 4, construction and operation of the pier rebuild project and future projects implemented under the General Plan revision may directly or indirectly disturb beach habitats suitable for Tahoe yellow cress (TYC). If TYC becomes established on the KBSRA beach in the future, without implementation of adequate TYC protection measures, construction activities and potential increases in beach use associated with the pier rebuild project and other projects implemented under the General Plan revision could potentially result in the disturbance or loss of TYC. However, CSP Standard and Special Project Requirements (Section 4.7) and General Plan guidelines would provide protection and prevent the loss of TYC. These requirements and guidelines require monitoring of the beach area for the presence of TYC and protecting any occurrences with signage, fencing, or other measures as identified in the TYC Conservation Strategy. Because implementation of these measures is required and would identify, protect, and avoid the loss of TYC occurrences if they become established at KBSRA, the potential impact to TYC from the pier rebuild and General Plan revision under Alternatives 2, 3, and 4 would be **less-than-significant**.

Alternative 1 would not result in changes to the General Plan, removal of existing structures, or pier construction. Therefore, Alternative 1 would have **no impact** on TYC or suitable habitat.

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Tahoe yellow cress occurs only on the sandy beaches of Lake Tahoe. TYC grows on coarse and sandy soils (often among cobbles or boulders) of active beaches, stream inlets, beach dunes and backshore depressions, generally within a few feet of the water table. This species is designated as a sensitive plant and threshold indicator species by TRPA, and is listed as endangered in California under the California Endangered Species Act (CESA). The distribution and abundance of TYC are closely linked to lake level, with greater abundance and more occurrences present during low lake levels when more beach habitat is available for colonization (Pavlik et al. 2002). The species exhibits a metapopulation dynamic, where populations or clusters of plants at some locations may periodically disappear or decline in number in some years (e.g., in high water years), and TYC may recover or colonize exposed suitable habitats during other periods (Pavlik et al. 2002). The timing and probability of these dynamic extirpation and colonization events depend primarily on lake level and disturbances from recreation or

development, but also on the biophysical characteristics of the sites themselves. The primary anthropogenic disturbances to this species are recreational use of beaches occupied by TYC and potentially development of marinas, boat ramps, and piers, which result in trampling and degradation or loss of habitat.

Potential habitat for TYC is present on the Lake Tahoe beach in KBSRA, although habitat suitability there is considered relatively low due to heavy recreational use (see Conservancy 2016). Suitable habitat for other special-status plant species is not present in KBSRA. Some TYC occurrences have been documented on beaches near KBSRA; however, TYC is not known to occur in KBSRA. The TYC Adaptive Management Working Group (AMWG) conducts/coordinates regular population surveys at known and potential TYC population sites. CSP and the Conservancy are AMWG members and primary partners in implementing the *Conservation Strategy for Tahoe Yellow Cress* (Stanton et al. 2015). TYC surveys were conducted at KBSRA by CSP in 2011, 2016, and 2017, and by the Conservancy in 2015 (Conservancy 2016); and, CSP plans to survey for TYC annually at KBSRA in future years. No TYC plants were found at KBSRA during surveys. However, because TYC exhibits a metapopulation dynamic and occurrences could become established on the KBSRA beach in the future, potential effects of the General Plan revision and the pier rebuild project on TYC are analyzed below.

### Alternative 1: No Project

#### General Plan Revision

Alternative 1 would be a continuation of the existing KBSRA General Development Plan and would not stimulate redevelopment projects within KBSRA, modify land uses, or result in an increase in construction activities within the park. Therefore, Alternative 1 would have **no impact** on TYC or suitable habitat.

#### Pier Rebuild Project

Alternative 1 would not modify or move the existing Kings Beach Pier and would therefore have **no impact** on TYC or suitable habitat resulting from pier construction or operation.

### Alternative 2: Eastern Pier Alternative (Proposed Project)

#### General Plan Revision

Under Alternative 2, the proposed General Plan revision would allow for the future development of recreation facilities and administrative and sanitary facilities, and reconfiguring of the existing parking lot in the upland portion of the project site. If TYC becomes established on the KBSRA beach in the future, depending on the specific locations and size of projects in relation to TYC occurrences and suitable habitat, construction-related activities that may occur within or adjacent to beach habitat occupied by TYC could result in the direct removal of TYC plants, or other disturbances through inadvertent trampling, soil disturbance, and dust deposition. Over the long term, the additional recreation capacity and facility improvements may increase the frequency of beachgoers, swimmers, and other recreationists within occupied TYC habitat, which could result in additional trampling, degradation, or loss of existing TYC, and adversely affect current or future TYC habitat suitability.

Subsection 61.3.6 of the TRPA Code states that “all projects or activities that are likely to harm, destroy, or otherwise jeopardize sensitive plants or their habitat, shall fully mitigate their significant adverse effects. Those projects or activities that cannot fully mitigate their significant adverse effects are prohibited.” Additionally, in California, TYC is listed as endangered under CESA; and, any “take” (i.e., removal or loss) of TYC would require authorization by CDFW through a California Fish and Game Code Section 2081 incidental take permit.

Although unlikely, if TYC becomes established at KBSRA in the future, CSP Standard and Special Project Requirements (Section 4.7) and General Plan revision Guidelines RES 3.1, 3.2, and 3.3 would provide protection and prevent the take of TYC. These requirements and guidelines require monitoring of the beach area for the presence of TYC and protecting any occurrences with signage, fencing, or other measures as identified in the TYC Conservation Strategy. Because implementation of these measures would identify, protect, and avoid take of TYC occurrences if they become established at KBSRA, the potential impact to TYC as a result of the General Plan revision would be **less than significant**.

#### Pier Rebuild Project

Under Alternative 2, the existing pier and boat ramp would be removed and a rebuilt pier would be constructed, as discussed previously. The removal of the existing structures and construction of a rebuilt pier would temporarily and permanently disturb beach habitat in KBSRA. If TYC becomes established on the KBSRA beach in the future, without implementation of adequate TYC protection measures, pier rebuild activities and associated increases in beach use could result in the disturbance or loss of TYC. Depending on the specific locations of TYC occurrences in relation to pier construction and operation, construction-related activities that may occur within or adjacent to beach habitat occupied by TYC could result in the direct removal of TYC plants, or other disturbances through inadvertent trampling, soil disturbance, and dust deposition. Over the long term, the additional recreation capacity provided by the rebuilt pier may increase the frequency of beachgoers, swimmers, and other recreationists within occupied TYC habitat, which could result in additional trampling, degradation, or loss of existing TYC, and adversely affect current or future TYC habitat suitability.

Although unlikely, if TYC becomes established at KBSRA in the future, CSP Standard and Special Project Requirements (Section 4.7) and General Plan revision Guidelines RES 3.1, 3.2, and 3.3 would provide protection and prevent the take of TYC. These requirements and guidelines require monitoring of the beach area for the presence of TYC and protecting any occurrences with signage, fencing, or other measures as identified in the TYC Conservation Strategy. Because implementation of these measures would identify, protect, and avoid take of TYC occurrences if they become established at KBSRA, the potential impact to TYC as a result of the pier rebuild project would be **less than significant**.

### Alternative 3: Central Pier Alternative

#### General Plan Revision

With Alternative 3, the proposed improvements in the upland portion of the project site, and the potential effects on TYC habitat as a result of construction and operation, would be similar to those described for Alternative 2, and the same CSP Standard and Special Project Requirements (Section 4.7) and General Plan revision guidelines applicable to TYC protection would apply. For the same reasons described for Alternative 2, the potential impact to TYC from the General Plan revision under Alternative 3 would be **less than significant**.

#### Pier Rebuild Project

With Alternative 3, the potential effects on TYC habitat as a result of construction and operation of the central pier would be similar to those described for Alternative 2, and the same CSP Standard and Special Project Requirements (Section 4.7) and General Plan revision guidelines applicable to TYC protection would apply. For the same reasons described for Alternative 2, the potential impact to TYC from the pier rebuild under Alternative 3 would be **less than significant**.

## Alternative 4: Western Pier Alternative

### General Plan Revision

With Alternative 4, the proposed improvements in the upland portion of the project site, and the potential effects on TYC habitat as a result of construction and operation, would be similar to those described for Alternative 2, and the same CSP Standard and Special Project Requirements (Section 4.7) and General Plan revision guidelines applicable to TYC protection would apply. For the same reasons described for Alternative 2, the potential impact to TYC from the General Plan revision under Alternative 4 would be **less than significant**.

### Pier Rebuild Project

With Alternative 4, the potential effects on TYC habitat as a result of construction and operation of the western pier would be similar to those described for Alternative 2, and the same CSP Standard and Special Project Requirements (Section 4.7) and General Plan revision guidelines applicable to TYC protection would apply. For the same reasons described for Alternative 2, the potential impact to TYC from the pier rebuild under Alternative 4 would be **less than significant**.

### Mitigation Measures

No mitigation measures are required.

## Cumulative Impacts

The geographic scope of cumulative impacts for biological resources is the Tahoe region. The primary biological resources issues relevant to cumulative impacts, where the project has the potential to contribute to impacts generated by other projects, are effects related to prime fish habitat and jurisdictional waters. Past, present, and foreseeable future activities that have affected or may affect biological resources in the Tahoe region include logging, grazing, fuels management, recreational development and activities, urban and commercial development, and right-of-way maintenance and operation activities. Other projects that may interact with the proposed project on a cumulative basis are listed in Table 5.1-2.

Implementing any of the action alternatives would result in the disturbance of prime fish habitat and jurisdictional waters (Lake Tahoe), as described in Impact 5.3.2-1 and Impact 5.3.2-3. However, no permanent net loss of prime fish habitat or jurisdictional waters would occur with any of the action alternatives. Construction activities under any action alternative would be required to comply with existing TRPA, federal, state, and local regulations and permitting requirements that protect aquatic, riparian, wetland, and other sensitive habitats, and require that compensation for unavoidable project-related losses or degradation of sensitive habitats is achieved in a manner that results in no net loss. Therefore, through compliance with existing regulations, which is a requirement of project approval and permitting, the disturbance or loss of jurisdictional waters and other sensitive habitats under Alternatives 2, 3, and 4 would be a less-than-significant impact. Based on the no net loss standard, the project **would not make a cumulatively considerable contribution** to the overall significant cumulative effect on sensitive habitats in the Tahoe-Truckee Region.