3

Park Plan

3 PARK PLAN

3.1 PURPOSE AND VISION

The purpose and vision of a State Park serve as the framework for future management of the Park. They are related, yet distinct, planning concepts that provide a context and direction for future planning efforts for the Park. These concepts are described in more detail below.

3.1.1 DECLARATION OF PURPOSE

The Declaration of Purpose describes the purpose of the Park and is the broadest statement of management goals designed to fulfill the vision for the Park. A Declaration of Purpose is required by the Public Resources Code, Section 5002.2(b), "setting forth specific long-range management objectives for the Park consistent with the Park's classification…"

The California Department of Parks and Recreation (Department) General Plan Policy Committee adopted the Park's current Declaration of Purpose in October 2000 in the absence of a formal General Plan that provides the framework for future Park management. It reads as follows:

> Existing Declaration of Purpose
>
> *"The purpose of Bidwell-Sacramento River State Park, in Butte and Glenn Counties, is to preserve and protect a variety of sites which collectively display various stages of the evolving hydrologic conditions and the shifting types of associated riparian ecosystems which occur in the middle reaches of the Sacramento River. The unit features high terrace riparian vegetation with mature oak woodland and an under-story of mixed grasslands. The unit provides important regional access for a wide range of recreational uses of the Sacramento River and certain of its local tributaries.*
>
> *California State Parks will preserve, protect, restore, interpret and manage the unit's natural, cultural, aesthetic and scenic resources, features and values, making them available to the public for their educational, inspirational and recreational benefits."*

During the General Plan planning process, it was evident that the existing purpose statement needed modification to more clearly and succinctly reflect the Park's current purpose as defined by this General Plan. The new purpose statement is intended to reflect current conditions, including knowledge of the resources at the Park, planning actions being undertaken in the project area, and the understood significance and value of the Park with respect to California and the State Park system. The Park's purpose has also been defined to balance the natural, cultural, and recreational resources in a manner that sustains these resources for the people of California. The proposed Declaration of Purpose for Bidwell-Sacramento River State Park reads as follows:

Proposed Declaration of Purpose

"The purpose of Bidwell-Sacramento River State Park is to preserve, protect, and restore a variety of sites which collectively display various stages of the evolving hydrologic conditions and the successional riparian ecosystems which occur in the middle reaches of the Sacramento River, while providing important public access for a wide range of recreational, interpretive, and educational uses of the Sacramento River and its local tributaries."

3.1.2 Vision Statement

The Vision Statement for Bidwell-Sacramento River State Park is a description of what the Park should ultimately look like in the future. Prior to this General Plan, no vision had been developed for the Park. As part of the General Plan process, a vision for the Park has been developed based on the shared vision of the Department and coordination with local stakeholders. The Vision Statement for Bidwell-Sacramento River State Park reads as follows:

"The Park will provide quality recreational and educational opportunities, afforded by the dynamic riverine environment of the middle reaches of the Sacramento River and the history of the area. Public access to the river will be provided to all visitors who enjoy boating, rafting, floating, swimming, wading, fishing, viewing, and learning experiences at the Park. The Park will also offer biking, hiking, and camping opportunities, in connection with surrounding public lands. The Park and its recreational and educational facilities will be developed and expanded sustainably and safely, in consideration of the Park's resources and capacity to accommodate the needs of the diverse stakeholders.

State Park staff will preserve and enhance the outstanding recreational and educational values of the Park. Recognizing its ecological and historical importance, the natural and cultural resources will be restored and protected, considering the expressed desires of the public and in accordance with established laws and regulations. The Park will provide interpretation of its resources and their significance in concert with the nearby Bidwell Mansion State Historic Park. Visitors will also have the opportunity to learn about the relationship between the river and the agricultural tradition of the region.

The Park is one of the last remnants of the historically extensive Sacramento River riparian system. The successional riparian forest and its abundant biodiversity will be maintained in their natural and native state. The river will be allowed to meander, to the extent compatible with existing land uses. Developments in the Park will be designed to accommodate naturally occurring floods. Through the Park's interpretive and educational facilities and programs, visitors, such as school groups, will learn about the dynamic nature of the Sacramento River and the way it shapes the ever-changing landscape and the surrounding land uses.

3.2 PARK-WIDE MANAGEMENT GOALS AND GUIDELINES

Park-wide management goals and guidelines, which are applicable to the entire Park regardless of subunit purpose and/or location, are management approaches for achieving the Declaration of Purpose and Vision Statement described above. Goals and guidelines are defined in the California State Parks Planning Handbook (2002):

- **Goal:** General, overall, and ultimate purpose, aim or intent toward which management will direct effort. Goals are not necessarily measurable except in terms of the achievement of component objectives which attainment of the goal involves.

- **Guidelines:** General set of parameters that provide directions toward accomplishing goals.

The goals and guidelines for Bidwell-Sacramento River State Park are organized into three main categories: (1) environmental resource management, (2) visitor use and opportunities, and (3) administration and operations. These components must be integrated with one another for successful implementation of the General Plan. Because of the broad nature of these categories, they are further organized into issue and sub-issue areas addressing specific aspects of the planning process.

3.2.1 ENVIRONMENTAL RESOURCES

The abundance of environmental resources was one key consideration for establishing the Park into the State Park system, and wise stewardship of the Park's resources is crucial in retaining and sustaining its biological, historic, aesthetic, educational, and recreational values. In balancing the needs of the dynamic ecosystem with those of Park visitors and Department staff, the complex natural processes that occur within the Park demand that a wide range of environmental resources be considered in future management decisions. For purposes of this Plan, the management of environmental resources at the Park refers to four main resource topics: (1) ecosystem (plant and wildlife) management, (2) cultural resources, (3) watershed management, and (4) scenic resources.

PARK-WIDE GOALS AND GUIDELINES FOR ECOSYSTEM MANAGEMENT

The natural resources of the Park are shaped and supported by the physical and hydrological patterns of the Sacramento River and Big Chico Creek. This relationship between physical features and patterns and biological resources is a dynamic system with complex, interdependent relationships. In a natural system, these processes are allowed to occur without interference, but they are often altered or interrupted by human influence. The following natural resource management approach is designed to perpetuate the natural processes and patterns at work in the Park and to restore such processes to optimal levels in areas where they have been disrupted by human alteration and non-compatible uses.

Overall Goal ER-1: Preserve, maintain and, where necessary, rehabilitate the Park's ecosystems to protect natural features and processes and perpetuate biological resource functions.

- **Guideline ER-1-1:** Inventory and monitor the condition of the Park's natural resources and identify appropriate management measures for their preservation and opportunities for enhancement and restoration.
- **Guideline ER-1-2:** Conduct scientific research with as little manipulation and/or disturbance as possible, with the intent of gaining a better understanding of methods for conserving sensitive species and ecosystems.

Sensitive Riparian Habitat and Other Plant Communities

Sensitive natural communities include communities that are of special concern to government agencies and private conservation organizations. Sensitive natural communities are considered important because they provide habitat for numerous wildlife and plant species including special-status species. Sensitive natural communities also include those considered rare or uncommon locally, regionally, or statewide, and those protected by state and federal laws and regulations. Sensitive natural communities that occur in the plan area include open water, wetland, and successional woodland communities, such as arroyo willow series, box elder, Fremont cottonwood series, and valley oak series.

Goal ER-1.1: Protect and restore sensitive natural communities, including wetland, valley oak woodland, and other successional riparian woodland plant communities that support the Park's abundant natural resources and function in the evolving hydrological and geomorphologic conditions of the middle reaches of the Sacramento River.

- **Guideline ER-1.1-1:** Restore natural processes and functions to parcels acquired for habitat values based on a comprehensive Natural Resource Management Plan.
- **Guideline ER-1.1-2:** Landscape developed areas with plants native to local area.
- **Guideline ER-1.1-3:** Protect natural and dynamic hydrological, physical, and biological processes and conditions of the river corridor to enable continued succession of plant community types.
- **Guideline ER-1.1-4:** Maintain riparian habitat areas that are representative of the major successional stages.
- **Guideline ER-1.1-5:** Protect mature oak trees and oak stands from direct or indirect damage by avoiding their removal for new facilities and implementing practices to prevent disease, such as sudden oak death syndrome.
- **Guideline ER-1.1-6:** Avoid sensitive riparian habitat when siting and designing proposed facilities to the extent feasible. Where development occurs in sensitive

riparian habitat, minimize impacts to the extent feasible and seek opportunities for habitat restoration elsewhere at the Park.

- **Guideline ER-1.1-7:** Support efforts to restore the Big Chico Creek Watershed such that ecosystem functions at the Park are improved, thereby enhancing special-status species and sensitive habitats that occur at the Park.

Special-Status Plant, Terrestrial Wildlife, and Aquatic Species

Special-status species include plant, terrestrial wildlife, and aquatic species that are legally protected or that are otherwise considered sensitive by federal, state, or local resource conservation agencies and organizations. These include species that are state and/or federally listed as Rare, Threatened, or Endangered; those considered as candidates or proposed for listing; species identified by CDFG and/or USFWS as species of concern; and plants considered by the California Native Plant Society to be rare, threatened, or endangered. A number of special-status species are known, or have potential, to occur in the Park (please refer to Section 2: Existing Conditions).

Goal ER-1.2: Manage for the perpetuation of special-status plant, terrestrial wildlife, and aquatic species within the Park, in accordance with state and federal laws.

- **Guideline ER-1.2-1:** Monitor the distribution, extent, and condition of special-status species populations within the Park.

- **Guideline ER-1.2-2:** Protect special-status species to the degree necessary to maintain or enhance their populations within the Park.

- **Guideline ER-1.2-3:** Enhance and/or restore special-status species habitat where feasible and compatible with established Park uses.

- **Guideline ER-1.2-4:** Provide special protection for federally and state-listed threatened and endangered species as required by state and federal laws and regulations.

- **Guideline ER-1.2-5:** Implement appropriate measures to avoid or minimize impacts to special-status species from maintenance activities, facility development, visitor use, and other Park actions, as required by state and federal resource protection laws and regulations. These may include, but not be limited to, avoidance of construction activities and vegetation removal during bird nesting seasons; alignment of trails to minimize vegetation removal; implementation of buffer areas around sensitive resources; and timing restrictions for in-water construction to avoid disruption of fish migration, spawning, and rearing periods.

- **Guideline ER-1.2-6:** Educate Park visitors regarding special-status species protection and management activities.

Non-Native Invasive Species

Non-native invasive plant species (i.e., invasive weeds) can dominate native plant communities or open water areas and degrade fish and wildlife habitat, resulting in a decline in native species diversity and abundance. Invasive weeds can further threaten natural resources and developed areas by damaging adjacent farm crops, causing increased fire incidence and intensity, or increasing flooding and erosion. Feral cats and other non-native mammals (e.g., black rats) can have a substantial negative effect on native wildlife populations. Feral cats prey heavily on native wildlife, particularly small and medium sized birds and mammals. Black rats have been documented as the primary predators of bird nests in some riparian habitats in northern California. The numbers of invasive or problematic plant and wildlife species can be increased by incompatible management actions and visitor uses.

Goal ER-1.3: Reduce the presence of invasive non-native plant species.

- **Guideline ER- 1.3-1:** Control or eliminate federally and state-listed noxious weeds, noxious weeds listed on California Invasive Plant Council's list: "Exotic Pest Plants of Greatest Ecological Concern in California," and other invasive weeds that can result in degradation to native plant and wildlife habitat in the Park.

- **Guideline ER-1.3-2:** Reduce the extent and prevent the spread of all invasive weeds to obtain maximum habitat diversity where feasible.

Goal ER-1.4: Reduce the numbers of feral and other problematic non-native animals, particularly those that have a negative effect on the populations of native special-status species.

- **Guideline ER-1.4-1:** Monitor the presence of feral and other potentially problematic, non-native animals (e.g., domestic cats, black rats, starlings, and cowbirds).

- **Guideline ER-1.4-2:** Where appropriate and feasible, develop a control plan to reduce the numbers of non-native and feral animals that have a negative effect on populations of sensitive species.

- **Guideline ER-1.4-3:** Inform Park visitors about the negative effects of releasing and/or feeding animals in the Park. Consider including this information in interpretive and educational programs at the Park.

Habitat Corridors

Habitat corridors connect areas of habitat that may otherwise be isolated. Such corridors facilitate movement of animals, including dispersal and migration. They may also facilitate dispersal of seeds. The Sacramento River, its tributaries, and their associated habitats, serve as habitat corridors. The river is used as a migratory pathway by a variety of aquatic species, including anadramous fish. Migratory birds are also dependent upon the river, Big Chico Creek, and their riparian and oak woodland habitats.

Goal ER-1.5: Preserve and enhance, as appropriate, habitat corridors provided by the Park and between the Park and other areas of similar habitats to maintain or increase their usage by native plant and animal species.

- **Guideline ER-1.5-1:** Coordinate with adjacent landowners to ensure preservation and enhancement, as appropriate, of existing habitat corridors.

- **Guideline ER-1.5-2:** Consider establishment of corridors linking existing but isolated parcels through acquisition or easements, as appropriate.

PARK-WIDE GOALS AND GUIDELINES FOR CULTURAL RESOURCES

Recorded and unrecorded cultural resources within the Park and in the surrounding areas are an important component of the cultural heritage of the region. These include prehistoric and historic sites, features, and artifacts, and include those linked to the prominent Bidwell family who donated much of the Park's land to the Department for the use and inspiration of the people of California. Preservation and interpretation of cultural resource features would be crucial in understanding early Native American and historic land use patterns in the vicinity of the Sacramento River.

Overall Goal ER-2: Protect the cultural resources within the Park, providing interpretive and educational opportunities, where feasible.

Archeological (Prehistoric) and Historic Resources

Because no comprehensive archaeological survey has been conducted, the extent and significance of cultural resources (includes prehistoric and historic resources) in the Park is not fully understood at this time. Approximate locations of some important cultural resources in the general vicinity of the Park are known (e.g., Chico Landing, Bidwell Ferry, Reavis Ferry, and Chico Free Bridge), but because of the dynamic nature of the adjacent river system, many of these resources have not been formally documented or assessed for significance. The locations of other potential cultural features (e.g., Giannelli Bridge, Sea Scout station, Tyler Dance Hall) are more well-defined, but again, they have not been fully documented.

Given the present lack of a comprehensive assessment of prehistoric and historic resource locations within and in the vicinity of the Park, the compilation of a cultural resources data base is critical. As the most important step in the preservation of cultural resources is detailed information on their locations, conditions, and cultural and temporal associations, the development of this data is an integral component to the protection of cultural resources in the Park, and associated interpretive efforts.

Goal ER-2.1: Locate and assess the significance of cultural resources within the Park.

- **Guideline ER-2.1-1:** Develop a Cultural Resource Management Plan (CRMP) for the Park. As part of the development of a CRMP, a comprehensive survey of the Park is necessary to survey, assess, and record known archaeological and historical resources

within the Park. In addition, the CRMP will provide recommendations for the protection, preservation, and interpretation of significant cultural resources.

- **Guideline ER-2.1-2:** Perform cultural resource investigations of development sites prior to the construction of facility developments. If significant cultural resources are found, implement protective measures in compliance with federal and state laws and regulations.

- **Guideline ER-2.1-3:** Investigate the presence of cultural resources on nearby properties in collaboration with other stakeholders, where feasible.

Park-wide Goals and Guidelines for Watershed Management

The Park's primary natural feature is the Sacramento River system. The various subunits are either located directly along the main river channel or at the confluence of the river and several of its tributaries, including Big Chico Creek and Pine Creek. These waterways are important for navigation, recreation, agricultural and urban water supply, and wildlife habitat. In consideration of these purposes, water quality and river dynamics are major issues in the Park planning process.

Overall Goal ER-3: Operate the Park within the context of natural watershed functions, and promote watershed health, wherever possible.

River Dynamics and Flooding

The natural dynamics of intermittent flooding, meander migration, and sediment deposition help to maintain a healthy riparian ecosystem that provides crucial habitat for hundreds of resident and migratory birds, fish and wildlife species. It also provides a rich bed load of fine soil and nutrients in the floodplain that have enabled productive farming along the river.

Goal ER-3.1: Allow for the natural meander of the Sacramento River where the river course and the associated flood events would be compatible with public safety, environmental protection considerations, and principles of the Sacramento River Conservation Area Handbook (SRCAF 2002).

- **Guideline ER-3.1-1:** Monitor river course changes and areas of excessive erosion caused by the river.

- **Guideline ER-3.1-2:** Minimize locating new facilities and bank stabilization features in areas likely to be within the river channel or sensitive habitats except where such facilities and features are necessary to maintain public safety or protection of sensitive habitat for special-status species.

Water Quality

The stretch of Sacramento River adjacent to the Park is a "water quality limited segment" of the Sacramento River as listed by the RWQCB on its Clean Water Act Section 303(d) List

(RWQCB 2003). Land uses in the Park and the surrounding areas may contribute runoff with pollutants and sediments that can degrade water quality, while the natural vegetation that characterizes the majority of the Park may improve water quality by filtering the water and trapping sediments. Sound planning decisions can help improve water quality, which is crucial in sustaining healthy aquatic habitats and migration corridors, maintaining safe conditions for visitors, and providing agricultural and urban water supplies to the region.

Goal ER-3.2: Operate Park facilities and manage resources in a manner that does not contribute to degradation in water quality of the watershed.

- **Guideline ER-3.2-1:** Implement Best Management Practices (BMPs) during construction, including the development of erosion control plans for projects involving excavation or other ground surface disturbances that would increase the potential for generating sediment-carrying runoff.
- **Guideline ER-3.2-2:** Establish, maintain, and preserve riparian vegetation buffers along riverbanks wherever feasible.
- **Guideline ER-3.2-3:** Design, maintain, and monitor use of trails so as to minimize erosion and soil compaction that contributes to erosion.

PARK-WIDE GOALS AND GUIDELINES FOR SCENIC RESOURCES

The aesthetic quality of the Park is based on its proximity to the Sacramento River and associated natural environment. As such, the Park exhibits a riverine landscape that can be appreciated by Park visitors, as well as casual "passers-by" that travel by the Park. In managing for the aesthetic quality of the Park, three key issues must be considered – the physical resources that influence the scenic quality of the Park, public viewpoints that provide access to the views of these scenic resources, and the integration of management proposals, such as facility development, into the existing landscape.

Overall Goal ER-4: Preserve, perpetuate, and provide access to the distinctive landscape qualities that reinforce the general character of Bidwell-Sacramento River State Park.

Scenic Resource Protection

The scenic quality of the Sacramento River and the surrounding natural and agricultural environment is a significant attraction of the Park. While views are generally limited within the Park by the flat topography and dense vegetation, some viewpoints from the Park, namely along the river, offer expansive views of the river and its surroundings. Moreover, visitors boating on the river also have uninterrupted views of the river and the adjacent woodland. Preservation of the natural appearance of the river-based viewshed is facilitated by the preponderance of public land ownership along this stretch of the Sacramento River.

Goal ER-4.1: Preserve the natural landscape appearance of the Sacramento River corridor and its tributaries.

- **Guideline ER-4.1-1:** Protect riparian woodland for its aesthetic value, as well as its natural processes and functions.

- **Guideline ER-4.1-2:** Establish visual screening of existing and proposed facility developments that are visible from the river or shoreline using natural vegetation wherever possible.

- **Guideline ER-4.1-3:** Consider the natural aesthetics of the Sacramento River when siting and designing signage in support of the Park and its facilities.

- **Guideline ER-4.1-4:** Shield light sources wherever possible to reduce light pollution that can degrade nighttime views.

- **Guideline ER-4.1-5:** Support activities that promote debris clean-up in and along the Sacramento River and its tributaries.

- **Guideline ER-4.1-6:** Review proposed development projects in proximity to the Park and provide input to local jurisdictions and public agencies regarding the visual impacts of developments along the Sacramento River that are visible from the Park.

Public Viewpoints

Public viewpoints are locations at which clearings in the vegetation give way to expansive views of the waterways in the foreground and the riparian vegetation or the surrounding agricultural uses in the background. Public access to these viewpoints, through trails or roadways, enhances the visitor's appreciation of the Park and the riparian environment.

Goal ER-4.2: Develop public viewpoints serving the Park's scenic resources, focusing on views of the Sacramento River and its tributaries from different vantage points throughout the Park.

- **Guideline ER-4.2-1:** Designate public viewpoints within the Park (e.g., along trails) where views of the waterways are unobstructed by existing vegetation or other natural features.

- **Guideline ER-4.2-2:** Coordinate with federal, state, and local jurisdictions to develop vehicle "pull-out" areas along public roadways serving the Park, where appropriate in consideration of traffic safety and other environmental concerns. Consider integrating interpretive signs or panels with road-side viewpoints as appropriate.

Design Standards and Guidelines

Facilities and signage with standardized design help to orient visitors to the location and boundaries of the Park. This is particularly important given the multitude of public lands in the vicinity that are owned and managed by various agencies and organizations with varying

operational policies. Design guidelines can also help to ensure visual and environmental compatibility of future development with the established land use pattern and existing natural setting.

Goal ER-4.3: Establish a uniform and consistent appearance of facilities and landscapes within the Park that are aesthetically pleasing and compatible with the landscape setting.

- **Guideline ER-4.3-1:** Develop and implement design standards and guidelines for all permanent Park facilities, such as signs, interpretive panels, trails, day-use areas, campgrounds, etc.
- **Guideline ER-4.3-2:** Develop and implement design standards and guidelines for landscaping plans that can be implemented in conjunction with facility development.
- **Guideline ER-4.3-3:** Replace existing (older) signs as needed using updated design standards and guidelines to ensure uniformly designed signs.
- **Guideline ER-4.3-4:** Support the development of comprehensive design standards and guidelines for the entire upper Sacramento River system that establishes standard signage (i.e., symbology) for facilities and other features along the river.

3.2.2 Visitor use and Opportunities

Establishing or maintaining public access and high-quality use of Bidwell-Sacramento River State Park is one the primary considerations in developing this Plan and will be used as a gauge in evaluating its ultimate success. The development of visitor use and opportunities parallels the efforts for resource protection, as both are management directives of the State Parks system. Opportunities to integrate visitor use and resource protection are particularly beneficial from a public and land stewardship perspective. Three main aspects of planning for visitor use and opportunities are considered in this Plan: (1) recreation, (2) interpretation and education, and (3) circulation and access

Park-wide Goals and Guidelines for Recreation

The Park is an important recreational resource for the greater Chico area and the surrounding region, as it is the primary point of access to the Sacramento River for the local residents of Butte and Glenn counties. Furthermore, of the various state and federal agencies owning land in the region, the Department is the only one with a mission to provide recreational opportunities.

The Park supports a large variety of recreational activities for different visitor types, and at times it accommodates a large number of visitors. A variety of facilities and programs are needed to fully accommodate the multitude of recreational needs of existing and future visitors. These facilities and programs must be compatible with the resource values of the Park if it is to remain a popular recreational attraction for the region.

Overall Goal VU-1: Provide recreational opportunities associated with the unique resources of the Sacramento River and its riparian and Oak Woodland environments.

River Access

The primary recreational attraction of the Park is the access it provides to the Sacramento River. Popular activities in the river include boating, fishing, tubing, kayaking, swimming, and wading. The Park features two boat ramps for both motorized and non-motorized (cartop) boat launching, as well as a number of undeveloped areas, such as gravel bars, that provide additional launching opportunities for non-motorized boats. The continuing growth in the demand for recreational boating opportunities and law enforcement needs on the river, intensified by the relative shortage of functional boat ramps in the area, may be accommodated by new or expanded facilities at the Park. Coordination between the agencies that operate boat launch facilities is an important key to providing sufficient and appropriate boating access in the region.

Goal VU-1.1: Expand boat launching opportunities serving motorized and non-motorized boating activity based on availability of appropriate sites.

- **Guideline VU-1.1-1:** Evaluate improvements to the existing boat launch areas (i.e., Irvine Finch and Pine Creek Landing) to accommodate larger vehicles and vessels, and repair deficiencies in existing ramps.
- **Guideline VU-1.1-2:** Provide expanded parking capacity, including boat trailer parking, at existing boat launch areas, based on local and regional demand and the availability of land.
- **Guideline VU-1.1-3:** Consider the development of a non-motorized (cartop) boat launch facility at appropriate locations at the Park.
- **Guideline VU-1.1-4:** Collaborate with other public agencies and organizations in identifying appropriate locations for motorized boat launch facilities in the region. Support the development of additional motorized boat facilities in the region (outside Bidwell-Sacramento River State Park) as demand warrants.
- **Guideline VU-1.1-5:** Explore cost-sharing opportunities for maintaining existing and developing new boat launch facilities with other public agencies, namely the U.S. Army Corps of Engineers and the California Department of Boating and Waterways.

Goal VU-1.2: Accommodate recreational access to the Sacramento River, while promoting the safety of Park visitors.

- **Guideline VU-1.2-1:** As appropriate, provide information regarding safe water-based recreation at appropriate river access points throughout the Park.

- **Guideline VU-1.2-2:** Control access to the river, as necessary, during peak-period recreation periods in coordination with other public land managers and law enforcement agencies.

Day-Use Areas

While day-use areas are used as staging for hiking, birding, and other recreational activities, the most traditional use of day-use areas is picnicking, an activity that may be enjoyed by people of all ages and abilities. Picnicking is one of the most popular recreation activities in the region, with demand increasing as population in the area grows. Facilities for picnicking can vary widely from simple benches located where one can enjoy the scenery, to individual picnic tables located in the shade of trees, to large covered structures with many tables and benches for larger groups. Amenities that may be considered for day-use areas include shade ramadas, barbecues, drinking fountains, restrooms, and trash receptacles. The demand for the different types of picnic facilities and other amenities vary by user group, with the large, growing and diverse population in the project area tending to favor large picnic facilities with sufficient parking that can accommodate large family and group events.

Goal VU-1.3: Develop additional day-use facilities near recreational or aesthetic amenities based on availability of appropriate sites.

- **Guideline VU-1.3-1:** Develop new day-use areas at appropriate locations throughout the Park, based on local and regional demand and in consideration of environmental constraints.

- **Guideline VU-1.3-2:** Maintain or expand existing day-use areas throughout the Park as demand warrants. Assess opportunities for linkage of existing and proposed day-use areas and other facilities proposed as part of this Plan where appropriate.

- **Guideline VU-1.3-3:** Design new and expanded day-use facilities to accommodate a range of user groups, including en-route visitors, families, and small and large groups to the extent feasible depending on the characteristics of the site. Consider the integration of at least one reservable group day-use area catering to special events into proposals for new or expanded day-use facilities.

- **Guideline VU-1.3-4:** Provide appropriate amenities at new or expanded day-use facilities that may include entrance kiosks for controlled entry, shade ramadas, flush restroom facilities, potable water, and trailhead access to Park and regional trail systems where available.

Camping

Overnight camping facilities are in high demand in the region. There are no developed campgrounds from the Park south to Colusa, a stretch of approximately 50 river miles. Opportunities for environmental boat-in camping are generally more available, but are limited to gravel bars below the ordinary high-water mark on the river. Both developed and

environmental (or primitive) camping opportunities have been identified by Park users as a desired feature of future Park development, with greater emphasis and need for developed campgrounds relative to environmental campsites.

Goal VU-1.4: Develop a range of overnight camping opportunities in the Park based on availability of appropriate sites.

- **Guideline VU-1.4-1:** Consider the development of a walk-in or boat-in environmental campground at an appropriate location within the Park, incorporating features of habitat restoration, where feasible.

- **Guideline VU-1.4-2:** Consider the development of a developed overnight campground at an appropriate location within the Park, which could include both family and group campsites. Incorporate provisions to address flood events (e.g., raise restrooms, concrete tables/pads) if the site is located within the designated floodplain.

- **Guideline VU-1.4-3:** Explore cost-sharing opportunities for the development of campground facilities with the U.S. Army Corps of Engineers as part of their Hamilton City flood control project.

Fishing Access

The Park is recognized for the high-quality fishing opportunities it provides. Bank fishing occurs at a number of locations throughout the Park, and boat fishing is accommodated through the Park's boat launch facilities. As fish spawning and rearing habitat is improved in the Sacramento River watershed, fish populations can be expected to increase, creating more opportunities for fishing. For visitors without boat access, sufficient fishing access along the riverbank is crucial in encouraging and enhancing fishing activity.

Goal VU-1.5: Expand and improve fishing access along the Sacramento River and its tributaries, including access for riverbank fishing.

- **Guideline VU-1.5-1:** Improve existing roads throughout the Park that provide access to established bank fishing opportunities, where feasible, to allow for additional parking opportunities and improved circulation.

- **Guideline VU-1.5-2:** Work with local jurisdictions to identify, sign, and improve locations that provide access to established bank fishing locations at the Park, where appropriate, based on public safety and environmental constraints.

- **Guideline VU-1.5-3:** Consider opportunities to develop additional parking areas on Park property that could facilitate access to established bank fishing locations along the Sacramento River and its tributaries.

Wildlife Observation

Public interest in wildlife observation, including bird watching and photography, is expected to increase substantially in the future as bird and wildlife populations increase in response to habitat improvements on established and recently acquired conservation lands in the surrounding area. Wildlife observation, especially bird watching, typically occurs on trails located in the Park. Hunting on adjacent lands and the use of motorized boats and jet skis limit bird watching and wildlife viewing because of public safety concerns and noise impacts that interfere with hearing bird calls or cause wildlife to move away.

Goal VU-1.6: Provide high quality wildlife observation opportunities throughout the Park.

- **Guideline VU-1.6-1:** Locate and design trails to provide access to high-quality wildlife-viewing areas within the Park where feasible.
- **Guideline VU-1.6-2:** Facilitate high-quality wildlife viewing opportunities through the use of appurtenances, such as bird boxes, that attract wildlife to the Park without encouraging unnatural wildlife behavior.
- **Guideline VU-1.6-3:** Provide amenities, such as interpretive displays and published bird lists, at day-use areas and along trails that enhance wildlife viewing opportunities.

Concessions

There are currently no concession services at the Park, although seasonal concessions have been used at the Park in the past. Looking to the future, the use of concession services may be considered appropriate when evaluated in the context of proposed recreational development proposed in this plan. Concession services could improve recreational opportunities at the Park by providing supplies and services that facilitate a high-quality recreational experience.

Overall Goal VU-1.7: Incorporate concession services serving recreational facilities at the Park.

- **Guideline VU-1.7-1:** Explore opportunities for temporary and permanent concession services as part of facility development proposals.
- **Guidelines VU-1.7-2:** Consider the provision of temporary concession services during peak recreation periods and special events.

Park-wide Goals and Guidelines for Interpretation and Education

Interpretation of the Park's natural and cultural resources can increase visitor appreciation of the diverse history of the region, including Native American practices and the rich agricultural influence of early settlers, and may promote public support for preserving, protecting, and restoring sensitive resources. Moreover, providing opportunities for public education can promote public safety, facilitate understanding of the riparian ecosystem and agricultural uses

of the area, and enhance the overall recreational experience for Park visitors. A successful interpretive and educational program can increase operational efficiency of the Park and foster a culture of ecologically sound Park stewardship for future generations.

An Interpretive Prospectus (1997) has been developed for the Park (please refer to Appendix E). It provides guidance for immediate interpretive development at the Park, but is flexible to allow modifications as part of future planning actions, including the development of a General Plan for the Park.

Overall Goal VU-2: Provide educational and interpretive opportunities associated with the unique natural and cultural resources of the Sacramento River and its riparian and Oak Woodland environments.

Interpretive Themes and Periods

The Interpretive Prospectus includes a set of interpretive themes for the Park (see Appendix D). It includes one unifying theme and a set of primary and secondary themes for each Park area, which define the use and meaning of that area and reflect its contribution to the whole Park. The unifying theme for the Park is:

> *The Riparian/Riverine Habitat is Dynamic and Critically Important to the Health of the Sacramento River and All Life Associated with It.*

In addition, a set of interpretive periods have been developed for the Park, which dictate the time period within which interpretive efforts are focused. The primary interpretive period for the Park is the Present, and secondary periods include *Prehistoric Origins*, *Human Prehistory*, *Early History and General & Annie Bidwell*, and *Annie's Gift Up to the Present*. .

Goal VU-2.1: Communicate a consistent set of meaningful and interesting interpretive and educational messages to the public via interpretive programs at the Park.

- **Guideline VU-2.1-1:** Implement the Interpretive Prospectus (1997) adopted for the Park. All new interpretative/educational programs and facilities should conform to the primary and secondary interpretive themes and periods in the prospectus.
- **Guideline VU-2.1-2:** Review and update the Interpretive Prospectus as appropriate to reflect current understanding of the natural and cultural resources and emerging use patterns at the Park.
- **Guideline VU-2.1-3:** Update the Interpretive Prospectus when new properties are added to the Park to reflect new interpretive opportunities associated with these new properties.

Events and Programs

Active public outreach events and programs, such as school group tours, community events, one-day classes, and educational camps, are an opportunity to provide in-depth education opportunities tailored for special groups, families, tourists, and other people with specialized interest or needs, as well as the community as a whole. Because the educational and community programs allow Park staff to engage the public in an interactive format, the relationship between the Park and the community can be enhanced.

Goal VU-2.2: Provide educational and recreational public outreach events and programs to various community groups.

- **Guideline VU-2.2-1:** Develop curriculum-based study guides for school outreach.
- **Guideline VU-2.2-2:** Operate staff/volunteer-guided tours for community groups.
- **Guideline VU-2.2-3:** Collaborate with community groups to identify opportunities to provide new educational programs that are consistent with the themes in the Interpretive Prospectus.

Interpretive Signage and Kiosks

Interpretive panels, kiosks, and other permanent displays can serve as a low-impact and low-maintenance method to transmit interpretive and educational messages to Park visitors if they are planned in consideration of the natural aesthetics of the Park. They can be used in conjunction with other informational signage that informs visitors regarding Park rules and guidance on public safety. While interpretive panels and kiosks allow only limited interactive opportunities with visitors, the permanent displays are an efficient way of conveying information to Park visitors.

Goal VU-2.3: Disseminate interpretive and educational information to Park visitors and the local community via non-staffed facilities.

- **Guideline VU-2.3-1:** Install interpretive signage, kiosks, and map displays throughout the Park and in the surrounding communities, focusing primarily on areas along existing and proposed trail systems, parking areas, and public viewpoints.
- **Guideline VU-2.3-2:** Develop interpretive facilities and school outreach programs that provide connections between the Bidwell Mansion State Historic Park and the Park.
- **Guideline VU-2.3-3:** Consider the natural aesthetics of the Park when siting and designing interpretive facilities, such as signs, panels, and kiosks.

Visitor Center

A visitor center can serve as a centralized location for a multitude of visitor and other services, including the dissemination of information regarding Park facilities and services, special events, recreational opportunities and restrictions, interpretive and educational opportunities, the mission of the Park, resource values and sensitivities, and basic contact and emergency reporting information. It can also potentially support features, such as theme-based exhibits and a cooperative gift-shop facility, which accentuate the overall purpose of the Park. The Park's close proximity to other state and federal public lands presents an opportunity for collaboration to develop a regional visitor center at an optimum location that can serve multiple public planning and outreach efforts.

Goal VU-2.4: Evaluate opportunities to develop a visitor center to provide multiple visitor services at an easily accessible location that serves local and regional residents.

- **Guideline VU-2.4-1:** Consider the development of a new visitor center that would serve the Park and potentially other public lands in the region. The size and amenities at the visitor center would be dependent on potential for multi-agency teaming opportunities.
- **Guideline VU-2.4-2:** Provide for a multitude of visitor services at the visitor center in an effort to provide a consolidated recreational and interpretive/educational experience.
- **Guideline VU-2.4-3:** Consider opportunities to integrate scientific research center in conjunction with the proposed visitor center.

Park-wide Goals and Guidelines for Circulation and Access

Parks that provide facilities for multiple modes of transportation increase accessibility for different user groups. Circulation facilities should be designed for safety (e.g., turning lanes, no sharp turns, sufficient width), convenience (e.g., parking, directional signage), and connectivity (e.g., connection between Park areas, points of interest, and the roadway system). Because of the discontiguous nature of the Park subunits, regional cooperation would be crucial in developing a well-designed and user-friendly circulation network.

Overall Goal VU-3: Provide safe, convenient, and well-connected facilities for multiple modes of transportation within and between the Park's subunits.

Visitor Access

Visitor access to the Park is an important consideration in future Park planning efforts. Visitors typically access the Park via River Road on the east side of the river and via SR 32 on the west side of the river. Because access to the Park is restricted to these two public roadways, it is imperative that the alignment, physical condition, and traffic along these roadways are conducive to the visitor access. In addition, there is no single entrance point to the Park and

entrance signs at the various subunits, where present, are not prominent, resulting in low recognition of Park facilities.

Public transportation, including alternative transportation methods, can facilitate visitation by students or others who cannot or choose not to drive to the Park. Currently, Glenn County provides bus service on SR 32 between Hamilton City and Chico; however, this bus route does not stop at the Park. Bus service that would connect the Park and the communities of Chico and Hamilton City, particularly on weekends or special occasions, has the opportunity to substantially increase accessibility to the Park; however, feasibility of providing bus service would depend on the expected level of existing and future use.

Roadway safety is another consideration in Park access. Because the Park is located along two major roadways in a rural area, vehicular traffic often travels at excessive speeds. Intersections with driveways, trail crossings, and other roadways should be designed to avoid collisions and other accidents involving vehicles, pedestrians, and bicyclists.

Goal VU-3.1: Provide for safe and readily available access to the Park from the local roadway system serving the Park.

- **Guideline VU-3.1-1**: Work with local jurisdictions to install directional signage along major roadways that direct Park visitors to the Park.
- **Guideline VU-3.1-2**: Install Park entrance signs at all subunit entrance points consistent with design standards and guidelines developed for the Park.
- **Guideline VU-3.1-3**: Coordinate with local jurisdictions and Caltrans to maintain and, where necessary, improve roadway conditions serving the Park, including providing review for development projects that could affect visitor access to the Park.
- **Guideline VU-3.1-4**: Work with Butte County in exploring opportunities for the realignment of River Road near the Big Chico Creek Riparian Area complex to facilitate visitor access.
- **Guideline VU-3.1-5**: Conduct traffic analyses for all major facility development projects when required. Comply with applicable circulation design standards and guidelines for all proposed facility developments that may affect the public roadway system.

Goal VU-3.2: Encourage the use of public transportation to the Park.

- **Guideline VU-3.2-1**: Coordinate with Butte and Glenn counties to establish seasonal bus service to the Park, and consider permanent service as demand warrants.
- **Guideline VU-3.2-2**: Provide auxiliary facilities in support of public transportation, such as public bus stops and turn-around space.

Parking

Availability of parking is a constraint on the number of people that can visit the Park by automobiles and buses. Because the Park is not within short walking distance from nearby communities (it is located approximately 6 miles from the City of Chico) and visitors commonly drive to the Park, there is the need to provide sufficient parking capacity at each major point of interest, particularly at boat launch areas, throughout the Park.

Goal VU-3.3: Provide car and bus parking spaces for points of interest where environmentally compatible and as space allows.

- **Guideline VU-3.3-1:** Accommodate bus access to the Park, where feasible, via bus parking and turnaround areas. Such facilities would serve organized groups utilizing the interpretive and educational resources at the Park.

- **Guideline VU-3.3-2:** Incorporate sufficient parking capacity, serving a range of vehicle types, into proposed facility development plans.

Internal Circulation and Access

Once visitors arrive at the Park, it is equally important to facilitate efficient circulation within and between Park subunits. The predominant mode of internal circulation at the Park is and will continue to be the Park's trail system, as there are no major vehicular roadways that promote internal circulation. Trails can serve a wide range of non-motorized activities. They provide footpaths to fishing access areas that are located away from major roadways, access to high-quality wildlife observation and sight-seeing opportunities, and can accommodate multiple modes of transportation, including walking/hiking, bicycling, horseback riding, and even water-based transportation such as kayaks and canoes. As trail development in the region progresses and as populations grow, it is anticipated that the Park will experience an increased demand for multi-use trail systems, particularly along the river corridor. Issues that must be considered in the development of a sound internal circulation plan include the types of trail systems proposed, impacts to vegetation and wildlife, and the need for directional signage and maps as appropriate. By informing visitors of their location and adjacent land ownership patterns, directional signage and maps can orient Park visitors and assist them to avoid trespassing on private lands.

Another consideration in promoting internal circulation throughout the Park and access to recreational opportunities is Americans with Disabilities Act (ADA) accessibility. Visitors with disabilities may be precluded from gaining access to and/or participating in certain recreational activities. There needs to be a concerted effort to promote the accessibility of Park facilities to people with varying abilities. As technologies and legal requirements established by the ADA evolve, the approach to ADA accessibility within the Park will also change.

Goal VU-3.4: Provide for an interconnecting trail network within the Park where feasible and consider linkages to regional trail systems where appropriate.

- **Guideline VU-3.4-1**: Consider the development of new and expanded internal loop trails and associated trailheads at appropriate subunits of the Park in an effort to link Park properties.

- **Guideline VU-3.4-2**: Coordinate with state and federal agencies to develop a regional loop trail system that would connect the Park with other nearby public land holdings.

- **Guideline VU-3.4-3**: Incorporate provisions for safe road crossings, where applicable, in the development of proposed trail systems.

- **Guideline VU-3.4-4**: Evaluate the suitability of existing and proposed trail systems for multiple uses in consideration of public safety and environmental factors.

- **Guideline VU-3.4-5**: Provide amenities, such as drinking fountains, restroom facilities, and interpretive panels, along trails where appropriate.

- **Guideline VU-3.4-6**: Coordinate with local jurisdictions and organizations to incorporate connections between bicycle trails within the Park and the regional bicycle trails system.

Goal VU-3.5: Connect and integrate the Park's subunits through the establishment of a canoe trail along the Sacramento River system.

- **Guideline VU-3.5-1**: Coordinate with federal and state agencies and local jurisdictions to develop a local canoe trail that would connect the existing and proposed boat launch areas throughout the Park, as well as providing access to other nearby public lands as appropriate.

- **Guideline VU-3.5-2**: Support the development of a comprehensive Sacramento River canoe trail that would be integrated with the proposed canoe trail at the Park.

- **Guideline VU-3.5-3**: Provide informational and interpretive signage along the Park canoe trail, while preserving the aesthetic qualities of the river corridor. Public information may include safety guidelines, rules of use, and location and alignment of canoe trail. Interpretive information may focus on interpretation of the waterway and associated resources. Coordinate with local private and public property owners in determining the appropriate placement of signage and developed facilities (e.g., camping areas) as appropriate.

- **Guideline VU-3.5-4**: Explore opportunities for integration of seasonal boating and equipment concessionaire that would serve canoe trail users.

Goal VU-3.6: Provide access to recreational opportunities to all people regardless of physical limitations.

- **Guideline VU-3.6-1**: Comply with existing and future requirements for ADA accessibility.

Goal VU-3.7: Develop a system of signage that directs, orients, and educates visitors within the Park.

- **Guideline VU-3.7-1**: Install Park maps selectively throughout the Park, including "you are here" identifiers, as appropriate.
- **Guideline VU-3.7-2**: Clearly delineate Park boundaries through the use of coordinated informational signage or other techniques.
- **Guideline VU-3.7-3**: Encourage delineation of adjacent public land boundaries.
- **Guideline VU-3.7-4**: Integrate information regarding Park rules and public safety, including the risk of wildfire, into directional and informational signage.
- **Guideline VU-3.7-5**: Install river view/access signs that direct visitors to appropriate locations along the river for safe access and high-quality views along the Sacramento River, implementing uniform design standards as they are developed for the Sacramento River corridor.

Goal VU-3.8: Provide for the safety of Park visitors while circulating within the Park.

- **Guideline VU-3.8-1**: Separate vehicle traffic from pedestrians, bicyclists, and equestrians wherever feasible.
- **Guideline VU-3.8-2**: Install signage that encourages safe driving practices for vehicles entering the Park that are compatible with pedestrians, bicyclists, and equestrians use (e.g., speed limits, "share the road," pedestrians ahead).

3.2.3 Administration and Operations

The administration and operation of Bidwell-Sacramento River State Park is an important component of overall Park management. Not only does it affect internal Park resources, such as staffing and funding, it indirectly affects the visitor experience by influencing the environment within which people are recreating or otherwise using the Park.

As used here, the term "administration and operation" refers to a broad category of management actions that are, for the most part, separate from direct management of the Park's natural resources or recreational facilities at the Park; instead, administration and operation reflects day-to-day operation of the Park as a whole, which is often linked to management approaches for integrating operations of the Park within the larger physical and planning environment within which the Park functions. While this section proposes broad guidance on the administration and operation of the Park, it is not intended to constitute a formal Operations Plan for the Park.

For the purposes of this plan, administration and operation of the Park can be organized into four components: (1) Park boundaries, (2) day-to-day operations, (3) facility development, and (4) local and regional coordination.

Park-wide Goals and Guidelines for Park Boundaries

As it exists today, the current extent of Bidwell-Sacramento River State Park is relatively small for a State Park unit, totaling just over 200 acres in size. In addition, the Park is a conglomeration of several discrete properties that function separately in providing recreational opportunities to the public and enhancing resource values in the Park. Although the approximate location of these properties (or subunits) is known, there exists some degree of uncertainty regarding their precise boundaries. Because of the fragmented nature of the Park's subunits, which is not visitor-friendly and can result in operational inefficiency, there is the desire to expand the Park, where feasible, to promote connectivity between the Park's subunits, as well as with other public land in the region, and to establish logical Park boundaries based on existing geographic features.

Overall Goal AO-1: Establishment of well-defined Park boundaries that can serve as base for future expansion in accordance with the vision and goals for the Park.

Delineation of Existing Park Boundaries

The delineation of existing Park boundaries is an important first step in planning for the future of the Park. Park boundary issues are prevalent mainly on the east side of the Sacramento River in Butte County. Discrepancies have arisen because of the lack of surveyed boundary information, and have been further compounded by the meandering nature of the river.

Goal AO-1.1: Attain a clear understanding of existing Park boundaries.

- **Guideline AO-1.1-1:** Work with Butte and Glenn counties to survey existing Park boundaries. Areas of concern include: (1) Big Chico Creek bridge overpass, (2) north end of Big Chico Creek Riparian Area along west side of River Road, (3) south end of Indian Fishery property near Old Chico Landing, and (4) Pine Creek Landing subunit.
- **Guideline AO-1.1-2:** Clearly delineate Park boundaries through the use of fencing or signage so staff and visitors understand the extent of State Park land.

Future Property Additions

Bidwell-Sacramento River State Park has the potential to grow over time through property additions. By increasing the size and diversifying the characteristics of the Park, land acquisitions can provide added recreational opportunities and natural and cultural resources to the Park for visitors' enjoyment as well as for the preservation and management of these resources.

Goal AO-1.2: Expand the Park to promote consolidated management of natural resources and recreational opportunities.

- **Guideline AO-1.2-1:** Acquire properties from willing-sellers as opportunities arise in order to achieve Park-wide goals.
- **Guideline AO-1.2-2:** Explore opportunities for funding of property acquisitions, including grant and bond funding sources.
- **Guideline AO-1.2-3:** Explore opportunities for land exchanges and Memorandums of Understanding (MOUs) with other public agencies that could improve operational efficiency at the Park.

Park-wide Goals and Guidelines for Ongoing Operation of the Park

The proposed General Plan entails major changes for Park resources and facilities. As a result, there is the need to reconsider existing Park operations at both the planning and ground level. This component of the plan characterizes broad-level goals and guidelines for day-to-day operations of the Park and its relationship to the visitor experience and management of important natural resources. It does not address specific changes to staffing and organization, which will be adjusted as necessary for successful implementation of the Plan.

Overall Goal AO-2: Manage, maintain, and operate Park facilities to meet visitor needs.

Administrative Center

The location of the existing Park administrative center at the Indian Fishery is not well-suited for such a facility. The administrative center has been repeatedly subject to flood events, thus requiring an elevated modular office. There is also a lack of storage space for maintenance and other equipment, which must be re-located offsite to avoid damage during flood events. Lastly, the existing facility is located on the east side of the river, and therefore, does not represent a centralized location relative to the properties and facilities considered in this Plan.

Goal AO-2.1: Establish a centralized location for administrative facilities that promotes efficient management of the Park's resources.

- **Guideline AO-2.1-1:** Relocate the existing administrative center at Indian Fishery to a more appropriate location that meets the needs of the Park, as well as other State Park units in the Valley Sector, allowing for centralized operations and equipment storage. The siting of such a facility will consider the elevation of seasonal flood events to minimize potential property damage and opportunities for multi-agency use.

Park Maintenance

Maintenance of Park facilities has the potential to affect the visitor experience. Benefits of properly and regularly maintained facilities include, but are not limited to, an improved aesthetic character of the Park and increased utilization of recreational facilities.

Goal AO-2.2: Maintain Park facilities to meet visitor needs.

- **Guideline AO-2.2-1:** Establish standardized procedures for Park maintenance that addresses issues including, but not limited to, routine waste disposal and recycling, removal of silt and debris from developed facilities after flood events, and regular trail maintenance and clearing.

Emergency Services and Visitor Safety

Because of the nature of existing and proposed recreational opportunities and location along the Sacramento River, there exists the potential for emergency service needs for Park visitors.

Goal AO-2.3: Provide a safe environment for visitors to the Park.

- **Guideline AO-2.3-1:** Coordinate with local law enforcement agencies and emergency response providers in promoting the safety of Park visitors.
- **Guideline AO-2.3-2:** Work cooperatively with local jurisdictions and public agencies in providing a safe environment for Park visitors during special events, including safe access to and from the Park.
- **Guideline AO-2.3-3:** Accommodate access for emergency vehicles where appropriate throughout the Park, including emergency access during peak recreation periods and events.

Park-wide Goals and Guidelines for Facility Development

Adequate facilities, such as administrative office space, recreational amenities, trails, and roads, are critical for efficient management of the Park. Planning for the development of such facilities within the Park involves consideration of natural and physical factors. The Park is subject to a fluctuating natural environment, namely the dynamic nature of the Sacramento River, which must be considered in facility planning. In addition, the majority of the Park is located within the designated floodplain, which places additional constraints on development. Physical factors, including public infrastructure, which vary throughout the Park, also are an important consideration in facility planning.

Overall Goal AO-3: Develop facilities within the parameters of the Park's natural and physical environment, and in consideration of the safety of Park visitors.

Facility Siting and Design

One unique feature of the Park is that it operates within a dynamic river system that subjects Park facilities to natural river events, including meandering and flooding. These phenomena must be considered when planning for and designing new facilities, especially because the purpose and vision of the Park highlight the natural river system, one of the key features of the Park.

Goal AO-3.1: Site and design appropriate Park facilities to embrace natural river processes.

- **Guideline AO-3.1-1:** Allow appropriate facility development within the 100-year floodplain and designated Inner River Zone, incorporating site and facility design features to minimize potential damage from flood events, to the extent feasible.
- **Guideline AO-3.1-2:** Re-design existing facilities within the 100-year floodplain that are subject to repeated flooding to withstand flood events.

Utilities and Infrastructure

Sound facility planning must also consider the existing infrastructure serving the Park. Currently, Park properties on the east side of the river, except for portions of Indian Fishery, are not served by public water or wastewater disposal systems. These systems represent the opportunities for drinking water and flush restroom facilities, which are an important component of many of the recreational amenities proposed for the Park in this Plan.

Goal AO-3.2: Develop facilities that are supported by established infrastructure systems.

- **Guideline AO-3.2-1:** Connect new facilities to existing potable water and wastewater disposal systems wherever possible.
- **Guideline AO-3.2-2:** Coordinate with local jurisdictions to extend utilities and other infrastructure to the Park where it does not exist when determined necessary.
- **Guideline AO-3.2-3:** Where new utility infrastructure or facilities associated with public services are needed to serve the Park, implement measures that would minimize adverse impacts to the environmental quality at the Park to the extent feasible.

Air Quality and Noise Considerations in Facility Planning

In planning for the development of facilities at the Park, the Department needs to consider potential effects on the environment, including adverse impacts on local and regional air quality and the noise environment at the Park. Potential impacts related to air quality and noise are most prevalent during the construction phase of new developments, but can also be attributed to common recreation uses.

Goal AO-3.3: Develop facilities that do not conflict with ambient air quality and noise standards.

- **Guideline AO-3.3-1:** Consult with applicable air pollution control districts (APCDs) and/or air quality management districts (AQMDs) prior to any major facility development projects at the Park, and implement all rules and regulations as required by these agencies.

- **Guideline AO-3.3-2:** Establish appropriate campfire restrictions, through coordination with the local APCD/AQMD, to promote air quality in the region, in conjunction with the development of an overnight campground at the Park.

- **Guideline AO-3.3-3:** Ensure new facility development and site improvement projects, including associated construction activities and vehicular traffic, conform with applicable noise standards.

Visitor Safety

Another consideration during facility planning is visitor safety. It is important that adequate levels of staff and necessary services are planned for when considering the development of new facilities and/or property acquisitions. Such resources are integral in providing a safe environment for park visitors.

Goal AO-3.4: Ensure the safety of Park visitors during the planning and development of new Park facilities.

- **Guideline AO-3.4-1:** When planning new facility development or property acquisitions, include consideration of the needs for public safety personnel, equipment, and communication systems.

- **Guideline AO-3.4-2:** When reviewing potential new facility development or property acquisitions, assess the ability to provide for adequate public safety as part of the environmental review.

Sustainability

A widely used definition of sustainable development is a "development that meets the needs of the present without compromising the ability of future generations to meet their own needs". Sustainability is integrated as a basic tenet of this Preliminary General Plan, as illustrated in the management guidelines and recommendations for facility locations based on a natural and cultural resource–based opportunity and constraints analysis. This Preliminary General Plan also encourages adaptive management techniques to monitor and adjust approaches to resource and visitor management with long-term benefits for each. Sustainable design practices can also be incorporated into future area-specific projects during the planning and design phases. The benefits of sustainable design concepts and practices include:

- Increasing environmental benefits (conservation of natural resources and reduced waste)

- Reducing operating costs through less energy consumption
- Promoting better health for park visitors (for example, through use of fewer toxic and low-emitting materials and interior climate control)
- Increasing operations and maintenance efficiency (more durable products, less maintenance of toxic substances, lower maintenance costs from resource and energy conservation
- Using adaptive management techniques to monitor and adjust approaches to resource and visitor management for long-term benefits to each

Goal AO-3.5: Incorporate principles and practices of sustainability into the Park's design, improvements, and maintenance and operations, and utilize adaptive management principles, to the extent feasible.

- **Guideline AO-3.5-1:** To the extent feasible, consider sustainable practices in site design, construction, maintenance, and operations. Sustainable principles used in design and management emphasize environmental sensitivity in construction, the use of non-toxic materials and renewable resources, resource conservation, recycling, and energy efficiency.

- **Guideline AO-3.5-2:** Programs such as LEEDs (Leadership in Energy and Environmental Design)[1] should be consulted for development of facilities and site-related construction.

Park-wide Goals and Guidelines for Local and Regional Coordination

Bidwell-Sacramento River State Park represents one component of an extensive network of public lands in the region. Locally, these public lands are located in close proximity to the greater Chico area located east of the Park. In addition, there are private land holdings located throughout the immediate vicinity of the Park. Based on the extent of local private and public landowners and the Park's unique location to a growing urban area, it is critical that this Plan provides for goals and guidelines pertaining to local and regional coordination efforts.

Overall Goal AO-4: Cooperate with local landowners, communities, and public agencies to foster coordinated management of public lands along the Sacramento River.

Community Involvement

Based on its proximity to the greater Chico area, which represents a large visitor and volunteer base, the Park appears to be under-used from a community involvement

[1] LEEDs is a program of the U.S. Green Building Coalition.

perspective. There is an active local community that can serve as an important resource in both Park planning and program implementation. Fostering the relationship between the Park and the community can promote use of the Park so that more people can experience its unique natural and recreational resources and can result in improved land stewardship.

Goal AO-4.1: Allow local communities the opportunity to provide input into Park planning and environmental review processes.

- **Guideline AO-4.1-1:** Consider soliciting public input on important Park management issues.
- **Guideline AO-4.1-2:** Consider the use of visitor survey programs to solicit suggestions on techniques to improve management of the Park.

Goal AO-4.2: Provide opportunities for volunteers to participate in Park-wide programs.

- **Guideline AO-4.2-1:** Consider developing a Volunteer-in-Parks program for interpretive program involvement and support.
- **Guideline AO-4.2-2:** Consider establishing regularly scheduled Park clean-up days where the public can participate, especially after peak-period special events.

Goal AO-4.3: Improve the recognition of Bidwell-Sacramento River State Park in the local and regional community.

- **Guideline AO-4.3-1:** Develop a public outreach program that focuses on dissemination of information regarding the Park, including maps and special events.
- **Guideline AO-4.3-2:** Improve the signage at Park entrances.
- **Guideline AO-4.3-3:** Represent the Park by participating in local community events.

Coordination with Private Landowners

There are substantial private land holdings interspersed with the network of public lands in the vicinity of the Park. The resulting mixed land ownership pattern between private and public interests often leads to compatibility and access issues that affect local landowners and Park visitors.

Goal AO-4.4: Work with private landowners in proximity to the Park to minimize conflicts associated with the mixed public and private land ownership pattern in the area.

- **Guideline AO-4.4-1:** Delineate boundaries between public and private land interfaces using techniques such as fencing or signage.

- **Guideline AO-4.4-2:** Review future facility development proposals in the context of land uses on adjacent private property such that potential land use incompatibilities may be minimized through design features (e.g., buffers) or other means.

- **Guideline AO-4.4-3:** Implement habitat management and resource enhancement programs in a manner that takes into consideration adjacent land uses, such as agriculture.

Coordination with Public and Public-interest Landowners

The network of public lands in the vicinity of the Park includes properties that are part of the Sacramento River National Wildlife Refuge (USFWS) and the Sacramento River Wildlife Area (CDFG). In addition, The Nature Conservancy (TNC) owns substantial land holdings in the project area, as do other non-profit groups, such as River Partners. Based on location and often-related management objectives, it is critical that the proposed plan work in concert with the planning processes currently being undertaken by these other agencies and non-profit groups. A regional approach to resource protection and recreation opportunities will result in efficient management of all public lands in the area.

Goal AO-4.5: Establish a multi-agency approach to regional public lands management where practical and feasible.

- **Guideline AO-4.5-1:** Support the concept of a multi-organization task-force consisting of representatives from USFWS, CDFG, and interested non-profit groups to address local planning and resource management issues.

- **Guideline AO-4.5-2:** Coordinate with public land managers in planning for recreational developments throughout the Park, including exploring opportunities for cost-sharing agreements.

- **Guideline AO-4.5-3:** Integrate habitat management and resource protection efforts with other public agencies to maximize resource values throughout the Sacramento River corridor.

- **Guideline AO-4.5-4:** Evaluate existing MOU between the Department, CDFG, and USFWS, and consider revisions, as necessary, to meet Park-wide goals.

3.3 Area-Specific Management and Development

The previous sections of this General Plan focus on goals and guidelines specific to issues or topics common to the management of state Parks. Although that approach is useful in understanding the desired management approach for particular issues, it does not provide the spatial dimension to Park planning that is also a valuable tool for successful Park management. In other words, it is important to understand what type of management approaches and facilities are being considered for different areas of a Park unit. This section

describes potential area-specific management and facility prescriptions for the various subunits that comprise Bidwell-Sacramento River State Park.

3.3.1 Overview of Management Area Zoning

One tool that has been used to address area-specific management in other State Parks is management area zoning. The concept of management zones has been commonly used as a guide for systemizing land use and resource management in areas of a Park unit that have common characteristics and would be managed similarly. This tool is especially applicable to large parks that have a range of resources and/or other physical characteristics that vary across the park.

The concept of management zoning was considered for implementation in this General Plan; however, there was consensus that because Bidwell-Sacramento River State Park is relatively small in size, and for the most part, homogenous in terms of resources and recreational uses, the Park would not be conducive to the use of management zones. Instead, the planning process uses area concept planning that focuses on facility-specific development at different subunits of the Park as described below.

3.3.2 Area Concept Planning

Because this General Plan focuses on facility-specific planning for different subunits of the Park, it was critical to understand the need for and most appropriate placement of various types of recreational facilities and uses within the Park. The need for facilities within the Park was based on current levels of recreational uses, capacity of existing facilities, and recreational and demographic trends (see Chapter 2, Existing Conditions). The conceptual siting of facilities being considered for development within the Park was based on a range of factors including location of existing recreational uses, resource constraints, administrative and operational constraints, site access, etc. In considering the needs of the Park, existing facilities, and future trends, a proposed land use and facility plan has been developed as part of this General Plan (see Exhibit 3-1). The land use and facility plan shows the potential location of proposed facilities at the Park in terms of which facilities are being considered for each subunit of the Park; however, it is not intended to represent site-specific facility planning in terms of actual siting and design of facilities. In other words, the land use and facility plan will only serve as a guide for the development of proposed facilities, which will require site-specific review at the time a particular project is proposed. By virtue of the fact that the facility map locates certain facilities throughout the Park, and therefore indirectly prescribes allowable recreational uses on particular subunits, it does set the foundation for the area-specific vision and management approach at each of the subunits considered in this plan. With this foundation, the Department can implement the issue-specific management goals and guidelines presented in Section 3.2 to the most appropriate locations to ensure consistency between facilities, land uses, and resource management.

It should be noted again that the proposed land use and facility plan includes properties that are not currently under the jurisdiction of the Department. These properties have been

included in the planning process based on their anticipated addition to the Park. If any of these properties are not added to the Park, the establishment of land uses and/or the development of facilities proposed on these properties may be developed on other existing subunits or future property additions that are considered appropriate based on the site-selection criteria described in Section 3.3.3.

Below is a description of the vision for each subunit of the Park, in terms of potential facilities and management approaches.

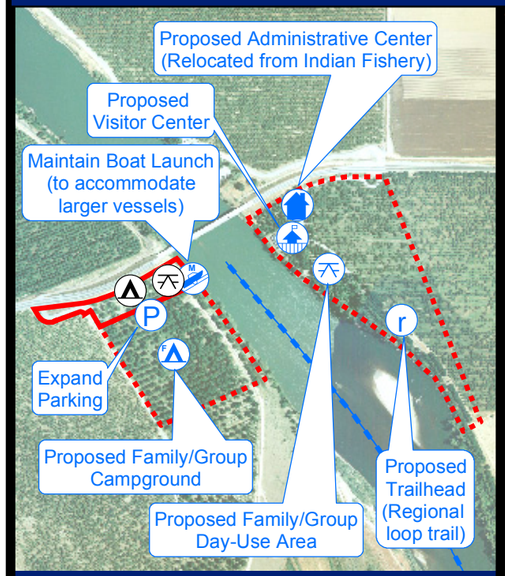
IRVINE FINCH RECREATION AREA

The Irvine Finch Recreation Area refers to the existing Irvine Finch River Access subunit and the potential addition of the Beard property located just south of Irvine Finch. The addition of the Beard property could allow for the expansion of the popular Irvine Finch facility into an integrated day- and overnight-use facility. This area is envisioned as the primary point of river access at the Park that could be served by improved day-use and new overnight camping facilities. Its current visitor base could be expanded from serving primarily day-use boat anglers to serving the demand for camping generated by anglers, local residents from the Chico and Hamilton City areas, as well as non-local visitors to the region. Proposed facilities and improvements being considered at the Irvine Finch Recreation Area include improvements to the existing boat launch ramp to accommodate vessels of various sizes, expanding parking for both vehicles and boat trailers, and the development of a moderate-scale overnight campground.

Considerations for an expanded day-use and overnight facilities at Irvine Finch are based on existing use patterns and the need to meet the demand for local camping opportunities. Currently, the Irvine Finch facility experiences substantial use during seasonal fish "runs," such as the salmon run that takes place during late summer and early fall. During these peak fishing periods, this facility commonly operates at full capacity. High use levels result in delays in boat launching and difficulty finding parking. By expanding capacity at this facility, these capacity issues could be resolved. In addition, there is a substantial demand for overnight camping facilities in the local area because of the lack of existing facilities in the greater Chico area. Overnight camping facilities could primarily serve anglers and other recreational boaters that use the boat launch facility, as well as family and small group campers from the local Chico area that do not currently have local access to camping opportunities.

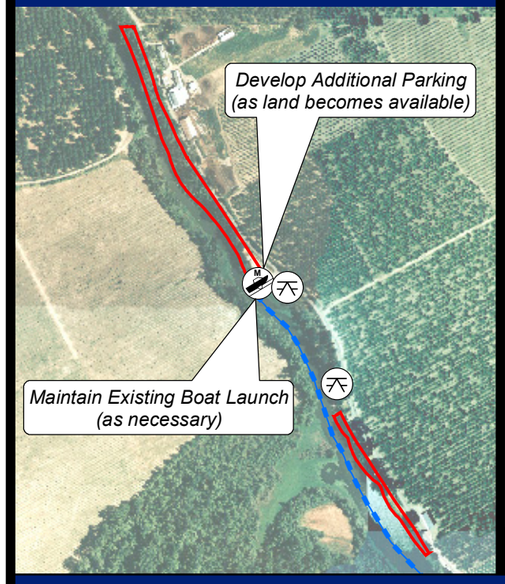
In addition, improvements to the existing boat launch ramp at Irvine Finch are being considered as part of this plan. The existing launch facility was originally developed for non-motorized boat access, namely inner tubes, for floats down the river. Subsequently, improvements have been made to the boat ramp to accommodate standard motorized boats. However, based on its current dimensions and configuration, the boat launch cannot accommodate larger vessels because of sedimentation at the bottom of the ramp. By implementing regularly scheduled maintenance and dredging, this boat ramp can be used by

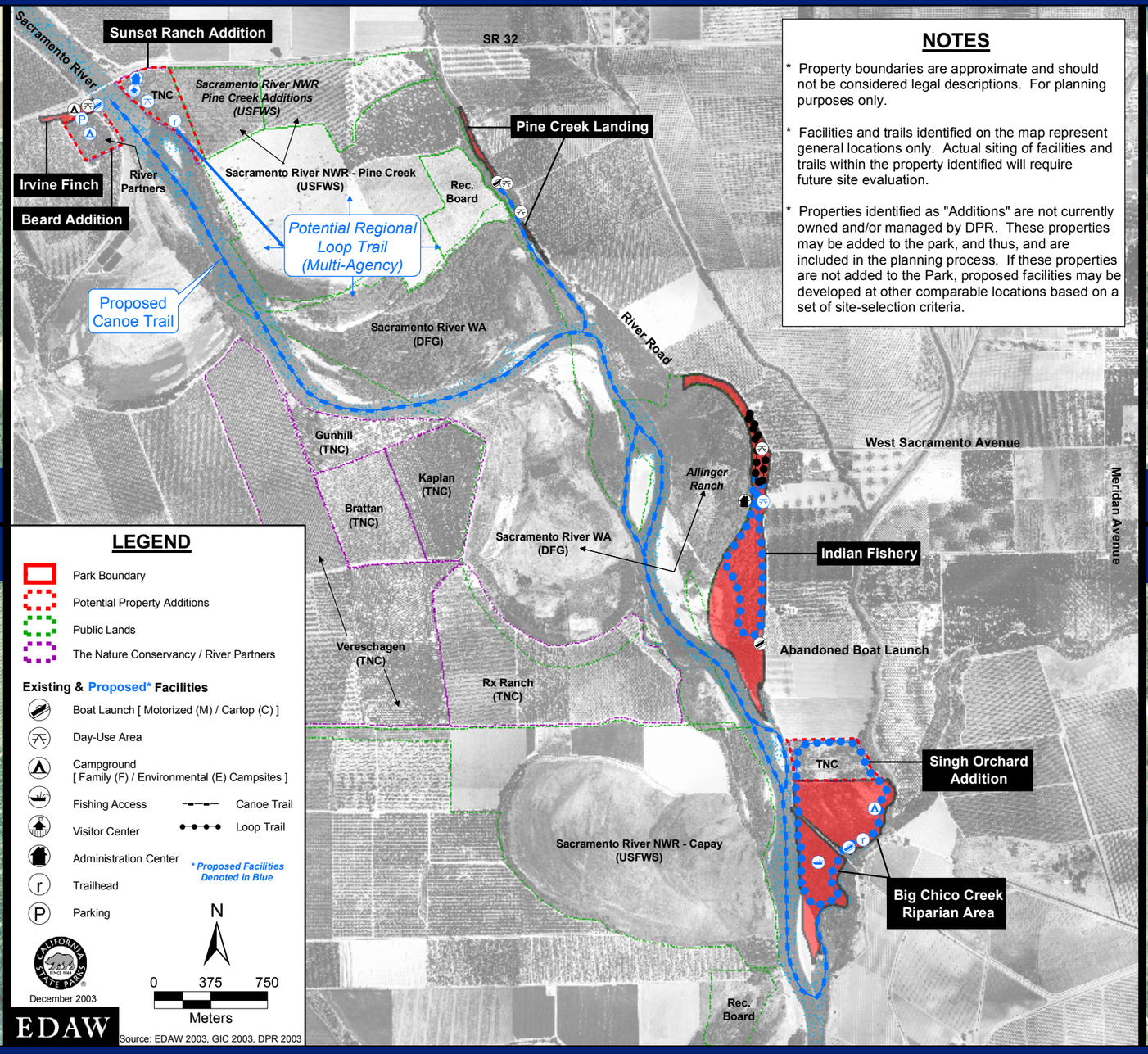
BIDWELL-SACRAMENTO RIVER STATE PARK



Irvine Finch Recreation Area & Sunset Ranch Addition

Pine Creek Landing





NOTES

* Property boundaries are approximate and should not be considered legal descriptions. For planning purposes only.

* Facilities and trails identified on the map represent general locations only. Actual siting of facilities and trails within the property identified will require future site evaluation.

* Properties identified as "Additions" are not currently owned and/or managed by DPR. These properties may be added to the park, and thus, and are included in the planning process. If these properties are not added to the Park, proposed facilities may be developed at other comparable locations based on a set of site-selection criteria.

LEGEND

- Park Boundary
- Potential Property Additions
- Public Lands
- The Nature Conservancy / River Partners

Existing & Proposed* Facilities

- Boat Launch [Motorized (M) / Cartop (C)]
- Day-Use Area
- Campground [Family (F) / Environmental (E) Campsites]
- Fishing Access
- Canoe Trail
- Visitor Center
- Loop Trail
- Administration Center
- Trailhead
- Parking

** Proposed Facilities Denoted in Blue*

N

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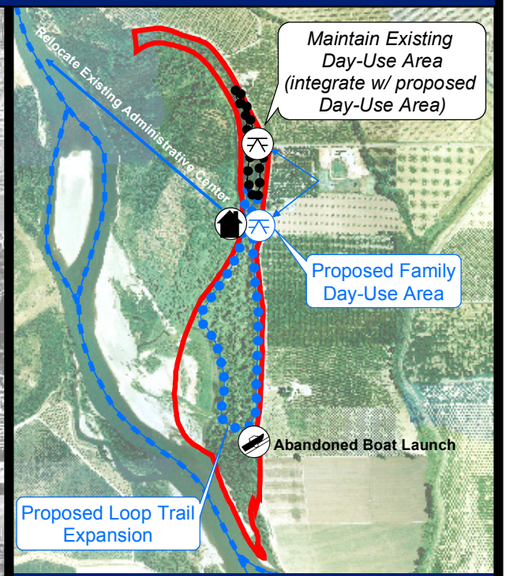
Meters

December 2003

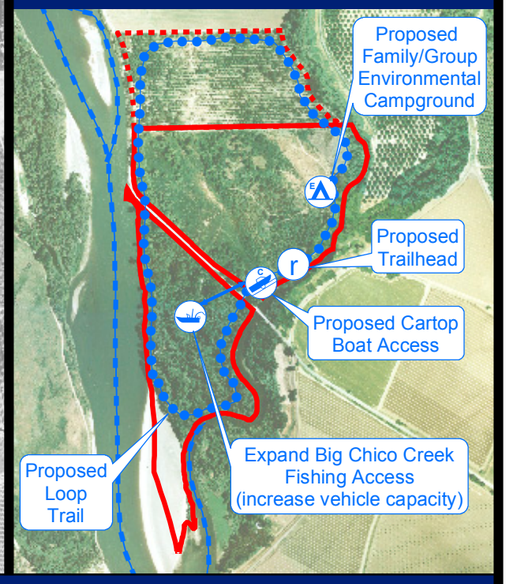
EDAW

Source: EDAW 2003, GIC 2003, DPR 2003



Indian Fishery

Big Chico Creek Riparian Area



GENERAL PLAN

EXHIBIT 3-1
LAND USE AND FACILITIES

additional users, namely those boat owners that cannot currently launch their boats at this facility.

The existing parking area may be expanded to accommodate existing and projected use levels at Irvine Finch. The parking expansion could be located on the Beard addition, adjacent to the existing parking lot to the south. This parking area could serve day-users, boaters, and overnight campers. The size of the expansion would be dependent on the level of campground development and existing use levels at the time of development; at this time, it is estimated that a parking expansion may be roughly double the existing parking capacity at Irvine Finch.

A new overnight campground is also being considered for development on the Beard Addition south of the existing Irvine Finch facility. The campground could include family and group campsites, and is envisioned to be a moderate-scale facility (e.g., roughly 50 family and 3 group campsites). The precise size and layout of the campground would be determined during project-specific planning. Campsites would likely include standard amenities, such as concrete picnic tables, fire pits, food lockers, and parking. This facility could be developed in conjunction with the existing day-use area and boat launch facility to offer an integrated, multi-use, recreational destination for Park visitors.

One additional feature of the Irvine Finch facility is that it could serve as the start point for a potential canoe trail that would link the various discontiguous Park subunits. The canoe trail would follow the meander of the Sacramento River, ultimately ending at the Big Chico Creek Riparian Area. Because the canoe trail would technically be located entirely on Park property, it is intended to represent a concept that visitors can choose to experience and could be facilitated by designated put-in and take-out facilities offered on Park property. It is envisioned that the canoe trail could include interpretive and informational signage along the Sacramento River that describes the history and resources associated with the river, guidance on watershed stewardship, and identification of public properties along the river; the siting and design of signage would consider the natural aesthetics of the river corridor and would need to be designed to withstand seasonal flooding and other physical factors. Because the river transects various public and private properties, this effort would require close coordination with local public and private landowners.

Based on the types of recreational facilities being considered at Irvine Finch, there may also be opportunities for concessions to provide products and services that would facilitate the recreational experience. Products offered could include firewood and other camping supplies serving overnight visitors. Services may include kayak/canoe or inner-tube rentals during peak river events. The establishment of concessionaires would be evaluated as facilities are developed and as demand warrants.

Summary of Potential Facilities Considered for the Irvine Finch Recreation Area

- Regular maintenance of the Irvine Finch boat ramp to accommodate larger vessels.
- New overnight campground, including family and group campsites, at the Beard Addition.
- Parking expansion to serve day-users, boaters, and overnight campers.

SUNSET RANCH ADDITION

As described in Section 2.3, the Department is currently considering the addition of the Sunset Ranch property located just east of the Sacramento River, south of SR 32, and as such, it has been included in the General Plan planning process. The characteristics of this property, namely its proximity to SR 32 and the Sacramento River, as well as the fact that it contains predominantly non-native vegetation, lends this property to exceptional opportunities for new recreational and interpretive facilities. This property is envisioned as the primary day-use destination for the northern portion of the Park, potentially serving a broad range of visitor-types and catering to both planned destination and en-route visitors traveling in the region. Facilities being considered at Sunset Ranch include a visitor center, day-use area, and trailhead to multi-agency trail system; it could also serve as the administrative headquarters for the Park and other units in the Valley Sector.

The facilities being considered at Sunset Ranch are based on the need to provide a centralized access point to the Park from SR 32. Because this property is located adjacent to other public lands managed by the USFWS and CDFG, it also offers opportunities for multi-agency teaming efforts, in terms of development of facilities, which are consistent with the mission of all three agencies. Its location on the Sacramento River also allows for potential additional riverbank access that would supplement access provided by the boat ramp found at the Irvine Finch subunit on the west side of the river.

A visitor center could serve as the focal point of the Sunset Ranch property. The type of visitor center that would be developed is dependent on potential multi-agency teaming opportunities that could be implemented to develop such a facility. At a minimum, the visitor center could take the form of a small-scale, permanent facility that serves as the point of information distribution and would consist of a range of interpretive displays focusing on the history of the Park and the region. On the other end of the spectrum, a multi-agency visitor center could take the form of a large-scale destination center in and of itself, serving the interests of the Department, USFWS and CDFG, and could include theme-based exhibits and a gift shop. A recent study in the project area has also explored the opportunities for a research center that could also be integrated into the visitor center concept that would aid in the research objectives of the agencies involved.

A new day-use area could also be developed at Sunset Ranch in conjunction with a visitor center. This moderately sized day-use area is foreseen to be the most intensely developed of the Park's day-use areas (e.g., approximately 10–15 family picnic areas and one large group area that can be reserved for special events). This facility could also offer additional

recreational amenities such as shade ramadas, lawn/play areas for children, etc. In addition, flush restroom facilities could be installed that connect to an onsite wastewater treatment and disposal system.

The Sunset Ranch property would also likely serve as the trailhead location for a potential multi-agency trail that connects the Park to the Pine Creek Unit of the Sacramento National Wildlife Refuge operated by the USFWS and the Sacramento River Wildlife Area operated by CDFG. Based on its location and potential integration with other proposed facilities (i.e., visitor center and day-use area), the Sunset Ranch property could serve as an ideal staging area for visitors to explore the different land management approaches and recreational opportunities offered by the substantial amount of public land in the project area. The precise alignment of the multi-agency trail would need to be coordinated with the other public land managers prior to development in order to avoid potential land use conflicts.

Finally, the Sunset Ranch property would be considered for the location of a new administrative headquarters for Bidwell-Sacramento River State Park (the existing administrative facilities at Indian Fishery would be removed). Day-to-day Park operations could be based out of the existing residence on the property, which would be converted to a Park office. Maintenance equipment could be stored at the barn adjacent to the proposed office location. There is another barn structure adjacent to the river at the Sunset Ranch property, which based on its age and composition, may be historically significant. There may be opportunities to restore this barn to interpret the agricultural significance of the region.

Summary of Potential Facilities Considered for the Sunset Ranch Addition

- New administrative center (relocated from Indian Fishery).
- New day-use area.
- New visitor center that could serve multiple public land agencies.
- Potential for new multi-agency loop trail and associated trailhead.

Pine Creek Landing

The Pine Creek Landing subunit, which provides motorized boat access and limited day-use facilities, is currently operating at full capacity. The existing boat ramp has been recently expanded and improved; however, ongoing maintenance of this facility is critical for optimal use. In addition, there is the need to expand parking facilities at Pine Creek, but based on the extent of current property boundaries, there is insufficient room to provide additional access at this time. As a result, no new facilities are proposed at Pine Creek Landing as part of this General Plan. If new properties are added to the Park in the future that are in proximity to this subunit, potential opportunities for additional parking and other ancillary facilities will be explored.

Summary of Potential Facilities Considered at Pine Creek Landing

- Ongoing maintenance of existing boat launch facility.
- Provision of additional parking as demand warrants based on the availability of land.

INDIAN FISHERY

The Indian Fishery subunit consists of the contiguous area that has historically been referred to as Indian Fishery to the north and Old Chico Landing to the south. For the most part, Indian Fishery is located further inland, providing access to an oxbow lake, but it does not provide direct access to the Sacramento River (although informal trails do connect this subunit to the river at certain locations). This subunit is envisioned to serve as a centralized access point for visitors accessing the Park on the east side of the river. It could offer both developed and passive recreational opportunities at one location, thereby appealing to a range of potential visitors. Facilities being considered at this location include a new family/group day-use area and the expansion of the existing loop trail that could be implemented in conjunction with the existing day-use area and potential relocation of the existing administrative facilities.

The potential new day-use area could be located at the location of the existing administrative center, which consists of several modular office buildings, which are being considered for relocation. A new day-use area would augment existing day-use facilities located north of the administrative center, and therefore, would be small to moderate in size (e.g., approximately 7–10 family picnic areas) with standard amenities, such as picnic tables, and barbeques. This facility could also be served by flush restroom facilities that could be connected to an onsite wastewater disposal system already developed at the site. In an effort to develop this area as a central point of access to the Park, a developed entrance may be constructed that could potentially consist of an entrance kiosk and/or signage that could be used to better track visitation and provide current information to visitors about the Park and special events. In addition, the existing day-use area located to the north of the proposed facility would be maintained at its current size in an effort to enhance the prominence of a new day-use area. As the central access point, a new day-use area could serve as the gathering point for interpretive and educational programs and could be developed to accommodate bus parking and turn-around space.

More passive recreational opportunities could also be provided at Indian Fishery through the expansion of the existing trail system. The trail system could be expanded to the south of the existing alignment, thereby providing access to the dense riparian vegetation that characterizes the essence of the Park. Such a trail system could be designed in a loop fashion to expose trail users to the unique resources that vary across the periphery of the property, including the abundant wildlife and scenic vistas that would serve visitors participating in wildlife viewing and other sight-seeing activities. It may also serve as the connector to the informal trails that provide access to the Sacramento River.

Summary of Potential Facilities Considered at Indian Fishery

- Relocation of existing administrative center to a more centralized location.
- New family/group day-use area at the location of the existing administrative center.
- Ongoing operation and use of existing day-use area.
- Expansion of existing loop trail system to the southern portion of the subunit.

Big Chico Creek Riparian Area

The Big Chico Creek Riparian Area consists of the western and eastern properties of the existing Big Chico Creek Riparian Area (divided by River Road), and the proposed Singh Orchard addition. For planning purposes, these properties are considered one subunit based on their location, proximity to each other, and similar physical characteristics. This subunit, located partially on the banks of the Sacramento River, is envisioned as a place for visitors to experience the vast riparian resources that are native to this stretch of the Sacramento River, while engaging in active restoration and protection of these resources so that they can be enjoyed in perpetuity.

The facilities being considered at the Big Chico Creek Riparian Area are based on the need to improve and expand access to this area, while balancing the sensitive nature of the resources present. There are limited opportunities for visitors to gain access to this area, with only one developed entrance road serving the property west of River Road, which provides access to the Sacramento River. No formal access exists to the property east of River Road or the proposed Singh Orchard addition. The Department is considering proposals to provide increased public access through a variety of low-impact improvements and facilities that would serve the entire Big Chico Creek Riparian Area, including the expansion of the existing entrance road on the property west of River Road, a non-motorized boat launch and environmental (or primitive) campsites on the property east of River Road, and a loop trail that would connect all three properties.

The potential expansion of the existing access road at the Big Chico Creek property may entail two components: (1) widening the road to allow for parallel parking along the road shoulder, and (2) developing formal parking spaces in conjunction with the existing turn-around at the end of the entrance road. By allowing for additional vehicles in this popular fishing and day-use area, this area could provide additional capacity for anglers and other visitors utilizing the resources associated with the Sacramento River. An improved entrance road could also facilitate emergency vehicle access as needed during peak recreation periods. The entrance road would continue to be subject to closure during the winter season.

A non-motorized boat launch area could be developed along Big Chico Creek on the east side of River Road. The boat launch area would likely be developed along the southern border of the property, in the vicinity of the area under the existing River Road bridge. This facility would be intended to serve primarily kayakers/canoers, as well as those visitors with other car-top boats; it would not be intended to serve motorized vessels based on the shallow

nature of Big Chico Creek at this location. To provide access to the boat launch facility, a road and a path would need to be installed and a small to moderate parking area developed (e.g., approximately 10–25 parking spaces) that could serve the entire Big Chico Creek Riparian Area. The size and configuration of such a parking area would be dependent on a range of factors, including which facilities would be served and the availability of other parking areas serving this area.

Further upstream from the proposed boat launch area, the property east of River Road is also conducive to the development of a small-scale environmental campground (e.g., approximately 10 family/group campsites). The defining characteristics of environmental (or primitive) campsites are that they result in little to no impact to physical resources of the area and offer greater solitude to visitors than standard developed campsites, which is accomplished mainly by prohibiting motor vehicle access to the campground. Other features of an environmental campground could include small picnic tables, chemical restrooms, prohibiting the gathering of firewood or campfires, and prohibiting pets on site. Access to the campground could be provided by a short walk from the proposed boat launch area and/or directly from Big Chico Creek.

In an effort to integrate the Big Chico Creek area, a proposed loop trail would also be considered that would connect existing and proposed facilities into one functional subunit. The trailhead would likely be developed in proximity to the proposed parking area on the east side of River Road. The alignment of the loop trail would be such that it provides access to all three properties that comprise the complex, allows visitors to access proposed facilities, and exposes visitors to various types of vegetation and other physical resources, including the Big Chico Creek and the Sacramento River. Consideration must be given to safe access across River Road in connecting the properties. Trail amenities may include interpretive panels and other informational signage as directed by the interpretive element of the General Plan.

Summary of Potential Facilities Considered at the Big Chico Creek Riparian Area

- Car-top boat access area along Big Chico Creek.
- Environmental (or primitive) campground on the property east of River Road.
- Expansion of fishing access through improvements to existing entrance road.
- Loop trail system and trailhead that would connect all properties.

3.3.3 Site-Selection Criteria

The proposed Facilities Plan for Bidwell-Sacramento River State Park recommends the development of recreational and administrative facilities throughout the Park, including potential property additions. Although these three potential property additions have been identified by the Department as appropriate for inclusion in the General Plan, there is some degree of uncertainty whether these properties will ultimately be transferred to the Department because no formal agreements are in place. In addition, circumstances may change on

existing Park properties that may result in situations that do not lend themselves to facility development as envisioned in the General Plan. Therefore, the potential exists that facilities that are proposed throughout the Park may not be constructed at these particular locations. Because many of these facilities and/or improvements have been identified by the Department as being integral to the future development of the Park in terms of meeting visitor needs and promoting the vision of the Park, a set of site-selection criteria has been developed that will allow the Department to evaluate other potential property additions for their appropriateness for certain types of recreational facilities if they are not developed on the properties considered in this General Plan. These criteria have been developed such that if other properties are acquired and developed with comparable facilities, proposed developments would result in comparable levels of environmental effects as the proposals identified in this plan.

The site-selection criteria vary based on the type of facility or improvement proposed. Criteria have been established for the following facilities: campgrounds, day-use areas, visitor center, administrative center, and trails.

Campgrounds and Day-use Areas

Properties that are added to the Park may generally be considered appropriate for campground and day-use facilities if the following criteria are met:

- Non-native vegetation.
- Located out of sensitive-species habitat.
- Close proximity to other Park subunits to offer opportunities for integration of facilities.
- Ability to provide water supply and wastewater disposal capabilities.
- Easy access from regional roadway network.

Visitor Center

Properties that are added to the Park may generally be considered appropriate for a visitor center if the following criteria are met:

- *Same as criteria for campgrounds and day-use areas, plus*
- Subject to minimal flooding.
- Proximity to other public lands in the region to allow for multi-agency teaming opportunities.

Administrative Center

Properties that are added to the Park may generally be considered appropriate for an administrative center if the following criteria are met:

- Subject to minimal flooding.

- Existing facilities that would allow storage of maintenance equipment.
- Centralized location that would allow for comparable travel times to the various Park subunits.

TRAILS

Properties that are added to the Park may generally be considered appropriate for trails facilities if the following criteria are met:

- *All properties would be considered appropriate for trail facilities.*

3.4 MANAGEMENT OF VISITOR USE IMPACTS (CARRYING CAPACITY)

Public Resources Code Sections 5001.96 and 5019.5 require that the land carrying capacity shall be determined before any Park development plan is adopted, and that attendance at State Park System units shall be held within the limits established by this capacity. A definition of carrying capacity by the code, however, is not provided.

3.4.1 CHARACTERIZATION OF CARRYING CAPACITY

The carrying capacity of land is developed by evaluating the interaction between land uses and natural systems and determining how these interactions will affect, over time, the land's integrity and sustainability. Maximum capacity is the point where land regeneration is exceeded by demands made on natural systems and there is resulting degradation or destruction of the systems. Carrying capacity not only relates to the area's environmental resources but also the quality of the visitor experience.

In terms of Park and recreation planning, carrying capacity may be extended in meaning to suggest that no cumulative net losses will be permitted to occur in any of the unit's resource values (natural, cultural, aesthetic, or recreational) because of human use (activities or facility development). However, seemingly insignificant effects can have a permanent impact on resource values. Therefore, the intent of the Public Resource Code is to avoid degradation of resource-based Park systems. The great variety of factors involved in damage to natural resources and the complexity of the interactions among the factors makes establishing a carrying capacity number difficult. Visitation, individual or group usage, time, and types and patterns of recreational use all contribute to the impact on resource systems. To aid in impact minimization, management can regulate capacity limits and land use, enact mitigation measures, educate and interpret for the public, and ensure proper design. Determination of resource location and significance allows management to create future guidelines for public use of a Park and access to it.

3.4.2 ADAPTIVE MANAGEMENT

Adaptive management is a tool to address carrying capacity (or allowable use intensity) issues and is included in the guidelines within this Plan. Adaptive management is an ongoing, intensive process of determining desired conditions, selecting and monitoring indicators and

standards that reflect these desired conditions, and taking management action when the desired conditions are not being realized.

The desired conditions for the Park are reflected in the goals presented in Section 3.2, particularly those pertaining to visitor experience and resource protection. If the Department determines that the entire Park or a specific area of the Park is not meeting the goals, then desired conditions would not have been realized and management action would be initiated. Management action could determine that the violation was caused by natural variation (e.g., increased bank erosion caused by meandering river) or by human-induced variables (e.g., trampling associated with increasing hiking activities). Actions to manage or limit visitor use would be implemented when the desired condition was not met because of impacts associated with visitor use. Management actions could include, but are not limited to, the following:

- Site management (e.g., facility design, barriers, site hardening, area/facility closure, redirection of visitors to suitable sites),
- Regulation (e.g., the number of people, the location or time of visits, permitted activities, or allowable equipment),
- Enforcement of regulations (e.g., patrols, notification, citations),
- Education (e.g., information signs and exhibits, interpretive programs, visitor center exhibits, brochures and fliers, public meetings, meetings with user groups), and
- Altering access (e.g., parking in proximity to sensitive resources, bike access, etc.).

Following the implementation of the management action, monitoring would be conducted to determine if the desired outcome is being achieved. If it is, then the Park is being operated within its carrying capacity. If the desired outcome is not being achieved, then alternative management actions would be carried out until the desired outcome is achieved.

3.4.3 Environmental Quality Indicators at the Park

Desired conditions, which are reflected in the goals and guidelines in this Plan, may be measured by assessing whether environmental quality indicators have been achieved. Successful results would be attained if the monitoring process is not too demanding of staff time and resources. For example, if the environmental quality indicators are physical conditions that are observable during the day-to-day operational activities of Park personnel, then the monitoring process would occur continuously with minimum administrative burden. Qualitative standards are preferred if quantitative monitoring and analyses are time- and resource-consuming, but may not produce necessary data. In all cases, however, the environmental quality indicators should be good predictors of the desired outcome. Thus, for some desired outcomes (e.g., sustainable populations of special-status species), the indicator monitoring processes may require field surveys undertaken by specialized staff.

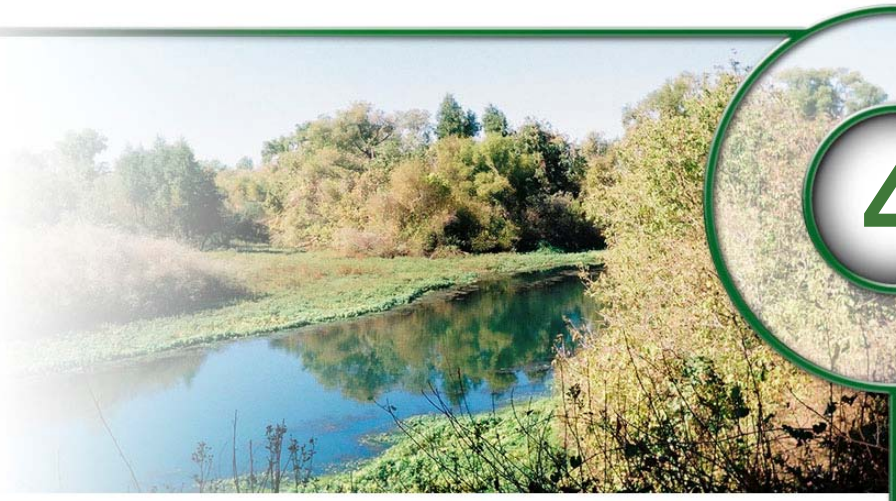
Table 3-1 contains environmental quality indicators based on some of the goals in this Plan and their associated desired outcomes. Environmental quality indictors may be refined

occasionally, based on site-specific knowledge, recent observations in the field, and updates in scientific understandings, if it is discovered that the existing environmental quality indicators are not the best predictors of the desired outcome. For example, it may be that reported increases in catches of salmon are a result of increasing fishing activities rather than an increase in salmon population. If this is discovered to be the case, then a new indicator would be developed for monitoring purposes.

Table 3-1
Carrying Capacity

Goal	Desired Outcome / Standard	Environmental Quality Indicators[1]
Goal ER-1.2: Manage for the perpetuation of special-status plant, terrestrial wildlife, and aquatic species within the Park, in accordance with state and federal laws.	Sustainable populations of special-status plant and wildlife species	✓ Increased occurrence of special-status plants species. ✓ Active nest sites. ✓ Presence of suitable habitat. ✓ Abundance of prey species. ✓ Report of increased fish catches.
Overall Goal ER-2: Protect the cultural and historical resources within the Park, providing interpretive and educational opportunities, where feasible.	Retention of the integrity and value of cultural resources.	✓ Lack of disturbance to known archaeological sites. ✓ Retention of historic building facades.
Goal ER-3.2: Operate Park facilities and manage resources in a manner that does not contribute to degradation in water quality of the watershed.	Water quality in adjacent water bodies that meets established standards.	✓ Lack of bank erosion where foot or bicycle traffic are known to occur. ✓ Proper functioning of water quality control devices such as grassy swales and grease traps after storm events.
Goal ER-4.2: Develop public viewpoints serving the Park's scenic resources, focusing on views of the Sacramento River from different locations throughout the Park.	Viewpoints available to the public that offer views of the river and its other natural riparian features.	✓ Views that are unhindered by growing vegetation in the foreground. ✓ Lack of new buildings or other major structures within the viewshed. ✓ Lack of overcrowding at the viewpoints on a regular basis.
Goal VU-1.1: Expand boat launching facilities serving motorized and non-motorized boating activity based on availability of appropriate sites.	Boat launch facilities that are sufficient for the types of boats used by visitors in the Sacramento River. Boat launch areas that can accommodate all visitors who come to the Park for its boat launching opportunities.	✓ Sufficient parking spaces to accommodate all visitors who come to use the boat launches. ✓ Wear and tear that is consistent with the expected life of the structure. ✓ Lack of visitor comments that the boat launches are insufficient for their boats.

[1] Environmental Quality Indicators may be updated by Park staff based on field observations, new scientific knowledge, etc.



4

Environmental Analysis

4 ENVIRONMENTAL ANALYSIS

4.1 INTRODUCTION TO THE ENVIRONMENTAL ANALYSIS

4.1.1 PURPOSE OF THE EIR

This section of the General Plan for Bidwell-Sacramento River State Park constitutes an environmental impact report (EIR), as required by Public Resources Code Sections 5002.2 and 21000 et seq., and is subject to approval by the California Parks and Recreation Commission (Commission). The Commission has sole authority for the Plan's approval and adoption. Following certification of the EIR and approval of the Plan, the Department will prepare facility development and resource management proposals (or comprehensive plans) that implement provisions of the General Plan as staff and funding allow. Future projects, based on the provisions in this General Plan, may be subject to permitting requirements and approval by other public agencies that have resource protection authority over the activities in the project area.

4.1.2 FOCUS OF THE EIR

The Notice of Preparation for this General Plan was circulated to the appropriate federal, state, and local planning agencies. Based on comments received during the NOP comment period and the planning process to date, this Draft EIR was prepared to analyze potential environmental impacts that may result from the implementation of the management goals and guidelines, as well as area-specific management and facility prescriptions, that constitute the proposed General Plan. Environmental resources or topics that would not likely be affected by the General Plan are briefly addressed in Section 4.5, Environmental Topics Eliminated from Further Analysis. Those topics or issues that warrant further environmental analysis are analyzed in detail in Section 4.6, Environmental Impacts.

4.1.3 SUBSEQUENT ENVIRONMENTAL REVIEW PROCESS

The tiering process of environmental review is incorporated into this EIR. Tiering in an EIR, particularly for a program-level project such as a general plan, allows agencies to consider broad environmental issues at the general planning stage. These environmental considerations will be analyzed in greater detail in subsequent environmental documents at the time specific development projects and management programs are proposed. It should be noted that subsequent environmental documents incorporate, by reference, the general analysis from the program-level EIR included here and will concentrate on the issues specific to the characteristics of subsequent projects (Public Resources Code §21093; California Environmental Quality Act (CEQA) Guidelines §15152). This EIR represents the first tier of environmental review.

Future second-tier environmental review will be based on more detailed information on proposed actions, including facility size, location, and capacity. Therefore, the environmental analysis will be more specific and focused, identifying any significant environmental impacts

and mitigation measures that are applicable to future projects. In addition, future actions will also be evaluated to determine if they are consistent with the proposed General Plan.

Because future environmental review will be more specific and focused, and the characteristics of future projects will be better defined, it will be possible to develop appropriate project-level mitigation measures that address potentially significant adverse impacts to the environment. Developing appropriate mitigation measures generally requires resource specialists to evaluate the scope of work, identify specific causes of impacts, and to specify measures that avoid or maintain impacts at a less-than-significant level. This information will be available once specific projects or actions are defined.

4.1.4 Contents of the EIR

The program EIR contained in this General Plan includes the following sections:

Introduction to the Environmental Analysis: This section includes a brief overview of the environmental review process, legal requirements, and approach to the environmental analysis.

EIR Summary: The EIR summary represents a summary of environmental impacts associated with the proposed General Plan and proposed mitigation measures to address the impacts identified, an overview of the environmental effects of alternatives considered to the preferred General Plan, and a description of any areas of controversy and/or issues that need to be resolved.

Project Description: This section provides an overview of the proposed General Plan, which is the focus of the program EIR.

Environmental Setting: This section notes the fact that the existing (baseline) conditions for environmental issues or resources that may be potentially affected by implementation of the General Plan are addressed in Chapter 2, Existing Conditions, which represents the environmental setting for this EIR.

Environmental Topics Eliminated from Further Consideration: This section describes those environmental topics that did not warrant detailed environmental analysis and the supporting rationale.

Environmental Impact Analysis: This section describes the level of environmental impact associated with implementation of the proposed General Plan, including goals and guidelines that address effects on the environment.

Other CEQA Considerations: This section contains information on other CEQA-mandated topics, including cumulative impacts, growth-inducing impacts, significant and unavoidable impacts, and significant irreversible environmental changes.

Alternatives to the Proposed Project: The alternatives analysis describes the various alternatives to the proposed General Plan (including the No Project Alternative) that are considered in this EIR and the associated environmental effects of these alternatives relative to the proposed project.

4.2 EIR Summary

4.2.1 Summary of Impacts and Mitigation

For the most part, implementation of the General Plan is not expected to result in significant impacts on the environment. Implementation of the goals and guidelines contained in Chapter 3, in conjunction with compliance with federal, state, and local laws and regulations, avoids potential significant environmental effects or maintains them at a less-than-significant levels. Additional mitigation measures, therefore, are not necessary.

Conversion of designated Important Farmland to non-agricultural uses is the one exception. Several of the proposed property additions are designated as Important Farmland, and if they are added to the Park, they would be removed from agricultural production. This represents a significant environmental impact, and because no feasible mitigation measures are available, it is considered significant and unavoidable.

4.2.2 Summary of Alternatives Considered

Several alternatives were considered during the planning process and an additional alternative was developed as part of the development of this EIR. The three planning alternatives represent a range of management treatments (i.e., minimum, moderate, and maximum) for natural and recreational resources at the Park. Features of each of these alternatives were used to develop the preferred General Plan alternative, which is the focus of this EIR. An additional alternative, which represents maximum restoration of the Park, is also considered in this EIR. This alternative is solely aimed at promoting ecological diversity and health of the Park, providing only limited recreation opportunities. And, as required by CEQA, the No Project alternative has also been considered here. It was concluded that the Maximum Restoration Alternative is the environmentally superior alternative among the alternatives considered here; however, it fails to meet one of the Department's fundamental objectives-providing high-quality recreational opportunities to residents of the state. As a result, it was excluded from further consideration in the planning process.

4.2.3 Areas of Controversy and Issues to be Resolved

Generally, there have been very few areas of controversy associated with implementation of the General Plan expressed at various public meeting held during preparation of the plan. There appears to be consensus between the Department and the public that the recreational value of the Park is not being realized and that future recreational development would improve the Park. However, there are different visions of the extent of recreation development, ranging from a focus on passive recreation and minimal facilities to developed recreation that is supported by a well-planned and integrated facility system. The proposed

General Plan is intended to balance these two directions and includes goals and guidelines that promote good stewardship of the land and resources, which addresses concerns regarding development-induced impacts on the environment. Other related issues pertain to the addition of Park properties and coordination with other public lands in the region, both of which are addressed in the General Plan.

4.3 PROJECT DESCRIPTION

The Plan section of this General Plan represents the project description for this EIR (see Chapter 3). The General Plan establishes the long-range purpose and vision for Bidwell-Sacramento River State Park, outlines a set of goals and guidelines that guides future management of environmental resources, recreational opportunities and operational considerations, and includes a discussion of area-specific planning concepts that focus on facility development at the various subunits of the Park. Please refer to Chapter 3, Park Plan, for specific details on the proposed General Plan (Project), which is the focus of this EIR.

4.4 ENVIRONMENTAL SETTING

Existing conditions that characterize the Park, including descriptions of important resource values and local and regional planning efforts, are described in Chapter 2, Existing Conditions and Issues. Information presented in Chapter 2 constitutes the CEQA environmental setting description for the following topics: aesthetics, agricultural resources, air quality, biological resources, cultural resources, geology, hazards and hazardous materials, hydrology and water quality, noise, public services, traffic and transportation and utilities. Please refer to Chapter 2 for detailed information on these topics.

4.5 ENVIRONMENTAL TOPICS ELIMINATED FROM FURTHER ANALYSIS

Based on a preliminary review of the proposed project, several environmental topics do not warrant comprehensive analysis in this EIR because there is no potential for significant environmental effects resulting from the implementation of the General Plan. These topics include Land Use and Planning; Mineral Resources; Population and Housing; and Recreation. A brief description of these topics and information supporting the decision to eliminate these topics from further analysis is provided below.

4.5.1 LAND USE AND PLANNING

The Park is located in a rural area of Butte and Glenn counties, outside of any established communities; the City of Chico is located approximately 6 miles to the west of the Park. Because the Park is owned and managed by the state, it is not subject to local land use planning (e.g., county general plans or zoning). In addition, there are no federal or state land use plans applicable to the Park. Management plans are currently being developed on adjacent public lands managed by the U. S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG), but these do not directly affect Park properties. As a result, no further analysis of this topic is necessary.

4.5.2 Mineral Resources

The Park is not located within an area with known mineral resources, and as such, it is not designated as an important mineral resource area by the California Department of Conservation under the Mineral Resource Zone (MRZ) classification System. Further, the Park does not contain any energy production or mineral extraction land uses. In the project area, there have been efforts in the past to extract gravel from the river channel to minimize interference with water pumping activities downstream of the Park, but these efforts are attributed to facility maintenance rather than commodity production. As such, no significant effects to energy and mineral resources would occur and no further analysis is necessary.

4.5.3 Population and Housing

The Park primarily serves visitors from the City of Chico, located 6 miles west of the Park. However, it also represents a regional destination for particular user groups, most notably anglers that use the Park as an access point to the Sacramento River during peak fishing seasons. Based on the characteristics of the Park, it is surmised that the primary visitor base comes from the four nearest counties (i.e., Butte, Glenn, Colusa, and Tehama counties). The population of this four-county area is projected to grow by roughly 2 to 4% annually through 2020 (DOF 2001). There are no features of the proposed General Plan that would directly induce regional population growth. However, additional recreational facilities proposed under the General Plan could result in additional visitation to the area, thereby potentially resulting in a limited indirect increase in the employment base of the local area, primarily in Chico. Recent demographic data show that the unemployment rate (2000) in Glenn County was at 11.9% and 7.0% in Butte County, and the housing vacancy rate in Glenn County was 8.1% and 6.9% in Butte County (DOF 2002). Given these data, it is expected that any increase in the demand for labor would be met by the existing local population, and therefore, no increase in population or the need for additional housing is expected. As a result, no significant effects to population and housing would occur, and no further analysis is necessary.

4.5.4 Recreation

The proposed General Plan focuses on the development of recreational facilities and implementation of management approaches that facilitate recreation use of the Park. The environmental effects of proposed facility development and resource management are analyzed as part of this EIR. Because the proposed General Plan would provide additional recreational opportunities in the region, it would not increase the use of other existing recreation facilities that could potentially result in physical degradation of those facilities, nor would it necessitate the construction of new facilities outside the Park. Therefore, no significant adverse effects to recreation would occur and no further analysis is necessary.

4.6 Environmental Impacts

4.6.1 Aesthetics

This section analyzes the aesthetic impacts that would result from the implementation of the proposed General Plan. The analysis is based on the general location of proposed facility developments within the aesthetic setting of the Park, as well as the goals and guidelines of the Plan.

Thresholds of Significance

The thresholds of significance for the analysis of aesthetic resources are based on criteria from Appendix G (Environmental Checklist) of the State CEQA Guidelines. According to these criteria, implementation of the General Plan would result in significant impact to aesthetics if it would:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Impact Analysis

Impact AES

Degradation of Viewshed and Night-time Views. Proposed facility development within the Park, namely within the riparian-based viewshed, could affect the natural appearance of the project area, including views available throughout the Park and from the Sacramento River. These developments may also introduce new nighttime light sources, which could affect nighttime views around the Park. Implementation of Goal ER-4.1 and associated Guidelines ER-4.1-1 through ER-4.1-6 would avoid or minimize potential adverse impacts to scenic resources and the aesthetic quality of the Park. As a result, this impact would be **less than significant**.

Implementation of the General Plan would result in the development of recreational and operational facilities and improvements that would be visible to Park visitors, including those people recreating along the Sacramento River and its tributaries. Such developments could potentially degrade the natural landscape of the river corridor and interfere with views of and from the Park. However, goals and guidelines have been included in the Plan to address potential adverse effects to visual resources. Goal ER-4.1, which calls for the preservation of the natural appearance of the Sacramento River corridor, is supported by a range of guidelines, including those that call for the retention of riparian woodland for aesthetic values (see Guideline ER-4.1-1), establishment of appropriate vegetative screening for new facilities

(see Guideline ER-4.1-2), and consideration of the natural aesthetics of the river when siting and designing Park signage (see Guideline ER-4.1-3). In addition, new facilities, such as the proposed visitor center, may require nighttime lighting and may introduce a new source of light/glare to the area, which could adversely affect nighttime views within the Park. Guideline ER-4.1-4 states that light/glare sources should be shielded, wherever possible, thus minimizing this impact. It is also the intent of the Department to support regular debris cleanup along the river, which would help maintain the aesthetic value of the river itself (see Guideline ER-4.1-5). With the implementation of the range of goals and guidelines in the Plan, the riparian appearance within the Park would be protected and the aesthetic values of the Park would be maintained; therefore, this impact would be less than significant and no additional mitigation measures are necessary.

4.6.2 Agricultural Resources

This section analyzes impacts related to agricultural resources that would result from the implementation of the General Plan. The analysis is based on a review of proposed facility development and resource management programs in the context of the designated Important Farmland in the region.

Thresholds of Significance

The thresholds of significance for the analysis of agricultural resources are based on criteria from Appendix G (Environmental Checklist) of the State CEQA Guidelines. According to these criteria, implementation of the General Plan would result in significant impact to agricultural resources if it would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Important Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- Conflict with existing zoning for agricultural use, or a Williamson Act contract; or
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Important Farmland, to non-agricultural use.

Impact Analysis

Impact AG

Conversion of Important Farmland to Non-Agricultural Uses. Implementation of the General Plan may result in the conversion of lands designated as Important Farmland that are currently in agricultural production to non-agricultural uses. Because there are no measures available to avoid or minimize this conversion as properties are added to the State Park system, this would be a **significant and unavoidable impact**.

As shown in Exhibit 2-4, portions of the Park are designated as *Important Farmland*, under the Farmland Mapping and Monitoring Program. These areas include the Irvine Finch

subunit and the Beard Addition, both of which are classified as "Prime Farmland," and the Singh Orchard Addition, which is classified as "Irrigated Farmland" (an interim farmland map category that substitutes for the *Important Farmland* categories where a modern soil survey is not available). It should be noted, however, that the Irvine Finch subunit is a developed recreation facility that is predominantly paved, and thus, would not likely meet the criteria for Important Farmland classification if reviewed in the context of existing conditions; as such, it is excluded from further evaluation. The Beard and Singh orchards are currently in production. Neither of these, nor the other Park properties, are under a Williamson Act contract, and State lands are not subject to local agricultural zoning.

In terms of proposed project features, the Singh Orchard addition is not planned for development and would likely be restored to riparian habitat and linked with the other Big Chico Riparian Area properties through the development of a loop trail. The Beard addition may be developed with an overnight campground, which would be integrated with the Irvine Finch River Access area. Because the Department would not continue agricultural production on these properties, in both cases, *Important Farmland* would be converted from agricultural to non-agricultural land uses, which would be a significant effect according to Appendix G of the CEQA Guidelines. Because no mitigation measures are available to address this issue, it is considered a significant and unavoidable impact.

It should be noted that restoring farmland to non-agricultural uses represents a return to its original (or natural) condition. In addition, there are long-term natural process and function benefits of habitat restoration.

Native riparian habitat has been dramatically reduced because of its conversion to agricultural and flood protection uses (e.g., channelization of the river with rip-rap for bank protection and levees for flood control). Taking lands out of agricultural production and restoring riparian habitat along the Sacramento River would increase animal and plant biodiversity and preserve sensitive species, and these are an important part of the Department's mission. Restoration also creates open space, which improves the aesthetics of scenic vistas and affords recreational opportunities (e.g., hiking, nature viewing and interpretation). Moreover, agricultural lands converted for riparian restoration purposes are generally flood prone and thus of marginal economic value in terms of agricultural production; such conversion would lessen the capital costs of flood protection and recurring costs of debris clean up following flood events.

Changes in land uses pursuant to the proposed General Plan could also indirectly affect adjacent agricultural operations, including agricultural uses on *Important Farmland*, if proposed facility development and resource management efforts conflict with or interrupt surrounding agricultural-based land uses. Implementation of Goal AO-4.4 and supporting Guidelines AO-4.4-1 through AO-4.4-3 would avoid or minimize such land use conflicts or incompatibilities through the use of appropriate signage/fencing, and review of development and resource management projects in the context of surrounding land uses. Therefore, there would be no additional indirect impacts to agricultural resources.

4.6.3 Air Quality

This section analyzes impacts related to air quality that would result from the implementation of the Preliminary General Plan. The analysis is based on ambient air quality conditions in the project area and is focused primarily on potential impacts associated with the construction of new facilities at the Park, as well as ongoing operations.

Thresholds of Significance

The thresholds of significance for the analysis of air quality are based on criteria from Appendix G (Environmental Checklist) of the State CEQA Guidelines. According to these criteria, implementation of the General Plan would result in significant impact to air quality if it would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standards or contribute substantially to an existing or projected air quality violation;
- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors);
- Expose sensitive receptors to substantial pollutant concentrations; or
- Create objectionable odors affecting a substantial number of people.

Impact Analysis

Impact AQ

Degradation of Air Quality. Construction and operations-related activities at the Park may generate criteria air pollutants, odors, and air toxics that could exceed federal, state, and local standards. Implementation of Goal AO-3.3 and Guidelines AO-3.3-1 and AO-3.3-2, which call for compliance with Butte County AQMD and Glenn County APCD rules and regulations, would avoid or minimize adverse effects on air quality. As a result, this impact would be **less than significant**.

Development projects at the Park could result in air emissions during construction, through the use of construction equipment and fugitive dust, and during operations, such as campfire emissions at the proposed overnight campground. These projects may be required to obtain "authorization to construct" and "permit to operate" from the Butte County AQMD and/or Glenn County APCD. As a part of this permitting process, projects are required to comply with the Districts' rules and regulations on fugitive dust emissions, architectural coating emissions, air toxics, odors, and other air pollutants during construction and operational activities. Pursuant to Goal AO-3.3 and Guidelines AO-3.3-1 and AO-3.3-2, implementation of air pollution control measures required by all applicable rules and

regulations would avoid or minimize the emission of criteria air pollutants from construction activities and stationary sources.

New recreational development proposed under the General Plan may generate additional vehicular traffic to and from the Park. The Transportation Project-Level Carbon Monoxide Protocol (Garza et al. 1997) states that signalized intersections at LOS E or F represent a potential for a CO violation. Due to the relatively low traffic volume on roadways in the area and the lack of intersections in the immediate vicinity of the Park, localized concentrations of vehicle-generated carbon monoxide would not be expected to exceed ambient air quality standards.

Typical recreational uses permitted in the State Parks system could potentially result in adverse effects on ambient air quality. Standard recreational uses are not known to generate odors that would be considered objectionable to most people, and the use of air toxics (e.g., regulated herbicides) would be in accordance with state and federal rules and regulations. However, the proposed General Plan includes provisions for the development of an overnight campground, with approximately 50 campsites and a group camp area, where the use of campfires would be expected to be standard. Based on the circumstances at the time such development is proposed, the applicable air district will be consulted and appropriate measures implemented to avoid or minimize this impact (see Guideline AO-3.3-2).

Based on the information presented above, any adverse effects on air quality would be less than significant. No mitigation measures are necessary.

4.6.4 Biological Resources

This section analyzes impacts related to biological resources that could result from the implementation of the proposed General Plan. A variety of documents and additional information were used to assess impacts on vegetation and wildlife from implementation of the proposed General Plan. These include biological studies previously conducted in the vicinity of the project site (see list of documents in Chapter 2, Existing Conditions, field surveys conducted during preparation of the Preliminary General Plan, aerial photographs, consultation with Park staff, and results of natural resource database searches.

Thresholds of Significance

The thresholds of significance for the analysis of biological resources are based on criteria from Appendix G (Environmental Checklist) of the State CEQA Guidelines. According to these criteria, implementation of the General Plan would result in significant impact to vegetation and wildlife if it would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state Habitat Conservation Plan.

IMPACT ANALYSIS

Impact VEG

Effects on Vegetation. Implementation of the Preliminary General Plan would result in the avoidance or minimization of disturbances or losses of sensitive plant communities or special-status plants through compliance with goals and guidelines that ensure protection of vegetative resources in the Park. This impact would be **less than significant**.

As discussed in Chapter 2, Existing Conditions, the dynamic riparian ecosystem of the Park contains a number of common and sensitive vegetation communities that are valuable habitat for plants and wildlife. Sensitive plant communities in the Park include wetland, valley oak woodland, and other successional riparian woodland plant communities. Proposed improvements, such as the development of new buildings/structures (e.g., visitor center) and other recreation facilities, including the car-top boat launch area, overnight campground, day-use areas, and trails, may be developed in proximity to areas containing sensitive vegetative resources. However, these developments would avoid or minimize impacts to wetlands and other sensitive plant communities based on the protective measures included in the goals and guidelines contained in the Preliminary General Plan. These include Goal ER-1.1 and associated Guidelines ER-1.1-3 through ER-1.1-6, which focus on avoidance of sensitive resources and onsite restoration where avoidance is not feasible; and Goal ER-3.2 and Guideline ER-3.2-2, which address the establishment and maintenance of riparian vegetation along riverbanks. In addition, implementation of Goal ER-1.3 and Guidelines ER-1.3-1 and ER-1.3-2 would control and possibly reduce the presence of invasive weeds at the Park, thus limiting the effect from invasive weeds and animals on native habitats and species.

Seven special-status plant species have the potential to occur in plant communities present at the Park. Based on the CNDDB and the presence of suitable habitat, three of these species, fox sedge, rose-mallow and Columbian watermeal, can occur within the Park. However, the

presence, locations and extent of populations of these plant species can vary because they grow in aquatic habitats, which are dynamic. Undocumented occurrences of these and other special-status plant species may be present in the Park; thus, focused surveys would be necessary to accurately determine the distribution and extent of special-status plant species in the Park. Direct impacts, such as direct removal or damage of special-status plant occurrences, would not occur as a result of implementation of the General Plan because development or expansion of facilities and other ground disturbance activities, including invasive weed abatement activities, would be conducted in accordance with Goal ER-1.2 and Guidelines ER-1.2-1 through ER-1.2-6, which focus on the protection of special-status plant and wildlife species, and all previously mentioned goals and guidelines. In addition, consistent with Guidelines ER-1.1-1 and ER-1.1-6, restoration could potentially increase the quality and extent of suitable habitat for special-status plant species.

Currently, no Habitat Conservation Plans or Natural Communities Conservation Plans have been approved in the region. Therefore, implementation of the Preliminary General Plan would not conflict with such plans.

Based on the information presented above, direct and indirect impacts to sensitive vegetation communities and special-status plants would be minimized or avoided, and as a result, this impact would be less than significant.

Impact WILD

Effects on Wildlife. Implementation of the proposed General Plan would result in the avoidance or minimization of disturbances or losses of special-status wildlife and wildlife corridors. The General Plan includes a range of goals and guidelines that ensure protection of natural resources, including wildlife, in the Park. These goals and guidelines maintain potential impacts at a **less-than-significant** level.

The Park supports a variety of terrestrial and aquatic wildlife species, primarily due to its position along the Sacramento River and Big Chico Creek. Many of the animals that occur in the Park are locally and regionally common, but as many as 24 terrestrial and 5 aquatic special-status species have been documented or have the potential to occur in the Park. Construction and maintenance of existing and proposed Park facilities could result in loss and/or disturbance of habitat and individuals of some of these special-status wildlife species. Potential direct impacts could result from development, re-location and/or expansion of facilities, such as trails, parking, campgrounds, picnic/day use areas, visitor center, administrative center, and boat launches. Potential secondary impacts on wildlife resulting from increased visitor use could include disturbance from visitor activities (e.g., hiking and boating), introduction/expansion of invasive species, and disturbance by domestic dogs.

However, impacts to special-status terrestrial and aquatic wildlife species would be avoided or minimized by implementation of the goals and guidelines contained in the proposed General Plan. These include Goal ER-1.2 and associated Guidelines ER-1.2-1 through ER-1.2-5, which would require monitoring of special-status species within the Park and development of specific measures to avoid and minimize adverse impacts that could result

from facility construction, maintenance activities, and visitor use. In addition, implementation of Goal ER-1.4 and Guidelines ER-1.4-1 through ER-1.4-3, would avoid or minimize potential impacts of non-native animals on wildlife in the Park, including impacts on special-status species, through monitoring efforts, development and implementation of a control plan, and public education to reduce release and feeding of non-native animals.

Wildlife movement is not expected to be substantially affected by construction and maintenance of proposed facilities. Relatively small patches of wildlife habitat would be disturbed and/or removed by facility development and such development would not substantially reduce opportunities for wildlife movement. In addition, habitat corridors would be protected and enhanced by implementation of Goal ER-1.5 and Guidelines ER-1.5-1, which promotes linkage with habitat areas that are currently isolated, and ER-1.5-2, which requires coordination with adjacent landowners to preserve habitat corridors in the vicinity. Potential impacts to the movement and/or migration of aquatic species would be minimized or avoided by implementation of Guideline ER-1.2-5, which restricts in-water construction during fish migration, spawning, and rearing periods.

4.6.5 Cultural Resources

This section analyzes impacts related to cultural resources that would result from the implementation of the Preliminary General Plan. The analysis is based on a review of known (and potentially significant) cultural resources at the Park and proposed land use developments and resource management efforts prescribed in the proposed General Plan.

Thresholds of Significance

The thresholds of significance for the analysis of cultural resources are based on criteria from Appendix G (Environmental Checklist) of the State CEQA Guidelines. According to these criteria, implementation of the General Plan would result in significant impact to aesthetics if it would:

- Cause a substantial adverse change in the significance of historical resources;
- Cause a substantial adverse change in the significance of an archaeological resource;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

Impact Analysis

Impact CUL

Impacts to Cultural Resources. Implementation of the Preliminary General Plan would result in the avoidance or minimization of disturbances to the integrity of cultural resources located within the Park. The Preliminary General Plan includes goals and guidelines that ensure the protection and maintenance of prehistoric and historic sites, features, and landscapes documented within the Park. This impact is considered **less than significant**.

Although portions of Bidwell-Sacramento River State Park have been subjected to cultural resource surveys related to transportation, reclamation, and recreation projects, no prehistoric or historic sites, features or artifacts have been formally documented within the Park. However, several important sites are known to exist (e.g., Bidwell Ferry, Gianelli Bridge, Sea Scout station, Tyler Dance Hall, etc.), but these have not been recorded using standard archaeological techniques. In addition, based on the presence of significant cultural resources within and in the immediate vicinity of the Park, and the sensitive nature of the landforms present in the area, it is likely that important resources remain to be discovered within Park boundaries.

Although general statements can be made regarding the cultural resources sensitivity of particular landforms within the Park (e.g., stream terraces and riverbanks are typically more likely to exhibit evidence for prehistoric occupation and various activities), additional surveys are needed to locate cultural resources, document their distribution, and ensure that they are not adversely affected by Park development and maintenance proposals. The implementation of Goals ER-2 and ER-2.1 and associated Guidelines ER-2.1-1, ER-2.1-2, and ER-2.1-3 support future research regarding the presence of cultural resources at the Park, including the development of a Cultural Resource Management Plan, and would also require cultural resource surveys prior to any development project proposed at the Park. These goals and guidelines prescribed in the General Plan would add considerably to the levels of research and preservation of cultural resources currently occurring within the Park, and therefore, would reduce impacts to a less than significant level.

4.6.6 Geology, Soils, and Seismicity

This section analyzes impacts related to geology, soils, and seismicity that would result from the implementation of the General Plan. The analysis is based on a review of available geologic, seismic, and soils-related information for the project area in the context of development and resource management features included as part of the proposed General Plan.

Thresholds of Significance

The thresholds of significance for the analysis of geology, soils, and seismicity are based on criteria from Appendix G (Environmental Checklist) of the State CEQA Guidelines. According to these criteria, implementation of the General Plan would result in significant impact to geological resources if it would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault, strong seismic ground shaking, seismic-related ground failure, including liquefaction, and/or landslides;
- Result in substantial soil erosion or the loss of topsoil;

- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; or
- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

IMPACT ANALYSIS

Impact GEO

Risk of Geologic and Seismic Hazards. The recreational facilities and other structures developed in the Park could be potentially subject to geologic and seismic hazards and/or other adverse environmental effects based on geologic and soil-related conditions that exist at the Park. Compliance with the California Building Code (CBC) would maintain the risks of such hazards to an acceptable level; therefore, this impact would be **less than significant**.

The Park is located in a seismically active region, and potentially active faults in the area (e.g., Chico Monocline fault, Coastal Ranges thrust zone, and other faults in the Sierra foothills) may produce earthquakes with magnitudes of 6.5 or greater (Butte County 1996). However, there are no faults in the immediate project area, and the Park is not located in an Alquist-Priolo special study zone. As a result, although the potential for seismic activity in the region exists, the Park is not expected to be subject to fault rupture. Due to the relatively mild topography of the Park, only minor (if any) seismically-induced landslides along river banks could occur. In the event of a large earthquake, the Park could be subject to moderately-strong seismic ground shaking, which could result in potential structural damage to Park facilities. The risk of liquefaction, which is the transformation of soils from a solid state to a liquid state during ground shaking, is high at the Park due to the presence of saturated sandy soils (e.g., Columbia silt loam, Maywood fine sandy loam, Gianella fine sandy loam). Liquefaction can cause buildings to sink and could render them susceptible to major damage. By law, all structures developed within the Park would have to comply with the standards contained in California Code of Regulations, Title 24 (i.e., CBC). As such, future development and improvements would include structural reinforcements and other features, as required by the CBC, which avoid or minimize seismically induced structural damage.

In terms of soil-related impacts, the primary risks at the Park are soil erosion and subsidence. Erosion risk increases with increasing slope, precipitation, ground disturbance, and decreasing vegetative cover. Although the Park is relatively flat and is densely vegetated in most areas, ground-disturbing activities that would be occurring at the Park (e.g., trail use) coupled with loss of vegetation from facility and trail development and climatic factors (e.g., wind, precipitation, etc.) could result in erosion and the loss of topsoil at the Park. However, there are goals and guidelines in this Plan that would control erosion factors. Goal ER-1.1 and Guidelines ER-1.1-1 and ER-1.1-2 would generate additional vegetative cover within the

Park, which would generally aid in minimizing erosion. In addition, the construction of new facilities would require the use of best management practices, including measures specified in erosion-control plans, as prescribed in Goal ER-3.2 and Guideline ER-3.2-1. Further Guideline ER-3.2-2 would maintain vegetative buffers along the riverbank, which would avoid or minimize the potential for transport of sediment into water bodies during construction activities and visitor use at the Park. Guideline ER-3.2-3 requires trails be designed, maintained, and monitored to minimize adverse erosion effects. Given these goals and guidelines, the potential for soil erosion would be avoided or minimized.

Subsidence is a concern in the region due to natural gas and groundwater extraction. In the immediate vicinity of the Park, the primary cause of subsidence is groundwater extraction for agricultural purposes. Implementation of the General Plan would accommodate the conversion of agricultural uses to open space and recreational uses on several properties being considered for addition to the Park. While new wells may be needed to provide potable water at recreational facilities, the overall use of groundwater is expected to decrease because irrigation-dependent agricultural uses would be discontinued. As such, implementation of the General Plan would decrease the risk of subsidence. Moreover, facilities that would be developed at the Park would be required to comply with the CBC, which includes structural requirements for areas susceptible to subsidence.

It should also be noted that the characteristics of the soils within the Park are conducive to supporting specialized septic systems (i.e., septic tanks designed to prevent accidental release during flood events), such as those currently operating at the Irvine Finch and Indian Fishery subunits. As a result, future developments that may require the use of septic systems would not be limited by the soils in the project area.

Overall, because potential seismic-related impacts would be avoided or minimized through provisions in the CBC, erosion impacts would be addressed through goals and guidelines in the plan, and there are no soils-related limitations to the use of septic systems at the Park, implementation of the proposed General Plan would result in less-than-significant impacts to geology and soils. No mitigation measures are necessary.

4.6.7 Hazards and Hazardous Materials

This section analyzes impacts related to hazards and hazardous materials that would result from the implementation of the General Plan. The analysis considers the types of proposed uses at the Park and the standard equipment and materials used in operating and managing the Park in relation to proposed hazard that could affect Park visitors and staff.

Thresholds of Significance

The thresholds of significance for the analysis of hazards and hazardous materials are based on criteria from Appendix G (Environmental Checklist) of the State CEQA Guidelines. According to these criteria, implementation of the General Plan would result in significant impact associated with hazards and hazardous materials if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area;
- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

IMPACT ANALYSIS

Impact HAZ

Risk of Wildland Fire, Exposure to Hazardous Materials, and Other Hazards. While the General Plan would accommodate new developments and improvements that may increase fire incidents and the use of hazardous materials, implementation of the management goals and guidelines, as well as the compliance with existing codes, rules and regulations, would maintain this impact at a **less-than-significant** level.

The analysis of hazards and hazardous materials under CEQA is multi-faceted. It is intended to address the use of hazardous materials, emergency response, and wildland fire. Each of these topics is addressed below.

There are no documented hazardous materials sites within the Park (EPA 2003). Implementation of the General Plan would not result in a substantial increase in the use of hazardous materials (e.g., propane, herbicides) at the Park. Transport and storage of hazardous materials within the Park would continue to be conducted in accordance with all regulatory requirements. Day-to-day operation of the Park does not involve the disposal of hazardous materials, and the Department would continue to contract with licensed providers of propane and herbicides when transporting these materials to the Park, as needed. The

use, storage, and disposal of hazardous materials, as well as the development of new storage facilities, would comply with state and federal rules and regulations.

Implementation of the General Plan would not conflict with the emergency response plans of either Butte or Glenn counties. Implementation of Goal AO-2.3 and Guidelines AO-2.3.1 and AO-2.3-2 would promote coordination with emergency response agencies in planning for the safety of Park visitors, including the continuation of a coordinated emergency response to special events at the Park. No road closures are planned, and adequate emergency vehicle access would be maintained with implementation of Guideline AO-2.3-3 which would require all areas to accommodate adequate access for emergency vehicles.

The increase in interaction between Park visitors and wildland habitat, as well as introducing new recreational uses at the Park, would increase the risk of wildland fires at the Park. Implementation of the General Plan would result in additional native vegetation habitat through restoration opportunities (see Goal ER-1.1), which could increase the fuel load at the Park. Increases in fuel load combined with additional recreational facilities and trails that would increase human activity throughout the Park, including the use of campfires at the proposed overnight campground, would result in a higher risk for wildfires relative to baseline conditions. The threat of wildfire could threaten or otherwise adversely affect Park visitors, nearby establishments, private residences, and other nearby land uses such as agriculture. Implementation of Goal AO-2.3 and Guidelines AO-2.3.1 and AO-2.3.2 would facilitate monitoring and patrolling of the Park, which would provide the opportunity to respond to potential causes of wildfire (e.g., illegal fires). In addition, Guideline AO-3.3-2 would restrict the use of campfires, further minimizing potential wildfire ignition. And finally, Guideline VU-3.7-4 would ensure the provision of information to visitors on Park rules regarding fire safety. Given these goals and guidelines, the increase in the risk of wildland fire is not expected to be substantial. Further, all buildings would be designed in compliance with the CBC, which requires fire safety features.

The Park is not within 2 miles of an airport, and the General Plan would not accommodate the types of development that would be in conflict with the operation of the nearest airport in Chico.

Based on the information presented above, impacts related to wildland fires, risk of exposure to hazardous materials, and risks associated with airport operations are considered to be less than significant. No mitigation measures are necessary.

4.6.8 Hydrology and Water Quality

This section analyzes hydrology and water quality impacts that would result from the implementation of the General Plan. This analysis considers the proposed development and resource management efforts prescribed in the General Plan in the context of the hydrological conditions that currently characterize the Park.

THRESHOLDS OF SIGNIFICANCE

The thresholds of significance for the analysis of hydrology and water quality are based on criteria from Appendix G (Environmental Checklist)of the State CEQA Guidelines. According to these criteria, implementation of the General Plan would result in significant impact to hydrological resources if it would:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam; or
- Inundation by seiche, tsunami, or mudflow.

IMPACT ANALYSIS

Impact HYDRO

Flood Damage, Riverbank Erosion, and Water Quality Degradation. Implementation of the General Plan would allow for the development of facilities within the floodplain, the construction and operation of which could generate pollutants that may affect water quality. Compliance with goals and guidelines and existing rules and regulations would maintain these impacts at **less-than-significant** levels.

All of the Park's subunits, except Irvine Finch, are located within the 100-year floodplain. The General Plan would allow for the development of new facilities in the floodplain based on

incorporating site and facility design features (e.g., elevated building pads), as prescribed in Goal AO-3.1 and Guideline AO-3.1-1. Some proposed facilities, such as campgrounds, function with minimal problems in the floodplain, while other permanent structures may need to be designed with flood-related protective features. In addition, per Guideline AO-3.1-2, existing facilities at the Park would be re-designed to withstand flood events, as needed. As a result, potential adverse environmental effects associated with flooding, including structural damage and release of pollutants, is expected to be minimal.

Implementation of the General Plan would not result in the alteration of the Sacramento River or its tributaries. However, the General Plan would allow for the development of new facilities and operations of existing facilities within the designated floodplain and Inner River Zone (see Guideline AO-3.1-1). It should be noted that siting of appropriate facilities within the Inner River Zone would take into account historic flooding patterns and river meander, including known hard-points along the river channel. As a result, the potential conflicts between structural developments and the natural hydrology of the river channel is expected to be minimal.

Based on the existing drainage pattern of the Park, which often results in onsite flooding, there are no features of the General Plan that would result in localized flooding at offsite locations. Furthermore, given the channel volume of the Sacramento River, implementation of the General Plan would not impede or redirect flood flows.

Due to close proximity of the Park to the Sacramento River and its tributaries, additional runoff generated by new impervious surfaces associated with facility development may drain into nearby waterways, thereby adversely affecting water quality. By virtue of the location of facilities within the floodplain, onsite pollutants may be washed into nearby waterways during flood events, resulting in degradation of water quality. However, there are goals and guidelines in the proposed General Plan that address potential impairments to water quality. Goal ER-1.1 and Guidelines ER-1.1-1 and ER-1.1-2 would result in additional vegetative cover within the Park, which serves as a filter to pollutants entering nearby water bodies. Goal ER-3.2 and Guidelines ER-3.2-1 and ER-3.2-2 would require vegetative buffers and other erosion-control features that would avoid or minimize the potential for runoff to carry eroded soils into water bodies during construction and operational activities. Erosion-control and other water quality control features may also be required by the Central Valley RWQCB through the NPDES permit program. Site-specific best management practices (BMPs) to reduce the level of contaminants in discharges to surface waters (e.g., runoff, dewatering discharges) would be required for all construction and operational activities in the Park that could result in the generation of contaminants in discharges (e.g., all construction activities involving more than one acre of disturbed areas). Through the Section 401 certification program, water quality control features may be required to ensure that the placement of fill in the waters of the United States (e.g., wetlands, rivers and streams) is consistent with the State's water quality standards and criteria. These goals and guidelines, as well as RWQCB requirements, would avoid or minimize the contribution of sediments and other pollutants into waterways.

Based on the information presented above, the General Plan would result in less-than-significant impacts related to the hydrology and water quality at the Park. No mitigation measures are necessary.

4.6.9 Noise

This section analyzes noise impacts that would result from the implementation of the General Plan. The analysis is based on typical noise levels generated by recreation uses that would be accommodated at the Park and the relationship with established noise standards.

Thresholds of Significance

The thresholds of significance for the analysis of noise are based on criteria from Appendix G (Environmental Checklist) of the State CEQA Guidelines. According to these criteria, implementation of the General Plan would result in significant impact associated with noise if it would:

- Expose persons to or generation of noise levels in excess of established standards;
- Expose persons to or generation of excessive groundborne vibration or groundborne noise levels;
- Cause a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project; or
- Cause a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

Impact Analysis

Impact NOISE

Increase in Ambient Noise Level. Based on the proposed facility developments in the General Plan, there would likely be an increase in visitation to the Park that could result in increases in ambient noise primarily from vehicle access to and from the Park. However, visitor use at the Park is not expected to be such that ambient noise levels would result in adverse impacts to sensitive receptors. Further, compliance with goals and guidelines in the General Plan would ensure that future construction of facilities and other improvement efforts at the Park would not generate noise levels that exceed the State noise guidelines. Therefore, this impact would be **less than significant**.

The three primary sources of noise expected within the Park are construction activities, operations of facilities, and vehicular traffic. Based on the California Office of Planning and Research's General Plan Guidelines (State Guidelines), 60 dBA is the maximum acceptable noise level for the most noise-sensitive land uses (e.g., single-family residences). Recreation and agricultural uses have a maximally acceptable noise level of 75 dBA, and the standard for commercial businesses is 70 dBA. While areas conducive to wildlife and nature observation are not included in the State Guidelines, they would also be considered noise-sensitive uses.

Based on information provided by U.S. Environmental Protection Agency (EPA), outdoor receptors within approximately 1,600 feet of construction sites could experience maximum instantaneous noise levels of greater than 60 dBA when onsite construction-related noise levels exceed approximately 90 dBA at the boundary of the construction site. There are sensitive uses that exist near the Park, including private residences adjacent to the proposed Sunset Ranch Addition and Scotty's Bar and Grill located along Pine Creek.

In addition, potential stationary sources of noise within the Park include the operation of facilities (e.g., visitor center), which would generate occasional parking lot-related noise, and general recreation use, which would generate noise from the use of recreation equipment (e.g., motor boats) and casual conversation.

Finally, if future development and improvements would generate additional visitation to the Park, then traffic volumes and the associated noise volumes along roadways would increase.

Overall, there exists the potential for adverse noise effects to nearby sensitive receptors resulting from construction of activities, including the development of a visitor center at the Park; stationary source noise associated with typical recreation uses at the Park; and traffic-related noise associated with increased visitation to the Park. Based on the characteristics of the Park and expected use levels, noise associated with typical recreation uses and traffic is not expected to exceed State Guidelines. However, construction-related noise could adversely affect nearby residences on a short-term and periodic basis. Goal AO-3.3 and Guideline AO-3.3-3 would require proposed development projects conformance with applicable state noise standards. This may be achieved through implementation of noise-reducing measures (e.g., noise walls, site design changes, and limits on hours of operations) that would maintain appropriate construction noise levels near sensitive uses. Therefore, this impact would be less than significant, and no mitigation measures are necessary.

4.6.10 Transportation and Circulation

This section analyzes transportation and circulation impacts that would result from the implementation of the General Plan. This analysis considers potential increases in visitation that would result from the proposed General Plan and the related effects on traffic and circulation in the project area. It should be noted that recreation use projections have not been developed for the Plan, and therefore, the analysis represents a qualitative evaluation of this issue.

Thresholds of Significance

The thresholds of significance for the analysis of transportation and circulation are based on criteria from Appendix G (Environmental Checklist) of the State CEQA Guidelines. According to these criteria, implementation of the General Plan would result in significant impact to transportation and circulation if it would:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the

number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);

- Exceed, either individually or cumulatively, a level of service standard established by the congestion management agency for designated roads or highways;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Result in inadequate emergency access;
- Result in inadequate parking capacity; or
- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks).

IMPACT ANALYSIS

Impact TRANS

Increase in Trips and the Effect on Local Traffic, Circulation, and Roadway Safety. Implementation of the General Plan may increase traffic volumes on local roadways serving the Park during noncommuter peak periods, but would not likely result in the degradation of traffic flows or the need for roadway expansion. Increased visitation to the Park may also affect internal circulation and parking, as well as roadway safety. Goals and guidelines in the General Plan avoid or minimize potential adverse affects related to the internal and local transportation system. As such, traffic-related impacts would be **less than significant**.

The General Plan would allow for new recreational developments that may attract additional visitation, which would increase vehicular trips along local roadways serving the Park. Most of the additional vehicular trips would occur during weekends, particularly during holiday weekends, and very few of the trips are expected during the peak commuter hours when LOS levels along SR 32 are of concern. Further, goals and guidelines in the General Plan would also facilitate the provision of public transportation to the Park (see Goal VU-3.2 and Guidelines VU-3.2-1 and VU-3.2-2), which would likely have a beneficial effect on traffic volumes in the area. There may be short-term traffic congestion during peak-period recreation events (e.g., Fourth of July, Labor Day), when thousands of visitors overwhelm the capacity of the local roadways. However, coordination and collaboration with Caltrans and other agencies, per Goal AO-2.3, which requires the provision of a safe environment for the visitors, and Guideline AO-2.3-2, would facilitate the safest and most expedient access to and from the Park possible. Overall, traffic conditions along local roadways are not expected to noticeably change as a result of the proposed General Plan.

In terms of roadway safety, intersection improvements or new intersections may be needed along SR 32, River Road, and other roadways where access roadways to new facility development connect with existing roadways. This is particularly applicable to proposed development areas that may need design features to provide safer access off the existing roadway system, which may be the case at the Sunset Ranch property. Goal VU-3.1 and

Guidelines VU-3.1-1 through VU-3.1-5 would provide for adequate roadway signage, preparation of traffic analyses for major development proposals, and coordination with Caltrans and local jurisdictions to implement roadway improvements, where necessary, to ensure safe access to and from the Park. Moreover, separation of vehicle traffic from pedestrians, bicyclists, and equestrians, and installation of roadway safety signage in the Park is prescribed under Guidelines VU-3.8-1 and VU-3.8-2, respectively. During peak-period recreation events, Goal AO-2.3 and Guidelines AO-2.3-2 would promote safe access to and from the Park along local roadways. In addition, implementation of Guideline AO-2.3-3 would ensure that the existing and new use areas be designed to maintain adequate access for emergency vehicles. Roadway visibility may be affected by nighttime campfire smoke from proposed overnight campgrounds; however, because these emissions would originate from proposed small- to moderate-scale facilities that are not located directly on the roadway system, they are not anticipated to result in safety hazards. With goals and guidelines prescribed in this plan, implementation of the General Plan would not be expected to adversely affect traffic safety in the project area.

With additional facilities, additional parking capacity would be needed at the Park. Implementation of Goal VU-3.3 and Guidelines VU-3.3-1 and VU-3.3-2 would provide for expanded parking capacity for vehicles and buses and private vehicles to meet visitor needs.

Overall, given the goals and policies related to traffic and circulation included in the Plan, as well as the compliance with applicable codes and regulations, impacts related to traffic and transportation would be less than significant.

4.6.11 Public Services and Utilities

This section analyzes impacts on utility and public service systems that would result from the implementation of the General Plan. The analysis based on the potential demands for public services and utilities as part of proposed facility developments included in the General Plan.

Thresholds of Significance

The thresholds of significance for the analysis of public services and utilities are based on criteria from Appendix G (Environmental Checklist) of the State CEQA Guidelines. According to these criteria, implementation of the General Plan would result in significant impact to public services and utilities if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection, police protection, schools, parks, and other public facilities;
- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;

- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments;
- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs; or
- Comply with federal, state, and local statutes and regulations related to solid waste.

IMPACT ANALYSIS

Impact UTIL

Increased Demand for Utility and Public Services. The General Plan would allow for the development of new facilities and improvements that would generate an increase in the demand for utility and public services. Because existing service providers and resource capacities are expected to be sufficient, the impact would be **less than significant**.

The General Plan would allow for the development of new facilities and site improvements that would increase visitor use at the Park, and therefore, generate additional demand for water, wastewater, electricity, propane, solid waste, telephone, law enforcement, fire protection, emergency, and road maintenance services. Because the level of additional visitation is not expected to be substantial, the Department would continue to utilize existing sources of utility and other public services, which have sufficient capacity to accommodate increases in demands that would result from implementation of this plan.

For services provided by outside sources including, solid waste collection and disposal, road maintenance, fire protection, law enforcement, and emergency medical services, existing service providers would be utilized. There are no known capacity issues that would affect the provision of these services for the Park.

The Department would continue to provide potable water from its existing wells or from new wells as needed. Based on the types of facilities proposed and the ceasing of irrigation on potential property additions currently in agriculture, it is expected that the existing groundwater supply would be sufficient to serve the Park. New water and wastewater facilities (e.g., pipelines) may be needed for new developments and would be built in conjunction with specific facility developments, per Guidelines AO-3.2-1 and AO-3.2-2.

The construction and installation of new equipment and facilities that may be needed to serve the future development within the Park could result in adverse environmental effects. Because preference would be given to the use of existing infrastructure over the development of new infrastructure, in accordance with Goal AO-3.2 and Guidelines AO-3.2-1 and AO-3.2-2, which give preference to connection with existing infrastructure over the development of new infrastructure, the amount of new development, including ground-disturbing activities, required to provide utility and public services may be avoided or minimized.

While the exact nature of the infrastructure and service needs would not be determined until the development proposal is available, it is expected that any adverse effects would be mitigated to the extent feasible in accordance with Guideline AO-3.2-3. Construction and operations of any new equipment and facilities are expected to be in compliance with state and federal rules and regulations. In addition, new infrastructure and services are expected to be environmentally compatible with the Park's resources, and any degradation of environmental values is not expected to be substantial based on implementation of Guideline AO-3.2-3.

Based on the information provided above, overall impacts associated with the provision of utility and other public services is expected to be less than significant, and no mitigation measures are necessary.

4.7 Other CEQA Considerations

4.7.1 Unavoidable Significant Effects on the Environment

This first-tier environmental review indicates that the potential significant environmental effects from implementation of the General Plan can be maintained at a less-than-significant level with appropriate facility siting, implementation of goals and guidelines included in this Plan, and the development of specific mitigation measures during the project-level environmental review process. The one exception, as discussed below, is the unavoidable significant conversion of farmland to non-farmland uses.

At the programmatic level, it is generally difficult to identify unavoidable significant effects on the environment because the specific location and scope of proposed uses or management efforts are not known. However, there are features of the proposed General Plan that would likely result in unavoidable significant effects on the environment, as described below.

Implementation of the General Plan would likely result in a significant and unavoidable effect related to the conversion of *Important Farmland* to non-agricultural uses. By expanding the Park through property acquisition and either restoring or developing new properties that are or may be considered *Important Farmland* (i.e., Beard Addition, Singh Orchard), these properties would be converted from agricultural to non-agricultural uses. Because the Department would not continue agricultural operations on these properties and there are no measures that can be taken to mitigate this effect, it is considered an unavoidable and significant effect on the environment under CEQA (Appendix G Checklist, CEQA Guidelines).

It should be noted that the Department would restore native riparian habitat on this land and that restoration would result in long-term natural process and function benefits.

4.7.2 Significant Irreversible Environmental Changes

No significant irreversible changes to the physical environment are anticipated from the adoption and implementation of this General Plan. Facility development, including structures, roads and trails, may be considered a long-term commitment of resources; however, the impacts can be reversed through removal of the facilities and discontinued access and use. Ongoing adverse effects on the environment, if any, can be monitored by Park staff through their consideration of carrying capacity issues. The Department does remove, replace, or realign facilities, such as trails and campsites, where impacts have become unacceptable either from excessive use or from a change in environmental conditions.

The construction and operation of facilities may require the use of non-renewable resources. This impact is projected to be minor based on considerations of sustainable practices in site design, construction, maintenance, and operations that are generally practiced by the Department. Sustainable principals used in design, construction and management, such as the use of non-toxic materials and renewable resources, resource conservation, recycling, and energy efficiency, emphasize environmental sensitivity.

4.7.3 Growth-Inducing Impacts

State CEQA Guidelines §15126.2(d) require that an EIR evaluate the growth-inducing impacts of a proposed project. Specifically, an EIR must discuss the ways in which a proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Growth can be induced in a number of ways, including the elimination of obstacles to growth, or by encouraging and/or facilitating other activities that would induce new growth. Growth inducement itself is not an environmental effect, but may lead to environmental effects. Such environmental effects may include increased demand on other community and public services and infrastructure, increased traffic and noise, degradation of air or water quality, degradation or loss of plant or wildlife habitats, or conversion of agricultural and open space land to urban uses.

If implemented completely, the General Plan may indirectly foster economic growth in the region. This economic growth would be associated with the development of new recreational and interpretive facilities, which could increase visitation to the Park. The anticipated increase in Park visitation is based on an increase in the overall capacity of the Park (i.e., Park expansion), interpretive potential at the proposed visitor center, the development of family and group day-use and overnight camping facilities, and improvements to the trail system, including additional new trails and linkages between the Park and regional trails. Additional directional and informational signage outside the Park should raise the Park's profile as a destination for recreation and historical interpretation.

If visitation to the Park increases, tourism-related spending would increase in adjacent communities and surrounding region, which would in turn support tourism- and recreation-related businesses and employment. The extent of such economic effects is unknown at this time, but could indirectly result in growth of local economic activity.

In addition, there will be the need to expand permanent and seasonal Park staff to address increases in Park visitation and to operate facilities, such as the proposed visitor center. Increases in employment opportunities in both the public and private sector could result in increases in local population growth, but this effect is expected to be minimal because the number of new jobs is not expected to be substantial and any new employees would likely be from the local area.

4.7.4 Cumulative Impacts

This EIR provides an analysis of cumulative impacts of the proposed General Plan, as required in State CEQA Guidelines §15130. Cumulative impacts are defined in State CEQA Guidelines §15355 as "two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts." A cumulative impact occurs from "the change in the environment, which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor, but collectively significant, projects taking place over a period of time (State CEQA Guidelines §15355[b]). By requiring an evaluation of cumulative impacts, CEQA attempts to ensure that large-scale environmental impacts will not be ignored.

To evaluate cumulative environmental impacts, other projects that could cumulatively contribute to the impacts described in this EIR need to be identified. In addition to substantial growth in the Chico region, several development and planning projects are being undertaken in close proximity to the Park by other public agencies, including the U.S. Army Corps of Engineers (USACE), USFWS, and CDFG. These projects are:

- Sacramento River Wildlife Area Management (CDFG).
- Comprehensive Conservation Plan – Sacramento River National Wildlife Refuge (USFWS).
- Hamilton City Flood Damage and Ecosystem Restoration Project (USACE)

Please refer to Chapter 2, Existing Conditions and Issues, for an overview and key features of these projects.

As described above, the facility development and resource management efforts proposed in the General Plan would not, except for conversion of farmland, result in significant adverse environmental impacts based on implementation of the goals and guidelines included in the Plan. Although not individually significant, those environmental topics that are not expected to be subject to significant adverse effects from the proposed development in the General Plan may result in cumulative impacts to the extent that they are occurring in the region, such

as water quality degradation and the loss of biological, cultural, and visual resources. However, features of the General Plan, including possible acquisitions and resource protection efforts, would act to protect existing Park resources, preserve viewsheds, and enhance plant and wildlife habitat by providing habitat linkages and buffers. As a result, cumulative impacts associated with these environmental topics are expected to be less than significant.

The General Plan would result in a significant and unavoidable impact related to the conversion of *Important Farmland* in the project area. This loss would cumulatively contribute to the loss of farmland and agricultural productivity that is affecting the region and the state, including losses associated with implementation of restoration and conservation uses on adjacent public lands. Therefore, this would be a significant and unavoidable cumulative impact, although restoration would return farmland to its original riparian habitat state, and provide environmental benefits to improved natural process and functions.

4.8 Alternatives to the Proposed Project

The guiding principles for the analysis of alternatives in this EIR are provided by the State CEQA Guidelines §15126.6, which indicate that the alternatives analysis must: (1) describe a range of reasonable alternatives to the project that could feasibly attain most of the basic objectives of the project; (2) consider alternatives that could reduce or eliminate any significant environmental impacts of the proposed project, including alternatives that may be more costly or could otherwise impede the project's objectives; and (3) evaluate the comparative merits of the alternatives. The State CEQA Guidelines §15126.6(d) permit the evaluation of alternatives to be conducted in less detail than is done for the proposed project. A description of the project alternatives, including the No Project Alternative, is provided in this EIR to allow for a meaningful evaluation, analysis, and comparison of these alternatives with the proposed General Plan.

4.8.1 Description and Environmental Effects of the Alternatives

Alternatives 1A, 1B, and 1C: Project Planning Alternatives.

Description

A range of planning alternatives was developed and presented to the public during the General Plan process. These alternatives represented a menu of options in addressing the various issues identified at the Park, and were organized by the degree of management (or treatment) for a particular issue. As such, these alternatives do not just represent separate alternatives unto themselves, but also describe packages of management intensity, ranging from minimum to moderate to maximum treatment of natural and recreational resources. In addition, some of the integral key features are included in more than one planning alternative.

The *minimum* treatment of natural and recreational resources (Alternative 1A) includes the following key features:

- Monitoring approach to management of special-status plant/wildlife species and non-native/feral animals;
- Control of California Department of Food and Agriculture (CDFA) Class "A" and "B" noxious weeds;
- Use of native plants in facility landscaping;
- Focus on the protection of known cultural resources;
- Expand Irvine Finch boat launch area and develop small-scale car-top boat launch area at the Peterson property;
- Minor expansion of picnic amenities at existing day-use areas;
- Limited number of primitive, environmental campsites at the Big Chico Creek Riparian Area, east of River Road;
- New internal loop trail at Big Chico Creek Riparian Area and canoe trail;
- Small visitor center at Beard Addition using signs/panels;
- Relocation of existing administrative center to Sunset Ranch Addition; and
- Implement policies that foster community involvement and coordination with local and regional planning efforts.

The *moderate* treatment of natural and recreational resources (Alternative 1B) includes the following key features:

- Active approach to management of special-status plant/wildlife species, including restoration of threatened and endangered species habitat and control of animals affecting sensitive species;
- Prevent spread of all existing and establishment of new invasive weeds;
- Restore natural habitat of future property additions;
- Focus on the protection of known and potential cultural resources at the Park;
- Expand Irvine Finch and Pine Creek boat launch areas and develop moderate-scale car-top boat launch area on the east side of the Big Chico Creek Riparian Area;
- Small expansion of existing day-use areas and develop new day-use area at Indian Fishery;
- Limited number of primitive, environmental campsites in the eastern portion of the Big Chico Creek Riparian Area and in Indian Fishery (near Old Chico Landing) and small family campground at Indian Fishery;
- New internal loop trail at Big Chico Creek Riparian Area, expand existing loop trail at Indian Fishery, and canoe trail;
- Moderate-scale, mobile visitor center with working farm at Sunset Ranch Addition;
- Relocation of existing administrative center to Sunset Ranch Addition; and

- Implement policies that foster community involvement and coordination with local and regional planning efforts.

The *maximum* treatment of natural and recreational resources (Alternative 1C) includes the following features:

- Active approach to management of special-status plant/wildlife species, including restoration of all sensitive species habitat, control of animals affecting sensitive species, and monitoring of biodiversity;
- Reduce extent of and control all invasive weeds;
- Restore natural habitat of all degraded sites within the Park;
- Focus on the protection of known/potential cultural resources at the Park and develop Cultural Resource Management Plan;
- Expand Irvine Finch and Pine Creek boat launch areas and develop larger-scale boat launch area on the eastern portion of the Big Chico Creek Riparian Area providing car-top and motorized boat access;
- Small expansion of existing day-use areas and development of two new day-use areas;
- Limited number of primitive, environmental campsites on the eastern portion of the Big Chico Creek Riparian Area and Indian Fishery (near Old Chico Landing). Large family campground at Beard Addition;
- New internal loop trail at Big Chico Creek Riparian Area, expand existing loop trail at Indian Fishery, coordinate to develop multi-agency loop trail near Sunset Ranch, and canoe trail;
- Coordinate to develop permanent, large-scale visitor center with working farm at the Sunset Ranch Addition serving multiple public agencies;
- Relocation of existing administrative center to Sunset Ranch Addition; and
- Implement policies that foster community involvement and coordination with local and regional planning efforts.

EVALUATION

The minimum treatment of natural and recreation resources (Alternative 1A) does not provide for substantial recreation development, but is limited in the extent of management of important natural, cultural and visual resources. On the other end of the spectrum, the maximum treatment of natural and recreation alternatives (Alternative 1C) calls for the greatest amount of facility development, but also includes the strongest or most stringent management of natural resources at the Park. The moderate treatment of natural and recreation alternatives (Alternative 1B) lies in between these two bookend planning concepts. It is difficult to ascertain what the resulting net environmental effect would be from these three alternatives on the environmental resources at the Park. Based on the balance of physical

development and environmental stewardship that characterizes each of these alternatives, it would be expected that these three alternatives would result in comparable environmental impacts relative to one another. Further, because the proposed General Plan is characterized by a combination of the three planning alternatives described above, and also balances the development of facilities with sound stewardship of natural resources, it is also expected to result in comparable environmental impacts relative to these planning concepts.

ALTERNATIVE 2: MAXIMUM RESTORATION ALTERNATIVE

Description

This alternative represents the scenario where the existing subunits of the Park and all future property additions are restored to natural habitat conditions to the extent feasible. As such, existing facilities at the Park would be removed where appropriate and no new recreation or operations-related facilities would be developed. The Park would ultimately represent discontiguous pockets of protected open space, where visitors could engage in passive recreation opportunities in the absence of developed facilities.

Evaluation

The Maximum Restoration alternative would result in less environmental impacts relative to the proposed General Plan. Because no recreation or other facility development is proposed, adverse environmental effects associated with ground-disturbing construction activities, such as loss or degradation of sensitive riparian and/or wildlife habitat, would be avoided. Also, there would be relatively less visitation to the Park under this alternative because recreation opportunities at the Park would be limited to passive opportunities only. With less visitation, there would also be less demand on consumptive resources (e.g., potable water) and public services (e.g., law enforcement), and resulting traffic, air quality, and noise effects would be less pronounced relative to the proposed project. However, this alternative would still entail addition of the three proposed properties included as part of the proposed project (i.e., Beard property, Sunset Ranch, and Singh Orchard), which would be restored to their natural habitat conditions. As a result, this alternative would result in the conversion of Important Farmland to non-agricultural uses similar to the proposed project.

Although the Maximum Restoration alternative would result in less impact to the environment, relative to the proposed project, it would not achieve one of the Department's primary missions –providing high-quality recreation opportunities to residents of the State. However, this alternative would still meet the criteria of a State Park, which are intended to balance natural, cultural, and scenic resource considerations and facilitate the provision of the recreational opportunities they provide to the public (albeit extremely limited under this alternative).

ALTERNATIVE 3: NO PROJECT ALTERNATIVE

Description

The California Environmental Quality Act requires an evaluation of the "no project" alternative and its impact (CEQA Guidelines §15126.6[e][1]). The no project alternative represents perpetuation of existing management actions, and its analysis is based on the physical conditions that are likely to occur in the future if the project (the proposed General Plan) is not approved and implemented. The purpose of describing and analyzing a no project alternative is to allow decision-makers to compare the impacts of approving the proposed project with the expected impacts of not approving the project. If a general plan is not implemented for Bidwell-Sacramento River State Park, the existing management scenario would continue for Park development, operation, and management, which includes, but is not limited to, the following features:

- maintenance of existing recreation and operation facilities and Park grounds,
- restoration of existing properties that were acquired for habitat values,
- property acquisition that facilitate management of the Park, and
- implementation of the Interpretive Prospectus (1997) developed for the Park.

Evaluation

The existing conditions at the Park, including the lack of needed facilities, would continue if the General Plan were not adopted. Visitation to the Park is increasing every year and based on demographic trends, use of the Park would increase, but not at the level expected under the proposed General Plan due to the lack of facilities. There would be public pressure to expand facilities at the Park; however, without a general plan in place, the Department would not have the authority to develop or enhance facilities to respond to this demand and funding for recreation and interpretation improvements to enhance the visitor experience may be difficult to obtain. Recreational and interpretive improvements that could enhance the visitor experience at the Park's current level of use or anticipated future needs would not be developed. As a result, similar to the Maximum Restoration alternative (Alternative 2), this alternative would potentially avoid construction-related impacts associated with facility development that would occur under the proposed General Plan.

However, without the facility improvement to accommodate the existing visitor demand, as well as the projected increase in visitor use (although less than the proposed General Plan), sensitive natural and cultural resources may be expected to degrade over time because of overuse and lack of formalized management approaches. In other words, under the No Project Alternative, the Park's natural and cultural resources would not receive an increased level of protection, as prescribed under the General Plan. Comprehensive Park-wide resource management plans and policies for natural and cultural resources would not be implemented, including the development of a formal Cultural Resource Management Plan (CRMP).

Traffic and circulation improvements may not be accomplished under the No Project Alternative. Parking and circulation problems would continue as visitor use increases, creating issues with visitor capacity at the Park. Improvements to informational and directional signage would not occur.

Finally, this alternative would continue current patterns of property acquisition, including those properties that contain Important Farmland. Because the Department would not continue agricultural use of these properties under most circumstances, the No Project Alternative would result in significant and unavoidable impacts to agricultural resources, similar to the proposed General Plan.

4.8.2 Environmentally Superior Alternative

State CEQA Guidelines §15126(d)(2) states that "if the environmentally superior alternative is the no project alternative, the EIR shall also identify an environmentally superior alternative from among the other alternatives." In light of this guidance, the EIR discusses whether the no project alternative or one of the other plan alternatives would be environmentally superior. Alternatives considered here include the proposed General Plan, the three planning alternatives (Alternatives 1A, 1B, and 1C), the Maximum Restoration Alternative, and the No Project Alternative.

It is concluded that the Maximum Restoration Alternative is the environmentally superior alternative from the alternatives considered here. Although property acquisition would still likely proceed under this alternative, thus potentially resulting in the conversion of *Important Farmland* to non-agricultural uses (a significant and unavoidable impact under all of the alternatives), it would minimize ground-disturbing activities and construction- and service-related impacts associated with facility development, which would be the lowest out of all of the alternatives. However, this alternative fails to meet one of the fundamental objectives of the Department, which is to provide high-quality recreation to residents of the State. Passive recreation opportunities would be provided, in conjunction with habitat restoration activities, but due to the sensitivities associated with restoration efforts, these opportunities would be extremely limited. As a result, it was excluded from further consideration in the planning process.

The proposed General Plan was selected because it balances the interests of natural, cultural, and recreational resources at the Park. It is based on fundamental principles of land and resource stewardship, which are found throughout the goals and guidelines of the Plan. Moreover, it provides the framework to establish improved and expanded recreation opportunities to Park visitors, which is an integral consideration for State Parks planning.