

Colusa-Sacramento River State Recreation Area

Preliminary General Plan and Draft Program Environmental Impact Report



February 5, 2016



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**Preliminary General Plan and
Draft Program Environmental Impact Report**

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EXECUTIVE SUMMARY



EXECUTIVE SUMMARY

A. PARK DESCRIPTION

Colusa-Sacramento River State Recreation Area (the Park) is located immediately north of the City of Colusa, California on the west bank of the Sacramento River. It occupies about 359 acres in the Sacramento Valley, an important agricultural region of northern California. The river is the main reason for the Park's existence. Much of the Park lies within the designated floodway of the Sacramento River. Regular floods from the north nourish the Park's riparian forest, create (and re-create) beaches and move woody debris into the river.

The Park is within the Colusa Subreach of the Natural Resources Agency's Sacramento River Conservation Area (SRCA), which encompasses about 222 river miles between Redding and Verona (Figure ES.1). Currently, river access is limited along the Colusa Subreach between Princeton and Colusa. Few public roads provide access to the river corridor through the productive orchards of fruit and nut trees. Of thirteen sites now owned by public agencies, the only developed recreational facilities are in Colusa-Sacramento River SRA and the adjacent Colusa Levee Scenic Park. Most other public lands are currently accessible only by boat. The Colusa Subreach Recreation Access Plan, prepared for The Nature Conservancy in 2007, recommends that *"no new land access points are recommended at this time."* Instead, it recommended expansion of, and increased facilities development, in the SRA. In particular, improving boating and camping facilities here will improve access to the river's abundant natural and recreational resources, as well as a wide variety of public lands.

B. PURPOSE OF THE GENERAL PLAN/ENVIRONMENTAL IMPACT REPORT

General plans are broad-based policy documents that provide management guidelines for a park unit. These guidelines define a unique framework, focused on this particular unit, for implementing State Parks' diverse mission of resource stewardship, visitor use, interpretation, and visitor services. The general plan defines the purpose, vision, and long-term goals and guidelines for park management for the next 20 years or more. Typically, a general plan is not a project-specific document; therefore, it typically does not define specific objectives, methodologies, and designs on how to accomplish these goals. Instead, it provides guidelines for future land management and for the facilities required to accommodate expected visitation. Because a General Plan is likely to be in effect for so long, it must be flexible enough to accommodate expected environmental change while clearly guiding decision-making consistent with the adopted Park vision.

The California Environmental Quality Act of 1970 (CEQA) requires state agencies to analyze and disclose the potential environmental effects, both direct and indirect, of a proposed discretionary action. The Environmental Impact Report (EIR) is an integral component of this General Plan.

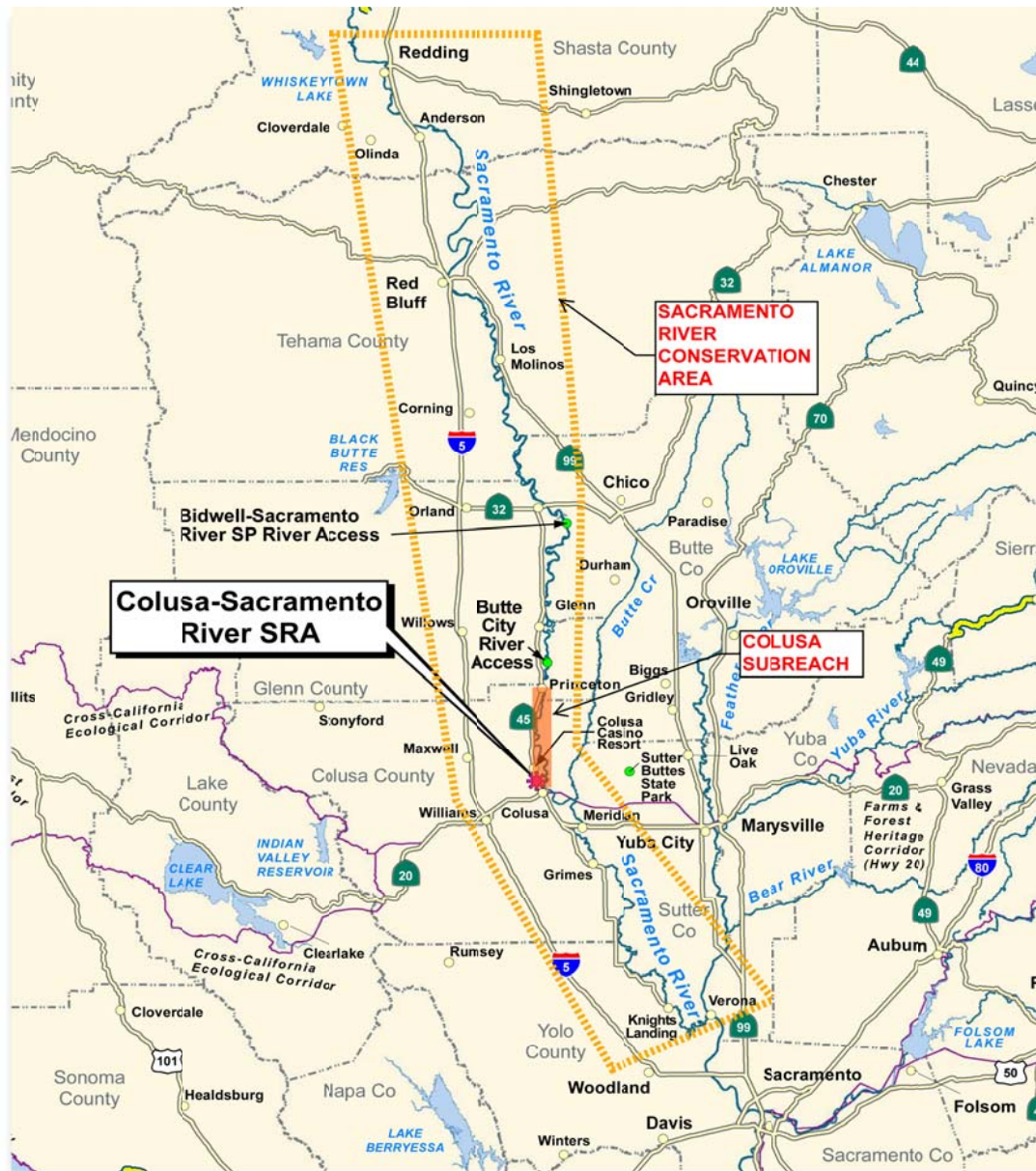


Figure ES.1. Sacramento River Conservation Area and Colusa Subreach

C. RELATED PLANNING EFFORTS AND PUBLIC OUTREACH

Stakeholder involvement is an important component of the general plan process. The people of California have entrusted California State Parks to manage the park system's natural and cultural resources while providing recreational opportunities on these public lands. It is important for planners to obtain input from diverse sources so the park's vision reflects the needs of a wide cross-section of Californians. The following groups and individuals provided written input or were consulted during the planning process begun in 2006:

Agencies. City of Colusa, Colusa County Resource Conservation District, Colusa Unified School District, Colusa County Local Agency Formation Commission, Colusa County, Central Valley Regional Water Quality Control Board, California Department of Water Resources, California Department of Fish & Wildlife, California Department of Transportation, Central Valley Flood Protection Board, California State Lands Commission, US Army Corps of Engineers, US Fish & Wildlife Service

Stakeholder Groups. Colusa Chamber of Commerce, Colusa County Garden Club, Colusa County Farm Bureau, Family Water Alliance, Sacramento River Trust, Sacramento River Conservation Area Forum, The Nature Conservancy, California Native Plant Society, Mt Lassen Chapter

Native American consultation. Ten tribal individuals/organizations on the Native American Heritage Commission consultation list were mailed letters requesting input.

Adjacent Property Owners and the Public. All City utility ratepayers, including adjacent property owners, were notified. Two public workshops were held in the City of Colusa. The California Parks and Recreation Commission conducted a public hearing on the Preliminary General Plan/Draft EIR.

D. DECLARATION OF PURPOSE.

The purpose statement describes the unique role that the Park will play in meeting the California State Parks mission. The proposed Declaration of Purpose for the Park is as follows:

The purpose of the Colusa-Sacramento River State Recreation Area is to make the passive and active recreational opportunities which are offered by the Sacramento River and its river bank available to all people; and to protect and enhance the riparian and riverine environment while accommodating changing hydrologic conditions and the successional processes which occur in the Colusa Subreach.

E. PARK VISION

The proposed Vision Statement is as follows:

The Park provides high quality recreational experiences consistent with the dynamic riverine environment of the Colusa Subreach of the Sacramento River. River access is provided to all visitors who enjoy activities such as boating, floating, fishing and beach activities. The Park and its recreational facilities encourage active, healthy lifestyles by offering walking, biking and paddling opportunities and other outdoor activities. The Park also offers passive recreational opportunities such as picnicking, camping and wildlife viewing.

The Park holds precious remnants of the historically-extensive Great Valley Riparian Forest and wetlands which are ecologically important to the watershed, the state, and the international Pacific Flyway. The Park's floodway resources are protected and its biodiversity is enhanced over time. The river channel, riparian forest and grasslands are managed as a dynamic interconnected system driven by natural successional forces to the extent compatible with surrounding land uses and river flow management objectives. Park facilities accommodate flooding where prudent and minimize disturbance to habitat values.

Partnerships engage Californians in experiencing and learning about the dynamic nature of the Sacramento River watershed and the Great Valley landscape it nourishes, and the State's role in managing its abundant biodiversity, its water supply and its flooding potential. The Park's facilities and programs enhance regional recreational activities by offering year-round overnight accommodations, boat launching and landing facilities, event space, regional recreation information and long-distance bicycling infrastructure. The history and pre-history of the region are illustrated through living history programs, personal interpretation and various media, both on- and off-site.

F. ISSUES AND OPPORTUNITIES

As a result of the outreach to agencies, stakeholder groups, tribes, and the public, a number of issues and opportunities emerged that are addressed in this General Plan. These include:

Unit Classification. The existing unit classification as a State Recreation Area was found to be appropriate. According to extensive studies cited in Chapter 2, the Park is the best place in the Subreach to increase recreational use, and more recreational facilities are needed. Recreation will remain a primary use of this Park with natural and cultural resources values preserved through management goals and guidelines.

Purpose and Vision. The Purpose and Vision highlight these priorities: 1) the significant recreational experiences that will be accommodated, 2) the primary ecosystem values to be supported and, 3) how the Park's facilities, land base, management and programs could enhance

regional recreation, preserve biological diversity and protect natural and cultural resources through partnership efforts.

Recreation Opportunities. There is an unmet and increasing need for outdoor recreation opportunities, facilities and services in the region. The Park is an appropriate location to increase motorized and human-powered boating access, wildlife watching and nature observation, health and fitness activities, river access, overnight accommodations, and social and cultural activities.

Interpretation and Education. Primary audiences that would benefit from increased interpretive programming include local and regional school children engaged in standards-based learning, local and Central Valley families and adults learning about their cultural and natural resources heritage, Northern California visitors engaging in wildlife observation and adult boaters exploring the Sacramento River.

Natural Resources Management. The Park sustains significant physical and biotic natural resources, including special status plant and wildlife species, within the Sacramento River Conservation Area designated by the Natural Resources Agency. Special management goals and guidelines focused on the existing habitat restoration projects, the Sacramento River floodway, the former river channel (commonly called Roberts Ditch), and climate change will help preserve natural resource values as recreational activities increase.

Facilities and Infrastructure Development. Expanding boating, park entrance and circulation, overnight accommodations, picnicking, and river access facilities in the Park require careful consideration, including collaboration with the Park partners listed at the end of Chapter 2. The construction of a boat launch ramp in the adjacent city park will require changes to both facilities and park management. Providing vehicle access to the RESTORATION PROJECT, RIPARIAN AREA and SOUTHWEST PARCEL will require modifying vehicle circulation facilities.

Park Revenues, Operations and Maintenance. Park management is currently shared with the City of Colusa. Management goals and guidelines for continuation of this partnership are incorporated into the Plan, such as completing a cost/benefit analysis to establish appropriate cost-sharing with the City of Colusa, pursuing mission-compatible concession opportunities, and exploring more collaborative management structures.

Community Concerns and Input. The most significant community desire is for increased recreational facilities and opportunities in the Park that benefit the City of Colusa residents and businesses. Partnering with the City of Colusa to complete the proposed Boat Launching Facility is particularly important to community members. Some community members are concerned that relocating the park entrance will create significant localized traffic impacts. Phasing improvements, such as a new campground and entrance station, over time may resolve these concerns.

G. GENERAL PLAN PROPOSAL

The General Plan recommends that, in order to meet the Park Vision stated earlier, opportunities for the following recreation & interpretive activities be expanded:

- Motorized and human-powered boating
- Wildlife watching and nature observation
- Trail activities such as bicycling, hiking, running, and orienteering
- Safe public access to the river, including for persons with mobility challenges
- RV and tent camping for groups and individuals, as well as overnight lodging
- Large and small outdoor social, interpretive and cultural events for groups and families
- Information and facilities serving regional recreation opportunities

The following facilities are allowable under this plan:

- Paved and unpaved roads, bicycle paths and trails
- Two primitive group campgrounds (up to 50 tents each)
- Unpaved day use parking (up to 35 spaces)
- Paved day use, boat trailer, and en-route parking (up to 110 spaces)
- Two boat launches
- Boat-in primitive campground (up to 8 tents)
- Maintenance yard and staff residence
- Individual and small group developed campground with RV hookups and/or cabins (up to 42 sites)
- Individual and large group developed campground (up to 20 sites)
- Picnic sites (up to 44 sites)
- Restrooms
- Outdoor event center
- Vehicle entrance improvements and entrance station (potentially off-site)
- Boat launching facility (off-site)

Increasing recreational opportunities, activities and associated facilities may impact natural and cultural resources in the Park. In order to reduce, eliminate or mitigate negative impacts, goals and guidelines have been developed for Park management in the following categories:

- Natural Resources Management (NRM)
- Cultural Resources Management (CRM)
- Recreational and Community Activities (RCA)
- Visitor Facility Planning (VF)
- Infrastructure (INF)
- Visitor Management (VM)
- Park Operations and Maintenance (O&M)
- Interpretation and Education (I&E)

In addition to this, management zones for appropriate recreation activities and facilities have been proposed, with zone-specific goals and guidelines. Analysis of the site opportunities and constraints considered the Park's physical, biotic, aesthetic, recreational and cultural resources; as well as existing circulation patterns, surrounding land uses, regional planning influences, and operational factors. This analysis led to designation of six management zones and consideration of off-site facilities to meet needs that are not able to be accommodated in the Park:

MANAGEMENT ZONE	MANAGEMENT INTENT
Restoration/Recreation Management Zone (RESMZ)	Improve habitat for regionally-native plants and animals, improve biological integrity and function, and provide floodway-compatible recreational and educational activities.
Riparian Recreation Management Zone (RIPMZ)	Perpetuate habitat for regionally-native plants and animals, allow ecological processes to nourish and sculpt the landscape, and provide floodway-compatible recreational activities.
Levee Overlay Management Zone (LOMZ)	Provide for flood control, as well as vehicle, pedestrian and bicycle circulation.
Southwest Management Zone (SWMZ)	Continue administrative and maintenance functions. Provide for camping and overnight lodging.
Channel Management Zone (CHMZ)	Protect ecological processes that nourish and sculpt the landscape while recognizing that historic human uses may take precedence.
Southeast Management Zone (SEMZ)	Provide diverse, concentrated recreational activities in a flexibly managed urban park setting.
Off-site Facilities (OFF)	Collaborate with partners to provide desirable off-site facilities and services. Consider land acquisition.

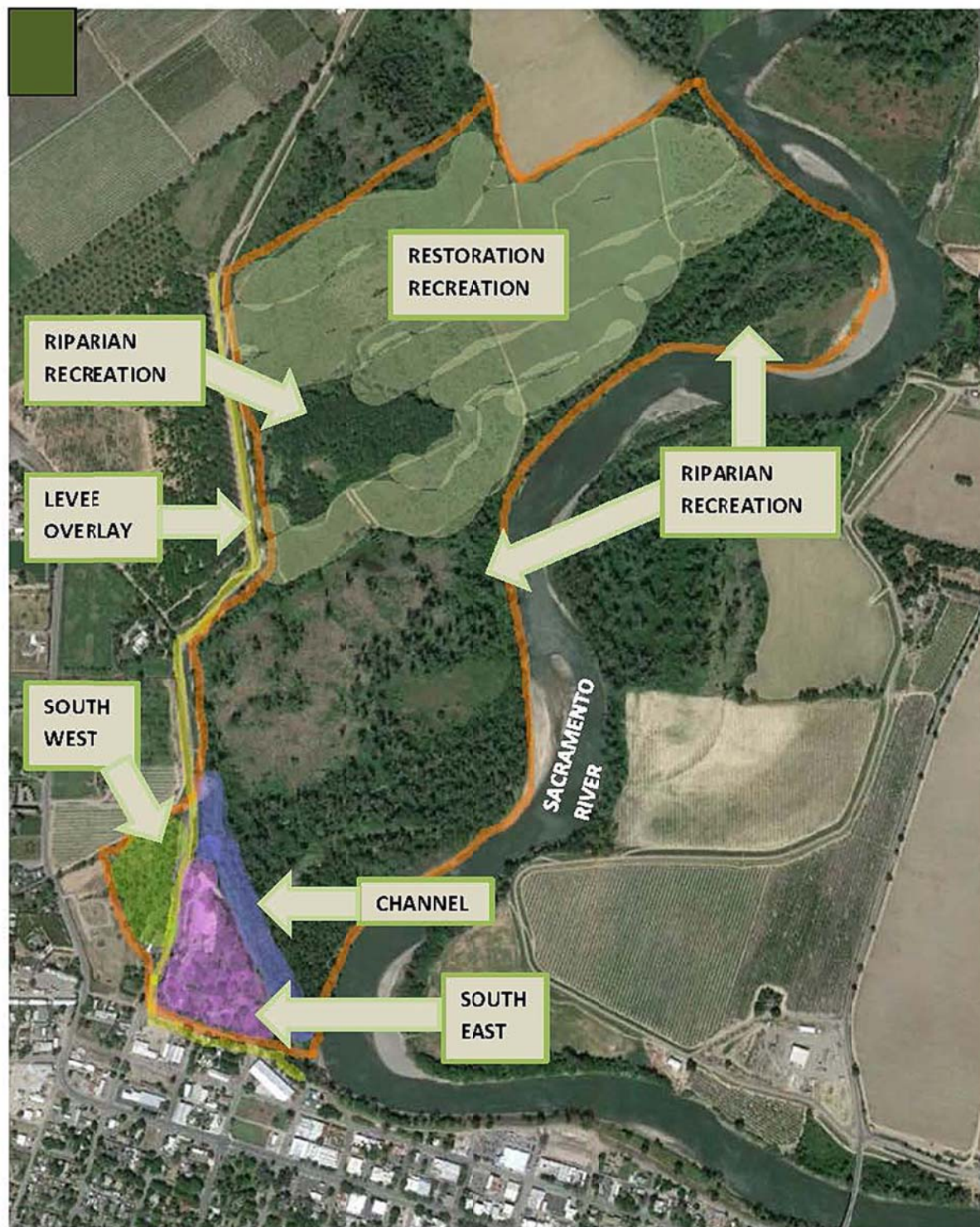


Figure ES.2. Management Zones

H. IMPLEMENTATION PLANNING EFFORTS

Because the General Plan is a general long-range document, implementing it will require more detailed planning. Implementation planning efforts may include feasibility reports, and site-specific development plans. At a minimum, the following issues will require additional planning before they can be implemented:

1. Overnight accommodations
2. Vehicle circulation and Park entrance
3. Park operation, including the boat launching facility

Overnight accommodations. Providing an expanded range of camping and overnight lodging opportunities in, or near the Park, is recommended. More primitive camping is suitable in the floodway and more developed accommodations should be outside the floodway. A feasibility study will assist the department with identifying opportunities such as joint management, concession operation, and off-site partnerships, as well as an analysis of facility size and amenities which influence the operational cost-effectiveness.

Vehicle circulation and Park entrance. Reconfiguring vehicle circulation, including the entrance station, is recommended to implement many of the facilities allowed in the plan while protecting natural resources, Park facilities and public safety. The General Plan includes design guidelines to resolve this, and other, circulation issues.

Park Operation. Park facilities are currently operated by the City of Colusa. Future operation of the Park must be negotiated upon expiration of the current Operating Agreement in October 2016 and after completion of the City of Colusa's proposed boat launching facility. The General Plan includes several recommendations that should be considered during these negotiations.

I. ENVIRONMENTAL ANALYSIS

This General Plan/EIR provides a program-level evaluation of the potential for significant adverse environmental impacts on aesthetics, air quality, biological resources, cultural resources, geology and soils, agricultural resources, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, mineral resources, noise, population and housing, public services, recreation, transportation and traffic, and utilities and service systems. The criteria used to determine the significance of impacts in the resource discussions were derived from State CEQA guidelines.

Implementation of the General Plan is not expected to result in significant impacts on the environment, because the goals and guidelines contained in Chapter 4 The Plan, the Department Operations Manual policies, the Department's Standard Project Requirements, the Department's Trails Manual, and Departmental Notices in conjunction with federal, state, and local laws and regulations, would avoid potentially significant effects or maintain them at less-than-significant levels.

CHAPTER

1



CHAPTER 1: INTRODUCTION

A. LOCATION AND REGIONAL CONTEXT

Colusa-Sacramento River State Recreation Area (the Park) is located immediately north of the City of Colusa, California, population about 6,000, on the west bank of the Sacramento River. It occupies about 359 acres within Colusa County in the Sacramento Valley, an important agricultural region of northern California. The state capital city of Sacramento is about 70 miles south of the Park. The Department of Parks and Recreation (the Department or California State Parks) owns and manages the Park.

The river is the main reason for the Park's existence. The Park is within the 20-mile long Colusa Subreach of the Natural Resources Agency's Sacramento River Conservation Area (SRCA), which encompasses about 222 river miles between Redding and Verona (Figure 2.1, 2.2). The Sacramento River Conservation Area Handbook (<http://www.sacramentoriver.org/forum>) provides valuable information about the region's natural, cultural, agricultural and recreational resources. Local, state and federal agencies, along with environmental organizations, have made significant progress in preserving and enhancing the SRCA's riparian and riverine habitat through acquisition, easements and habitat restoration over the past 25 years. The Sacramento River Public Access Study found substantial public interest in accessing these natural areas. California State Parks is an important partner in realizing the SRCA's public access goals.

Currently, public access is limited along the Colusa Subreach public lands between Princeton and Colusa. Few public roads provide access to the river corridor through the productive orchards of fruit and nut trees. Of thirteen sites now owned by public agencies, the only developed recreational facilities are in Colusa-Sacramento River SRA and the adjacent Colusa Levee Scenic Park. Most other public lands are currently accessible only by boat. The Colusa Subreach Recreation Access Plan, prepared for The Nature Conservancy in 2007, states that "no new land access points are recommended at this time." Instead, it recommends expansion of, and increased facilities development, in the SRA. Improving boating and camping facilities here will improve access to the river channel's abundant natural and recreational resources, as well as a wide variety of public lands.

The Colusa region plays a pivotal role in an array of wildlife and human movement corridors, including:

- The Pacific Flyway, which brings wave after wave of migrating waterfowl, songbirds and raptors through the region in the spring and fall. Many birds quickly move on, but many waterfowl, in particular, spend the winter here. Bird enthusiasts and hunters from throughout California and beyond visit the region to see impressive skeins of geese, rafts of ducks, wedges of swans, and herds of cranes, especially in the federal refuges and state wildlife areas.
- The Sacramento River is a large, dynamic alluvial river flowing southwest from Goose Lake, along the California-Oregon border, through the Sacramento Valley and out the Golden Gate to the Pacific Ocean. The natural food web of the Sacramento Valley is supported by the

river's dynamic nature. Migratory fish such as salmon and sturgeon depend on a healthy river to complete their life pattern. Resident species of fish and mammals don't migrate, but often depend on the water's flow to bring them sustenance. Flooding and erosion move sediment and organic matter which provides nourishment and homes for invertebrates, reptiles and amphibians. In return, these animals nourish the riparian forests, scrub and meadows, especially salmon that bring ocean nutrients to enrich the entire food web. These prized fish have calorie-rich flesh devoured by mammals, birds and invertebrates, and also deliver nitrogen and phosphorus necessary for vigorous plant growth. Substantial areas of riparian and riverine habitat have been preserved, restored and enhanced over the past 25 years, strengthening the habitat corridor.

Humans also use this north-south habitat corridor. Boaters traverse the river in vessels such as bass boats, speed boats, kayaks, canoes and rafts. Intrepid boaters can travel about 300 river miles from Keswick Dam all the way to the sea. Anglers harvest the migratory fish while catch-and-release anglers, photographers, and painters "*capture*" transient wildlife but wish to leave them unharmed.

- Highway 20 spans the state from the coast to the Sierra, coming within two blocks of the Park. The California Department of Transportation has designated Highway 20 as the *Tahoe-Ukiah Highway*, and California State Parks' California Recreational Trails Plan designates it the *Farms and Forest Heritage Corridor* and the *Cross-California Ecological Corridor*. Traversing this corridor offers visitors an interesting cross-section of the state's unique and diverse physical and cultural geography.

B. SITE CHARACTERISTICS

The defining feature of the Park is the Sacramento River, although direct access and views are currently limited. Much of the Park is subject to regular winter and spring flooding from the Sacramento River, as all but 6 acres lie within the Sacramento River floodway. The Park ranges from about 40 feet above mean sea level (msl) at Cobb's Bend beach to about 70 feet above msl at the top of the levee, with much of the park between 50 and 60 feet above msl. Riparian forest of varying age and complexity, occupies most of the property.

Recreation uses and facilities are concentrated in the southeast, where vehicle access is provided. Picnicking, walking, camping, fishing, nature observation and boat launching are popular. The majority of the Park is currently undeveloped, with only pedestrian access allowed north of a former river channel.

C. PURPOSE ACQUIRED

Early acquisitions in 1955-1958 were for the purpose of providing day use, boating and fishing access to the Sacramento River. As the river channel migrated eastward, more land was naturally added to the Park. The Southwest Parcel was originally acquired from the Sacramento and San Joaquin Drainage District in 1957, although the District retained the right to excavate and remove earth. This right was released in 1975 because the Department was "considering the development of an all-year campground" (Appendix N).

The Ward Tract was accepted as a no cost acquisition in 2006 subject to a Use Restriction Agreement with The Nature Conservancy (TNC) which states, “*The property shall not be used in violation of the Grant Purposes*”. US Bureau of Reclamation (Reclamation) and Fish and Wildlife Service (USFWS), Grant Purposes for TNC’s purchase in 2001 were for acquisition and preservation of riparian habitat along the Sacramento River that supports sensitive species that use riparian corridors and have been impacted by the Central Valley Project. The State of California Resources Agency grant purpose was to acquire, restore and manage the property pursuant to CALFED Bay Delta Program goals and objectives for ecosystem restoration.

D. SENSE OF PLACE

Identifying the Park’s “*sense of place*” is an important step to establishing the Park’s current purpose and vision. What characteristics make this park distinctive, drawing users to this unit? What inherent qualities should be protected, highlighted and/or enhanced?

The landscape provides a personal connection to a powerful, dynamic river, California’s largest. It is a place for recreation, inspiration, contemplation and renewal.

- The river provides active recreational opportunities on or near the water. The summer heat brings people wishing to picnic, hike and walk in the shade of tall trees, and splash in the water. Autumn, in particular, brings anglers and hunters with their boats, tapping into a primeval urge to connect with, and often harvest, wildlife. Others search for exhilarating experiences while kayaking, running or riding a bicycle.
- Visitors search for inspiration and contemplation along park trails, especially when spring and autumn bring colorful, melodious songbirds migrating through the forest. The awesome power of the river at flood stage brings viewers to the levee, marveling at trees bending to the current and human efforts to control the vast watershed.

Northern California poet Gary Snyder published this piece in the 1992 anthology No nature: new and selected poems:

River in the Valley

*We cross the Sacramento River at Colusa
Follow the road on the levee south and east
Find thousands of swallows nesting
On the underside of a concrete overhead
Roadway? Causeway? Abandoned. Near
Butte Creek.*

*Gen runs in little circles looking up
At swoops of swallows—laughing—
They keep
Flowing under the bridge and out,*

*Kai leans silent against a concrete pier
Tries to hold with his eyes the course
Of a single darting bird.
I pick grass seeds from my socks.*

*The coast range. Parched yellow front hills,
Blue-gray thornbrush higher hills behind.
And here is the Great Central Valley,
Drained, then planted and watered,
thousand-foot deep soils
thousand-acre orchards*

*Sunday morning,
Only one place serving breakfast
In Colusa, old river and tractor men
sipping milky coffee.*

*From north of Sutter Buttes
We see snow on Mt. Lassen
And the clear arc of the Sierra
South to the Desolation peaks.
One boy asks, “where do rivers start?”*

- Resting on a park bench, log, or beach, enveloped in the natural world, can bring renewal to a tired soul seeking peace and solitude, especially during periods of relatively low use. Watching the breeze gently stirring leaves, hearing the distant sounds of everyday tasks being carried out beyond the levee, and feeling cool water and rounded rocks with bare toes can refresh the spirit.

E. THE UNIT PLANNING PROCESS

State Park unit planning occurs under a planning hierarchy that begins with the Department's mission statement. First and foremost, a State Park unit serves statewide interests, best described in the California Outdoor Recreation Plan (www.parks.ca.gov/CORP). The unit is studied to document its resources, classified based on the physical attributes of the unit, and subject to management guidelines provides in the Public Resources Code (PRC) Section 5019.50-5019.80.

A general plan is then prepared based on PRC 5002.2.

(a) Following classification or reclassification of a unit by the State Park and Recreation Commission, and prior to the development of any new facilities in any previously classified unit, the department shall prepare a general plan or revise any existing plan, as the case may be, for the unit.

The general plan shall consist of elements that will evaluate and define the proposed land uses, facilities, concessions, operation of the unit, any environmental impacts, and the management of resources, and shall serve as a guide for the future development, management, and operation of the unit.

The general plan constitutes a report on a project for the purposes of Section 21100. The general plan for a unit shall be submitted by the department to the State Park and Recreation Commission for approval.

(b) The resource element of the general plan shall evaluate the unit as a constituent of an ecological region and as a distinct ecological entity, based upon historical and ecological research of plant-animal and soil-geological relationships and shall contain a declaration of purpose, setting forth specific long-range management objectives for the unit consistent with the unit's classification pursuant to Article 1.7 (commencing with Section 5019.50), and a declaration of resource management policy, setting forth the precise actions and limitations required for the achievement of the objectives established in the declaration of purpose.

Additional planning efforts often follow adoption of the general plan, such as a Road and Trail Management Plan, program or project feasibility study, management plan and/or development plan. Each of these subsequent planning processes should be consistent with the adopted general plan. When circumstances change, the general plan may need to be amended to best serve the park unit and statewide interests.

F. PURPOSE OF THE GENERAL PLAN

General plans are broad-based policy documents that provide management guidelines for a park unit. These guidelines define a unique framework, focused on this particular unit, for implementing State Parks' diversion mission of resource stewardship, visitor use, interpretation, and visitor services. By legal mandate, every state park in California must have a general plan before the major commitment of State resources.

The general plan defines the purpose, vision, and long-term goals and guidelines for park management for the next 20 years or more. Typically, a general plan is not a project-specific document; therefore, it typically does not define specific objectives, methodologies, and designs on how to accomplish these goals. Instead, it provides guidelines for future land management and for the facilities required to accommodate expected visitation. Because a General Plan is likely to be in effect for so long, it must be flexible enough to accommodate expected environmental change while clearly guiding decision-making consistent with the adopted Park vision.

This General Plan expands on previous planning efforts for the park that are described in Chapter 2. Preparation began slowly in 2008, building on the Colusa Subreach Master Plan process. This effort began in earnest in 2012, in order to provide timely guidance for the Department's collaborative partnership with the City of Colusa, most significantly the proposed boat launching facility.

G. CALIFORNIA ENVIRONMENTAL QUALITY ACT

The California Environmental Quality Act of 1970 (CEQA) requires state agencies to analyze and disclose the potential environmental effects, both direct and indirect, of a proposed discretionary action. An Environmental Impact Report (EIR), as prepared by state and local governments, is usually a stand-alone document intended to meet the requirements of CEQA. However, CEQA also encourages options to avoid redundancy. The Department frequently utilizes two strategies to minimize duplicative environmental review efforts: combining the General Plan with the EIR and tiering the review process.

When the lead agency combines a plan and an EIR, all CEQA requirements must be covered and the document must identify where these requirements are met. Please refer to the Table of Contents for the location of EIR-required elements within this document.

Tiering is a process where a lead agency prepares a series of EIRs or Negative Declarations, progressing from general concerns (program) to more site-specific evaluations (project) with the preparation of each new document (State CEQA Guidelines Section 15152). This GP also serves as a first-tier (program) EIR, as defined in Section 15166 of the State CEQA Guidelines, and will be a reference for future environmental documents that could provide more detailed information and analysis for site-specific developments and projects.

Future actions that may result from GP adoption and implementation have been anticipated and potential impacts resulting from these actions analyzed. Measures have been incorporated as goals and guidelines, where feasible, to help ensure that planned actions will not result in significant environmental impacts. Therefore, the CEQA analysis detailed in this GP/EIR is intended to be

adequate for many future actions implemented if they are consistent with the Plan's goals and guidelines. Actions may require additional CEQA analysis once project details are known, while others may simply comply with the goals, guidelines and any mitigation measures identified in this document to ensure they are in environmental compliance. Information contained in this GP/EIR may be utilized to determine how much additional CEQA documentation is necessary, if any, based on State CEQA Guidelines Sections 15162-15164.

H. ORGANIZATION OF THIS GENERAL PLAN/EIR

This General Plan/EIR contains the following sections:

- Executive Summary
- Chapter 1, Introduction
- Chapter 2, Existing Conditions
- Chapter 3, Issues and Analysis
- Chapter 4, Park Plan (Goals and Guidelines)
- Chapter 5, Environmental Analysis
- Chapter 6, References, Contributors, and Glossary
- Appendices

Executive summary. A brief discussion of the General Plan's most important points. It provides the reader with a clear picture of the key planning issues, and summarizes all the essential information.

Chapter 1, Introduction. An overview of Colusa-Sacramento River State Recreation Area (the Park) and explanation of the planning process.

Chapter 2, Existing Conditions. Describes the current physical conditions of the Park and the park's relationship to the surrounding region. It includes information on land uses, facilities, recreational resources, natural and cultural resources, and interpretive resources. It also describes current park operations and transportation networks surrounding the Park. Chapter 2 establishes the baseline against which proposed changes will be evaluated. Planning influences that affect unit planning and management, such as regional demographics and statewide planning efforts, are also described.

Chapter 3, Issues and Analysis. Explains the planning assumptions underlying the General Plan, identifies key issues to be addressed in the planning process, and documents stakeholder input. Key issues are analyzed and recommendations are prepared that must be addressed in the Park Plan.

Chapter 4, Park Plan. Presents the purpose, vision, and management zones for the Park. It lists the goals and guidelines for the unit and establishes the management intent, goals and guidelines for each management zone.

Chapter 5, Environmental Analysis. Contains the program Environmental Impact Report (EIR) for the General Plan, including an analysis of the potential environmental impacts resulting from implementation of the General Plan. Chapter 5 includes the following sections:

- EIR Introduction
- EIR Summary
- Project Description
- Environmental Setting
- Environmental Effects Eliminated from Further Analysis
- Environmental Impacts and Mitigation
- Alternatives to the Proposed Plan
- Other CEQA Considerations

Chapter 6, References, Contributors and Glossary. Includes all the written sources, organizations, and individuals consulted in the preparation of the General Plan; lists the many contributors to the preparation of this General Plan; includes the glossary of terms and acronyms.

Appendices. The Plan references many documents. For the reader's convenience, the following documents are included in the appendices:

#	Name
A	RESERVED
B	<p><u>6. Federal Endangered and Threatened Species that occur or may be affected by projects in the counties and/or USGS 7 ½ minute quads you requested</u> by US Fish and Wildlife Service Sacramento Office. March 11, 2014.</p> <p><u>7- 11. California Natural Diversity Database (CNDDB)</u> by the California Department of Fish and Wildlife. March 11, 2014.</p> <p><u>12- 13. Inventory of Rare and Endangered Plants, Colusa (546A) Quad</u> by the California Native Plant Society. March 17, 2014.</p> <p><u>14+. Colusa-Sacramento River SRA Vegetation Restoration and Recreation Improvements Project—Delineation of Wetlands and Other Waters of the US</u> by DWR. Addendum. 2007.</p>
C	<u>Cooperative Interagency Agreement between the Department of Parks and Recreation and The Department of Water Resources for Mitigation at the Colusa State Recreation Area</u> , 2008
D	USFWS Land Management MOU, December 2004
E	<u>Memorandum of Agreement Regarding the Sacramento River Conservation Area</u> , 1999
F	<u>City of Colusa 2011 Operating Agreement</u>
G	City of Colusa Construction Operating Agreement (COA), including Amendment No. 1, 2006
H	<u>Riparian Habitat Restoration Plan Ward Unit/ Colusa-Sacramento River State Recreation Area</u> (Plant composition of riparian forest mitigation sites) by The Nature Conservancy, 2007.
I	Historic Resources Report by The Department of Parks and Recreation, 2015
J	Environmental Noise Assessment, January 2015
K	<p>1- 28. Transportation Study, November 2014</p> <p>29+. Transportation Study Technical Appendix</p>
L	Colusa-Sacramento River SRA Parkwide and Core Area Concept Studies
M	Standard Project Requirements
N	<p>56. Riparian Forest Restoration Plan, Borrow Area and Shop Area, November 2000</p> <p>57. Letter from DPR to The Reclamation Board, 1975</p> <p>58. Colusa SRA Borrow Area: Elderberry, Fox, Wetland, 2015</p>

I. STAKEHOLDER INVOLVEMENT

Park planning requires close coordination with a variety of stakeholders, including agencies, stakeholder groups, Native American parties, and individual members of the public. The Department obtained stakeholder input through the environmental review scoping process, informal meetings and in public workshops in Colusa. In addition, stakeholder input was considered that was received during the Colusa Subreach process led by The Nature Conservancy and SRCAF. The following groups and individuals provided written input or were consulted during the planning process:

Agencies. City of Colusa, Colusa County Resource Conservation District, Colusa Unified School District, Colusa County Local Agency Formation Commission, Colusa County, Central Valley Regional Water Quality Control Board, California Department of Water Resources, California Department of Fish & Wildlife, California Department of Transportation, Central Valley Flood Protection Board, California State Lands Commission, US Army Corps of Engineers, US Fish & Wildlife Service

Stakeholder Groups. Colusa Chamber of Commerce, Colusa County Garden Club, Colusa County Farm Bureau, Family Water Alliance, Sacramento River Trust, Sacramento River Conservation Area Forum, The Nature Conservancy

Native American consultation. The Department's Native American Consultation Policy and Implementation Procedures clarifies that consultation with local Native California Indian tribes is required when a General Plan is being prepared. Consultation is a process in which both the Native California Indian tribe(s) and the Department invests time, effort and understanding to seek a mutually respectful resolution for the purpose of preserving or mitigating impacts to a cultural place, site, object or human burial where feasible. In response to a December 4th, 2013 request by California State Parks, the Native American Heritage Commission reported that no sacred lands had been identified in the Park. All ten tribal individuals/organizations on the Native American Heritage Commission consultation list were mailed a letter inviting input on December 6, 2013. A follow-up attempt was made to contact each organization by telephone on January 27, 2014. Responses include the following:

- Yocha Dehe Wintun Nation in Brooks, California. Letter dated December 19, 2013. The Tribal Chairman Marshall McKay asked for a copy of the Department's Native American Consultation Policy and Implementation Procedure, and also asked for a draft of the General Plan for review.
- Mr. Kesner Flores (Wintun (Patwin)) in Wheatland, California. Telephone conversation January 27, 2014. Asked that we include "*an inadvertent finds response plan*" in the General Plan and also asked for a draft of the General Plan for review.

Public Involvement. Public involvement is an important component of the general plan process. The people of California have entrusted California State Parks to manage the park system's natural and cultural resources while providing recreational opportunities on these public lands. It is important for planners to obtain public input from diverse sources so the park's vision reflects the needs of a wide cross-section of Californians. Local residents, frequent visitors and interest groups often possess valuable information about park resources and opportunities, potential management techniques, and planning influences outside the unit borders. A small percentage of stakeholders actually engage in the process, however, despite efforts to increase public involvement. The

Department must consider information from a variety of sources as it seeks to determine the statewide interest.

A range of methods were used to gather public input for this plan, as follows:

- Prior to the general plan process, the department, in concert with The Nature Conservancy, held public meetings on May 11, August 2 and December 4, 2006 to inform the Colusa Subreach Recreation Access Plan and Master Plan for the SRA.
- An email contact list of interested parties (about 90 addresses) and a mailing list of adjacent property owners (17 addresses) was prepared
- A newsletter (issues in February 2013, June 2014 and January 2016) was prepared and distributed.
 - Newsletters were mailed to adjacent property owners and distributed at Colusa City Hall, Colusa County Library and Courthouse, Kittles Outdoor (sporting goods retailer), at the Park and at the public workshops.
 - The newsletters were emailed to the contact list. The Chamber, Kittles Outdoor and SRCAF agreed to forward these emails to reach an additional 4,000 members of the public.
- The City of Colusa notified residents of the first public workshop in electrical utility bills (about 2,100).
- A web page was prepared and regularly updated with workshop information and exhibits, public input summaries and contact information.
- A press release was sent to the Colusa Sun Herald and other local news sources to announce each workshop. Reporters attended and reported on the workshops.
- Public workshops were held in the City of Colusa's Boy Scout Cabin, as follows:
 - On February 28, 2013, about 21 participants received an overview of the project, reviewed the existing resources inventories, and shared their questions, concerns and issues as part of the CEQA scoping process.
 - On June 19, 2014, about 23 participants discussed three planning alternatives, shared input on a preferred alternative and gave further input as part of the CEQA public review process.
 - On xx date, the California Parks and Recreation Commission conducted a public business meeting taking action regarding the Preliminary General Plan/Draft EIR.
- The Colusa City Council discussed the Plan on June 17, 2014.

In accordance with the CEQA, a Notice of Preparation was distributed in June 2014, and a Notice of Availability and Intent to Adopt was distributed along with publication of this Preliminary General Plan/Draft EIR.

CHAPTER

2



CHAPTER 2: EXISTING CONDITIONS

This chapter summarizes the existing land uses, facilities, recreational resources, natural and cultural resources, interpretive resources, park operations and transportation networks of Colusa-Sacramento River State Recreation Area (Park), and surrounding lands. While the evaluation of existing conditions focuses on the current boundaries of the Park, it also addresses planning influences outside the Park and the Department for some issues, where data are readily available and important to understand regional resource conditions, programs and policies affecting the Park. Regional-oriented resource information provides context to information collected for the Park itself.

Information on existing conditions was collected during the Colusa Subreach planning effort, Department of Water Resources' (DWR) Tisdale Bypass mitigation project, Chico State's cultural resources research, recent field work, and additional research conducted during the General Plan preparation process. This information, along with climate change projections (Chapter 3), provides the baseline data for developing the area plans and goals/guidelines that comprise the foundation of this document. However, this is not a comprehensive inventory of all that is known about the Park. More detailed information can be found in the Park's Unit Data File, available at the Northern Buttes District office, and in documents listed in the References Section of the General Plan.

A. UNIT CLASSIFICATION AND PURPOSE

The State Park System is organized by a ten-level classification system. Most properties fit into the following six classifications: State Park, State Beach, State Historic Park, State Recreation Area, State Natural Reserve, and State Vehicular Recreation Area. These classifications are described in Sections 5019.50 et seq. of Article 1.7 of the Public Resources Code (PRC).

In 1957, the Park was named and classified as Colusa-Sacramento River State Recreation Area.

PRC 5019.56(a) "State recreation areas, consisting of areas selected and developed to provide multiple recreational opportunities to meet other than purely local needs. The areas shall be selected for their having terrain capable of withstanding extensive human impact and for their proximity to large population centers, major routes of travel, or proven recreational resources such as manmade or natural bodies of water..."

The original Statement of Purpose adopted in July, 1959 states, "To provide day use and boat launching facilities and fishing access for the recreational use of the Sacramento River." The current Statement of Purpose, updated in December, 1975 states,

"The purpose of Colusa-Sacramento River State Recreation Area is to make possible the public enjoyment of recreational experiences which are afforded by the Sacramento River and its west side shore lands in the vicinity of the City of Colusa in Colusa County. All daytime and overnight recreational activities which can be practiced within the area without permanent damage to the scenic and natural resources of the area may be practiced for public enjoyment. The resources of the area may be enhanced or manipulated to improve the recreational experiences for people."

B. REGIONAL LAND USE AND RECREATION OPPORTUNITIES

REGIONAL LAND USE. The Park is located immediately north of the City of Colusa, California, population about 6,000, on the west bank of the Sacramento River (Figure 2.1). Regional land use is predominantly agriculture, with most acreage dedicated to growing rice. Walnuts and row crops are grown directly west and north. The grazing lands of the Sutter Buttes are visible to the east (Figure 2.2).

Much of the Park lies within the designated floodway of the Sacramento River. The Colusa Subreach of the Sacramento River, the floodway between Princeton and Colusa, has been a focus of natural resource preservation and restoration through collaboration with the Sacramento River Conservation Area Forum (SRCAF), The Nature Conservancy (TNC) and several state and federal agencies. The California Department of Fish and Wildlife (CDFW) manages conservation lands to the north and just across the river. Seven state and federal wildlife areas are managed for conservation purposes within twelve miles. The Colusa Bypass, northeast of the Park, redirects large flood flows south toward the Sacramento-San Joaquin Delta.

Downtown Colusa forms the Park's southern boundary, delineated by the Sacramento River levee. Between the levee and Main Street are a private trailer court, City water storage facility, several warehouses and maintenance facilities. The City of Colusa Levee Scenic Park is located southeast of the Park between downtown and the river. Remnants of Colusa's Chinatown District are also southeast of the Park, and a few single family homes are to the southwest.

The lands west and north of the Park boundary are in Colusa County's jurisdiction. They include mainly agricultural and rural residential land uses, with some commercial and industrial uses (Figure 2.3).

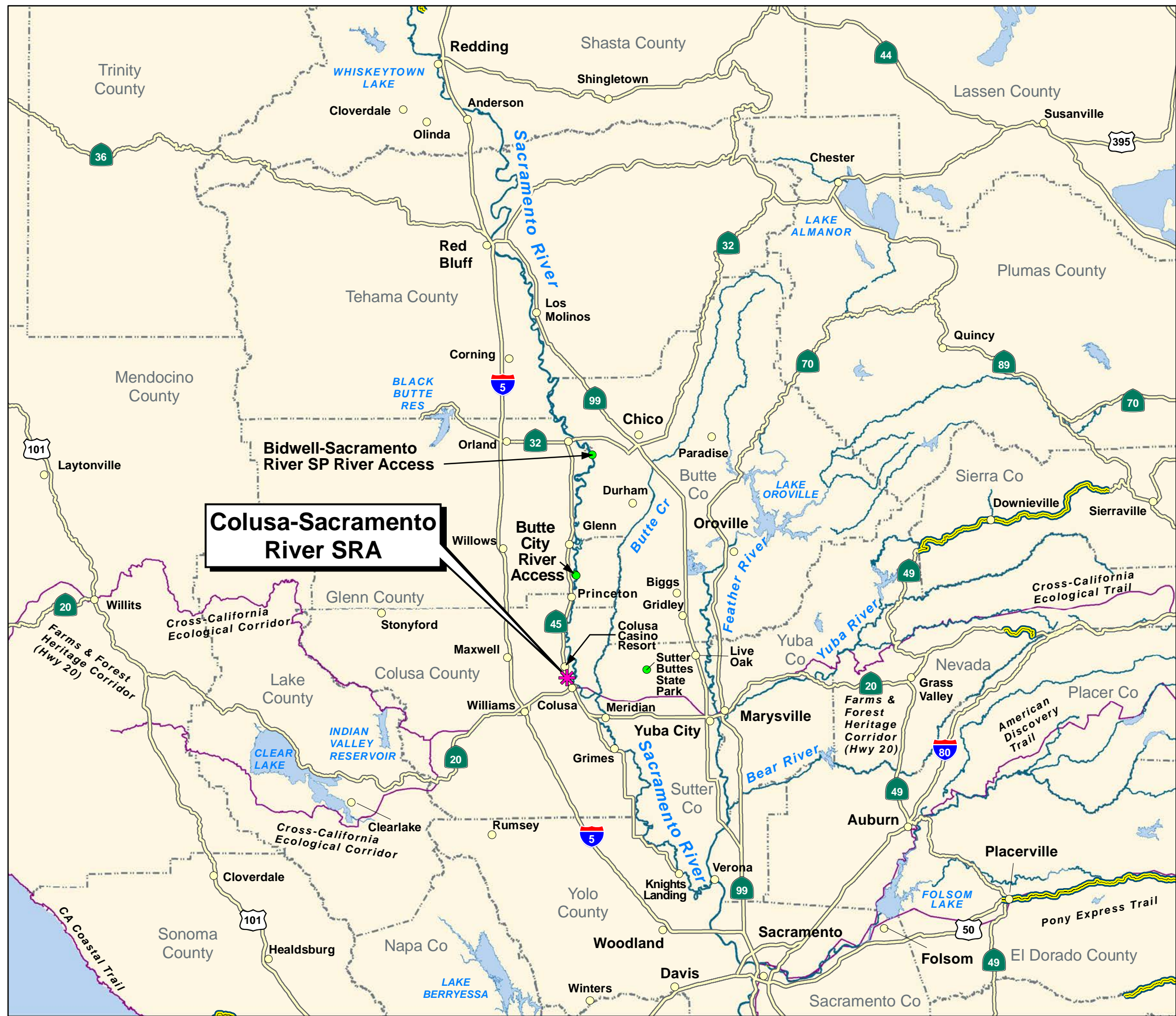
REGIONAL RECREATION OPPORTUNITIES. Recreational activities occur on public and private lands. Public lands are managed by federal, state and local agencies. Figure 2.1 and 2.2 illustrate the most significant nearby recreational lands.

Federal. The Sacramento River National Wildlife Refuge, Delevan National Wildlife Refuge, Colusa National Wildlife Refuge and Sutter National Wildlife Refuge are managed by the US Fish and Wildlife Service primarily for waterfowl hunting and wildlife watching. The nearest facility is about 2.5 miles from the Park.

California State Parks. Bidwell-Sacramento River State Recreation Area (SRA), Lake Oroville SRA, Clay Pit State Vehicle Recreation Area, Clear Lake State Park (SP), Bidwell Mansion State Historic Park (SHP), State Park at Sutter Buttes, and Anderson Marsh SHP are within 50 miles of the Park. These lands are managed by California State Parks to protect natural and cultural resources, provide a wide diversity of experiences, such as fishing, boating, camping, wildlife watching, off-road vehicle use, and deliver education and interpretation services to the public. The Butte City Project is owned by the Department but operated by the USFWS to provide recreation opportunities and facilitate wildlife habitat restoration.

COLUSA-SACRAMENTO RIVER STATE RECREATION AREA DRAFT GENERAL PLAN

FIG 2.1: LOCATION MAP



Legend

- Colusa-Sacramento River SRA
- Other selected State Parks
- Sacramento R. and Selected Tributaries
- County Boundaries
- California Recreational Trails System
- Scenic Highways
- Highways
- Selected Location Names

Map Location, showing Sacramento R. watershed (black outline) and the Sacramento R. Conservation Area (dark olive shading)

Scale
1:922,000
1 inch = 76,833 feet
Miles

0 5 10 15 20 25

NOTES:

Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

PLANNING DIVISION

GENERAL PLAN SECTION

Date: 10/16/2014

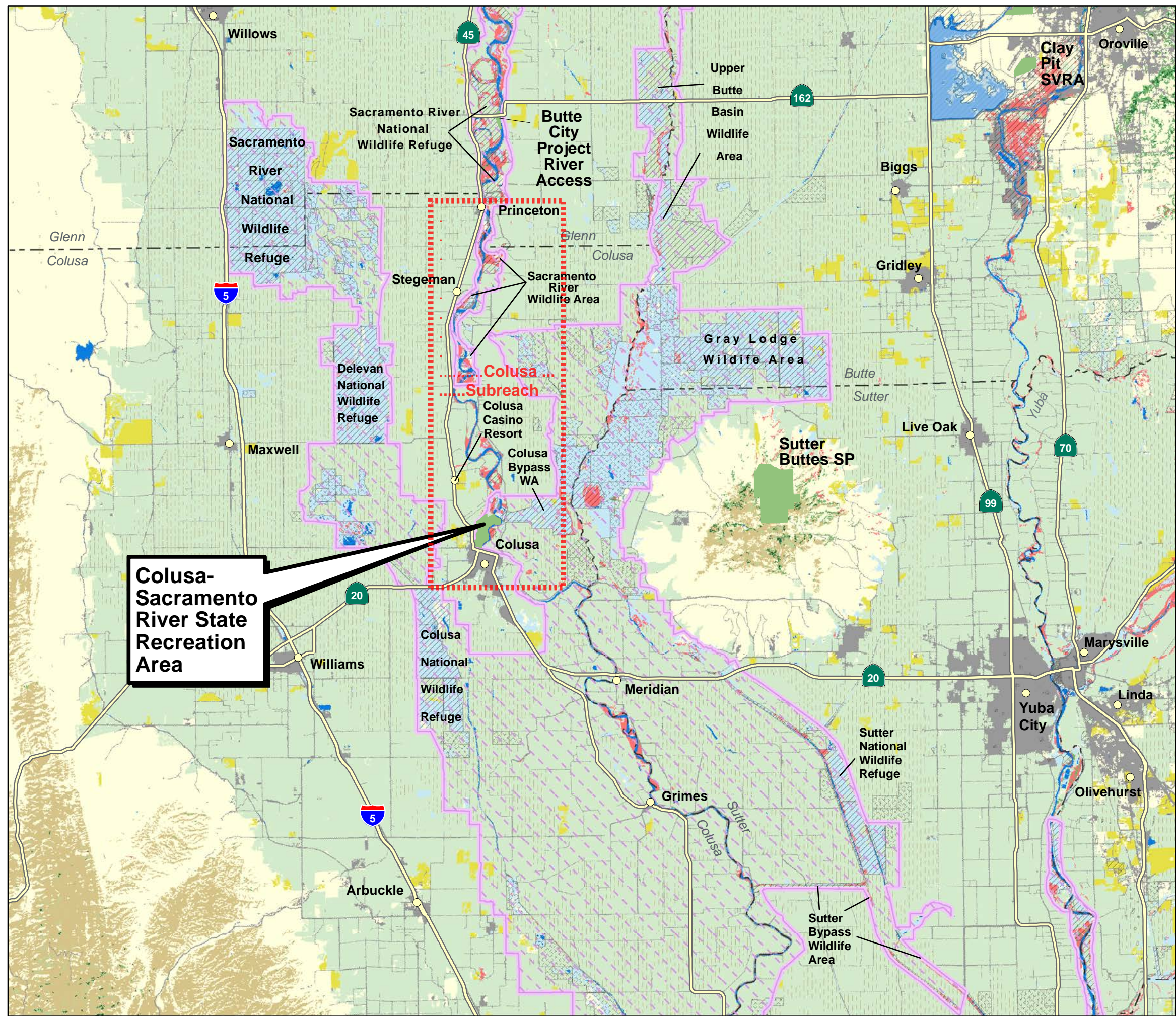
Calif. Dept. of Parks & Recreation

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Fig 2.2

COLUSA-SACRAMENTO RIVER STATE RECREATION AREA DRAFT GENERAL PLAN

FIG 2.2: REGIONAL LAND USE



Legend

- Open Water
- Non-Vegetated / Urban
- Deciduous Forest
- Evergreen Forest
- Mixed Forest
- Shrub/Scrub
- Grassland/Herbaceous
- Pasture/Hay
- Cultivated Crops
- Woody Wetlands
- Emergent Wetlands
- Rice
- Calif Protected Lands Overlay
- Conservation Easements
- Important Bird Areas
- Selected Location Names
- Highways
- State Park Boundaries
- County Boundaries

Map Location, showing Sacramento River Conservation Area, based on SB 1086

Data Sources:

- 1) National Land Cover Database, USGS, 2001, & DWR County Land Use (Rice), 1995-2004.
- 2) California Protected Lands Database, GreenInfo, Inc, 2011
- 3) National Conservation Easement Database.
- 4) Important Bird Areas, California Audubon Society, 2008.

Scale
1:234,700
1 inch = 19,558 feet
Miles

NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

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Date: 10/16/2014

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California Department of Fish and Wildlife. Gray Lodge Wildlife Area, Upper Butte Basin Wildlife Area, Colusa Bypass Wildlife Area, Sutter Bypass Wildlife Area and Sacramento River Wildlife Area are managed primarily for waterfowl production, hunting and wildlife watching, although they also provide significant flood management functions.

Most significant to the Park's management is the Sacramento River Wildlife Area because of proximity, access, similar flooding and natural resources management issues. The Wildlife Area comprises about 4,000 acres of riparian forest, grasslands, oxbow lakes, and gravel bars where fishing, bird watching, nature study, and trapping are allowed. Among the diversity of species that can be seen are otters, beavers, gray fox, bobcat, western pond turtles, ash-throated flycatchers, great blue herons, egrets, and a variety of birds of prey. Many of these wildlife units can only be accessed by boat, so increasing boat launching at the Park can increase recreation opportunities in these public lands.

Table 2.1 shows recreation visits from the 2013 USFWS report *Banking on Nature*. In 2011, over 45,000 non-resident auto tour visitors spent \$1.7 million, bringing significant tourism income, jobs and tax revenues to the area.

Local. Colusa County's website does not list any recreational facilities. The General Plan Open Space and Recreation Element proposes the development of a countywide outdoor recreation plan and bikeway along the west bank of the Sacramento River. The Colusa County Fairgrounds, about a mile south on Highway 20, offers self-contained camping for hunters, as well as many events.

Table 2.1. SACRAMENTO NWR: 2011 RECREATION VISITS				
Activity		Residents	Non-Residents	Total
Non-Consumptive:	Pedestrian	854	5,712	6,566
	Auto Tour	6,788	45,424	52,212
	Boat Trail/Launch	0	0	0
	Bicycle	2	0	2
	Interpretation	2,086	2,171	4,257
	Photography	90	600	690
	Other Recreation	0	0	0
Hunting:	Big Game	0	0	0
	Small Game	157	217	374
	Migratory Birds	3,113	4,300	7,413
Fishing:	Freshwater	0	0	0
	Saltwater	0	0	0
TOTAL VISITATION		13,089	58,425	71,514
Source: Banking on Nature. Table 8-2.				

City of Colusa outdoor recreation facilities include the adjacent Colusa Levee Scenic Park and Memorial Park two blocks south. Ball fields, tennis courts, picnic areas, playgrounds and a municipal swimming pool are also available.

Private. Private outdoor recreation facilities nearby include the Colusa Casino Resort, Colusa Indian Community Outdoor Adventures guide services, many duck clubs, marinas such as Colusa Landing and Lovey's Landing, and the Colusa Golf and Country Club. These facilities are open to the public, except for some members-only duck clubs.

Regional boating opportunities. The Sacramento River Conservation Area Forum illustrates the many potential boating sites accessible from the Park along the Sacramento River on the website <http://www.sacramentoriver.org/>. Information regarding the Sacramento River Boating Trail is available from the Division of Boating and Waterways Boating Trails Program at: <http://www.dbw.ca.gov/BoaterInfo/BoatTrails.aspx>

C. PARK LAND USE AND FACILITIES

PARK LAND USE. Much of the approximately 359 acre park is undeveloped and within the Sacramento River floodway. The eastern boundary is determined by the meandering riverbank, so the Park's size changes over time. Descriptions of the existing land use and resources are organized into areas with similar resources and management structure (Figure 2.3). Acreage calculations for the four areas fully inside the Park boundary are estimates.

RESTORATION PROJECT: 137 acres were re-vegetated in 2009. This area has no facilities. A maintenance road is closed to unauthorized vehicles, but visitors may walk in. Habitat includes 35 acres of native grassland and 102 acres of riparian forest including three acres for access and parking. This area is subject to flooding at a one-to-four year recurrence interval. Inventories of the natural and cultural resources of this area occurred prior to revegetation.

RIPARIAN AREA: 205 acres of mature trees and dense undergrowth transition into younger stands and occasional beaches along the river's edge. This area adjacent to the river accommodates regular flooding when the river rises. The riverbank is eroding and accreting regularly, with steep sandy banks in many areas that limit safe access for fishing, boating and swimming. Much of this area was either formed over the last 40 years as the river adjusted its course, previously farmed, or previously modified by recreational development. A primitive road used as a trail provides access to the river while the channel maintenance road is occasionally mowed to maintain access. A few large Valley oak trees remain among tall cottonwood trees. Dense California wild grape, non-native blackberries, fig, willow and other native and non-native plants have colonized this area, with several meadows and beaches interspersed. This area has not been recently surveyed for natural or cultural resources due to the vegetation density.

CHANNEL: This former channel of the Sacramento River, including the bed and banks, is under the jurisdiction of the California State Lands Commission and US Army Corps of Engineers outside the State Park boundary. The channel, commonly called Roberts Ditch, is separated into two segments by fill. It is used for irrigation and navigation. However, the river is often inaccessible unless the channel is regularly maintained through a costly sediment dredging operation. Resource protection and regulatory compliance requirements make the process for acquiring dredging permits expensive and lengthy. Dredging did not occur between 2006 and 2014.

SOUTHWEST PARCEL: This 6 acre area is protected from Sacramento River flooding and disconnected from the rest of the Park by the levee and Roberts Road. About 4.5 acres of native riparian forest were planted in the reclaimed borrow pit in 2001 around an-acre stand of native vegetation. A maintenance shop, carport, hazardous materials building and storage building serve the Park. This area, along with the SOUTHEAST PARCEL, comprises the Park's core developed area.

SOUTHEAST PARCEL: This 11 acre area, a relatively flat former City landfill closed in the 1950s, is bounded by the levee, channel and Colusa Levee Scenic Park. This area is subject to flooding at a 4 year recurrence interval. This area was first developed in the 1950s and 1960s. It includes the following facilities:

- Restroom/shower building and 14 campsites. Two sites are currently used for a camp host.
- Entrance building, restroom building, interpretive panel structure, and picnic tables.
- Boat launch ramp and parking lot.
- Roadways.

LEVEE. Underlying parcel ownership of the Sacramento River Flood Control Project levee area varies between City of Colusa right-of-way, Central Valley Flood Protection Board fee title, and easements on DPR and adjacent parcels. DWR maintains the levee.



Restored riparian forest
in RESTORATION PROJECT



Restored riparian forest
in SOUTHWEST PARCEL



Restored native meadow in
RESTORATION PROJECT



Wild grape field
in RIPARIAN AREA



Meadow and riparian forest
in RIPARIAN AREA



Nature Trail in RIPARIAN AREA

Figure 2.4 Park Character Photographs

VISITOR FACILITIES. All visitor facilities noted below are in the SOUTHEAST PARCEL unless otherwise noted (Figures 2.5 and 2.6). The history of facility development is described in the Cultural Resources Section of this chapter.

- Visitor contact: The Entrance Station is approximately 275 square feet, constructed of concrete block with composition shingles. It is in good condition overall. A sewage dump station with its own septic tank and leach field serves recreational vehicles with sewage tanks.
- Picnic: The shady picnic grounds lie along, but well above, the former channel. It contains about a dozen individual concrete picnic tables with grills and a group site with 5 tables and a large grill. There is an interpretive kiosk describing natural resources topics. The restroom was updated in the winter of 2014-15. A septic tank and leach field is adjacent.
- Camping: The shady 14 site campground, each containing a paved parking space, concrete picnic table and grill can accommodate tents and small RVs. Four campsites can accommodate RVs up to 27 feet long. A camp host currently occupies two sites, with 12 available for visitors. Several water spigots are provided, and there are a few electrical hookups. The restroom/shower building was updated in the winter of 2014-15. A septic tank and leach field is adjacent. The campground has been described as inadequate in size, configuration and services.
- Landscaping / grounds: About 7 acres of the park are maintained as mowed, irrigated lawn, including the day use and camping areas. Mature ornamental trees planted in the early 1960s and 1970s, such as ash, hackberry, fruitless mulberry, various conifers and blue gum, provide dense shade.
- Boating: The two-lane boat ramp has been the most popular recreation amenity since it was built. At peak times, the 40 automobile/trailer spaces and 45 automobile spaces aren't sufficient, so overflow parking occurs in the campground, along park roads and outside the park. In 1976, the State Lands Commission authorized a permit for a floating wharf along the river which expires in 2025. This wharf does not currently exist.
- Trails: A half-mile long nature trail in the RIPARIAN AREA connects Park facilities to the river. It traverses a dense riparian forest along a former park roadway.



Campground



Boat ramp



Entrance Station



Group picnic area



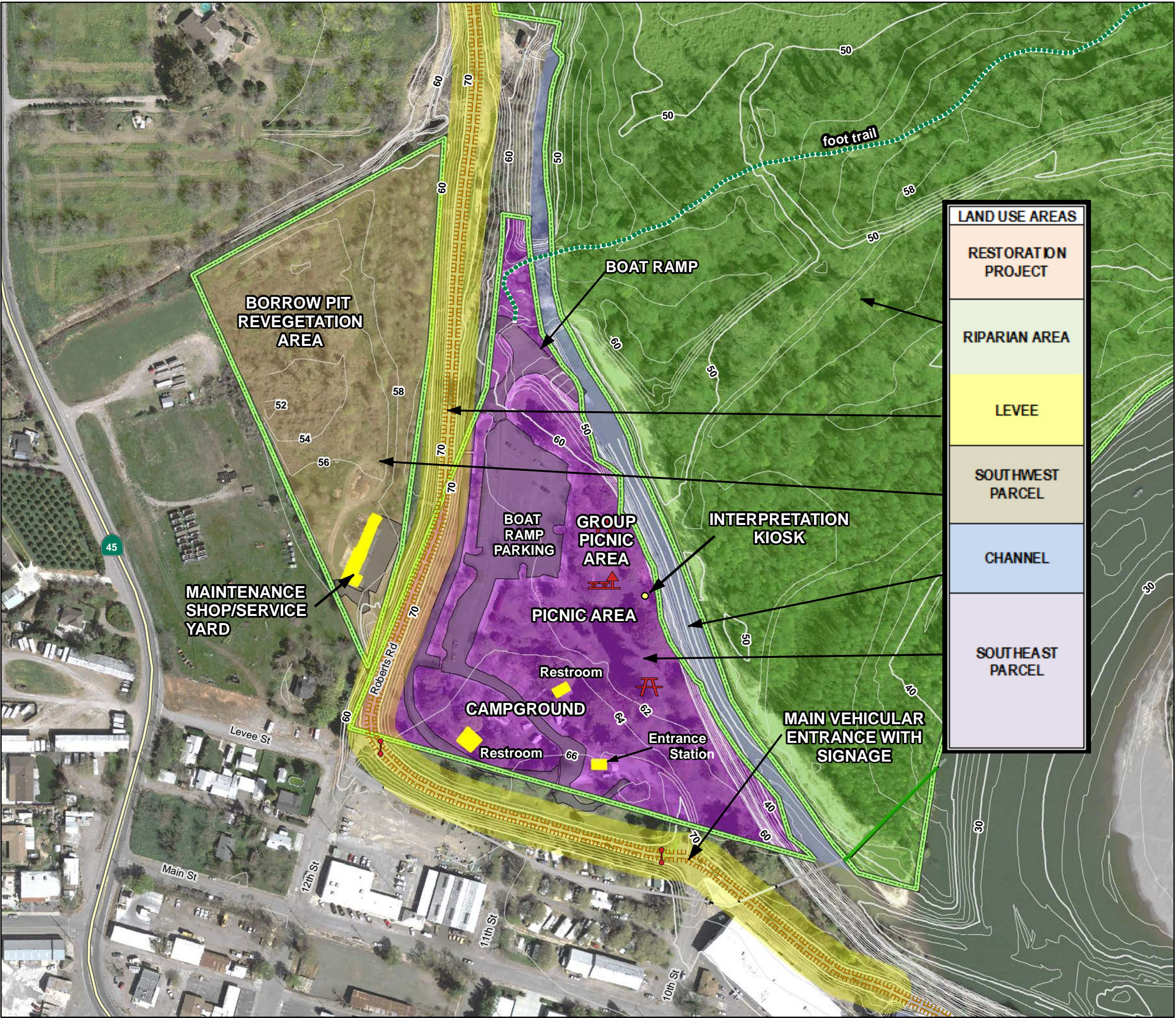
Campground restroom and shower building (Combination Building)



Day use restroom(Comfort Station)

Figure 2.5. Existing visitor facilities.

COLUSA-
SACRAMENTO RIVER
STATE RECREATION AREA
DRAFT GENERAL PLAN
FIG 2.6: EXISTING CORE
AREA FACILITIES

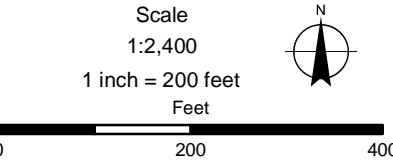
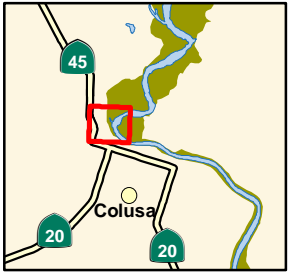


Legend

- State Park Boundaries
- Existing Park Paved Areas
- Existing Park Buildings
- Highway
- Foot Trail
- Picnic Areas, Developed Family Picnic Area
- Picnic Areas, Developed Group Picnic Area
- Interpretive Kiosk
- Gate
- Levees

Contour Interval: 2 ft

Data Sources:
1) Levees - Sacramento River GIS.
2) Park Facilities: CSU Chico GIS Center, and Calif State Parks.
3) Contours: US Army Corps of Engineers.
4) Image: April, 2008, 1 ft. DWR Sacramento River Flood Control Project.
5) Park Boundaries, Roads, and Historic Landfill: Cal State Parks.



NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

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D. PARK RECREATION

VISITOR ACTIVITIES. The primary recreational activities in the Park are walking, bank fishing, launching a motor boat and picnicking. There are few other fishing access points and boat launching facilities on this stretch of the river. The boat launch ramp is also an important river access point for emergency and law enforcement personnel.

Fishing for king salmon, steelhead, rainbow trout and striped bass is excellent in this stretch of the Sacramento River. Anglers also target catfish, shad, carp and sturgeon. Bank fishing is common at Colusa Levee Scenic Park or at the gravel bar-beach area at the end of the Nature Trail, although neither of these sites allows easy access. Fishing from a boat offers the best opportunity for success.

Camping, picnicking, paddling, dog walking, nature observation and wildlife watching are also popular activities. Bicycling is popular on the levee. Kayakers occasionally camp on Cobb's Bend beach.

VISITOR OPPORTUNITIES. The campground provides inexpensive overnight accommodations for nearby recreation activities outside the Park, such as hunting or wildlife watching on wildlife refuges, and boating on the Sacramento River. Public lands upstream and across the river allow extended touring of the river, especially by human-powered, or non-motorized, boats. Lazy water currents in places, sand bars that collect woody debris, riparian forest contributing shade and pleasing views, and beaches only reachable by water provide interesting exploration opportunities to shallow-draft boats. Floating down the river on rafts is a popular activity further north, especially at Bidwell-Sacramento River SRA; however few rafters make it this far south. Motor boats are more popular downstream of the Park because the floodway is tightly constrained by levees, water currents may be faster, navigation hazards often less, and launching and landing facilities further apart. Downstream views are dominated by levees, often with rock revetment, and there is little shade. Boat races and water skiing were more popular when woody debris and sediment were regularly removed from the channel.

NATURE EXPERIENCES. While the Park property does not contain large natural areas, it does provide the opportunity for boaters to access state and federal properties within the Colusa Subreach containing larger tracts of riparian vegetation that feel remote from human civilization. At Colusa-Sacramento River SRA, the feeling of wildness is fleeting. Migratory birds seasonally occupy the property, offering human visitors a chance to enjoy these wild species. Aerial acrobatics of the bank swallow often entertain visitors. Raptors, including the Swainson's hawk, hunt in the grasslands. Riverine fishes such as salmon, offer sustenance and a connection to the historically more abundant runs in these waters. As habitat restoration matures, visitors will be able to experience wildness more realistically, although the sights and sounds of homes, farms and industry are often only a step away.

VISITATION. Table 2.2 demonstrates 16 years of estimated attendance levels at the Park. The Park received an estimated 23,266 visitors in 2011, with 2,000 overnight camping visits. About half the Park's visitors paid for camping, day use and/or boat launching. With free parking easily available along nearby public roads, and residential neighborhoods adjacent to the Park, walk-in visitors are common and are not currently charged an entrance fee. Visitors who pay a fee are more accurately counted. Free day use has been estimated using different techniques and may not be counted at all

when staffing is inadequate, which may explain the wide differences over time. Boat launches also vary significantly over time; likely due to changes in channel siltation that affect river access, water level changes that affect navigation and the availability of sport fish.

Table 2.2. Estimated Park Attendance 1996-2011

Year	Paid Day Use	Free Day Use*	Overnight Camping	Boat Launches	Total*
1996	7,594	33,608	8,104	798	49,305
1997	2,155	13,706	5,960	983	21,821
1998	6,287	20,544	5,848	3,647	32,679
1999	4,688	51,211	6,272	3,592	62,171
2000	10,437	81,658	6,817	8,497	98,912
2001	41,983	134,670	6,515	9,632	183,168
2002	26,430	158,764	6,968	6,016	192,162
2003	25,086	185,674	8,020	7,127	218,780
2004	24,414	228,652	9,153	6,230	262,219
2005	21,909	193,441	6,524	6,433	221,874
2006	12,656	121,727	5,775	3,290	140,158
2007	16,515	0	6,842	4,307	23,357
2008	13,062	0	6,512	3,374	19,574
2009	10,131	8,903	5,664	1,755	24,698
2010	13,448	13,404	2,868	3,182	29,720
2011	9,813	11,453	2,000	2,883	23,266
<p>*= Reported free attendance varies significantly due to different estimating techniques.</p> <p>Source: California State Parks statistical records. The City of Colusa managed the Park after 2011.</p>					

Because the Park has limited camping facilities, most of the attendance is attributable to day-use visitors who live within a few hours' drive from the Park. Many regular day use visitors are likely to be local residents of Colusa, the largest population center within the county, or employed nearby. Visitors are also drawn from nearby Butte, Glenn, Sutter and Yuba counties. The City of Colusa and City of Williams report that out-of-town visitors support the economic vitality of their communities. While regional visitors pursue water-based recreational activities in the Park, namely boating and sport-fishing, local residents comprise the bulk of the people pursuing land-based recreational activities, such as picnicking and walking.

PROSPECTIVE VISITOR PROFILE. Every 5 years, California State Parks carries out the Survey on Public Opinions and Attitudes on Outdoor Recreation in California. The 2009 survey offers recreation patterns, as well as opinion and attitude findings sorted by age, gender, income, region and ethnic heritage. Below are several findings that may guide Park management decisions:

- Most California adults surveyed participated in walking for fitness or pleasure (74%). Other popular activities include included picnicking in picnic areas; driving for pleasure;

sightseeing; driving through natural scenery; beach activities; and visiting outdoor nature museums, zoos, gardens or arboretums. Outdoor recreation activities with the highest percentage of youth participation are walking on streets/sidewalks/paths/trails in their community, swimming in a pool, jogging or running, and playing in a park.

- California adults say the most important park facilities and services are play areas for young children; wilderness areas where no vehicles or development are allowed; environmental and outdoor education programs; multi-use turf areas for field sports; picnic sites for large groups; trails for multiple, non-motorized activities; and hard surface trails.
- The top four activities that California's adults would like to participate in more often are walking for fitness or pleasure; camping in developed sites; bicycling on paved surfaces; and day hiking on trails.
- Per capita, adult Hispanics spent more days than non-Hispanics visiting highly developed parks and recreation areas, and fewer days visiting natural and undeveloped areas.
- Only 8.3% of Central Valley residents say they visit a park alone. More Hispanics (66%) than non-Hispanic (52%) visited parks with family members.
- The Sacramento River Public Recreation Access Study, completed in 2003, analyzed the recreational preferences and patterns of the region by conducting interviews, public meetings, and reviewing data from several previous studies. This report found that:
 - 77% of the Sacramento River's Red Bluff to Meridian recreation users were residents of the 8-county region adjacent to the river.
 - The most important factors influencing enjoyment of recreational activities by local study respondents is "*being in the outdoors*" (87.4%), "*relaxing*" (77.3%) and the "*beauty of the area*" (76.7%).
 - Participation in hunting (17.2%), freshwater fishing (48.3%), swimming in lakes/rivers/ocean (72.4%) and power boating (44.8%) are more prevalent in the local area than in the rest of the state.

OVERNIGHT ACCOMMODATIONS. The Park's campground has 12 spaces available for visitors, although group tent camping on the lawn is available by special arrangement. Campground visitors are allowed to stay for a maximum of 30 days per year. From 2001-2008, the campground often reached capacity during the April through September peak camping season. Fewer campers visited during 2009-2011, possibly due to reduced boat launching availability. California State Parks operates the only other public campgrounds along this stretch of the Sacramento River—at Bidwell-Sacramento River SRA (39 miles) and Woodson Bridge SRA (62 miles). The adjacent Highstreet Trailer Court appears to serve as residential housing instead of recreational camping. There are two small motels in town. The Colusa Casino Resort is located about 3.5 miles north on Highway 45. The town of Williams is 10 miles away with seven lodging establishments.

SEASONAL USE PATTERNS. The boat launch ramp is in high demand from April through the fall when migratory fish are running. Fishing for salmon, steelhead, shad and striped bass are popular seasonal activities. Camping is most popular from April through September. Most of the park is within the Sacramento River floodway, so it is closed when flooded, usually in the winter or spring about every four years. Figure 2.7 shows flooding frequency estimates. Popular seasonal activities available in the region are shown on Table 2.3.

Table 2.3. Popular Regional Activities.

SEASON	ACTIVITIES
Spring	Hiking, bicycle riding, camping, fishing for striped bass, black bass, catfish & sturgeon, turkey hunting, Old West re-enactments
Summer	Motorized and non-motorized boating and floating, American shad fishing, striped bass thru June, salmon (starts mid-July), City of Colusa July 4th celebration, Colusa Farmer's Market, State Duck Calling Contest in late August, Labor Day and Independence Day floating events at Bidwell-Sacramento River State Park. Deer and quail hunting
Autumn	Chinook salmon and steelhead fishing, Motorized and non-motorized boating, camping, hiking. Hunting for waterfowl, deer, turkey, pheasant, quail, snipe & dove
Winter	Waterfowl and shorebird observation and photography, Winter run salmon fishing, sturgeon fishing starts early December
SOURCE: Department staff, USFWS, local recreation providers	

CONCESSIONS. No concessions operate in the Park currently.

ACCESSIBILITY. The group picnic area is accessible to persons with mobility impairments. There are access-compliant parking spaces near the entrance station. The developed area of the park is mostly flat. There are no routes to the river or to town without significant barriers for persons with mobility impairments. The Department's Transition Plan recommends accessibility improvements to the restrooms.

E. NATURAL RESOURCES

Natural resources are categorized into Physical (topography, climate, air quality, geology, soils, and hydrology and water resources; and Biotic (Dynamic riparian ecosystem, vegetation and habitat communities, sensitive natural communities, habitat restoration, habitat corridors, special status plant species, non-native invasive plant species, and special status wildlife). However, as conservationist John Muir wrote in his journal in July 27, 1869, "*When we try to pick out anything by itself we find that it is bound fast by a thousand invisible cords that cannot be broken, to everything in the universe.*" Our physical and biotic resources nurture and sustain each other in a complex and fascinating web. Each of these categories, by itself, provides only a tiny glimpse into the interdependent nature of our natural world. Natural resource management must consider the impact of human actions on the entire natural community today and far into the future.

PHYSICAL RESOURCES.

Topography: The Park ranges from about 40 feet above mean sea level (msl) at Cobb's Bend beach to about 70 feet at the top of the levee, with much of the park between 50 and 60 feet above msl (Figure 2.6 and 2.7), as follows:

- RESTORATION PROJECT was plowed and farmed in the recent past, so it contains mostly flat and gently sloping terrain which ranges from about 55 to 60 feet above msl.

- RIPARIAN AREA contains varied alluvial terrain from about 40 to 60 feet above msl. There is generally a steep 10 feet tall bluff adjacent to the river and on the north side of the former river channel during much of the year.
- CHANNEL contains very steep side slopes from about 40 to 65 above msl, and a relatively flat bottom. This former river channel extends from the river to the Robert's Ditch Irrigation Company's pump station. It effectively separates the SOUTHEAST PARCEL and RIPARIAN AREA, with the exception of fill for a roadway and trail near the boat ramp.
- SOUTHEAST PARCEL has been graded relatively flat between about 60 to 65 above msl.
- SOUTHWEST PARCEL contains varied terrain, including a small potential wetland; borrow pit excavation and partial backfilling at about 53 to 60 feet above msls.
- LEVEE includes the levee crown, side slopes and levee toe. The levee bisects the SOUTHEAST and SOUTHWEST PARCELS and forms the western boundary of the RESTORATION PROJECT and RIPARIAN AREA.

COLUSA-
SACRAMENTO RIVER
STATE RECREATION AREA
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FIG 2.7: HYDROLOGY

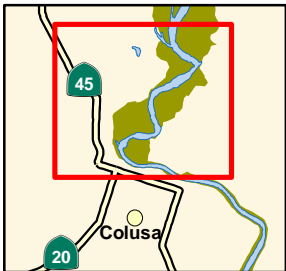


Legend

- Levees (Limit of Floodway)
- Large Woody Debris in River
- Bank Reinforcement
- State Park Boundaries
- DWR Flood Recurrence Model
- 5 foot contours
- Rivermiles
- Irrigation Well
- Flow Direction

Data Sources:
1) Levees - Sacramento River GIS.
2) DWR Flood Recurrence Interval: DWR Northern District.
3) Contours: 1 foot, resampled to 5 foot, Jones & Stokes.
4) Image: NAIP, 2012, 1 meter.
5) Large Woody Debris - Ayers Assoc. field inventory, 2006, & 2008 aerial interpretation, DPR.
6) Water / septic: Calif Dept of Parks and Recreation, Northern Buttes District.

Map Location, showing Sacramento River Conservation Area



Scale
1:10,500
1 inch = 875 feet
Feet
0 200 400 600 800 1,000

NOTES:

Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

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Please see
FIG 2.1: Location
Map for extent of
Sacramento River
Watershed

FIG 2.7



Climate: A Mediterranean climate, with hot dry summers and cool wet winters, characterizes the Sacramento Valley. In Colusa, average maximum temperature in July is about 95 degrees Fahrenheit, with January about 54 degrees Fahrenheit according to the Western Regional Climate Center. Low temperatures average 60 degrees Fahrenheit in July and 37 degrees Fahrenheit in January. Average precipitation is about 16 inches, mostly occurring from November through March. Snow is rare and freezing conditions are generally short-lived. It is important to note both the highly variable precipitation patterns and the wide diurnal (day to night) temperature variability in the summer. Multi-year droughts are common in California.

The region's Mediterranean climate lends itself to outdoor recreation, because summer precipitation is infrequent, humidity generally remains low and recreationists are able to plan visits with little concern for summer storms. River recreation is very popular in the heat of a summer day. The Delta breeze often sweeps in San Francisco's Golden Gate and up the Sacramento Valley, bringing cool evening air after blistering hot days.

Refer to Chapter 3 for a discussion of how projected climate change may significantly affect natural resources, landscapes, water flows and recreational patterns.

Air Quality: The Park is within the Colusa County Air Pollution Control District's (CCAPCD) jurisdiction, located in the Northern Sacramento Valley Air Basin (NSVAB). The CCAPCD administers local, state and federal air quality management programs for Colusa County and its cities. The Basin is in nonattainment for federal and state standards for carbon monoxide and small particulate matter (PM10). Colusa County is specifically designated as a state PM10 and ozone standards nonattainment area.



Figure 2.8. Annual levee burning

Operators of two adjacent land uses, agricultural and industrial, occasionally create dust, store or apply pesticides, burn agricultural waste such as orchard prunings and rice stubble, and operate machinery (trucks, tractors, pumps) that emits odors that may drift into the Park. Levee vegetation in the region is subject to annual burning so levees can be inspected for safety (Figure 2.8).

Geology: The Park is located on the Sacramento Valley floor, a huge basin filled with deep accumulations of marine and non-marine sediments, with some volcanic material. This section of the Valley, 40 miles across, is between 40 and 200 feet above msl, with a gentle slope toward the Sacramento River. A large sea once existed between the Sierra-Cascade and Coast Ranges, extending from the Redding area in the north to the Bakersfield area to the south. Valley sediments now evident at the surface were deposited by rivers originating in these mountains. Natural levees formed from soil deposited next to the Sacramento River channel and its tributaries, creating shallow basins on either side of the Valley. Sutter Buttes, a dramatic, isolated volcanic plug, rises more than 2000 feet above the Valley floor about 6 miles east of the Park.

Geologic hazards in the area are few. According to a 2007 California Geological Survey, there are no Alquist-Priolo Earthquake Fault Zones in Colusa County so only moderate ground acceleration from

earthquakes centered outside the County are likely. The nearest Quaternary Fault is about 9 miles east in the Sutter Buttes and un-named.

Although the Park has a shallow water table, the soils are moderately stable, so liquefaction is unlikely. Land subsidence may occur due to groundwater pumping in the region. Landslides are not determined to be a hazard due to the flatness of the site, although sandy riverbank slopes may suddenly collapse if over-steepened or undercut. Wind erosion and flood events re-arrange and re-sort surface soils, especially exposed soil in or near watercourses. Localized erosion potential is high within the floodway.

Soils: Much of the region contains prime agricultural soils, and most of the Park was formerly farmed. Soils in this area are mostly deep alluvial clay loam, deposited over thousands of years of river meandering. The soil matrix reflects the movement of the river channel as it erodes, sorts and deposits soils over time.

The Baseline Assessment for Riparian Restoration at the Ward Restoration Area, prepared for The Nature Conservancy in 2005, includes the most detailed and recent soils information in the Park. The RESTORATION PROJECT soils were found to be a relatively homogeneous profile of a sandy clay loam or clay loam surface, with coarser and finer clay loam profiles. Most of this area has deep to very deep soils with an impermeable layer at 3.5 to 15.5 feet. The water table was reached between 2.5 and 9.5 feet in late May and between 3 and 15.5 feet in late June (the report notes that it was a particularly wet spring and summer). Half of the sampling holes showed mottling within two feet of the saturation level, indicating extended periods of flooding.

The Colusa-Sacramento River SRA Vegetation Restoration and Recreation Improvements Project—Delineation of Wetlands and Other Waters of the US report prepared in 2007 for DWR, describes the Vina loam and Corbiere loam soil types that were found in depth. Refer to the Wetland Resources section below for more information.

Much of the RIPARIAN AREA contains alluvial loam deposited by the river since the State first acquired property for the park; however these soils have not been mapped recently.

The SOUTHWEST PARCEL contains a former borrow pit adjacent to the levee toe, reportedly used for highway construction. According to the Riparian Forest Restoration Plan, Borrow Area and Shop Area, prepared by the Department in 2000, the borrow pit was filled with assorted organic and mineral debris over many years under an agreement with the City of Colusa. The most recent soil survey is included in Appendix N. The subgrade contains different types of unconsolidated materials such as pea gravel, sand and composted vegetation. A one acre low area with remnant native vegetation contained moist soils at 20" deep during a July 3, 2015 site investigation.

The SOUTHEAST PARCEL contains loam and sandy loam soil of unknown origin that covers an old City of Colusa landfill. The Riparian Forest Restoration Plan (Appendix N) includes a 1958 newspaper article describing the installation of 36,000 yards of gravel, "*from the Colusa Weir...to fill low spots and level the old dump area*". The site flooded regularly, so that some waste was transported away from the site by the river. Landfill debris occasionally surfaces, such as old bottles, which are described in more detail in the Cultural Resources section.

A Phase One Environmental Site Assessment conducted by Hanover Environmental Services in 2005, “revealed no evidence of recognized environmental conditions in connection with the subject property except for the following:

- *Potential contamination to soil and groundwater due to the historic use of the property as a city landfill.*
- *Potential contamination to soil and groundwater due to the long term industrial nature of surrounding properties and known impacts to surrounding properties.”*

Soil tests that were conducted by Basic Laboratory in April 2014 for an archeological investigation in the SOUTHEAST PARCEL showed lead as the most abundant metal with an Occupational Safety and Health permissible exposure limits based on an 8hr day (OSHA PEL), and the common dry cleaning solvent tetrachlorethene (PCE).

Hydrology and Water Resources: The Sacramento River is the main feature of the Park and reason for its existence. Park property comprises the west bank of the Sacramento River along River Mile (RM) 144 – 147. The Sacramento River is a large, dynamic alluvial river flowing southwest from Goose Lake, along the California-Oregon border, through the Sacramento Valley. It merges with other rivers, enters the Sacramento-San Joaquin Delta, then flows west into San Francisco Bay and the Pacific Ocean. According to the Sacramento River Watershed Program, “*The Sacramento River is the largest river and watershed system in California (by discharge, it is the second largest U.S. river draining into the Pacific, after the Columbia River). This 27,000–square mile basin drains the eastern slopes of the Coast Range, Mount Shasta, the western slopes of the southernmost region of the Cascades, and the northern portion of the Sierra Nevada.*”

Central Valley Project (CVP). The CVP, which includes Shasta Dam and Shasta Lake, regulates the flow of the Sacramento River. Authorized by the federal Emergency Relief Appropriations Act of 1935, and reauthorized by the Department of the Interior, the project provided that dams and reservoirs be used for 1) river regulation, improvement of navigation, and flood control; 2) irrigation and domestic uses; and 3) power generation. The CVP Improvement Act of 1992 added

The Naked River—Levees Without Trees

Glen Martin, a San Francisco chronicle reporter, kayaked the Sacramento River from its headwaters to San Francisco Bay in July 1992 and told his story in a week-long series, “River: A Reporter’s Journey.” This remarkable journey chronicled the nature and character of the largest of California’s rivers, some 375 miles long, fed by the major tributaries of the McCloud, Pit, Feather, Yuba, Bear and American rivers. Martin wrote of the striking differences between the upstream river--natural and meandering, and the “strait-jacketed” engineered, downstream reaches.

“Drifting past thick stands of woodland and the mouths of creeks and slough, I contemplate the wild creatures that surround me in abundance. For the most part, they remain unseen, but their presence is palpable.

I regret leaving this lovely place, with its bankside jungles and silences pierced only by bird song. Twenty miles south, “the Ditch” awaits me. It is a bleak stretch of river from Colusa to the delta, its banks largely ripped and stripped of vegetation.”

Figure 2.9. Excerpt from California Rivers. A Public Trust Report by the California State Lands Commission, 1983.

the authorized purposes of recreation, fish and wildlife enhancement and water quality improvements. The CVP is operated by the Bureau of Reclamation.

Colusa Subreach. The natural dynamics of intermittent flooding, river meander and sediment deposition are evident throughout the Colusa Subreach—the 20-mile length of the river from Princeton south to Colusa (Figure 2.2). Levees are set back in this reach, which allow natural floodplain processes to occur. For example, in 1909, the Sacramento River occupied the former channel which now separates the RIPARIAN AREA from the SOUTHEAST PARCEL. As the Sacramento River's channel moved east, the Park's land mass grew. The river channel's current configuration adjacent to the Park has been relatively stable since 1991 (Figure 2.10).

Flooding. Regular floods from the north nourish the Park's riparian forest, create (and re-create) beaches and move woody debris into the River. In 2007, the DWR identified the Ordinary High Water Mark at Cobb's Bend at approximately 63 feet above mean sea level (msl). Flooding depths up to about 25 feet above autumn river flows occur in the winter and spring about every two to five years, spilling into the Park and pushing against the levees. The levee in Maintenance Area 1 and levee maintenance surrounding the Park is the responsibility of the DWR Sutter Maintenance Yard. The Ward Baseline Assessment included a flood frequency analysis (Figure 2.7). Flood analyses are on-going, so Park planners should seek out and utilize the most recent analysis.

The RESTORATION PROJECT and RIPARIAN AREA are expected to flood up to about 25 feet every 1-4 years, on average, with the deepest and most frequent flooding near the river. The strongest flood currents are expected to occur in the grassland area of the RESTORATION PROJECT. The SOUTHEAST PARCEL is expected to flood up to about 8 feet every 4 years, on average. The SOUTHWEST PARCEL is protected by the levee in a Federal Emergency Management Agency Flood Insurance Rate Map Zone X. This means the property is "*determined to be outside the 0.2% annual chance floodplain*", facing the same flood risk as the City of Colusa.

The Sacramento-San Joaquin Drainage District, now managed by the Central Valley Flood Protection Board (CVFPB), was created by the State legislature in 1913 to hold property rights for the flood control system. The State Plan of Flood Control, authorized by both the United States Army Corps of Engineers (USACE) and state DWR, and overseen by the CVFPB, is part of a larger system of flood control facilities designed to protect Sacramento and San Joaquin Valley communities and farms. The Sacramento River system comprises hundreds of miles of levees, four dams, three flood bypasses and basins, five weirs and several pumping stations that are managed together to move storm water safely downstream around cities, towns and farmland.

Shasta Dam stores Sacramento River flood waters above and north of Colusa that historically contributed to major flooding in the Sacramento Valley. The Colusa Bypass, authorized in 1928 northeast of the Park, carries flood flows between the City of Colusa and Sutter Buttes, through a series of flood bypasses toward the Feather River and beyond. The Sacramento River's designated floodway narrows considerably downstream and south of the Park.

The CVFPB regulates improvements proposed within the floodway, including land within the Park, such as levee planting, structures, earth moving and road construction, under the authority of Title 23 of the California Code of Regulations.

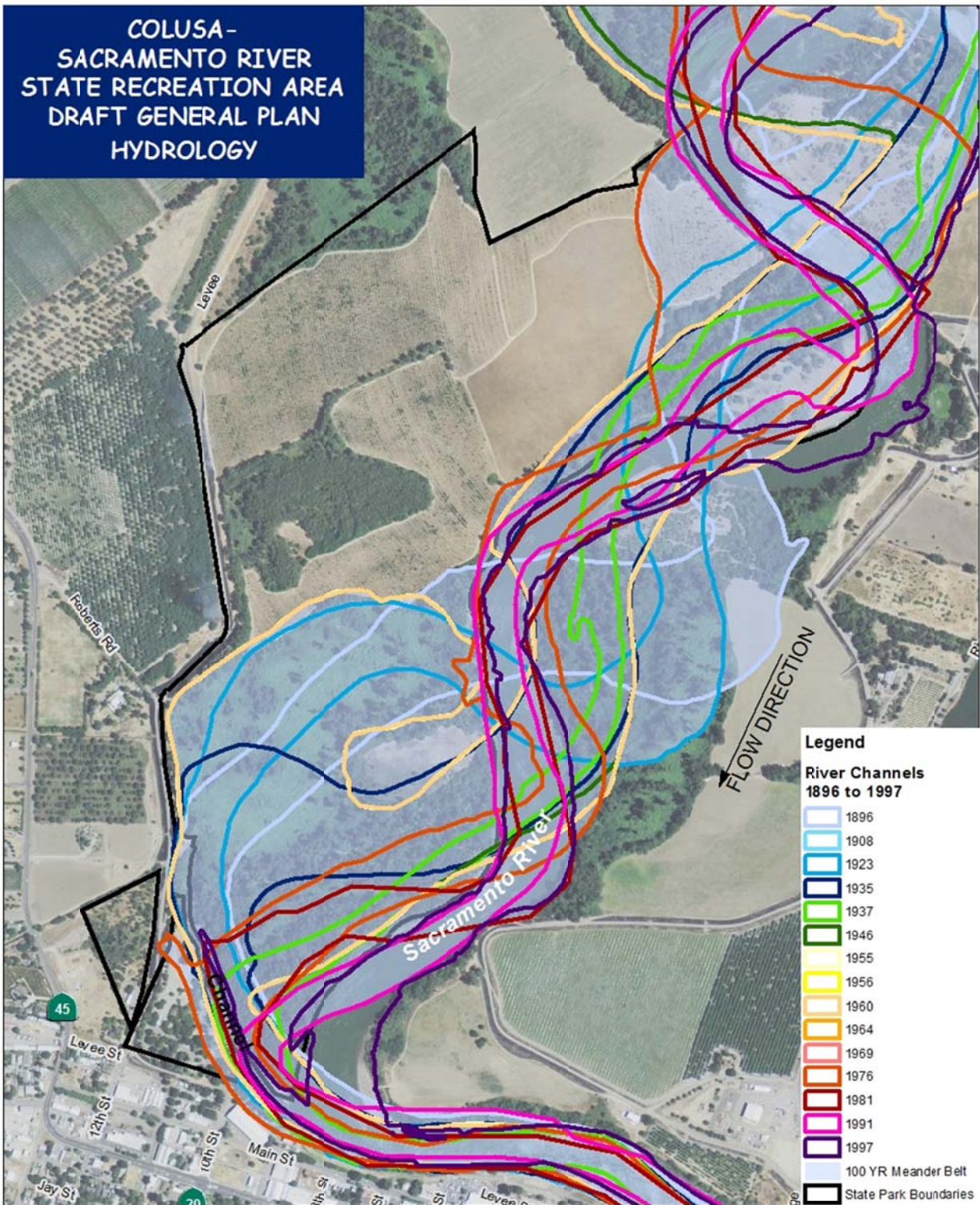


Figure 2.10. Sacramento River channel configuration 1896-1997

Water Supply. The Sacramento River watershed, which includes the Yuba, Feather and American rivers merging downstream of Colusa, carries 31% of the state's total surface water runoff. The federal Bureau of Reclamation's (Reclamation) Central Valley Project manages the Sacramento River's water supply for irrigation, power generation, navigation flows, environmental and wildlife conservation, and municipal and industrial needs. Shasta Dam forms Shasta Lake, a 4.5 million acre-foot reservoir upstream of Colusa that is the state's largest. Keswick Dam is nine river miles downstream of Shasta Dam and assists with migratory fish management. Reclamation provides a minimum flow of 2,000 to 3,900 cubic feet per second below Keswick Dam for fish conservation, depending on the season and precipitation patterns. Controlled releases are often highest in September through November (for flood control capacity and fish passage), while natural flows are often highest in the winter (precipitation) and spring (snow melt).

Roberts Ditch Irrigation Company has held a perpetual right to obtain Sacramento River water for irrigation since 1903. A pump station currently operates on the levee's river side adjacent to Roberts Road, moving water through the channel, then through the levee and into Robert's Ditch, where it irrigates 1,400 acres. As the river channel moved easterly, maintaining this supply became more costly with dredging of the lengthening channel, so supplemental groundwater pumps were recently installed. The water rights were perfected under the CVP Settlement Contract process.

There is a well at the northern border of the Park that served the RESTORATION PROJECT. The Park's domestic water is supplied by the City of Colusa, including irrigation water.

Navigation. Historically, natural (unimpaired) stream flow into the Sacramento River varied dramatically monthly and annually as precipitation and snowmelt occurred. Post-colonial navigation was dependent on these natural flows, dredging and removal of navigation hazards such as rocks and trees. According to the Butte County Historical Society, as many as 28 ferries operated on the river in the 1850s to move people and freight. Now, upstream dams, diversions and bypasses manage most of the river flow predictably, so water levels can be anticipated in advance. With appropriate gear and suitable conditions, river navigation is possible from the Golden Gate oceanfront to Keswick Dam at River Mile (RM) 302.

Until 2006, the Park's former river channel was regularly dredged to provide both irrigation flows and boat access to the river channel. A once-popular marina, Cruise'n'Tarry, operated across the River at Cobb's Bend until erosion and siltation overtook the facility. Significant woody debris is evident in the River north of Cobb's Bend. Woody debris benefits the salmon fishery but presents hazards which boaters must avoid. The State Lands Commission has jurisdiction over the bed and bank of the river, and the former river channel, so any encroachments such as boat ramps, docks or piers must be approved by them.

Water quality. Land uses in the watershed above Colusa affect the Sacramento River's water quality. According to the Sacramento River Watershed Program, much of the upper Sacramento River watershed is managed by the U.S. Forest Service and private landowners for multiple uses such as timber production, cattle ranching, some irrigated agriculture, and recreation. The Sacramento Valley includes about 2 million acres of irrigated rice, wheat, orchard fruits and olives, corn, alfalfa, tomatoes, and vegetables. Irrigation and storm water runoff carry silt, organic matter and pollutants into the river, and introduce warmer waters which may be detrimental to native fish. Mining in the watershed discharged toxic minerals such as mercury and chemicals such as hydrochloric acid into the river. Despite significant state and federal attention to removing mining pollution sources, legacy impacts remain.

The US Environmental Protection Agency and the California State Water Quality Control Board (SWQCB) regulate water quality under the Clean Water Act. Much of these agencies' responsibilities are carried out by regional boards. The Park is located in Regional Water Quality Control Board Region 5 – Central Valley. The Water Quality Control Plan (Basin Plan) for the Sacramento River and San Joaquin River Basins (Fourth Edition – 1998) says: *“Beneficial uses” of California’s waters include recreation, aesthetic enjoyment, navigation, and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves.*” The Basin Plan’s beneficial uses of this stretch of the Sacramento River that are relevant to Park operations are as follows:

- Water Contact Recreation (REC-1) – Uses of water for recreational activities involving body contact with water where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, whitewater activities, fishing, and uses of natural hot springs.
- Non-contact Water Recreation (REC-2) – Uses of water for recreational activities involving proximity to water, but not normally involving contact with water where water ingestion is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tide pool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.
- Commercial and Sport Fishing (COMM) – Uses of water for commercial or recreational collection of fish, shellfish, or other organisms, including, but not limited to, uses involving organisms intended for human consumption or bait purposes.
- Wildlife Habitat (WILD) – Uses of waters that support wildlife habitats, including, but not limited to, the preservation and enhancement of vegetation and prey species used by wildlife, such as waterfowl.
- Migration of Aquatic Organisms (MIGR) – Uses of water that support habitats necessary for migration, acclimatization between fresh water and salt water, and protection of aquatic organisms that are temporary inhabitants of waters within the region.
- Navigation (NAV) – Uses of water for shipping, travel, or other transportation by private, military, or commercial vessels.

The Sacramento River between Red Bluff and Knights Landing is a Clean Water Act Section 303(d) category 5 impaired water body, according to the State Water Quality Control Board’s 2010 303(d) List of Water Quality Limited Segments. This means that the water contains pollutants that exceed protective water quality standards for some of the beneficial uses identified above. Constituents that lead to this designation include Dichlorodiphenyltrichloroethane (DDT), Dieldrin, Mercury, Polychlorinated biphenyls (PCBs). A category called *“Unknown Toxicity”* includes unidentified toxins. Both DDT and Dieldrin contamination is from agricultural land use. Gold Rush era mining in the watershed unleashed mercury into waterways throughout the Sacramento Valley. Mercury contamination has been regularly found in fish tissue samples collected in the Sacramento River at Colusa. Fish found to contain mercury concentrations over the USEPA criterion for human health include: Striped Bass, Sacramento Pikeminnow and Sacramento Sucker. Fish collected that exceeded DDT criteria include Carp and Channel Catfish. The California Water Quality Monitoring Council issues fish and shellfish consumption advisories to protect human health.

There is no currently identified water quality issue associated with the former landfill within the SOUTHEAST PARCEL, but a Phase One Environmental Site Assessment in 2005 suggests that, *“the*

probability of recognized environmental conditions in association with the subject property is significant enough to warrant further investigation."

BIOTIC RESOURCES.

Knowledge of biotic resources helps to determine appropriate uses for park land and guides management actions designed to protect and enhance valuable and sensitive habitats. Significant biological resource values and/or issues include the dynamic riparian ecosystem, vegetation and habitat communities, sensitive natural communities, habitat restoration, habitat corridors, special status plant species, non-native invasive plant species, and special status wildlife. These are discussed in the following sections after summaries of regulations designed to protect and enhance sensitive biological resources, and general locations of biotic communities.

The most conspicuous single element in a natural landscape is usually the vegetation. Because of the interdependent relationship between plants and wildlife resources, the Park is described below in the context of Vegetation and Habitat Communities.

Information provided in this section is based on the following resources:

- *California Natural Diversity Database (CNDDB), by the California Department of Fish and Wildlife. March 11, 2014.
- *Inventory of Rare and Endangered Plants, Colusa (546A) Quad, by the California Native Plant Society. March 17, 2014.
- *Federal Endangered and Threatened Species that occur or may be affected by projects in the counties and/or USGS 7 ½ minute quads you requested, by US Fish and Wildlife Service Sacramento Office. March 11, 2014.
- Riparian Habitat Restoration Plan Ward Unit/Colusa-Sacramento River State Recreation Area (Planting Composition tables), by The Nature Conservancy, 2007
- Wildlife Species in the Sacramento River Conservation Area, by the Sacramento River Conservation Area Forum. Appendix B of the Handbook 2003.
- Baseline Assessment for Riparian Restoration at the Ward Restoration Area, by The Nature Conservancy, 2005.
- Invasive non-native plant inventory. California Invasive Plant Council, 2013.
- Personal communications with Parks staff
- Colusa-Sacramento River SRA Vegetation Restoration and Recreation Improvements Project—Delineation of Wetlands and Other Waters of the US report by DWR, 2007.

* documents above are in Appendix B, which constitute a biologic inventory of special status plant and animal species that occur or could potentially occur in the Park and surrounding region.

Regulatory Background. Many biological resources in California are protected because of their rarity or substantial recent declines in populations and/or habitat. Special-status species include plants and animals that are listed or proposed for listing as Threatened or Endangered under the FESA or CESA, species considered as candidates for such listing, animals identified by CDFW as California Species of Special Concern and by USFWS as Federal Species of Concern, and animals that are Fully Protected under the California Fish and Game Code. The primary laws and regulations that protect biological resources and are applicable to implementation of the General Plan are listed below. Descriptions of these and other pertinent regulations are summarized in appropriate sections.

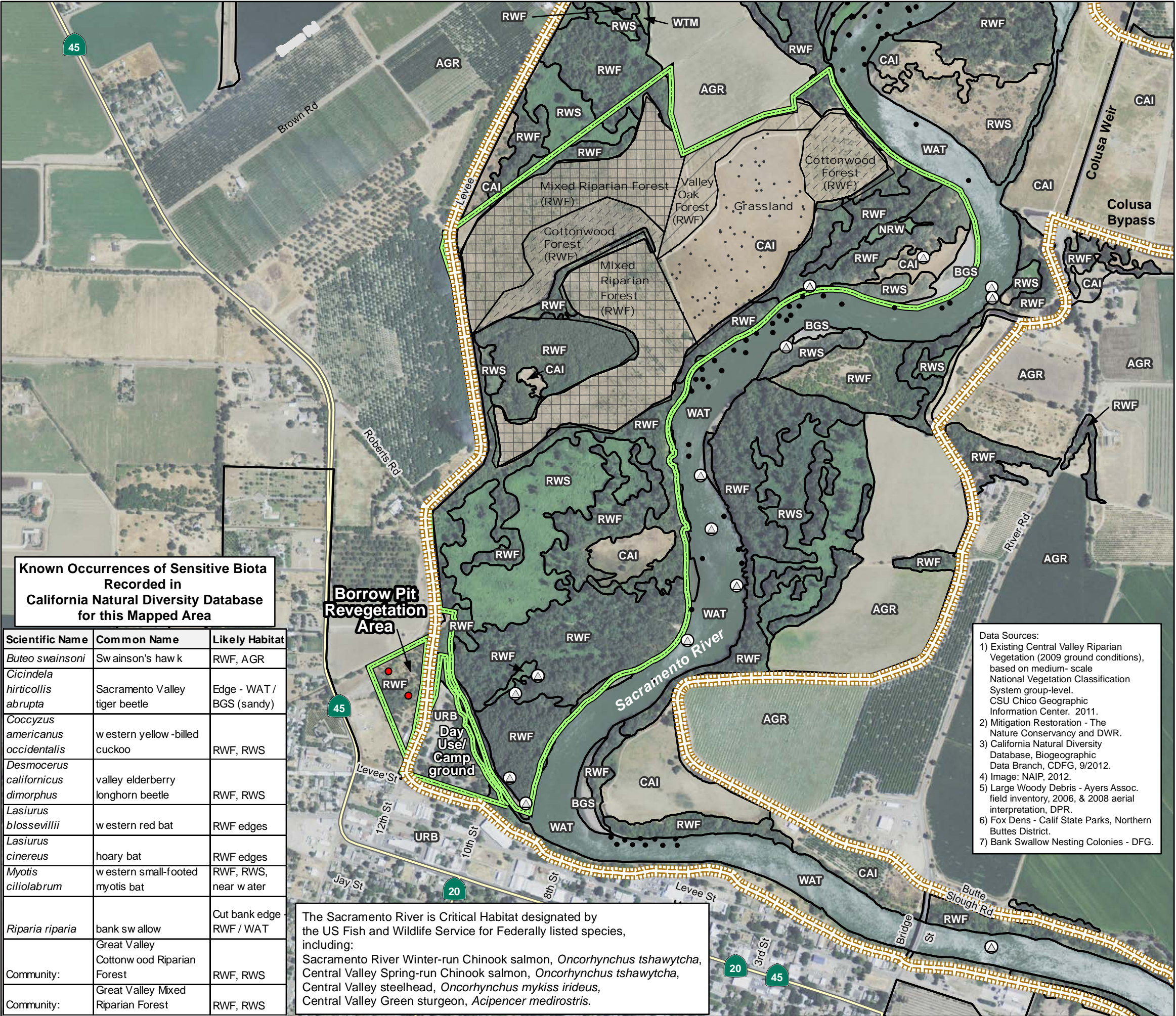
- Federal Endangered Species Act (FESA)
- Clean Water Act (CWA)
- Migratory Bird Treaty Act
- California Endangered Species Act (CESA)
- Section 1600 of the California Fish and Game Code
- Section 3503.5 of the California Fish and Game Code
- Magnuson-Stevens Fishery Conservation and Management Act (MSA)
- California Native Plant Society (CNPS)

Vegetation Mapping. Maps of the vegetation and habitat communities of the Park were prepared in 2011 using the Existing Central Valley Riparian Vegetation study (2009 ground conditions) by CSU Chico's Geographic Information Center, although some areas were adjusted based upon field verification (Figure 2.11). Vegetation boundaries are based on map attributes in addition to labeled map units, such as tree height and composition of vegetation life forms. Because the extensive agricultural lands surrounding the Park provide some wildlife values, Figure 2.2 also delineates cropping patterns. Understanding the wildlife values of surrounding lands helps to guide management strategies in the Park. Below is a brief summary of the location and extent of biotic communities in the Park.

- **RESTORATION PROJECT:** native grassland and young riparian forest planted in 2009
- **RIPARIAN AREA:** mature riparian trees and dense undergrowth grading into younger stands and occasional beaches along the river's edge. Much of this area was either formed over the last 40 years as the river adjusted its course, previously farmed or formerly disturbed by recreational development. A few large Valley oak trees remain among tall cottonwood trees. Dense California wild grape, non-native blackberries, fig, willow and other native and non-native plants have become established. A small grassland is present near the river at RM145, and within a riparian forest bounded by the levee and the RESTORATION PROJECT.
- **CHANNEL:** open water at times. The south bank is steeply vegetated with native and non-native trees and understory. The bed, north bank and maintenance road were regularly cleared until 2006, so it is mostly unstable bare soil or pioneer vegetation such as small willows, introduced grasses and weeds.
- **SOUTHEAST PARCEL:** mowed and irrigated lawn with mature ornamental trees.
- **SOUTHWEST PARCEL:** native riparian forest, about one acre remnant, and the rest planted in a reclaimed borrow pit in 2001 (Refer to Appendix N for plant list)
- **LEVEE:** non-native erosion control grasses and forbs regularly mowed and/or burned to allow inspection

Fig 2.11

COLUSA-
SACRAMENTO RIVER
STATE RECREATION AREA
DRAFT GENERAL PLAN
FIG2.11: HABITAT AND WILDLIFE



PLANNING DIVISION

GENERAL PLAN SECTION

Date: 10/16/2014
Calif. Dept. of Parks & Recreation
DRAFT

CALIFORNIA STATE PARKS
SINCE 1964

NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

Dynamic riparian ecosystem. The Colusa Subreach Background Report, prepared by The Nature Conservancy and SRCAF in 2008, describes the riparian ecosystem along this stretch of the river. The following description is drawn primarily from this document, with quotes identified. The rich biotic resources of the Colusa Subreach are shaped and supported by the physical and hydrological patterns of the river system. The Sacramento River meanders here, where “*relatively stable, straight subreaches alternate with more sinuous, dynamic subreaches*”. In the Colusa Subreach, the river’s floodplain is generally more tightly constrained by levees than it is further north and more loosely constrained than it is further south. Because of this, the historic extent of the Sacramento River’s riparian forest community is reduced in the Subreach and very limited below Colusa. Physiographic features include floodplains, basins, terraces, active and remnant channels, and oxbow sloughs.

Shaped by hydrology and the meandering tendency of the Sacramento River, these features provide a foundation for many evolving riparian plant communities. A diverse riparian corridor depends on the hydrologic dynamics of intermittent flooding, meander migration and sediment deposition to sculpt and re-sculpt the landscape. As the river channel meanders across the flood plain, mature forest and woodlands are removed by the channel cutting through the bank, or carving an entirely new channel. Sometimes, an oxbow lake or slough is created out of a newly abandoned meander bend. The sediment generated by erosion is then deposited in a different location, where pioneer plant communities colonize. North of the CHANNEL, the Park’s topography reveals evidence of former river channels, eroded banks and sediment deposits.

A dynamic riparian ecosystem supports numerous plant types of varying composition and age. Pioneer plant communities with willows, young cottonwoods, and other small trees and shrubs typically form on recently deposited sand bars and along channel edges. These plant communities may get scoured away by fast moving water or may transition over time into a mature mixed riparian forest growing on low to middle floodplain terraces and valley oak woodland occurring on higher floodplain terraces. Figure 2.12 illustrates a dynamic riparian ecosystem in the Sacramento River watershed, with a mature forest on the left (eroded bank), pioneer plant communities on a sand bar on the right and woody debris in the river.



Figure 2.12. Dynamic riparian ecosystem along the Fall River in NE California. Source: courtesy of Dennis Dahlin

The diverse natural resources of Colusa County, primarily its abundant water, arable soils, and warm climate, lead to settlement patterns that destroyed much of the riparian forest (refer to the Cultural Resources section). The historic riparian ecosystem is now highly fragmented, having been converted to agricultural, urban, and rangeland uses. Along the Colusa Subreach, most of the remaining forest is restricted to areas closest to the river, where it is subject to regulated flows controlled by upstream dams and diversion structures, and directed by levees.

In addition to the inherent natural resource values, many recreational activities are enhanced by, or depend on, the presence of streamside woody vegetation. Anglers, pedestrians, picnickers, campers,

cyclists, and boaters use woody vegetation for shade, while wildlife and nature viewers enjoy the wildlife, visual and aesthetic values it provides.

Vegetation and Habitat Communities. Biotic resources can be organized into communities for identification and management purposes. The following community descriptions are based on the medium-scale National Vegetation Classification System by California State University (CSU) Chico Geographic Information Center (2011). Communities present in, and immediately adjacent to, the Park include: Agriculture, Barren/Gravel/Sand, California Naturalized Annual/Perennial Grassland, Naturalized Riparian Wetland, Riparian Woodland Forest, Riparian Wash Scrub, Urban and Water are shown on Figure 2.11. The descriptions below include both plant and animal species that comprise holistic communities.

Agriculture (AGR): Row crops and orchard fruits and nuts are the primary agricultural products grown on privately owned lands immediately adjacent to the Park. While agricultural crops are not currently grown in the Park, they do affect the types of wildlife that may reside, forage or seasonally nest in the Park. Orchards and cultivated fields are generally devoid of native vegetation, but provide some habitat values for wildlife, such as yellow-billed magpie, house finch, crows, barn owls, California ground squirrel, and several species of raptors. Nearby rice fields provide exceptional foraging habitat for migratory waterfowl, while Sandhill cranes and deer may forage in corn fields in winter. Pasture, grain and alfalfa fields provide foraging habitat for raptors and owls, and may provide nesting habitat for tri-colored blackbirds.

Barren/Gravel/Sand (BGS): Sediment/gravel bars typically form below the ordinary high water mark, the approximate river stage during high flow periods that occur once every 2 years on average. They are generally considered to be part of Waters of the United States and subject to USACE jurisdiction under Section 404 of the CWA, and the State Lands Commission. A sediment bar has developed just north of the Nature Trail's terminous. Point bars, such as the one at Cobb's Bend, form on the inside of river bends where slower flows result in the deposition of gravel and sand. The coarser sediments are deposited near the base of the point bar while finer grains settle out as the water moves toward the top of the point bar. These bars are expected to move over time.

Sediment/gravel bars may serve as nurseries for the early seral stages of riparian plant community development depending on the sediment type, the timing of river flooding and drawdown during periods when riparian trees and shrubs disperse their seeds. Sacramento Tiger Beetles (thought to be extinct) and other invertebrates have colonized these dynamic landscapes in the past. This open ground provides foraging habitat for shorebirds such as spotted sandpipers and various species of bats. Bank swallows nest in vertical cut banks and cliffs with fine or sandy soil.

California Naturalized Annual/Perennial Grassland (CAI): Grasslands in the region are often a diverse blend of flowering herbaceous forbs and grasses of mostly introduced or invaded non-native species, although a native grass meadow was planted in the RESTORATION PROJECT. Patches of grassland often form in previously disturbed areas, such as occasionally flooded terraces along river banks and/or where impermeable soil layers prevent tree establishment. The Sacramento River levee in the Park is vegetated with grasses which are mowed or burned regularly. Annual grasses and forbs dominate, such as bromes, ryegrasses, oats, mustards, yellow-star thistle, clovers, lupines and filaree. These areas provide foraging habitat for raptors, dove, ring-neck pheasant, California quail, turkey, western meadowlark, deer and rodents.

Naturalized Riparian Wetland (NRW): Wetland communities develop in permanently or seasonally flooded areas within the site, such as along river and slough channels. According to the Colusa-Sacramento River SRA Vegetation Restoration and Recreation Improvements Project—Delineation of Wetlands and Other Waters of the United States prepared by Jones & Stokes in 2007, hydrophytic (water-loving) vegetation that typically characterizes wetlands in the Park include “*rosy lippia* (facultative wetland species) and common spikerush (obligate wetland species). Associate species consists of a mix of hydrophytic and upland, weedy species, such as white sweetclover and Spanish lotus”. These wetlands provide foraging habitat for egrets and herons, and a home for reptiles such as turtles and snakes, and amphibians such as frogs.

Riparian Woodland Forest (RWF): The riparian forest consists of a multistory canopy that provides important habitat for numerous wildlife species. Riparian forest may be dominated by cottonwood, willow, valley oak and/or western sycamore. The midstory may include the same species as occur in the overstory as well as boxelder and/or naturalized black walnut. Understory species may consist of California wild grape, poison oak, non-native invasive Himalaya blackberry, California blackberry, blue elderberry, California wild rose, white root sedge, field sedge, and/or various thistles. Riparian habitat is expected to support high wildlife diversity and may serve as an important wildlife corridor when connected. This high-density forest may provide roosting, nesting, and foraging habitat for raptors, owls, swifts and hummingbirds, woodpeckers, and cuckoos. Resident, wintering and migratory songbirds forage in riparian forests, among resident reptiles, amphibians and rodents. Egrets, turkey vultures and herons may nest and roost in mature riparian vegetation. Mammals such as deer, coyote and fox, beaver, opossum and raccoon live in these forests. Bats may spend the summer months raising their pups in tree cavities, attics and under bridges. Riparian forest vegetation provides shaded riverine aquatic cover, woody debris and root wads at the river’s edge and when the site is inundated, providing essential habitat for young salmonids and other aquatic organisms.

Riparian Wash Scrub (RWS): Lower stature than the riparian forest discussed above, RWS consists of willows, blackberry and buttonbush often dominated by California button willow and California wild grape. This habitat is often transitional, reclaiming moist, fertile land disturbed by erosional forces or farming, then maturing into a riparian forest over time. Movement of the Sacramento River channel over time clears out mature riparian forest, leaving sand and gravel bars that are colonized by RWS plants, providing nesting habitat for willow flycatchers and other nesting and migrating songbirds. RWS may also be present where shallow, nutrient-deficient or dry soils limit growth of taller trees.

Water (WAT): Open water habitat includes the Sacramento River and the former river channel. The river system is composed of various features including gravel riffles, runs, and pools. Sediment deposition from eroding banks and downed large woody debris are important inputs to the river system. Much of the former river channel has silted in, so it is often dry and connected to the main river channel only during high water.

The aquatic habitats of the Sacramento River provide vital fish spawning, rearing, and/or migratory pathway for anadromous fish, including Chinook salmon, green sturgeon, striped bass, American shad and Central Valley steelhead; as well as spawning habitat for migratory Sacramento splittail. Resident fish species include catfish and black bass. Raptors such as bald eagle and osprey, as well

as bank swallows and bats, forage for prey above or in open water. Muddy banks reveal evidence of visiting deer and river otter.

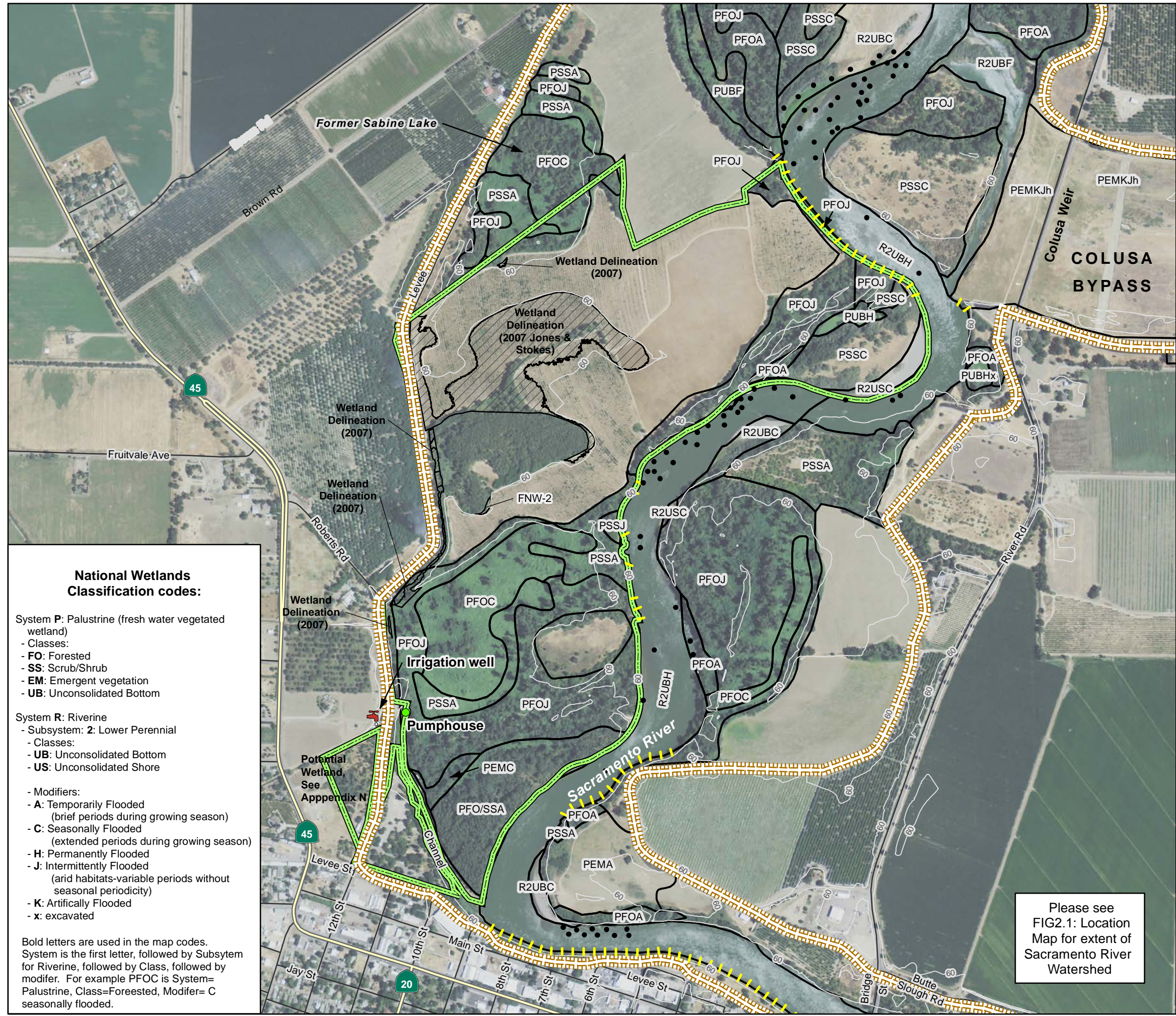
The USFWS Shaded Riverine Aquatic Cover report published in Oct 1992 states that the interface between RWF and WAT is of particular value to a wide array of fish and wildlife species. Shaded riverine aquatic cover *“moderates water temperatures, which is an important factor for all life stages of salmonid fishes”, “provides food and habitat for both terrestrial and aquatic invertebrates, which in turn serve as food for numerous bird species and several fish species including Chinook salmon and steelhead trout”, “provides shaded escape cover for fish, and feeding perches for birds such as the belted kingfisher, and nesting and resting areas for birds such as herons, egrets and wood ducks” and “natural, often eroding banks...provide substrate required by certain bank-dwelling birds (e.g., bank swallows, rough-winged swallows, and belted kingfisher), mammals (e.g., muskrat, mink, beaver, and river otter) and fish (e.g., channel catfish) for feeding, cover and shelter.”* The report clarifies that, *“No other cover type along the river supports such diverse and abundant fauna.”*

Urban (URB): The urban landscape includes irrigated and mowed cool- and warm-season turfgrasses, and introduced species of ornamental shrubs and trees, especially shade trees. In 1961, maple, eucalyptus, cedar, sweet gum, cypress, goldenchain tree, ash, mulberry, pistache, live and southern oaks, redwood and zelkova were planted. Additional sweet gum, pistache, tulip tree and live oak were planted in 1976. Common species that utilize this community include songbirds, tree and ground squirrels, deer and crows. Urban landscapes are more highly managed to reduce hazards to humans such as noxious weeds, stinging/biting insects, and structurally unsound trees.

Sensitive natural communities. Sensitive biological resources are of special concern to resource agencies such as CDFW and the USFWS, government agencies such as counties or cities, and/or conservation organizations such as the California Native Plant Society (CNPS). 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, uncommon or declining locally, regionally, or statewide because of natural conditions or conversions to other land uses. These communities may be protected by state and federal laws and regulations, such as CEQA, NEPA, Section 1600 et al. of the Fish and Game Code, Section 404 of the Clean Water Act (CWA), the Porter-Cologne Act, and/or the Magnuson-Stevens Act. All the Park’s habitat communities are considered sensitive habitat types except for Agriculture (AGR), Grasslands (CAI) and Urban (URB).

Wetlands (BGS, NRW, WAT) are protected as Waters of the United States and subject to USACE jurisdiction under Section 404 of the CWA. Wetland habitat has been dramatically affected by conversion of land for urban and agricultural uses and water that filled the wetlands has been diverted for other uses. Wetlands that historically existed in California are estimated to range from 3 to 5 million acres. The current estimate of wetland acreage in California is approximately 450,000 acres. This represents an 85% to 90% reduction; the greatest percentage loss in the nation. Wetland habitat is highly productive, important for protecting water quality, and supports numerous wildlife species. Wetlands are identified by soils, the presence of water and/or plant species designated Facultative, Facultative Wet, or Obligate per USACE guidelines. Regular flooding, erosion and siltation can change the location, depth and function of wetlands in the Park. Wetlands that have been mapped in and around the Park are shown on Figure 2.13.

COLUSA-
SACRAMENTO RIVER
STATE RECREATION AREA
DRAFT GENERAL PLAN
FIG 2.13: WETLAND RESOURCES



**National Wetlands
Classification codes:**

- System **P**: Palustrine (fresh water vegetated wetland)
- Classes:
 - **FO**: Forested
 - **SS**: Scrub/Shrub
 - **EM**: Emergent vegetation
 - **UB**: Unconsolidated Bottom
- System **R**: Riverine
- Subsystem: **2**: Lower Perennial
 - Classes:
 - **UB**: Unconsolidated Bottom
 - **US**: Unconsolidated Shore
- Modifiers:
- **A**: Temporarily Flooded (brief periods during growing season)
 - **C**: Seasonally Flooded (extended periods during growing season)
 - **H**: Permanently Flooded
 - **J**: Intermittently Flooded (arid habitats-variable periods without seasonal periodicity)
 - **K**: Artificially Flooded
 - **x**: excavated

Bold letters are used in the map codes. System is the first letter, followed by Subsystem for Riverine, followed by Class, followed by modifier. For example PFOC is System=Palustrine, Class=Forested, Modifier= C seasonally flooded.

Legend

National Wetlands Inventory

2007 Wetland Delineation Prior to Revegetation

Levees (Limit of Flood Plain)

Large Woody Debris in River

Bank Reinforcement

State Park Boundaries

Highway

Local Roads

60' Contour

NOTE: ALL PARK LAND NORTHEAST OF THE CHANNEL HAS BEEN DELINEATED AS OTHER WATERS OF THE UNITED STATES BY THE DEPARTMENT OF WATER RESOURCES, 2007 (APPENDIX B4).

Map Location, showing Sacramento River Conservation Area

Data Sources:

1) NWI: US Fish and Wildlife Service, original image date 1983, boundaries adjusted to April 2008 image.

2) Wetlands Delineation based on soil sampling - 2007 Jones & Stokes.

3) Levees - Sacramento River GIS.

4) Image: NAIP 2012.

5) Large Woody Debris - Ayers Assoc. field inventory, 2006, & 2008 aerial interpretation, DPR.

Scale

1:10,500

1 inch = 875 feet

Feet

0 200 400 600 800 1,000

N

NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

NORTHERN
SERVICE
CENTER

GENERAL
PLAN
SECTION

Date: 10/16/2014

Calif. Dept. of Parks & Recreation

DRAFT

Please see FIG2.1: Location Map for extent of Sacramento River Watershed

The Colusa-Sacramento River SRA Vegetation Restoration and Recreation Improvements Project—Delineation of Wetlands and Other Waters of the US report, prepared in 2007 for DWR, describes wetland resources mapped in the RESTORATION PROJECT. *“A total of 1.48 acres of wetlands and 26.74 acres of Other Waters of the United States (areas at or below the OHWM) were delineated. Vina loam, 0 to 2 percent slopes, frequently flooded, is the dominant soil series. The Vina series formed from mixed alluvium on floodplains and is classified as Pachic Haploxerolls. The modal pedon of the Vina series ranges from fine sandy loam to silt loam to a depth of 60 inches. Redoximorphic features begin at a depth of 26 inches in the modal pedon. The duration of the flooding is described as “long” (i.e., 7 to 30 days). The Vina map units qualify as hydric soils having met the National Technical Committee for Hydric Soils criterion number 4, which are “soils that are frequently flooded for long duration or very long duration during the growing season”. “ Further hydrologic analysis in an addendum reports that the entire RESTORATION PROJECT and RIPARIAN AREA are more properly described as being within USACE’s “Other Waters” (Appendix B-4).*

About an acre of remnant facultative vegetation occurs in the SOUTHWEST PARCEL (Appendix N).

Riparian forest communities (RWF, RWS) are considered sensitive because of their wildlife habitat value and the historic loss of these communities. In California, some riparian habitats qualify as wetlands, which are protected as described above. The CNDDB 2013 lists Great Valley Cottonwood Riparian Forest and Great Valley Mixed Riparian Forest as Special Status habitats.

Habitat Restoration. There have been two habitat restoration projects in the Park.

DWR Restoration Project. The RESTORATION PROJECT includes Mixed Riparian Forest, Cottonwood Forest, Valley Oak Forest (all RWF) and Grassland (CAI) communities planted by River Partners in 2009. It is a DWR-commissioned project consisting of 137 acres, including 85.5 acres of mixed riparian forest for required mitigation from Tisdale Bypass and 48.51 acres of oak woodland, riparian forest and grassland habitat for proposed advanced mitigation. Implementation is guided by the following documents:

- Riparian Habitat Restoration Plan, Ward Unit. The Ward Tract restoration plan was prepared in 2007. This project mitigated for nearby habitat removal by DWR to maintain flood capacity in the Tisdale Bypass. Long-term plan objectives are to establish early-successional and late-successional stage riparian communities, provide habitat for neotropical migrant land birds and improve water quality by decreasing sediment and pesticide runoff into the Sacramento River. A conceptual public recreation plan included vehicle access and parking, primitive camping and trails. Management objectives are to meet or exceed 80% survival of woody and herbaceous plants after three years and ensure that woody plant species diversity is comparable to nearby riparian forest remnants. According to DWR, the management objectives of the restoration plan have been met.
- Management Plan for Wetland Habitat at Colusa-Sacramento River State Recreation Area. The management approach (2009 draft) includes details of public access, CVFPB conditions, mitigation credits, and financial assurances. As of this writing, the Management Plan has not been accepted by the USACE, so it is subject to revision.

As vegetation matures, it will provide habitat, foraging, nesting and resting opportunities for migratory and resident birds, strengthening the wildlife corridor. When the river channel moves, shrub and tree species will provide shaded riverine aquatic habitat, organic inputs and woody debris that will benefit aquatic invertebrates and vertebrates.

A Cooperative Interagency Agreement between the Department of Water Resources and California State Parks was signed in 2008 (Appendix C). DWR is responsible for monitoring the riparian forest establishment until it meets the draft Management Plan for Wetland Habitat at Colusa-Sacramento River State Recreation Area goals, estimated to be 10 years from planting. After the establishment period, California State Parks is responsible for maintenance of the biological integrity and function in perpetuity, except that DWR must maintain the grasslands habitat. Recreational use is allowed as long as it is consistent with terms of the Cooperative Interagency Agreement.

Borrow Pit Revegetation. The SOUTHWEST PARCEL borrow pit was planted with 4.5 acres of Valley Oak Forest and Cottonwood Forest plants in 2001 by California State Parks staff. . Goals of the Riparian Forest Restoration Plan, Borrow Area and Shop Area (Appendix N), were:

- To bring the Borrow Area within the umbrella of stated conservation and recreation policies and functions of the Colusa-Sacramento River State Recreation Area and the California State Park System
- To restore natural ecosystem processes to the site, contributing to cumulative rivershed effects such as water quality and habitat for endangered species
- To augment the natural setting for public enjoyment and relaxation.

This restoration was designed to meet several CALFED and California Senate Bill 1086 objectives, such as:

- Provides habitat for threatened or endangered species (Swainson's Hawk, western yellow-billed cuckoo, wood ducks, neotropical migratory birds, valley elderberry longhorn beetles), which promotes recovery and establishment of self-sustaining populations and minimizes the need for future endangered species listings.
- Promotes ecosystem processes, which support natural aquatic and terrestrial residents of these forests...
- Increases the area and quality of riparian habitat and the continuity of the riparian corridor.
- Eliminates and helps to prevent the reestablishment of non-native weeds.

This project was for habitat enhancement, not required mitigation. The California State Parks Natural Resources Division administers the Natural Resources Deferred Maintenance Program, which provided \$20,000 to fund this effort. The funding did not impose special requirements for long-term protection of this habitat restoration.

Habitat corridors. The Sacramento River, its tributaries, and their associated vegetation and habitat communities, serve as 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 river is used as a migratory pathway by a variety of aquatic species, including anadromous fish. Migratory birds are also dependent upon the river and its riparian and oak woodland habitats. Tremendous efforts have been undertaken by state and federal agencies and environmental organizations over the past 25 years to strengthen the Sacramento River's habitat corridor, including land acquisition and habitat restoration in the

Colusa Subreach. The Park connects critical aerial, terrestrial and aquatic habitat corridors in this fragmented natural landscape. Nearby USFWS and CDFW waterfowl refuges add important habitat and wildlife movement corridor value to this stretch of the Pacific Flyway. The Colusa Subreach contains sensitive natural communities in privately owned agricultural or publicly owned (USFWS and CDFW) conservation lands along the edge of river and slough channels that flood frequently (Figures 2.2 and 2.11). Shaded riverine cover, nutrients and woody debris from parkland benefits the migratory fish corridor. Flooded lands can provide cover for young salmon smolts on their way to the ocean.

Special Status Plant Species. Database searches, literature review, CNPS Rare and Endangered Plant Inventory 2013 and observation of existing habitats identified six special status plant species which have the potential to occur in the Park (Appendix B). Plants listed as rare under the California Native Plant Protection Act (CNPPA) or included listed in California Native Plant Society (CNPS) California Rare Plant Ranks (CRPR, formerly known as CNPS Lists) 1A, 1B, 2A, and 2B are also treated as special-status species as they meet the definitions of Sections 2062 and 2067 of the CESA and in accordance with CEQA Guidelines Section 15380. In general, the CDFW requires that plant species on CRPR 1A (Plants presumed extirpated in California and Either Rare or Extinct Elsewhere), CRPR 1B (Plants rare, threatened, or endangered in California and elsewhere), CRPR 2A (Plants presumed extirpated in California, but more common elsewhere); and CRPR 2B (Plants rare, threatened, or endangered in California, but more common elsewhere) of the CNPS Inventory of Rare and Endangered Vascular Plants of California (CNPS, 2010) be fully considered during the preparation of environmental documents relating to CEQA. In addition, species of vascular plants, bryophytes, and lichens listed as having special-status by CDFW are considered special-status plant species. To date, there has been no complete field survey and inventory of special status plant species in the Park.

The Baseline Assessment for Riparian Restoration at the Ward Restoration Area, prepared in December 2005 by The Nature Conservancy describes these special-status plant species potentially occurring, but not documented, within one mile of the Ward Tract:

- Ferris's Milk-vetch (*Astragalus tener* var. *ferrisiae*) is considered a CNPS List 1B species (plants rare, threatened or endangered in California and elsewhere). This annual herbaceous member of the bean family (Fabaceae) produces purple and white flowers from April to May. Suitable habitat consists of vernal mesic meadows and seeps as well as subalkaline flats in valley grasslands.
- Britblescale (*Atriplex depressa*) is an annual herb that blooms from April through October in the Chenopodiaceae family. This CNPS List 1B endemic species may inhabit Chenopod scrub, meadows and seeps, playas, valley and foothill grassland, vernal pools in alkaline and clay soils.
- Palmate-bracted bird's-beak (*Cordylanthus palmatus*) is a CNPS List 1B endemic species that is designated endangered both federally (since 1986) and in California (since 1984). It potentially occurs in Chenopod scrub, and Valley and foothill grassland. This hemiparasitic annual herb in the Orobanchaceae family blooms from May through October.
- Rose-mallow is an emergent perennial herb in the mallow family (Malvaceae) that produces large white or pink flowers. This CNPS List 2 species blooms from June to September and grows in freshwater marshes and swamps.

- Coulter's goldfields (*Lasthenia glabrata* ssp. *coulteri*) is an annual herb in the Asteraceae family that blooms from February through June. It is a CNPS List 1B species that may be found in marshes and swamps, playas and vernal pools.

In addition, blue elderberry is protected because it provides potential habitat for the valley elderberry longhorn beetle (*Desmocerus californicus dimorphus* (VELB). Blue elderberry shrubs (*Sambucus mexicana*) have been found within the Park in riparian forests, and were planted in the SOUTHWEST PARCEL. See the Special Status Wildlife section below for more information.

Non-native Invasive Plant Species. Non-native (also called exotic, alien, non-indigenous) species are those that have been introduced through human activities, either incidentally or deliberately. Many non-native plant species are not invasive and do not have adverse effects on natural plant and animal communities. However, some non-native species have resulted in the transformation of native habitats to a non-native plant community with resultant reduction of native plants and degradation of wildlife habitat. Invasive species management is an important component of preservation of the natural resource values.

The state and federal government both have laws and regulations protecting commerce and environmental lands from damages caused by invasive weeds. The California Department of Food and Agriculture and federal government each maintain lists of noxious weeds for the purpose of eradication or control.

The California Invasive Plant Council (CalIPC) maintains a list of invasive non-native plants that threaten wildlands. These species are classified based on the level of threat and invasiveness. Each plant on the list receives an overall rating of High, Moderate or Limited based on evaluation using the criteria system.

- High – These species have severe ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal and establishment. Most are widely distributed ecologically. The list includes 14 species in Colusa County, such as Giant reed, Himalayan blackberry and Tamarisk.
- Moderate – These species have substantial and apparent—but generally not severe—ecological impacts on physical processes, plant and animal communities, and vegetation structure. Their reproductive biology and other attributes are conducive to moderate to high rates of dispersal, though establishment is generally dependent upon ecological disturbance. Ecological amplitude and distribution may range from limited to widespread. The list includes 23 species in Colusa County, such as Dalmation Toadflax, Italian ryegrass and Edible fig.
- Limited – These species are invasive but their ecological impacts are minor on a statewide level or there was not enough information to justify a higher score. Their reproductive biology and other attributes result in low to moderate rates of invasiveness. Ecological amplitude and distribution are generally limited, but these species may be locally persistent and problematic. The list includes 21 species in Colusa County, such as Russian thistle.

The full CalIPC list is available on the websites <http://www.cal-ipc.org> and <http://www.calweedmapper.org>. Table 2.4 contains a list of invasive species anticipated to occur within the Park or nearby habitat.

Table 2.4. NON-NATIVE INVASIVE SPECIES

COMMON NAME	FORM	NOTES	STATUS
Black Walnut	Tree	Observed in the Park	Common
Edible Fig	Tree	Observed in the Park	Common
Mulberry	Tree	Observed in the Park	Common
Tree of Heaven	Tree	Observed in the Park	High priority
Osage Orange	Tree	Observed in the Park	Less common
Hackberry	Tree	Observed in the Park	Less common
Chinaberry	Tree	Observed in the Park	Less common
Red Sesbania	Tree	Migrating downriver	Very high priority
Northern Catalpa	Tree	Migrating downriver	
Silver Maple	Tree	Migrating downriver	
Pecan	Tree	In RESTORATION PROJECT	
Giant Reed (Arundo)	Perennial		Eradicating
Perennial Pepperweed	Herbaceous perennial		
Himalayan blackberry	Thicket		
Periwinkle	Perennial groundcover		
Ivy	Vine		
Virginia Creeper	Vine		
Pokeweed	Herbaceous perennial		
Blessed Thistle	Annual		
Bull Thistle	Annual		
Puncturevine	Annual		
Johnson grass	Grass		High priority
SOURCE: California State Park staff			

Special status wildlife. The CNDDDB lists state and federal special status terrestrial (land-based) and aquatic (water-based) animal species that were documented to occur at one time in the region. Terrestrial species documented by CNDDDB and USFWS within the region are described on Table 2.5 below. Suitable habitat may be available now, or as the restoration areas mature, for other Special Status terrestrial wildlife.

Table 2.5. Special-Status Terrestrial Wildlife Anticipated to Occur within the Park			
Species	CDFW	USFWS	Habitat
Invertebrates			
valley elderberry longhorn beetle / <i>Desmocerus californicus dimorphus</i>	--	T	Elderberry shrubs, usually in streamside habitats below 3,000 feet through the Central Valley
Sacramento Valley tiger beetle / <i>Cicindela hirticollis abrupta</i>	--	--	Now considered extinct. Occurred on moist open sand or mud along river.
Reptiles and Amphibians (none)			
Birds			
Swainson's hawk / <i>Buteo swainsoni</i>	T	--	Forages in open meadows, grasslands, and agricultural fields; nests in tall trees (20-30 feet)
western-yellow billed cuckoo / <i>Coccyzus americanus occidentalis</i>	E	--	Large patches of mature riparian forest
bank swallow / <i>Riparia riparia</i>	T	--	Riparian woodland; nests in vertical banks and cliffs with fine or sandy soils
Mammals			
western red bat / <i>Lasiurus blossevillei</i>	CSC	--	Nests in old cottonwood, sycamore and Valley oak cavities. Forages over wetlands, forests and meadows.
hoary bat / <i>Lasiurus cinereus</i>	--	--	
western small-footed myotis / <i>Myotis ciliolabrum</i>	--	--	
CDFW State Listing Categories: E California Endangered T California Threatened FP Fully Protected CSC California Species of Concern			USFWS Federal Listing Categories: T Federal Threatened PD Proposed for Delisting FSC Federal Species of Concern
Source: CNDDDB 2013			

Invertebrates. The valley elderberry longhorn beetle (VELB) is federally listed as Threatened. This beetle requires blue elderberry shrubs for reproduction and survival. Elderberry shrubs are abundant in some areas of the Park. Valley elderberry longhorn beetle has not been documented in the Park, but because suitable habitat is present, there is potential for this species to occur.

The Sacramento Valley tiger beetle habitat is present; however, this species is considered extinct from its historic range following extensive surveys of the Sacramento and Feather Rivers from 2001-2004. According to the Coleopterists Bulletin, the Knisley study failed to find any individuals and very little suitable habitat remaining along the Sacramento and Feather Rivers. The loss of habitat is most likely the cumulative effects of Oroville and Shasta Dams, including the loss and deterioration of sandy edge river habitats and prolonged high water levels.

Reptiles and Amphibians. No special status species are documented to occur in the Park, although northwestern pond turtles and giant garter snakes have been documented in the surrounding areas. Giant garter snakes tend to prefer fresh emergent wetlands and agricultural ditches

(generally associated with rice fields) and are not known, or anticipated to occur in rivers or large stream supporting predatory fish species. With the presence of the levee between ideal giant garter snake habitat and the river, in which they do not frequent, it is suspected this species of snake does not utilize existing habitats within the Park.

Northwestern pond turtles are known to utilize the Sacramento River; however, they tend to prefer slow, sluggish areas with many basking locations. The river's edge adjacent to the Park and the former river channel do not contain the type of habitat the turtles prefer, thus northwestern pond turtles are unlikely to reside in the Park.

Birds. Swainson's hawk is state listed as a Threatened species and has been recently documented by CNDDDB in the general vicinity of the Park. Swainson's hawks typically nest in scattered riparian or woodland trees adjacent to grasslands and/or agricultural fields that provide suitable foraging habitat. Grasslands provides suitable foraging habitat while riparian habitat and large trees in the Park providing suitable nest sites.

Western yellow-billed cuckoo is state listed as Endangered. They nest in large blocks of riparian forest vegetation. Western yellow-billed cuckoo is not known to nest in the Park, but riparian vegetation on and adjacent to the Park could provide suitable habitat, especially as the RESTORATION PROJECT matures.

Bank swallow is state listed as a Threatened species. Bank swallows nest colonially in vertical banks and cliffs with fine-textured sandy soils. Nesting colonies are currently present along the Park's river bank. Recovery of bank swallow will require an increase in river meander with constantly eroding banks of appropriate substrate.

The Park contains habitat that supports a number of other migratory bird species that have protected status under the Migratory Bird Species Act of 1918.

Mammals. Western red bat, hoary bat and western small-footed myotis are protected under the California Fish and Game Code, with the western red bat also listed as a California Species of Special Concern. These bats occur in mixed riparian and other forest habitats. They nest in rock crevices, hollow trees, buildings and bridges, with young typically born in May and June. Riparian vegetation in the Park provides suitable habitat. Western red bat is likely to occur, as it has been documented near the bridge just downstream of the Park.

Aquatic Species. According to the USFWS/NOAA and CDFW, State and Federally endangered Central Valley winter-run and threatened spring-run Chinook salmon, as well as federally threatened Central Valley steelhead and green sturgeon occur in the Sacramento River. In addition, USFWS also identified the Sacramento River winter-run Chinook salmon, Central Valley spring-run Chinook salmon, and Central Valley steelhead as Evolutionary Significant Units, meaning they are substantially reproductively isolated from other populations and are an important component of the evolutionary legacy of the species. The fall/late-fall-run Chinook salmon also enter the Sacramento River but are currently only a federal Candidate for being listing as Threatened or Endangered. Table 2.6 describes these Special Status species.

Chinook salmon and Central Valley steelhead are anadromous fish that spend their adult lives in the ocean and return to freshwater to spawn. The three runs of Chinook salmon correspond to when

the adults enter freshwater to begin their spawning migration. Chinook salmon and steelhead spawn in rivers and streams where females deposit eggs in depressions in gravel spawning beds. All three Chinook salmon runs and Central Valley steelhead are known to migrate by the Park to spawning habitat upstream. These fish are important sport fishing resources.

Table 2.6 Special-Status Fish Anticipated to occur in or adjacent to the Park			
Species	CDFW	USFWS	Habitat
Chinook salmon - Central Valley winter run <i>Oncorhynchus tshawytscha</i>	E	E	Rivers and streams, including the Sacramento River
Chinook salmon - Central Valley spring run <i>Oncorhynchus tshawytscha</i>	T	T	
Chinook salmon - Central Valley fall/late fall run <i>Oncorhynchus tshawytscha</i>	CSC	C	
Central Valley steelhead <i>Oncorhynchus mykiss</i>	---	T	
green sturgeon <i>Acipenser medirostris</i>	SCS (1)	T	Rivers, including the Sacramento River
KEY: E=Endangered, T=Threatened, CSC=California Species of Concern, C=Candidate, SCS=Federal Species of Special Concern Source: CNDDB 2014			

Green sturgeon migrate from the ocean to the upper Sacramento River to spawn every two-to-four years from about age 15 to age 40. Upstream dams block potential spawning habitat of these largest and most ancient of bony fishes. Mature adults can be found near the Park in late spring to early summer. Green sturgeon were federally listed as Threatened in 2006 and currently cannot legally be caught for sport or commercial purposes.

The Magnuson-Stevens Fishery Conservation and Management Act (MSA) is the primary governing law for fisheries management in the United States. The MSA applies to all federal waters within the migratory range of anadromous species that spawn in U.S. rivers and/or estuaries. Historically, it focused on preventing overfishing in coastal waters, but a 2006 amendment added more focus on helping to sustain fishery units and populations by protecting and enhancing spawning grounds. The MSA established eight Regional Fisheries Management Councils. Their aim is to end overfishing, rebuild depleted fish stocks, protect essential fish habitat, and establish bycatch reduction programs. The Pacific Fisheries Management Council is responsible for managing commercial fisheries resources along the coasts of Washington, Oregon, and California. Managed species are covered under three fisheries management plans: Pacific Groundfish Fishery Management Plan, Coastal Pelagic Fishery Management Plan, and Pacific Salmon Fishery Management Plan.

Public Law 104-297, the Sustainable Fisheries Act of 1996, amended the Magnuson-Stevens Fishery Conservation and Management Act to establish new requirements for Essential Fish Habitat (EFH) descriptions in federal fishery management plans and to require federal agencies to consult with National Marine Fisheries Service (NMFS) on activities that may adversely affect EFH. Any

reasonable attempt to encourage the conservation of EFH must take into account actions that occur outside of the EFH, such as upstream and upslope activities that may have an adverse effect on EFH. Therefore, EFH consultation with NMFS is required by federal agencies undertaking, permitting, or funding activities that may adversely affect EFH, regardless of its location.

Essential Fish Habitat (EFH) has been defined by the MSA as “*those waters and substrate necessary to fish for spawning, breeding, feeding, or growth to maturity*” (NMFS 2000). EFH is the aquatic habitat (water and substrate) necessary for fish to spawn, breed, feed, or grow to maturity (50 CFR Part 227, March 19, 1988) that will allow a level of production needs to support a long-term, sustainable commercial fishery and contribute to a health ecosystem. The following components of EFH must be adequate for spawning, rearing, and migration:

- Substrate composition
- Water quality
- Water quantity, depth, and velocity
- Channel gradient and stability
- Food
- Cover and habitat complexity
- Space
- Access and passage
- Habitat connectivity

All Chinook salmon Evolutionarily Significant Units (i.e., Sacramento River winter-run, Central Valley spring-run, and Central Valley fall-run) are included in the Pacific Salmon Fishery Management Plan and contain EFH within the area. The river adjacent to the Park is considered a corridor for migrating Chinook salmon to spawning grounds near Red Bluff, as well as a possible rearing location for juveniles.

California Central Valley Salmon & Steelhead Recovery Plan. Recovery plans delineate such reasonable actions as may be necessary, based upon the best scientific and commercial data available, for the conservation and survival of listed species. The Recovery Plan for the Evolutionary Significant Units of Sacramento River Winter-Run Chinook Salmon and Central Valley Spring-Run Chinook Salmon and the Distinct Population Segment of Central Valley Steelhead was adopted by the National Marine Fisheries Service on July 11, 2014.

F. CULTURAL RESOURCES

A cultural resource is any defined location of past human activity, occupation or use, identifiable through field investigation, historical documentation or oral histories. Cultural resources can be found individually in archeological, historical or architectural sites, structures, places, objects and artifacts. Cultural resources can also be found collectively in districts, landscapes and traditional cultural properties. A cultural landscape is defined as a geographic area which includes both cultural and natural resources associated with a historic event, activity or person, or that exhibits other cultural or aesthetic values. Places where ritual cultural activities take place can be cultural resources if they are integral to the traditional practices, spiritual beliefs or world-view of specific cultural groups. The four general types of cultural landscapes are ethnographic, historic designed, historic vernacular and historic site. The following cultural resources information extends well beyond the Park itself in order to describe the larger cultural history and influences that affect park management.

Information provided in this section is based on the following sources:

- Cultural Resource Overview and Management Plan. Sacramento River Conservation Area, Tehama, Butte, Glenn and Colusa Counties, California. Gregory G White, PhD, California State University, Chico for The Nature Conservancy. February, 2003.
- Cultural Resource Investigation for the Colusa Subreach Planning. Volume I of II. Lisa D. Westwood, California State University, Chico. Gregory G. White, California State University for The Nature Conservancy. January 2005.
- CA State Parks, Colusa SRA Utility Improvements Project Phase 1.5 Extended Inventory. Gregory G. White, California State University. 2015.
- Colusa County archives.
- California State Parks Real Property Records
- Colusa Sun Herald newspaper

CULTURAL SETTING.

An understanding and overview of the cultural history of the vicinity is crucial to the preservation and accurate interpretation of cultural resources located within or adjacent to the project area. The cultural history of the current project area can be described in terms of three general time periods: prehistoric, ethnographic, and historic.

Prehistoric. There is no singular archaeological chronological framework that applies to the entire Central Valley. The one most accepted by current researchers which can be applied to the project area is comprised of three basic periods: The Paleo-Indian, Archaic, and Emergent (See Table 2.7).

Paleo-Indian. Early evidence for ancient human occupation of the project area or vicinity is scant, but recent obsidian hydration sampling at Borax Lake near Clear Lake, approximately 30 miles to the west of the project area, provides tentative evidence that human activity including occasional obsidian quarrying activity was occurring in northern California as early as 16,000 years before present (BP). Archaeological data indicates that these earliest peoples were culturally conservative, low-density hunters and foragers who moved between widespread resource patches and practiced

technological traditions that were similar from region to region. These sites, although extant, are rare due to the dynamic natural process of the Central Valley. Many have been destroyed or buried by alluvium.

Archaic. This time period is divided into Lower, Middle, and Upper Archaic.

- Lower Archaic. The Lower Archaic in the Central Valley is represented by isolated finds and rare sites similar to the Paleo-Indian period. The earliest archaeological demonstrations of this time period in northern California are referred to by researchers as the *Borax Lake Pattern*. Subsistence evidence alludes to seed collecting and large game hunting. Alluvial deposition has presumably obscured many sites relating to the Lower Archaic period. Key artifacts from this time period are wide-stemmed projectile points along with mano and metates.
- Middle Archaic. The Middle Archaic corresponds to the Middle Holocene climatic period. Distinct regional cultural traditions first emerge in the Central Valley during this time period. These cultural traditions include the *Mendocino* and *Berkeley Patterns*. In the North Coast Ranges outside of the project area the Berkeley pattern was endemic to alluvial basins, while the Mendocino Pattern was common to the foothills and mountainous terrain, suggesting different ecological niches. Studies of plant and animal remains associated with archaeological resources from this time period suggest continued subsistence focusing on seeds and a mix of small and large game.
- Upper Archaic. After 3,000 BP, the archetypical Upper Archaic culture is represented by the *Berkeley Pattern*, which had considerable cultural diversity, with distinct variants having been identified in the central Sacramento Valley and central North Coast ranges. The Upper Archaic archaeological record is better understood than previous time periods of the area. The high frequency of mortars and pestles relative to flaked stone has been read to indicate a heavy reliance on acorn processing. Berkeley Pattern sites contain many features most notably rock-lined ovens, hearths, fire-cracked rock conglomerations, house floors, cairns and burials.

Climate Regime		Period	Division	CAL BP ¹	Characteristics
Pleistocene	Late	Emergent	Upper	100	Clam disk bead economy appears; more goods moving farther; growth of local specializations involving production and exchange; interpenetration of south and central exchange systems.
			Lower	200	Bow and arrow replaces dart and atlatl; south coast maritime adaptation flowers; territorial boundaries well established; distinctions in social status linked to wealth increasingly common; regularized exchange between groups includes more, and more varied, materials.
	Middle	Archaic	Upper	1500	Growth of sociopolitical complexity; development of status distinctions based on wealth; shell beads gain importance, possibly indicators of both exchange and status. Emergence of group-oriented religious organizations; possible origins of Kuksu religious system at end of period; greater complexity of exchange systems; evidence of regular, sustained exchanges between groups; territorial boundaries not fully established.
			Middle	2500	Unstable climate, landscape, and resources; hunting dominant, but economy generally more diversified; sedentism begins to develop, accompanied by population growth and expansion; technological and environmental factors provide dominant themes; changes in exchange or in social relations appear to have little impact.
	Early	Paleoindian	Lower	7500	Ancient lakes dry up as a result of climatic changes; milling technology common and widespread; plant food emphasis, little hunting; most artifacts manufactured of local materials; exchange similar to previous period; little emphasis on wealth; social unit remains the extended family.
			Clovis	10500	Spread of human populations in California; probable but not demonstrated hunting emphasis; milling technology and vegetal food likely, but currently no evidence; exchange probably ad hoc; basic social unit probably the extended family; resources acquired by changing habitat.
Pleistocene	Late	Paleoindian	Pre-Clovis	13500	Hypothesized coastal colonization route; hints of occupation in alluvial basins.
				?	

TABLE 2.7. Prehistoric Chronological Framework. Source: White 2003

Emergent. Many archaic technologies and cultural traditions are altered during the Late Holocene after 1,200 BP. An onset of new cultural patterns and behaviors begin to appear similar to those existing locally at the time of culture contact. Except for the medieval climatic anomaly, climate stabilizes during this period. The representative Emergent Period culture is the *Augustine Pattern*, a regional variable and widespread tradition marked by the coalescence of long- distance trade spheres and the introduction of the bow and arrow, which replaced the atlatl.

Fishing and seed gathering, primarily acorn, increase in usage for subsistence. Shell bead economy, basketry, and ritualized socio-religious activities become more refined during the Emergent Period. Sites consistent with a Late Holocene occupation in Colusa County include the upper component of the Mathis Mound; and several sites excavated north of the town of Sites, which are represented by recent prehistoric short-term seasonal gathering camps or stations occupied by a few individuals and possibly related to a larger permanent or semi-permanent village.

Ethnographic. Early Euro-American anthropologists and explorers often recorded their observations and opinions of Native American cultures en route across North America, on missions, trade routes, or exploration. This early ethnographic information provides archaeologists with a valuable link between the archaeological record and modern Native American cultures.

The current project area was likely populated by the Patwin which are linguistically classified as Wintun of the Penutian language stock (Figure 2.14). The Wintun are separated linguistically and culturally into three major groups: the northern Wintun; the central Wintun, or Nomlaki; and the southern Wintun or Patwin. These three groups represent mutually

unintelligible languages, each divided into local dialects. The Patwin themselves are divided into two distinct groups, the River Patwin who inhabited approximately 80 miles along the Sacramento River (Figure 2.15), and the Hill Patwin, who lived in the Coast Range foothills.

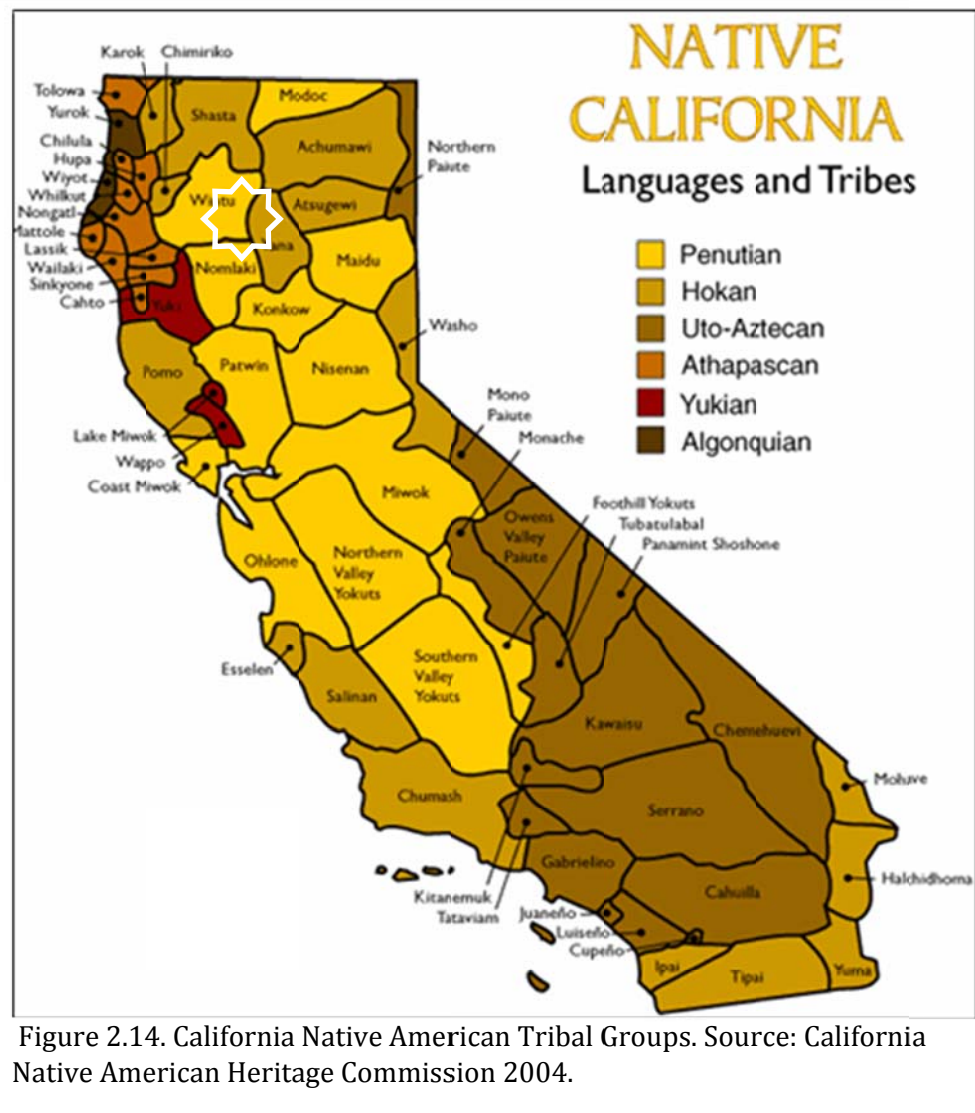


Figure 2.14. California Native American Tribal Groups. Source: California Native American Heritage Commission 2004.

The absence of agriculture in the greater part of California may be linked with an efficiency of the collecting and hunting economy. Acorns were the staple food source of the Patwin, and were used in making gruel, soup, and bread. Other foods used by the Patwin include deer; fish, including salmon, perch, pike, and sucker; birds such as geese, duck, and quail; blackberries and elderberries; grubs; worms; and wild honey.

Patwin architecture is complex in terms of its permanence, size, and the amount of people required to organize and build community structures. Fish weirs were constructed that spanned the width of the Sacramento River (Figure 2.16). Unique to the Patwin and Pomo are the use of granaries, which were used to store acorn and other grains.

The Patwin traded for obsidian, along with cordage, headbands, and other commodities from the Pomo along the coast, with shell beads being the dominant monetary unit. Patwin ceremonial and religious practices combined elements of social performance, lineage, social hierarchy, economy, and technology. The Kuksu society, or “*Big-Headed*” dance, practiced in varying forms throughout California, was a male secret society focusing on initiation through ritualistic raising of the dead.

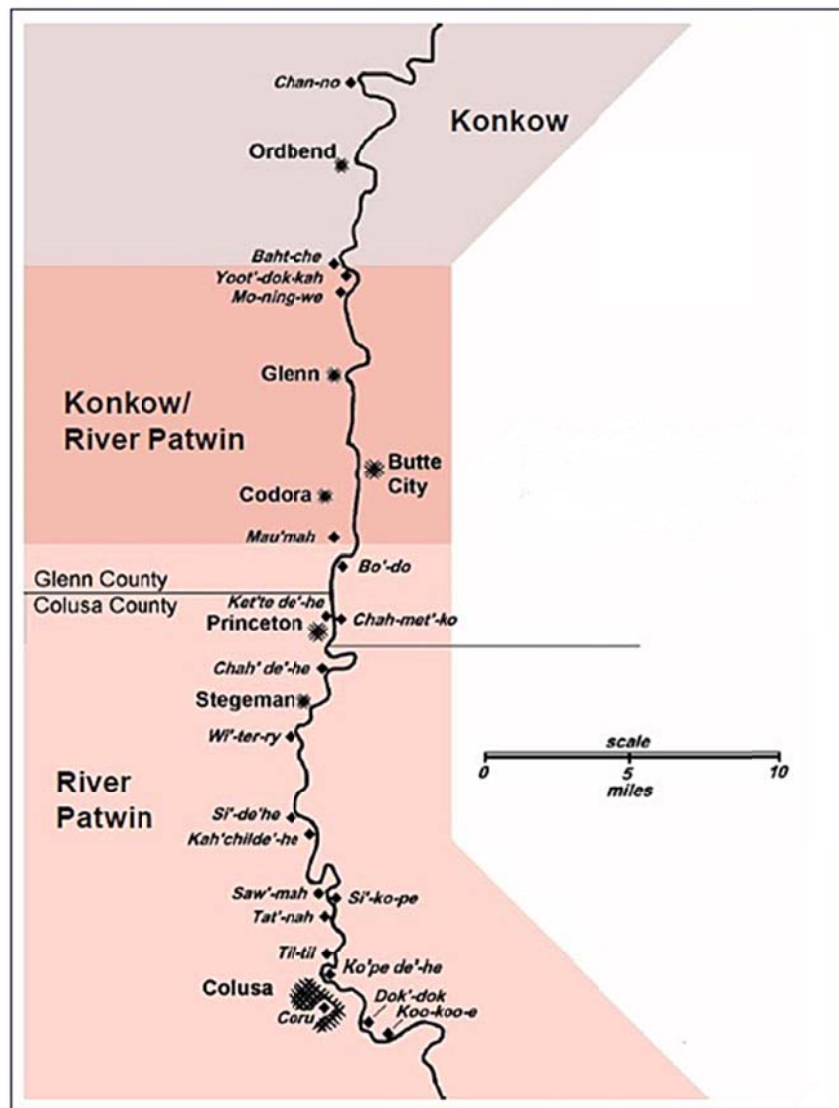


Figure 2.15. Konkow and River Patwin territory and village names. Based on Heizer and Hester 1970 taken from White 2003

Culture contact between Native Californians and immigrant populations occurred at various times in northern California, dating to as early as 1579, when Sir Francis Drake visited the Coast Miwok. The Portola Expedition, a Spanish military exploratory mission led by Gaspar Portola of Spain, entered central and northern California in 1769, had numerous encounters with Native peoples and began what is known as the Mission Period. The project area formed the northern frontier of Spanish and Mexican territory, and accordingly, the region's earliest known non-Indian visitors consisted of Spanish military expeditions on patrol.

Early contact between the Euro-American settlers and the Native American inhabitants was relatively peaceful. Research has shown that Colus Indians

were prominent along the Sacramento River basin. Chief Sioc was the primary authority figure, well respected and feared by the people. The main Native American village site was located in Colusa, called *Ko-ru* or *Coru*, situated at the place where the Municipal Water Works of Colusa was built. An epidemic in 1832 forced the remainder of the native inhabitants across the river. At least a dozen villages were known to exist between Princeton and Sycamore, and many more in other areas along the Sacramento River.

Historic. The earliest historic activity in Colusa was by Spanish explorers traveling up the Sacramento River from San Francisco in the early 1800s. Perhaps the first to enter the Colusa area was Captain Gabriel Moraga in 1808. Moraga was traveling from the San Francisco Bay up the Sacramento River, which he named, to a point about 18 miles north of the town of Colusa.

In 1821, the village of *Coru* was visited and described by Captain Luis Antonio Arguello, Commandant of the Presidio de San Francisco and his chaplain the Reverend Father Fray Blas de Ordaz. This expedition visited Patwin and Konkow villages on the west side of the Sacramento River while they looked into rumors of white settlement in the area. This early expedition's information is considered to be the most accurate ethnographic overview of the area as it predates the devastating malaria epidemic of 1832-1833. The expedition documented 11 villages between Grimes and Ordbend, including *Coru*. The village of Chac, aka Cha' de'-he, about 6 miles south of the project area, was estimated to include 1000-1600 inhabitants. At contact, the villages in this area were composed of both River Patwin and Konkow Maidu individuals, reflecting the cosmopolitan nature of river settlements. White states that this area of the Sacramento River is believed to have had the highest density of population, 16.7 people per square mile, of any area of prehistoric California.

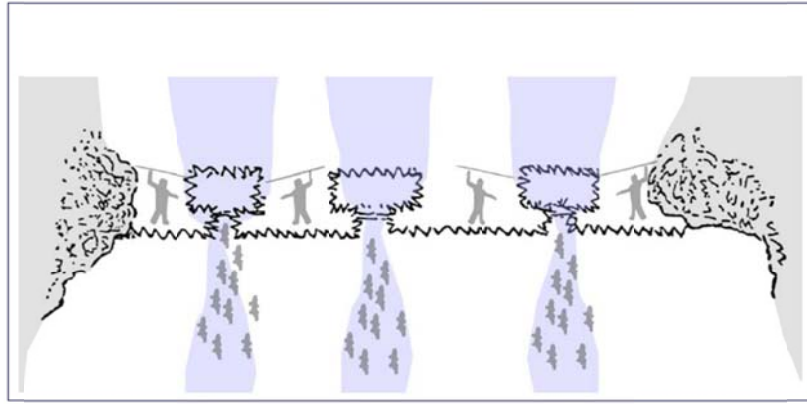


Figure 2.16. River Patwin weir at Salmon Falls, Colusa in 1841 (adapted from Wilkes 1841, reprinted 1958:78). Source: White 2003.

Euroamerican settlement. The area likely remained relatively unknown to Euroamericans until 1843, when John Bidwell and Peter Lassen, in the interest of their employer, John Sutter, visited the area in pursuit of horse thieves. The Colusa area was never incorporated within a Spanish or Mexican land grant. Euroamerican settlement of the Colusa area is credited to a Kentuckian in 1846 or 1847, Dr. Robert Semple. Optimistic about the potential of the Sacramento River for commerce, Semple and his brother, Charles, decided the most desirable location for a trading center would be at Salmon Bend (now Colusa). They laid out several streets and built a house on Lot 2, Block 6 on Levee Street.

Colusa soon became a way station on the route of wagon and mule trains that serviced Shasta and the northern mines. Located at the head of navigation of the Sacramento River, several people recognized the potential of the Sacramento River for transportation of goods, people, and livestock from Sacramento north. Unfortunately, the river was known for its snags. By 1854, snags and navigation obstacles along the river were removed and wheat growing in the region flourished. Rapid development of the town ensued along the grid that the Semples had established. So typical of early frontier development, a conflagration in 1855 engulfed the city, sparing only a few structures in the business district.

City incorporation. The town of Colusa was finally incorporated in 1868 after the upper-class citizens of Colusa were distressed over the wallowing of pigs and miners in the streets. The town grew to include the typical array of nineteenth-century small town businesses: attorneys, banks, barbers, bakeries, blacksmiths, cobblers, breweries, carpenters, clothing merchants, carriage painters, civil engineers, confectioners, dentists, pharmacists, hotels, music teachers, newspapers, oyster saloons, restaurants, saloons, tobacco and cigar shops, telegraph stores, wagon makers, wheat dealers, and wool dealers. Prior to an 1870s fire, Colusa's Chinatown "*stretched along both sides of Main Street from Fifth to 12th Streets*", according to Colusa-born resident Jimmy Lee in a 2009 Colusa Sun-Herald article [Chinatown gets recognition](#). The Sacramento River levee widening destroyed buildings on Main Street's north side. Main Street just south of the Park includes a distinctive "*row of brick structures, which remain today as the only link to Colusa's Chinese cultural heritage.*" In 1876, the town's population reached an estimated 2,500 residents, including 430 school children and six teachers. By 1868, the city established a formal dump which is now the location of the state park campground. Colusa also was the home of the county courthouse and a county hospital.

State Plan of Flood Control (SPFC). The Sacramento Valley's first large-scale flood control system was begun by the US Army Corps of Engineers in 1911 to protect communities and farms from regular flooding, and to improve river navigation. The state of California was granted control of this system from the federal government in 1957. The Sacramento River levee that borders and bisects the Park is part of the SPFC, as is the Colusa Bypass across from Cobb's Bend.

Cruise'n Tarry Marina. White (2005) writes,

"The growth in the population of Colusa was undoubtedly related to its location along the navigable – yet perilous – Sacramento River. Thus, Colusa's tie to river commerce and recreation started early, and continues today. Evidence for recent historical use of the Sacramento River is located in the Cruise'n Tarry tract of the Colusa Subreach. The Cruise'n Tarry marina site was constructed between 1958 and 1961 by the Stifler family. The marina complex included a launch ramp, boat dock, and a campsite.

During its height of operation, the marina area was connected to the Sacramento River via a 450-yard channel. The complex covered eight acres, and was capable of docking up to 85 boats. Once a year, members of the non-profit sail and boating club called the United States Power Squadron sailed up the Sacramento River from the San Francisco Bay to the Cruise'n Tarry marina, bringing with it several large yachts up to 80 feet in length. The marina was a destination point for many Californians, who stayed at the marina's hotel and restaurant.

Although the marina was a popular spot for local, Bay area, and Northern California hunters, fisherman, and vacationers, the Cruise'n Tarry marina also attracted popular figures such as Jack Elam and Merle Haggard. The use of the Upper Sacramento River by the movie industry for filming introduced many of its constituents to the area.

The economic viability of the Cruise'n Tarry marina, however, suffered a decline in the 1960s, following severe erosion of the marina property. Business declined as maintenance and erosion abatement costs increased, and the marina was no longer profitable. It was sold in 1973, and changed hands several times since then – most recently to the Department of Water Resources."

PARK PROPERTY HISTORY.

Colusa City Dump. The Colusa City dump operated from 1868 to 1955 on 7 acres of the SOUTHEAST PARCEL. Its operation relied on regular scouring during flooding events. Interviews with people from the local area stated that before it closed it operated as a burn dump. When the Department took possession of the landfill, it had been covered over with soil, obscuring and encapsulating any potentially significant archeological features. Digging at the locale still yields bits and pieces of the past. Some of these finds have been displayed at the entrance station.

Development of the Park. The Colusa County Boat Club began developing recreation facilities at the park site in the 1950s. On July 30, 1954, the Colusa Sun Herald reported that the Colusa County Boat Club's "first annual water show" was to be held on August 1, 1954. On July 17, 1955, the Colusa County Boat Club held the Second Annual Water Show and Pot Luck Picnic at the Colusa Boat Landing, billed as "The Future Home of The State Park." The program (Figure 2.17) also advertised a boat race from Stockton to Redding with a celebratory overnight stop in Colusa on August 5, Colusa County Boat Club Salmon Derby on October 30th, and the Lions Club Annual Salmon Derby (date not given). The Colusa Sun Herald headline was "Nearly 2,000 see Boat Club's Show" on July 18, 1955.



Figure 2.17. Program cover.
Source: Colusa County archives.

Ownership of the Park's original 7 acres was transferred from the City of Colusa to California State Parks in 1955. Between 1957 and 1958, State Parks purchased an additional 57 acres of land from adjoining landowners. In 1957, the Park was named and classified as Colusa-Sacramento River State Recreation Area. The one page General Development Plan from September 1957 showed four separate picnic areas, a boat ramp and entrance station. The Statement of Purpose adopted in July, 1959 states, *"To provide day use and boat launching facilities and fishing access for the recreational use of the Sacramento River."*

DPR constructed a day use restroom, entrance station, picnic area and maintenance shop between 1958 and 1961 in the core area. A campground, restroom/shower building was added in 1977, which altered the core area's original layout and configuration. A picnic area, then a campground just northwest of the river was constructed and abandoned, apparently due to channel migration erosion and deposition processes. Refer to the Historic Resources Report (Appendix I) for more information.

The total area of the Park increased over time due to the eastward migration of the Sacramento River channel, which created new riparian forest on the river's west bank. The 2006 addition of the 235-acre Ward Tract, formerly used for field and orchard crops, expanded the Park to approximately 359 acres. The Ward Tract property was acquired at no cost from The Nature Conservancy. No comprehensive General Plan has ever been prepared for the Colusa-Sacramento River SRA to help guide management of its many resources, public access and long-term use.



Figure 2.18. 1954 Water Show.
Source: Colusa County Hall of Records



Boat race parking. August 1959



Aerial looking north. 1964±



Maintenance shop. 1959.



Flag raising ceremony at entrance station. 1961



Entrance landscaping. February 1964.



Aerial looking west. 1985.

Figure 2.19. Core Area Photos 1959-1985.
Source: California State Parks archives.

CULTURAL RESOURCES INVESTIGATIONS.

Archaeology. Between the years of 2000 and 2014, seven archaeological investigations including research and inventory projects were undertaken in the park. Approximately 255 acres have had adequate archaeological coverage and recent California Historic Information System Center searches. Eighty three (83) acres, in the RIPARIAN AREA just to the north of the developed campground and south of the Ward addition, have not received any archaeological coverage. This area is thickly vegetated with riparian species; thus locating cultural resources would be difficult.

One archaeological resource, the Colusa City Dump, CA-COL-286H is recorded as a result of archaeological inventory (White, 2015). Targeted Phase 1.5 extended inventory was completed on the dump site in 2014. This archaeological testing of the dump site indicates that surface deposits to three feet deep were thoroughly crushed and reworked in advance of Campground construction. Excavation of a trench on the south margin of the Campground found that archaeological evidence of the dump extends to a depth greater than nine feet. Moreover, these trench observations also indicated that the deposits greater than three feet in depth are likely to contain event-specific features representing individual dump actions or temporal palimpsest representing specific sets of events. These dump events may retain sufficient integrity of source and treatment to yield information pertinent to analysis and interpretation of City of Colusa domestic economy and social change during the early 20th century, Depression era, World War II, and post-War eras. Future development at the site that disturbs the deposits to a depth greater than three feet will require additional archaeological investigation.

The lack of cultural resources on or within 6" of the surface does not preclude buried deposits within the park. During a 2012 interview with Dr. Greg White, the acknowledged cultural resource expert for this area of the Sacramento River, he indicated that this portion of the river has a very active flood history which is well documented and that the park is highly culturally sensitive. An example is the Colusa fiber optic archaeological studies which exposed archaeological resources in downtown Colusa including a buried site just 4 blocks from the park which was 1.5 meters below surface and only 800 years old. White indicates that the active flood history dictated changing prehistoric land uses and that he suspected that habitation locales in the area were constantly changing. During this interview, White expressed concern for not only buried prehistoric deposits but also historic deposits from early Colusa development. There are no investigations of potential submerged resources or paleontological resources in the department's records.

Historic. In 2001, Past Forward, Inc. undertook a statewide inventory of potentially historic post-war structures in DPR properties. The subsequent report, Recordation and Evaluation of Buildings and Structures Constructed Between 1942-1965 In and By California State Parks and Beaches (2002), found the buildings in the Park Unit's core area, which include the entrance station/office, restroom, maintenance shop, and landscape not eligible for listing on the California Register of Historic Places for their historic or architectural significance. As part of the general plan process, DPR conducted a new survey and re-evaluation of the core area, including associate landscape features in February 2015 (Appendix I). The research/analysis team confirmed that, due to alterations and post-1976 additions, the core area is not eligible as a historic district; nor does it contain individually significant structures. However, the team recommended that the 1961-1966-built maintenance shop undergo further research.

G. VISUAL AND AUDITORY RESOURCES

The Park's aesthetic character is based on a set of physical and biological resources that define the landscape, the existing sound environment, and opportunities the Park provides to visitors. The visual and auditory resources that define the aesthetic character of the Park are described below.

SCENIC CHARACTERISTICS.

The Park contains small but excellent examples of the once-extensive riverine landscape in the Sacramento Valley. Only isolated or fragmented remnants of this resource remain today. Dense riparian forest, even the narrow bands remaining along the Sacramento River, can envelop visitors in the sights and sounds of the natural world. Park visitors are reminded of a beautiful and important part of the state's natural heritage. The best examples of this landscape are included in the RIPARIAN AREA, which can be viewed from the Nature Trail, the river, the levee and Colusa Levee Scenic Park.

Viewshed. The Sacramento River levee minimizes views between the Park and nearby residences and roadways, except in the SOUTHWEST PARCEL. This visual separation helps to isolate the Park from views of nearby agricultural and industrial operations, and minimizes Park activity disruptions to nearby homes. On the other hand, the levee crown elevates visitors, providing extensive scenic views of the Park, downtown Colusa and nearby orchards, as well as views of the Park maintenance yard. Because of the riparian vegetation, there are no clear vistas of the river from existing recreation facilities. From some locations, the Sutter Buttes, a dramatic volcanic plug, is clearly visible to the southeast. Various industrial and utility facilities are visible from the SOUTHEAST and SOUTHWEST PARCELS, such as warehouses and parking areas. Two City of Colusa water towers add iconic small town imagery to the skyline. The Highstreet Trailer Court's cluttered residential area is visible from the levee and the existing 10th Street entrance road. The City of Colusa's [Economic Development Plan](#) recommends new high-density housing, office and retail uses adjacent to the Park, which may dramatically change the viewshed to the south.

Lighting of homes and businesses dominates nighttime views from the levee to the south and west, but these are not visible from most of the Park. The SOUTHWEST and SOUTHEAST PARCELS have low levels of night lighting, including widely-spaced pole lights along roadways. There is no night lighting outside the Park's core.

Designated Scenic Areas and Routes. Neither the California Department of Transportation nor Colusa County have designated scenic highways or roadways within sight of the Park. Similarly, no roadways in the region are classified as a National Scenic Byway. The Sacramento River is not designated as a wild and scenic river under the federal and state Wild and Scenic Rivers acts.

SOUNDSCAPE.

Natural sounds. Birds singing in the willow scrub, squirrels rustling in dry leaves, frogs croaking in the mud, tree limbs rubbing together and the strong Sacramento River current flowing are some of the natural sounds you can hear in the Park.

Noise. The Park is located at the rural/urban interface, so it is subject to both urban and agricultural noises. The Sacramento River levee partially buffers these noises in all areas except the SOUTHWEST PARCEL, which is subject to Highway 20 and 45 traffic sounds as well as industrial and agricultural equipment operations, such as pump motors, harvesting and spraying equipment. Typical intermittent noises heard in the Park include vehicular traffic along Roberts Road as well as Roberts Irrigation Company water pumps. In addition, there are intermittent noises associated with recreation activities, such as engine noise from watercraft, mowers, RV generators and light vehicular traffic.

H. INTERPRETIVE RESOURCES

Interpretation and education are essential components of California State Parks' mission—not only in providing inspiration and education, but also in protecting natural and cultural resources and enhancing health and recreation.

Interpretation, according to the California State Parks Interpretation Mission Statement, "*is a special form of communication that helps people understand, appreciate, and emotionally connect with the rich natural and cultural heritage preserved in parks.*" This "*special form of communication*" is also used to acquaint and inform people about recreation opportunities, good health and safety practices in the parks, and the reasons behind park rules. Some examples of interpretation are museum and visitor center exhibits, guided walks, campfire programs and interpretive panels. Education differs from interpretation in that it is intended for kindergarten through 12th grade school groups, and is designed to help fulfill the state curriculum content standards. In this section and elsewhere in this plan, "*interpretation*" is often used to refer to both interpretation and education. Where school-specific opportunities are being discussed, "*education*" is used.

Colusa-Sacramento River State Recreation Area is a park with unmet interpretation potential. Despite its variety of cultural, natural and recreational resources, the park currently has few interpretive offerings for visitors, and very little previous interpretation planning. This section describes existing interpretation planning, current interpretation at the park and in the surrounding area, and current support of interpretation.

PAST INTERPRETATION PLANNING.

The department's Operations Division prepared an interpretive prospectus for Colusa-Sacramento River SRA in January 1976. This is the only interpretation planning that has been done for the park. This brief document (only seven pages, including a map page) was written when the park was much smaller. Its "*themes*" would be called topics in current interpretation planning phraseology. Nevertheless, it included some still-valid material that was used to inform the general plan interpretation sections.

INTERPRETIVE FACILITIES AND SERVICES.

Interpretive facilities include interpretive installations such as exhibits, panels and non-presented audio-visual programs. Interpretive facilities, sometimes referred to under the broad category of “*non-personal interpretation*,” contribute to the overall visitor experience and further understanding of the park’s resources. They also invite further exploration and encourage visitors’ safe enjoyment of the park.

Non-personal interpretation. There are few interpretive facilities.

- Interpretive panels: four panels in a single non-ADA compliant large shelter located in part of the picnic area that is not universally accessible (Figure 2.20). It is also far from usual paths of travel. All four panels have natural history topics: anadromous fish, water birds, birds of prey, and common animals. They are from the 1990s statewide “Generic Panel” program, which produced panels on common topics that could be used in multiple parks around the state. The panels are still in good shape and readable, and the shelter is also in good repair.
- Brochures: One 11”x17” park brochure with history, natural history and recreation information. Map is out-of-date—it does not show additional lands added to the park.
- Bulletin boards: two bulletin boards on the entrance station.
- Other informational signage: Several signs are posted in prominent locations on the entrance station, away from the bulletin boards. Two are from California Department of Fish and Wildlife. Their topics are the aquatic invaders New Zealand snail and Quagga mussel. The other signs are paper printouts warning visitors to avoid poison oak and nettles. They are posted on the exit side of the kiosk. Three separate paper maps are posted on the entrance station.



Figure 2.20. Interpretive kiosk

Online Interpretation. The park web page at http://www.parks.ca.gov/?page_id=461 gives brief information on the cultural and natural history of the park. The park brochure is also available online via this web page. There is no social media for the park.

Personal Interpretation. Every autumn, docents from Sutter’s Fort State Historic Park’s “Mobile Living History” program reenact an 1843 trapper’s camp at Colusa-Sacramento River SRA’s campground and day use area. The encampment lasts for four days. Schools can sign up to bring classes for a living history station program at the camp, which is designed to meet fourth and fifth grade curriculum content standards. This popular program serves hundreds of students every year. It currently costs four dollars per participant.

Support for Interpretation. There is currently no interpretive staff assigned to Colusa-Sacramento River SRA, and no volunteer program. The park does not have a cooperating association to financially support interpretation.

The California Department of Parks and Recreation Northern Buttes District is a signatory on a 2004 Memorandum of Understanding (MOU) with the US Fish and Wildlife Service and the California Department of Fish and Game (now called the California Department of Fish and Wildlife). Under this MOU, the parties agree to cooperate on public use of the Sacramento River National Wildlife Refuge, the Sacramento River Wildlife Area, and state parks along the Sacramento River in Colusa, Glenn, Butte and Tehama Counties. (See Appendix D.) This cooperation, subject to reauthorization every five years, includes the following:

- Coordinate to provide public use opportunities that are consistent with the goals and needs of both agencies and their respective public.
- Provide clear, non-conflicting, straight-forward information to visitors.
- Cooperate in the development of public use plans. This would include cooperating with signing, brochures, use maps, and regulations.
- Promote mutual environmental education and special event opportunities.

The Department also signed a Memorandum of Agreement Regarding the Sacramento River Conservation Area (MOA), along with 11 other state and federal agencies and seven counties. Colusa County is included. The Conservation Area goals include *“Provide for the accurate and accessible information and education that is key to sound resource management”* (See Appendix E).

NEARBY INTERPRETATION AND EDUCATION PROVIDERS.

Colusa National Wildlife Refuge. The Colusa unit of the Sacramento National Wildlife Refuge complex is the closest interpretation provider to Colusa-Sacramento River SRA. Its entrance is on Highway 20 one-half mile west of Colusa. The Sacramento National Wildlife Refuge complex is made up of six national wildlife refuges clustered on or near the Sacramento River between Red Bluff and about 15 miles southeast of Colusa. The Colusa refuge offers the following self-guided interpretation:

- Auto Tour
- Interpretive Panels
- Discovery Walk

These are all available year-round, sunrise to sunset.

In addition, the refuge complex offers guided interpretive opportunities for the public, some of which take place at the Colusa refuge. In winter 2012-2013 these included birding tours, an “Owl Prowl” night interpretive program, and a plein-air waterfowl painting class.

The refuge offers educational programs for all ages, Tuesdays through Sundays from October to February. These programs must be reserved in advance. Interpretation and education topics at the refuge include wetlands, waterfowl, other wildlife, migration, wildflowers, habitat restoration and refuge history.

The main Sacramento National Wildlife Refuge interpretive center, near the town of Willows, offers Discovery Packs for visitors and educators to check out on the day of their visit. They also offer Wild about Wetlands resource kits for loan to classrooms in Glenn and Colusa counties.

Colusi County Historical Society. The society meets one time per year in Colusa, Glenn and Tehama Counties. Programs on local history are presented at each meeting.

Sacramento Valley Museum. The Sacramento Valley Museum is in Williams, ten miles west of Colusa. Exhibits focus on Sacramento Valley life, and more specifically Colusa County life, from the mid 19th to mid 20th century. At the present there are no guided interpretive or educational opportunities.

Sutter Buttes Regional Land Trust (formerly Middle Mountain Foundation). The nonprofit trust leads guided tours of privately owned land in the Sutter Buttes, about 15 miles east of Colusa. Hike topics include the ecology, geological origin, and human history of the buttes. The trust also offers curriculum content standards-based hikes for school groups, reinforcing classroom lessons in geology, ecology and biology.

California Swan Festival. Centered in Marysville, this festival includes workshops and tours related to swans, other waterfowl, and general birding topics. It began in November 2013, and the second annual festival was held in November 2014. The organizers intend for it to be an annual event. Tour venues in 2014 included the Sacramento National Wildlife Refuge and its interpretive center, the Colusa National Wildlife Refuge, and Sutter Buttes.

I. OPERATIONS AND MAINTENANCE (O&M)

Understanding existing park operations and maintenance considerations helps guide the development of General Plan management strategies. This section summarizes existing operational policies, structure, maintenance facilities, utility infrastructure and services, security and emergency services.

OPERATIONS POLICIES.

The Department Operations Manual describes policies and guidelines for management of Park resources, public safety, facilities maintenance and other operational functions. Chapter 4 highlights policies that are particularly relevant to specific topics covered by the General Plan.

OPERATIONAL STRUCTURE.

The Park is located in the Valley Sector which is part of the Northern Buttes District. The Northern Buttes District manages a total of 16 park units and covers Siskiyou, Modoc, Lassen, Shasta, Trinity, Tehama, Glenn, Butte, Sutter, Colusa and Lake counties. The district offices in Oroville are about 48 miles from the Park, and house natural and cultural resources specialists, interpretive specialists, law enforcement, engineering, maintenance and administrative personnel. The Valley Sector manages 7 parks in Tehama, Glenn, Butte, Sutter and Colusa Counties. The Valley Sector houses Interpreters, Law Enforcement, Maintenance Staff and a host of seasonal staff based at the various parks in the sector. Day-to-day operations in the campground and day use area are currently carried out by the City of Colusa under a [2011-2016 Operating Agreement](#) (Appendix F). A camp host provides day-to-day maintenance and fee collection. There are no California State Park staff that regularly work at or patrol the Park.

MAINTENANCE FACILITY.

The existing maintenance facility is located in the SOUTHWEST PARCEL. It consists of a storage building, carport and hazardous materials storage building in good condition, and a maintenance shop in working condition. A burn pile for woody debris is present, as well as a travel trailer that currently serves as temporary living quarters for a City of Colusa caretaker.



Figure 2.21. Maintenance facility

UTILITIES AND SERVICES.

- Outdoor lighting exists at the buildings within the maintenance yard and at the restroom and entrance station building in the SOUTHEAST PARCEL.
- Water for domestic, irrigation and emergency purposes is provided to the SOUTHWEST and SOUTHEAST PARCELS by the City of Colusa. Main service connections are shown on Figure 2.7. An irrigation well and pump station is located in the northeasterly corner of the RESTORATION PROJECT for irrigation. The Park used approximately 2,700 gallons of water in 2010.
- Wastewater is collected in septic tanks and directed to several leach fields; one in the Maintenance Yard and three in the SOUTHEAST PARCEL.
- Stormwater is mostly managed on site through surface drainage and infiltration. One drainage inlet exists near the campground with an underground pipe discharging into the CHANNEL.
- Solid waste is collected in large trash bins that are emptied by a contracted waste collector. Trash cans and recycling receptacles are located in the picnic area and campground.
- Hazardous materials stored on site include new and used motor oil, paint, and Glyphosate product herbicides such as RoundUp. All of these materials are stored in a signed, locked shed located in the maintenance yard. None of the materials are stored in quantities that require reporting in the Certified Unified Program Agency (CUPA) hazardous materials Business Plan. Used motor oil and unwanted left over paints are disposed of at the nearest qualified recycle center.
- Electricity in the SOUTHEAST and SOUTHWEST PARCELS is provided to the Park by Pacific Gas and Electric. There's one electric meter in the campground that supplies power to the campground area and one near the maintenance yard that supplies power to the shop complex.
- Propane is stored in tanks located at the maintenance building and near the restroom/shower building, and reported in the (CUPA) Business Plan. There is no natural gas service.
- Telecommunications facilities include a telephone line at the entrance station and maintenance shop. Mobile telephone service is adequate in the SOUTHEAST and SOUTHWEST PARCELS but coverage is poor in the RIPARIAN AREA and RESTORATION PROJECT. Wireless internet services are not currently provided.

- Underground irrigation is provided to lawn areas in the SOUTHEAST PARCEL, distributing domestic water provided by the City of Colusa. The RESTORATION PROJECT has main line piping from an agricultural well, but all above-ground drip irrigation has been removed.

SECURITY AND EMERGENCY SERVICES.

- Park security in the core area is currently provided by a City of Colusa caretaker / host.
- Fire protection is provided by the Sacramento River Fire District.
- Law enforcement in the core area is provided by the Colusa County Sheriff's office. California State Park rangers are responsible for other areas of the Park.
- Medical aid is provided by Sierra Sac-Valley Emergency Medical Services Agency. The Colusa Regional Medical Center is two miles away, providing 24/7 emergency services and a communication station for the Sierra Sac-Valley Emergency Medical Services Agency.

LEVEE MAINTENANCE.

The Department of Water Resources Sutter Maintenance Yard is the Local Maintaining Agency (LMA) responsible for flood fighting and maintenance, including levees in and adjacent to the Park. Regulations for levee maintenance are described in the California Code of Regulations Title 23 under the Central Valley Flood Protection Board's obligations to the US Army Corps of Engineers pursuant to operations and maintenance manuals and numerous agreements. General guidance for levee vegetation management is illustrated in Figure 2.22.

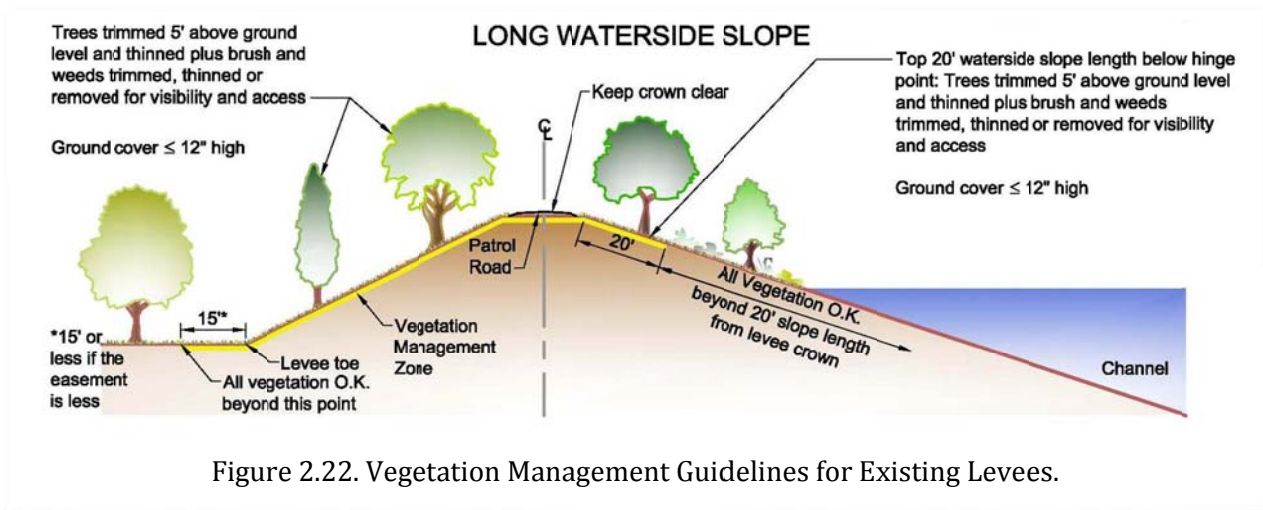


Figure 2.22. Vegetation Management Guidelines for Existing Levees.

J. TRANSPORTATION AND CIRCULATION

INTERNAL CIRCULATION.

The existing roadways and trails have little connectivity within the Park, as discussed below. See Figures 2.3 and 2.6 for maps.

The main Park entrance road begins at 10th Street on the levee (Figure 2.23). It passes the entrance station and sewage dump station, loops behind the campground, then ends at the boat ramp. An 85-space parking lot serves the boat ramp, group picnic site and the rest of the day use area. The entrance station serves only the SOUTHEAST PARCEL. Drivers must exit this area of the Park and use public roads to access other areas. The Nature Trail begins at the boat ramp, providing the only off-road pedestrian access to the RIPARIAN AREA. Separated pedestrian or bicycle routes that connect the day use and campground facilities do not currently exist.



Figure 2.23. Park entrance road at 10th Street on the levee.

A narrow paved maintenance road steeply descends from Roberts Road into the SOUTHWEST PARCEL's fenced maintenance yard. A gravel-surfaced road provides access to a burn pile.

Public vehicular access to the RESTORATION PROJECT and RIPARIAN AREAS from Roberts Road is currently restricted by a locked maintenance gate. Access on single lane natural surface roads is restricted to authorized DWR and California State Parks vehicles, and farm equipment servicing private property on the Park's northern boundary. Refer

to the Department's Land Ownership Record dated 02/26/2013 for information regarding access easements.

TRANSPORTATION NETWORK.

Local roads. Park roads connect to Roberts Road and 10th Street. Two-lane two-way 10th Street connects to Main Street one block south of the Park, and to Market Street (Hwy 20/45) two blocks south of the Park (Figure 2.24). Two-lane two-way Roberts Road, an extension of 12th Street beginning at Levee Street, steeply climbs the levee, bisects the SOUTHEAST and SOUTHWEST PARCELS, then connects to Highway 45 north of town. The levee maintenance road is alternately paved with asphalt or surfaced with gravel, with maintenance gates restricting gravel road segments to maintenance vehicles only.



Park access roads at 12th (left) and 10th (right) Street.



Figure 2.24. Local Roads. Roberts Road looking southeast toward parking lot.

Non-motorized transportation. The SOUTHEAST PARCEL's entrance road is accessible by bicycle and on foot from Colusa Scenic Levee Park via a 9 foot wide asphalt paved path on the levee crown. Several outdoor staircases connect Main Street to Colusa Scenic Levee Park, but there are no visible wheelchair ramps nearby. A signalized intersection at 10th Street and Market (Hwy 20/45) provides an opportunity for pedestrians to safely cross the busiest intersection in town; however, there are no sidewalks or bicycle routes connecting this intersection to the Park. Pedestrians and bicyclists use narrow Robert's Road to access the RESTORATION PROJECT. Non-motorized access to Park facilities by persons with mobility challenges is severely limited.

Transit Services. Colusa County Transit offers bus service between Colusa and Williams, Arbuckle, Grimes and Meridian, Maxwell and Princeton, Stonyford and Yuba City. The nearest bus stop is located two blocks south of the Park at 12th and Market Streets (Hwy 45).

State and Interstate Highways. Two lane Highways 20 and 45 intersect two blocks south of the 10th Street Park entrance. Highway 20 West connects to Interstate 5 in Williams, and brings visitors from Sacramento (70 miles), the San Francisco Bay Area, Redding and beyond. Highway 20 East leads to the Colusa County Airport, then connects to Meridian, Yuba City/Marysville, Grass

Valley/Nevada City and beyond. California Department of Transportation has designated Highway 20 as the Tahoe-Ukiah Highway, and the California Recreational Trails Plan designates it the Farms and Forest Heritage/Cross-California Ecological Corridor, although neither are signed near the Park. Highway 45 North follows the west bank of the Sacramento River, connecting to multiple riverside recreation destinations and provides access to the Park from Oroville and Chico. Highway 45 South connects to the river towns of Grimes and Knights Landing.

K. PLANNING INFLUENCES

REGIONAL DEMOGRAPHICS.

Reviewing regional demographic patterns and growth projections provides clues to the types of activities and facilities that may be in demand in the future. The five-county region is the largest demographic unit studied, as it is likely to include the majority of Park visitors.

Existing Population. The existing demographic characteristics of the five county region are shown in Table 2.8. In total, the 2010 population was 436,730. The median age of residents ranges from 32.1 to 37.5. Agriculture is the dominant industry in the five county region. The majority of residents are white, which, according to the census, may include those who identify Hispanic/Latino heritage.

Colusa County, in contrast to nearby counties, has a majority of residents who describe themselves as of Hispanic/Latino heritage. This county also has the smallest population, lowest percentage of residents below the poverty level and the second youngest median age of the five surrounding counties. The City of Colusa, the county seat, is directly adjacent to the Park. About 42 percent of City of Colusa residents describe their race as White (not Hispanic) and 52 percent describe themselves as of Hispanic or Latino heritage.

TABLE 2.8. DEMOGRAPHIC PROFILE of FIVE COUNTY REGION

County	Population (1)	Median Age (2)	% White (3a)	% Hispanic/Latino (3b)	Median HH Income (4)	% Below Poverty Level (4)
Butte	219,989	37.2	81.86%	14.14%	\$42,187	19.8%
Colusa	21,449	33.5	64.68%	55.11%	\$48,701	16.1%
Glenn	28,183	35.3	71.08%	37.48%	\$42,904	18.0%
Sutter	94,785	34.5	60.96%	28.76%	\$49,450	16.5%
Yuba	72,324	32.1	68.37%	25.02%	\$47,068	19.2%
5-COUNTY	436,730					
STATEWIDE	37,253,956	35.2	57.59	37.62%		

Sources: 1, 2, 3. State of California, Department of Finance

http://www.dof.ca.gov/research/demographic/state_census_data_center/census_2010/#DP

4. US Census Bureau 2010

<http://factfinder2.census.gov/faces/nav/jsf/pages/searchresults.xhtml?ref=geo&refresh=t>

Compared to the rest of California, the Census Bureau reports the following significant differences for Colusa County residents:

- Housing—66.8% of residents own their home, compared to 57.4% in California. Median value of owner-occupied units is \$240,000, while California's is \$458,000.
- Income—Median household income is \$47,596, compared to \$60,883 for California.
- Education—9.6% of residents hold a bachelor's degree or higher while California has about 30.1%.
- Age—30% of Colusa's population is under 18 years of age, compared to 25% for California.

Projected Population. Table 2.9 shows projected population levels in the five-county regional area. These counties together are projected to experience average annual population growth of roughly 1% between 2010 and 2035.

Table 2.9. POPULATION PROJECTIONS						
County	2010 EST	2015	2020	2025	2030	2035
Butte	219,989	231,043	244,417	260,742	276,009	290,186
Colusa	21,449	22,765	24,521	26,329	28,112	29,869
Glenn	28,183	29,320	30,611	31,992	33,318	34,676
Sutter	94,785	99,424	108,054	119,011	131,390	145,637
Yuba	72,324	76,858	83,363	90,103	97,037	104,599
TOTAL	436,730	459,410	490,966	528,177	565,866	604,967
Source: State of California, Department of Finance, Interim Population Projections for California and Its Counties 2010-2050, Sacramento, California, May 2012.						
http://www.dof.ca.gov/research/demographic/reports/projections/interim/view.php						

PUBLIC HEALTH.

The California School Kid's Physical Fitness report is a statewide study of the fitness of fifth-, seventh- and ninth-graders. In 2011-2012, fewer than 25% of Colusa County students met the "healthy zone" standard, with 30% identified at high risk for future health problems. The category "body composition" was the most significant factor. According to the report, regular vigorous exercise is one method to improve the physical fitness and health of Colusa's children.

SYSTEM-WIDE PLANNING.

Long-range, management level planning extends beyond the scope and scale of a single State Park Unit. System-wide planning typically addresses issues and trends, needs and deficiencies, roles and responsibilities, or actions and opportunities for a whole range of issues of interest to government agencies. System-wide planning policies and objectives are considered during the General Plan process so the Park can support, and be consistent with the desired long-range goals of California State Parks and other agencies.

California State Parks.

Mission. The Mission of California State Parks is to “Provide for the health, inspiration and education of the people of California by helping to preserve the state’s extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high-quality outdoor recreation.” Each unit’s Declaration of Purpose and Vision Statement, as well as the General Plan’s management goals and guidelines, must be within the context of the Department’s Mission Statement.

State Park System Plan. The California State Park System Plan describes both the challenges that face the State Park system as well as the goals, policies, objectives and proposals for new programs and initiatives needed to guide the State Park system. The latest Plan in 2002 identified priorities relevant to the Park such as:

- Cooperate and coordinate natural heritage preservation with other state, federal and regional land management agencies.
- Expand youth-oriented outdoor recreation programs, and construct more camping and picnicking facilities (especially group facilities).
- Increase education and interpretive programs for youth, reach out to Californians who haven’t yet visited state parks and develop more interpretive facilities.

California Recreational Trails System. The California Recreational Trails Plan (Phase One) outlines State trail improvement goals and guidelines, and general alignments for the California Recreational Trails System’s twenty-seven long-distance routes. The Farms and Forest Heritage Corridor (also called the Cross-California Ecological Corridor) follows State Highway 20 from the Pacific Ocean shore at Jug Handle State Beach to Lake Tahoe, although this route is little known, little publicized and specific recreational amenities have not been developed. Because this route is identified, however, it is given priority for state and federal grants.

CORP. The California Outdoor Recreation Plan (CORP) is our state’s strategy for identifying the wide range of ways in which recreation providers can deal with obstacles and create the outdoor recreation opportunities to meet public demand now and in the coming years. The CORP and associated research, updated every five years, provide strategies for all public agencies – federal, state, local, and special districts engaged in providing outdoor recreation lands, facilities and services throughout the state -- for meeting the outdoor recreation needs of Californians.

The CORP presents valuable information about participation in, and demand for, water-dependent outdoor recreation activities including fishing and motor boating, paddle sports and swimming. The CORP inventories protected lands throughout the state, compiles public opinions about outdoor recreation and the management of public waters and lands, describes why wetlands are important recreation resources and discusses California’s Recreation Policy. www.parks.ca.gov/CORP

Central Valley Vision. The Central Valley Vision Implementation Plan 2009 offers a catalog of proposed initiatives to be implemented over the next twenty years to improve recreation and resource protection in the Central Valley. The plan resulted from analysis by California State Parks with input from Central Valley residents and partners, including public agencies and non-profit organizations. The Plan recommended the addition of two new riverside state parks between Redding and Red Bluff, development of additional recreational facilities in existing state parks, and new boating trails along the Sacramento River to better connect Central Valley residents and

visitors with their river. A **Base Camp Strategy** is proposed to leverage the resources of various agencies, such as CDFW and BLM, to increase access to public lands while minimizing services and facilities cost. Specific recommendations at Colusa-Sacramento River SRA are to acquire about 13 acres, restore 140 acres of wildlife habitat, add about 20 campsites and 10 picnic sites, increase interpretive services, and enhance boating and angling facilities.

www.parks.ca.gov/centralvalleyvision

Division of Boating and Waterways (DBW). DBW, a former state agency that became a division of California State Parks in July 2013, helps local and state agencies with water-dependent recreation planning. They offer grants and loans to improve boating facilities, periodic boating needs assessments, accessible boating facility guidelines and water trail planning. The City of Colusa has received a local assistance grant from DBW to plan a new boat launching facility adjacent to the Park. The department considered the City's boating facility plans in this general plan process.

Public Resources Code. California Public Resources Code (PRC) Section 5019.50-5019.80, Classification of Units of the State Park System, provides for the designation of State park units and offers guiding principles for State Park improvements. The PRC classifies different types of State Park units and provides guidance for the upkeep and improvements. This code is used as a reference to plan appropriate improvements within the Park.

Access for Visitors with Disabilities. One of the goals of California State Parks is to make sure that everyone – including visitors with mobility challenges – has access to the natural and cultural wonders that make up the system. The department has a rigorous program to make sure new and renovated facilities support this goal. The Access to Parks Guidelines, first issued in 1994 and revised in 2015, details the procedure to make state parks more accessible while maintaining the quality of park resources. Also included in the guidelines are recommendations and regulations for complying with the Americans with Disabilities Act (ADA) and state regulations. The All Visitors Welcome: Accessibility in State Park Interpretive Programs and Facilities was issued in 2003, providing guidance on developing accessible interpretive programs and facilities. Most Park facilities were constructed before ADA and state regulations were implemented. The Transition Plan, which guides improved access to existing facilities and programs, recommends that access to the Park's camping, parking and restrooms be improved.

Concessions Program Policies. The department's Operating Contracts policy outlines ways that businesses, not-for-profit organizations and public agencies may offer goods and services to the public at California's state parks. Concession programs can provide an important part of the visitor experience, such as food service, tours, historical reenactments, and others. The City of Colusa operates the Park under a 5-year Operating Agreement signed in 2011.

The Natural Resources Agency.

Upper Sacramento River Fisheries and Riparian Habitat Management Plan (1989). Senate Bill 1089 created the Upper Sacramento River Fisheries and Riparian Habitat Advisory Council and charged it with developing a plan to “provide for the protection, restoration, and enhancement of fish and riparian habitat and associated wildlife for the area between the Feather River and Keswick Dam”. The Park is located in the 222 river-mile Sacramento River Conservation Area (SRCA); and CSP signed a MOU in 1999 agreeing to support the 1989 plan. The goal of the SRCA is to “preserve

remaining riparian habitat and reestablish a continuous riparian ecosystem along the Sacramento River between Redding and Chico and reestablish riparian vegetation along the river from Chico to Verona.”

California Department of Fish and Wildlife (CDFW).

Natural Community Conservation Planning (NCCP). The NCCP program’s goal is the protection and perpetuation of California’s biological diversity. An NCCP identifies and provides for the regional and area-wide protection of plants, animals and their habitats while allowing compatible and appropriate economic activity. Nearby Regional Conservation Plans include the Butte Regional Conservation Plan NCCP/HCP and Yuba-Sutter NCCP/HCP. The Park is not within the jurisdiction of a NCCP/HCP.

Comprehensive Management Plan for the Sacramento River Wildlife Area (2004). The Sacramento River Wildlife Area consists of thirteen fee-titled units and three conservation easements, all within the floodplain of the Sacramento River. The central management strategy for the properties is preservation and restoration of the Great Valley Riparian Habitat for the mutual benefit of Special Status species, game species and other native species. Goals relevant to the General Plan process include:

- Contribute to the Overall Goal of the Sacramento River Conservation Area: Preserve remaining riparian habitat and reestablish a continuous riparian ecosystem along the Sacramento River between Red Bluff and Chico and reestablish riparian vegetation along the river from Chico to Verona.
- Maintain and Enhance habitat for Special Status Species.
- Support the Natural Processes that Result in the Creation and Enhancement of Habitat.
- Maximize the Habitat Value of Wildlife Area Property.
- Support Scientific Research and Monitoring.
- Support the Conservation of Wildlife Habitat on Privately owned Land along the Sacramento River.
- Support Compatible Public Use through Consistent Regulations.
- Inform the Public of Compatible Recreation Use Opportunities.
- Identify the Wildlife Area through a Signing Program.
- Expand Opportunities for Public Access.
- Support Environmental Education.
- Provide Law Enforcement to Protect Habitat and Wildlife and to Help Mitigate Impacts on Adjacent Landowners.
- Secure the Habitat from Vehicular Trespass.
- Control Invasive, Nonnative Plant Species.
- Maintain Management Area Signing.
- Maintain Access Improvements.
- Control Dumping of Refuse and Vehicles.
- Cooperate with Adjacent, Private Landowners to Address Mutual Concerns.
- Participate in an Ongoing Management Coordination Structure for Habitat and Recreation Lands along the River.
- Coordinate with Other Law Enforcement Agencies.
- Coordinate with Local Public Service Agencies.

- Share Resources and Equipment with Other Public Habitat Management Agencies.
- Pursue Alternative Management Mechanisms and Property Transfers and with other Public Property Management Agencies.

CDFW/USFWS/CSP Memorandum of Understanding (MOU). A MOU signed in 2001 and again in 2004 between these state and federal agencies helps to improve agency communication and guide cooperative management, monitoring, restoration and enhancement activities for lands managed for fish, wildlife and plants along the Sacramento and Feather rivers in Yuba, Sutter, Tehama, Butte, Glenn and Colusa counties (See Appendix D).

California Department of Water Resources.

State Plan of Flood Control (SPFC). California Water Code Section 9110(f) defines the SPFC as: “*the state and federal flood control works, lands, programs, plans, policies, conditions and mode of maintenance and operations of the Sacramento River Flood Control Project*”. However, the SPFC is only a portion of the larger system that provides flood protection for the Central Valley. The Sacramento River levee that borders and bisects the Park is part of the SPFC, as is the Colusa Bypass across from Cobb’s Bend. The Central Valley Flood Protection Board (CVFPB or the Board) provides project oversight, so facilities proposed in the floodway or on the levee will require the Board’s approval.

Central Valley Flood Protection Plan (CVFPP). Record floods in 1986 and 1997 severely tested the SPFC and prompted the state to develop the CVFPP, adopted by the Board in June 2012. The CVFPP encourages multi-benefit flood management projects that protect cities, communities and farms while enhancing biological diversity and recreation.

Bay Delta Conservation Plan (BDCP). The BDCP, in draft form in March 2014, seeks to carry out the co-equal goals of providing for the conservation and management of aquatic and terrestrial species, including the restoration and enhancement of ecological functions in the Sacramento-San Joaquin River Delta, and improving current water supplies and the reliability of water supply delivery conveyed through the State Water Project (SWP) and the Central Valley Project (CVP). Preliminary proposals include water storage release timing changes at Lake Shasta which may affect Sacramento River water levels, and habitat expansion to benefit aquatic organisms. This may change boating, flooding and the type and abundance of fish migrating by the Park.

California Water Plan (CWP). The CWP provides a collaborative planning framework for elected officials, agencies, tribes, water and resource managers, businesses, academia, stakeholders, and the public to develop findings and recommendations and make informed decisions for California’s water future. The plan, updated every five years, presents the status and trends of California’s water-dependent natural resources; water supplies; and agricultural, urban, and environmental water demands for a range of plausible future scenarios. The 2013 update includes a major objective to “*Protect and Enhance Public Access to the State’s Waterways, Lakes, and Beaches,*” and chapters such as the Water-Dependent Recreation Resource Management Strategy (RMS) which offers a menu of water resources management recommendations that improve water-dependent recreation.

California State Lands Commission.

Public Trust Doctrine. In California, submerged lands are subject to the Public Trust Doctrine, under which these lands are held in trust for the statewide public and dedicated to such uses as commerce, fisheries, navigation, environmental preservation, and recreation. Uses of these lands must be consistent with the Public Trust Doctrine. The State Lands Commission is the state agency with authority concerning the Public Trust Doctrine and owns and manages much of the public trust land, including the bed of the Sacramento River and the CHANNEL.

Not-for-profit organizations: Sacramento River Conservation Area Forum (SRCAF) and The Nature Conservancy (TNC).

The Sacramento River Conservation Area Forum is a conglomeration of local, state, federal, and private organizations aimed at implementing the actions necessary to achieve the Natural Resources Agency's SRCA goal (described earlier). The guiding principles for the SRCA include: ecosystem management, flood management, voluntary participation, local concerns, bank protection, and information and education. California State Parks participates in the SRCAF. TNC, a worldwide environmental advocacy organization, is active in ecosystem preservation and restoration in the Sacramento Valley. Planning related to the Park's General Plan process is noted below.

Sacramento River Public Recreation Access Study (2003). TNC, in conjunction with the USFWS, the California Wildlife Conservation Board and the CDFW, assessed the existing and potential public recreation uses, access, needs, and opportunities along a 100-mile stretch of the Sacramento River between Red Bluff and Colusa. The goals of the study were to (1) identify and characterize existing public access opportunities and needs associated with public recreation facilities and infrastructure and (2) identify and make recommendations for future public recreation access opportunities and management programs.

The study revealed substantial public interest in accessing natural areas. Potentially attractive recreation uses include trail hiking and walking, hunting and fishing, camping and picnicking, wildlife viewing and nature study, boating and beach activities, and attending outdoor cultural events, museums and historic sites. Regional trends indicate a continued interest in the traditional recreation activities of boating, fishing and hunting. Additionally, birding, wildlife viewing and other nature observation activities were expected to increase 65% over the next 40 years. Key suggestions and needs that were identified include:

- improve the condition of boat ramps and other access points;
- provide more outreach, including handouts, kiosks, and visitor centers;
- provide maps and signage to assist in finding river access and services and to reduce trespassing;
- increase the number of facilities and amenities such as trails, picnicking and camping facilities, especially in the southern portion of the study area;
- provide recreation opportunities for the diversity of ethnic groups (primarily Caucasian and Hispanic) and interests in the study area;
- minimize conflicts between different recreation uses (e.g., boating vs. bird watching, hunting vs. hiking or fishing);

- increase coordination among land managers to improve the value of the recreation opportunities within the study area by planning together and sharing resources and expertise;
- improve coordination among law enforcement and resource agencies with regard to public safety services, including coordination for large annual recreation events;
- plan for the expected substantial population growth in the study area and region over the next decades; and
- coordinate public recreation access planning among the resource agencies, non-profit land trusts, private entities, local landowners, recreation users and other stakeholders in the study area to optimize results and minimize conflicts.

LOCAL PLANNING.

Colusa Subreach Planning. Planning was initiated by SRCAF and TNC to develop a strategy for restoration of the ecosystem along the Sacramento River between the community of Princeton and the City of Colusa in Northern California, where the Park is located. The objective was to restore the ability of the environment to support viable populations of native wildlife, within the flood management system, agriculture and other existing land uses. One product of this planning effort is the Colusa Subreach Recreation Access Plan (2007). Of thirteen sites now owned by public agencies, the only developed recreational facilities are in Colusa-Sacramento River SRA and the adjacent Colusa Levee Scenic Park. Most other public lands are currently accessible only by boat. The Colusa Subreach Recreation Access Plan, recommends that “*no new land access points are recommended at this time.*” Instead, it recommended expansion of, and increased facilities development, in the SRA. In particular, improving boating and camping facilities here will improve access to the river’s abundant natural and recreational resources, as well as a wide variety of public lands. This plan proposes other limited improvements, mainly due to state landowner agency reluctance to commit to additional enforcement and maintenance functions. Existing vehicular access could be improved to public lands near RM 164, 162 and 146 (Cruise ‘n’ Tarry site across from the Park at Cobb’s Bend). New carry-in/car-top boating access ramps are proposed at RM 162 and 146. Boat-in camping could be improved on public lands near RM 160, 148 and 147. These improvements, if implemented, would increase non-motorized boating along the river just north of the Park.

Colusa-Sacramento River SRA Master Plan. TNC worked with California State Parks and the SRCAF to complete a master plan for the Park in January 2007. This plan’s purpose was to “*develop a master plan for public access and recreation that is compatible with adjacent land uses and with wildlife habitat conservation*”. Recommendations included relocation of the boat ramp, park entrance and campground, as well as enhanced boating and picnicking facilities. Acquisition, habitat restoration and low-impact recreational development of the former Ward property was also recommended. The Department did not take official action on the Master Plan; however, the Ward property acquisition and restoration, and the City of Colusa’s boating facility project, arose from this plan. Other plan recommendations will be considered as part of this GP process.

Colusa County.

Colusa County General Plan. Land use development in Colusa County is guided by the 2011 County General Plan. The County General Plan designates the southern portion of the Park as *Parks and Recreation*, while the former Ward Tract and other land within the levee is identified as *Designated Floodway*. The County General Plan specifies land adjacent to the western boundary as *Agricultural Transition* (intended for long-term agriculture, providing a permanent boundary or land use buffer around communities) and *Industrial*. *Agricultural Transition* allows smaller parcel size (10 acres) than other agricultural zones, and prohibits Agricultural Industrial, Energy Production and Low-intensity Recreation uses such as hunting. *General Agricultural* land use is designated adjacent to the northern boundary. *Rural Residential* and *Urban Residential* land use is designated just west of Highway 45. Small parcels with *Commercial* and *Industrial* designations are a few blocks southeast. Current land use seems to be generally consistent with the General Plan, although the *Industrial* parcel just west of the SOUTHWEST PARCEL has a single family residence and is otherwise undeveloped. Figure 2.3 illustrates land use designations.

County Bicycle Plan. Several bikeways are designated close to the Park. These can serve as recreation, exercise and human-powered transportation corridors. An off-road Class I Bikeway (Bike Path) is planned on the west levee of the Sacramento River. Class I routes accommodate pedestrians. A Class II Bikeway (Bike Lane), restricted to bicycles only, is designated along Highway 20 and 45 as they pass through Colusa. A Class III Bikeway (Bike Route) with 3 ft. shoulder is designated along Lurline Avenue. Class III facilities require the roadway be shared by vehicles and bicycles.

City of Colusa.

City General Plan. The City of Colusa's 2007 General Plan promotes a vision of the city's Community Character and Design as follows:

- Preserve Colusa's Sense of Community and Small Town Character
- Preserve and Strengthen the Downtown, Riverfront, and other Historic Places
- Preserve the Environmental Resources that Define Colusa
- Ensure ease of mobility for all residents, visitors and businesses

The plan designates *Mixed Use* in the downtown along the River's south bank, including adjacent to the Park. *Low Density Residential* is designated on either side of Highway 20 south of Jay Street. Colusa Scenic Levee Park and Memorial Park at Highway 20 and 45 are designated *Park*. Figure 2.3 illustrates land use designations.

Downtown Colusa Economic Development Plan. The City of Colusa adopted an Economic Development Plan for the downtown in 2012 to support “*the community’s vision for a vibrant, active, and economically healthy Downtown*”. A common theme identified in the planning process was that the public felt that the City’s river frontage was under-utilized. Common points of discussion in public workshops included:

- River is crucial to revitalization.
- Encourage new development along Main Street that offers views over the levee.
- Create more housing in downtown.
- Bring tourists to downtown on a regular basis.
- Parking is crucial but should not distract from pedestrian-friendly atmosphere.
- Leverage the boat launch to make downtown a destination. Attract boaters, fishermen and families as part of their daily lives.

The plan identified the area just south of the Park, between 10th and 13th Streets, as the proposed *Downtown Gateway*. The revitalization strategy combines residential, commercial, workplace, lodging, and entertainment land uses in multi-story mixed-use buildings with shared parking facilities. The proposed *Riverfront District*, east of 10th Street, is proposed to be a “*vibrant center for river-oriented entertainment and commerce*.” Revitalization strategies include enhanced streetscape connections to Market Street, a gateway arch at 10th just north of Market Street, reduction of off-street parking, emphasizing the existing water towers as landmark icons, creating a community plaza and marketplace building to encourage riverside commerce and tourism, and emphasizing water connections (public moorings) and riverfront venue linkages. Figure 2.3 illustrates the proposed revitalization strategy.

City Bikeway Master Plan. The bikeway plan was adopted in 2013. The plan supports the Colusa County Bikeway Master Plan’s designations (noted above) and expands upon them. The overall goal is “*to promote safe, convenient, and enjoyable cycling by establishing a comprehensive network of bikeways that link the Activity Centers of Colusa and coordinate with existing and future Colusa County Regional Transportation Bikeways*.” Proposed bikeways near the Park are:

- Class I Bike Path (off-road) on the Sacramento River levee and circumnavigating the City
- Class II Bike Lane along 10th Street from the Sacramento River Levee to Fremont Street
- Class III Bike Route (on-street) along Main Street from 10th Street to Bridge Street

PARTNERSHIP AGREEMENTS.

Management of the Park is done in cooperation with many partners. Table 2.10 describes the types of partnerships and the relevant guiding documents.

Table 2.10. EXISTING PARTNERSHIPS			
ORGANIZATION	RESPONSIBILITIES	PARTNERSHIP INSTRUMENT	EFFECTIVE DATES
City of Colusa	Perform day-to-day campground and day use operations in the SOUTHEAST and SOUTHWEST PARCELS	Operating Agreement	2011-2016
	Construct and agree to manage Boat Launching Facility for 20 years	Construction Agreement + Amendment #1	2006-2016
	Design and permit the project, agree to construct then manage for 20 years per DBW requirements	DBW Boat Launch Facility Local Assistance Grant	March 2006+
Colusa County	Maintain Robert's Road public street		
	Public Safety and Fire		
California Department of Water Resources (CDWR)	Access and inspect riparian restoration mitigation site. Mow meadow, with right to maintain all habitat.	Cooperative Interagency Agreement	May 7, 2008 in perpetuity
DWR's Sutter Maintenance Yard	Sacramento River Flood Control System		
State Lands Commission (CSLC)	Holds sovereign ownership of the bed of the Sacramento River and former river channel. Protects public trust easement of the bank and public navigational easement, at a minimum.	Common Law Public Trust	In perpetuity
Roberts Ditch Irrigation Company	Holds perpetual right to divert Sacramento River water.	CVP Settlement Contractor 2005-2045	1903-present
US Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW)	Mutually manage, monitor, restore and enhance lands managed for fish, wildlife and plants along the Sacramento and Feather rivers in Yuba, Sutter, Colusa, Glenn, Butte and Tehama counties.	Memorandum of Understanding	2001, updated in 2004. Five year period with potential extensions.
Counties of Butte, Glenn, Colusa, Tehama, Sutter, Shasta, Yolo. State Natural Resources Agency, CDFW, Wildlife Conservation Board (CWCB), CSLC, CVFPB, DWR, California Department of Food and Agriculture (CDFA). Federal USACE, BLM, USFWS, Reclamation	Collaborative management of the Sacramento River Conservation Area	Memorandum of Agreement	1999+

CHAPTER

3



CHAPTER 3: ISSUES AND ANALYSES

This chapter identifies planning assumptions, and then analyzes the key issues to be addressed in the General Plan and EIR. The following key issues are analyzed below:

- Unit Classification
- Purpose and Vision
- Recreation Opportunities
- Interpretation and Education
- Natural Resources Management
- Facilities and Infrastructure Development
- Park Revenues, Operations and Maintenance
- Community Concerns and Input

Exhibits 3.1 and 3.2 illustrate some of the geographic information used in this chapter.

A. PLANNING ASSUMPTIONS

The following planning assumptions are based on California State Parks policies, core program initiatives, existing agreements, climate change projections, and other planning influences described in Chapter 2 that may affect the Park.

- The Park property within the Sacramento River floodway will continue to accept floodwaters. Levee and floodway management decisions and actions are the responsibility of the CVFPB, USACE and DWR. California State Parks will not take actions that degrade flood management capability.
- The Plan will incorporate natural resources management goals and guidelines consistent with current agreements with Park partners such as CDFW, DWR, Natural Resources Agency, CVFPB and USFWS.
- Park facilities will provide access to, and support, the City of Colusa's boat launching facility planned in Colusa Levee Scenic Park.
- In developing this Plan, the Department will consider public input obtained during the Sacramento River Public Recreation Access Study and the Colusa Subreach planning process, which culminated in a Master Plan for the Park, as well as the general plan process.
- The Plan will strive to:
 - meet the goals outlined in the Sacramento River Conservation Area (SRCA) planning documents.
 - meet the goals of the Department's California Outdoor Recreation Plan, Central Valley Vision (CVV) and the California Recreational Trails Plan.
 - maintain or increase the capacity for overnight accommodation.
 - guide sustainable operations per the Department's 2013-14 Strategic Action Plan.
 - accommodate a reasonable share of recreation demand based on recreation trends identified in Survey of Public Opinions and Attitudes in California.
 - respond to the City of Colusa's development plans.

COLUSA-SACRAMENTO RIVER STATE RECREATION AREA DRAFT GENERAL PLAN

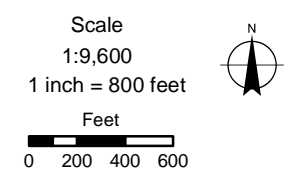
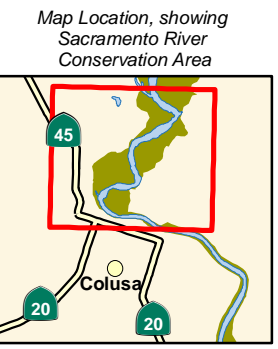
FIG3.1: PARKWIDE SITE ANALYSIS




Legend

- DWR 25 Year Erosion Projection
- DWR Flood Recurrence Model
- Levees
- Bank Reinforcement
- Gates
- Highway
- State Park Rd
- State Park Trail
- Colusa City Limit
- Other Public Lands
- Ward Tract DWR Mitigation Restoration Area
- Ward Tract Mitigation Habitat Types:
 - Grassland
 - Valley Oak Forest
 - Mixed Riparian Forest
 - Cottonwood Forest
 - State Park Boundaries












- Data Sources:
- 1) Levees - Sacramento River GIS.
 - 2) Flood Recurrence Interval & 25 year erosion projections: DWR Northern District.
 - 3) Proposed Boat Ramp / Parking: Moffatt & Nichol, Sept, 2012.
 - 4) Image: NAIP, 2012.
 - 5) City Limits: Colusa General Plan.
 - 6) Contours: USACOE, 2002.
 - 7) Ward Tract Mitigation: DWR.
 - 8) Public Lands: GreenInfo, Inc CPAD 1.8, July 2012, & Sacramento River GIS, 2001, & Calif Dept of Fish & Wildlife.



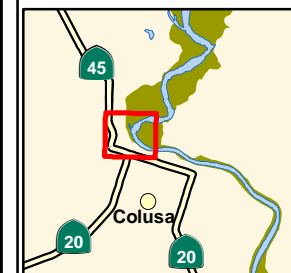
NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

PLANNING DIVISION ----- GENERAL PLAN SECTION	Date: 10/16/2014	
	California Department of Parks & Recreation DRAFT	

Legend


-  Levees
-  DWR 25 Year Erosion Projection
- Elevation Zones:**
 -  More than 60 ft
 -  50-60 ft
 -  40-50 ft
 -  Less than 40 ft
-  Steep slopes
-  Colusa City Limit
-  Gates
-  Bus Stop
-  Signalized Traffic Light

Map Location, showing
Sacramento River
Conservation Area



Scale
1:3,000
1 inch = 250 feet

Feet



Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

Date: 10/16/2014

Calif. Dept. of Parks &
Recreation

DRAFT



B. UNIT CLASSIFICATION.

The Park's classification establishes management priorities for natural and cultural resources stewardship and for wise public use. The chief purpose of a State Recreation Area classification is to provide recreation opportunities, as follows:

PRC 5019.56(a) State recreation areas, consisting of areas selected and developed to provide multiple recreational opportunities to meet other than purely local needs. The areas shall be selected for their having terrain capable of withstanding extensive human impact and for their proximity to large population centers, major routes of travel, or proven recreational resources such as manmade or natural bodies of water. Areas containing ecological, geological, scenic, or cultural resources of significant value shall be preserved within state wildernesses, state reserves, state parks, or natural or cultural preserves, or, for those areas situated seaward of the mean high tide line, shall be designated state marine reserves, state marine parks, state marine conservation areas, or state marine cultural preservation areas.

A review of the original classification was conducted as part of the General Plan process, because the original classification was based on a much smaller land base. Gradual river channel changes over time have added more land to the Park. The 2007 Ward Tract acquisition also increased the park's size with the express purpose of preserving and restoring habitat of statewide importance while providing public access and recreation.

Findings of this review are as follows:

- The SOUTHEAST PARCEL has provided public access to the river since at least 1954. There are currently few other public access points within the Colusa Subreach. According to public input during the Colusa Subreach planning process, the Park is the best place in the region to increase river-based recreation, and more recreational facilities are needed.
- In 2013, the Park encompassed about 346 acres of natural habitat and about 13 acres of more developed park land. The Park's eastern boundary is determined by the location of the riverbank, so the Park's size changes as the river meanders.
- The Great Valley Riparian Forest is recognized as a rare and significant habitat with high biological diversity by being listed as a Special Status habitat in the California Natural Diversity Database. The RIPARIAN AREA includes about 200 acres of mature trees and dense undergrowth grading into younger stands and occasional beaches along the river's edge.
- The Park contains wetlands that support numerous wildlife species, especially in the RIPARIAN AREA. The interface between the riparian forest and open water is of particular value to a wide array of fish and wildlife species.
- State and Federal agencies, as well as environmental organizations, have made extensive efforts to protect and expand habitat values in the Colusa Subreach and along the Sacramento River, including restoration of native grasslands and riparian forest in the RESTORATION PROJECT.

For the reasons cited above, re-classifying the SRA as a State Park was considered. The definition of a State Park is found in the Public Resources Code, as follows:

PRC 5019.53. State parks consist of relatively spacious areas of outstanding scenic or natural character, oftentimes also containing significant historical, archaeological, ecological, geological, or other similar values. The purpose of state parks shall be to preserve outstanding natural, scenic, and cultural values, indigenous aquatic and terrestrial fauna and flora, and the most significant examples of ecological regions of California, such as the Sierra Nevada, northeast volcanic, great valley, coastal strip, Klamath-Siskiyou Mountains, southwest mountains and valleys, redwoods, foothills and low coastal mountains, and desert and desert mountains.

Each state park shall be managed as a composite whole in order to restore, protect, and maintain its native environmental complexes to the extent compatible with the primary purpose for which the park was established. Improvements undertaken within state parks shall be for the purpose of making the areas available for public enjoyment and education in a manner consistent with the preservation of natural, scenic, cultural, and ecological values for present and future generations. Improvements may be undertaken to provide for recreational activities including, but not limited to, camping, picnicking, sightseeing, nature study, hiking, and horseback riding, so long as those improvements involve no major modification of lands, forests, or waters. Improvements that do not directly enhance the public's enjoyment of the natural, scenic, cultural, or ecological values of the resource, which are attractions in themselves, or which are otherwise available to the public within a reasonable distance outside the park, shall not be undertaken within state parks.

State parks may be established in the terrestrial or nonmarine aquatic (lake or stream) environments of the state.

Another option would be retaining the SRA classification for the unit, while applying a sub-classification for the RIPARIAN AREA and RESTORATION PROJECT as a natural preserve. The definition of a Natural Preserve is found in the Public Resources Code, as follows:

Section 5019.71. Natural Preserves consist of distinct nonmarine areas of outstanding natural or scientific significance established within the boundaries of other state park system units. The purpose of natural preserves shall be to preserve such features as rare or endangered plant and animal communities existing in California prior to the impact of civilization, geological features illustrative of geologic processes, significant fossil occurrences or geological features of cultural or economic interest, or topographic features illustrative of representative or unique biogeographical patterns. Areas set aside as natural preserves shall be of sufficient size to allow, where possible, the natural dynamics of ecological interaction to continue without interference, and to provide in all cases, a practicable management unit. Habitat manipulation shall be permitted only in those areas found by scientific analysis to require manipulation to preserve the species or associations that constitute the basis for the establishment of the natural preserve.

One effect of this change would be the restriction of motor vehicle use in these zones by the public [PRC Section 5001.8(a) and DOM Section 0304.5.2]. Potential impacts include:

- Fewer visitors may recreate if they can't access these areas by automobile, especially those with mobility difficulties and families with young children. The nearest feasible parking area would be 1.2 miles away in the SOUTHWEST or SOUTHEAST PARCEL. More parking spaces would need to be provided there.
- Habitat restoration goals that have been established do not rely on natural successional processes that generally guide natural preserve management. Instead, mitigation success is measured by survival rates of plants and establishment of a particular plant community mosaic.
- Removal of silt and other debris deposited by floods may be necessary to preserve recreation access; however this would be inconsistent with this designation. Maintaining accessibility for visitors, especially those with mobility difficulties, would be more challenging, especially if sedimentation removal is reduced and eroded areas are not repaired.
- The Sacramento River floodway's capacity to pass flood waters is critical for public safety. Restrictions that may limit or increase the cost of flood management efforts should not be established.
- The Ward Tract has a farm equipment access easement which must be honored, until or unless the farmer is willing to abandon the easement.

Recommendation. The re-classification to a State Park, or applying a Natural Preserve sub-classification, is not recommended due to the following reasons: the unit size is smaller than most existing state parks, the natural values of the unit do not rise to the level of "outstanding", and the property does not represent the most significant example of the ecological region. Further, this designation may reduce recreational opportunities and complicate floodway management. The Park is the best place in the Colusa Subreach to increase recreational use, and more recreational facilities are needed. The important natural resources that have been added to the unit can be adequately preserved through management goals and guidelines.

C. PURPOSE AND VISION.

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

Declaration of Purpose. The declaration of purpose is the broadest statement of management goals designed to fulfill the Park vision. It is a unique statement of direction for the state park it is intended to guide. Public Resources Code, Section 5002.2(b), requires that the General Plan's Declaration of Purpose be prepared, "*setting forth specific long-range management objectives for the Park consistent with the Park's classification.*"

The original Statement of Purpose adopted in July, 1959 states, "*To provide day use and boat launching facilities and fishing access for the recreational use of the Sacramento River.*" The current Statement of Purpose, updated in December, 1975 states:

The purpose of Colusa-Sacramento River State Recreation Area is to make possible the public enjoyment of recreational experiences which are afforded by the Sacramento River and its west side shore lands in the vicinity of the City of Colusa in Colusa County. All daytime and overnight recreational activities which can be practiced within the area without permanent damage to the scenic and natural resources of the area may be practiced for public enjoyment. The resources of the area may be enhanced or manipulated to improve the recreational experiences for people.

Recommendation: The existing Declaration of Purpose shall be expanded to encompass the Department's habitat conservation responsibilities, especially in the RIPARIAN AREA and RESTORATION PROJECT. The new purpose declaration should reflect not only recreation, but highlight protection of the Park's significant and dynamic natural resources, and how it supports ecosystem restoration actions being undertaken by the department's partners in the region.

Vision Statement. The Vision Statement for the Park is a description of what the Park should ultimately look like, and how it should function in the future. Prior to this General Plan, no vision had been developed for the Park.

The Vision establishes the priority of various potential uses, such as recreation, habitat preservation and education. This Park's potential to fully realize its unique role in supporting the California State Parks mission is also dependent on strong partnerships with local, state and federal agencies; in particular, the goals expressed in partnership documents that are compatible with the Department's mission and feasible to be implemented in the Park.

Recommendation: The Vision Statement shall be drafted to highlight these priorities: 1) the significant recreational experiences that should be accommodated, 2) the primary ecosystem values to be supported and, 3) how the Park's facilities, land base, management and programs could enhance regional recreation, preserve biological diversity and protect natural and cultural resources through partnership efforts.

D. RECREATION OPPORTUNITIES.

The Park now provides opportunities for fishing and boating, beach play and hiking, nature observation and wildlife watching, picnicking and camping, relaxing and river floating, and outdoor teaching and learning. Regional population growth and demographic indicators indicate an increased demand for public access to the Sacramento River and the variety of recreational opportunities and experiences it offers. The existing facilities could be relocated and/or remodeled to better serve existing and anticipated future demands, and the expanded land base could be utilized to expand recreational opportunities that are compatible with habitat restoration efforts. The Sacramento River Public Recreation Access Study describes needed facilities and amenities to address regional demand, and the Colusa-Sacramento River State Recreation Area Master Plan provides recommendations for the Park based on extensive public input.

Recommendation: Increased outdoor recreation opportunities and associated visitor services that shall be considered include:

- Sacramento River motorized and human-powered boating access. Motorized boating opportunities may be reduced over time by increases in woody vegetation in the river

channel, less sediment removal, potential reductions in water flows due to climate change, and increases in fuel costs. These factors may increase human-powered boating use. Consider providing Sacramento River boating trail facilities and programs, and providing parking, restrooms and other facilities and services that support the City of Colusa's planned boat launching facility.

- Wildlife watching and nature observation within the riparian forest, along the river bank and in the restored grasslands. This includes connecting the existing Nature Trail to other trails, improving the tread to make some trails suitable for mobility impaired users, adding viewing areas and providing a loop road through the RESTORATION PROJECT.
- Outdoor recreation that increases public health, including that of Colusa County's children. The Sacramento River's riparian forest provides cooling shade and lower temperatures which draw visitors interested in active recreation. These include hiking, and/or running trails, orienteering and other trail-based activities. Connecting Park trails and roads to the City and County of Colusa's proposed long-distance bicycle path will increase active recreation opportunities available to pedestrians and bicyclists.
- Safe public access to the river, including for persons with mobility difficulties, for bank fishing and beach play.
- Overnight accommodations for visitors pursuing regional boating, wildlife watching and hunting opportunities. Implement the Central Valley Vision's Base Camp strategy by providing overnight camping and lodging, including facilities that appeal to regional wintertime hunting and wildlife watching visitors arriving by vehicle or boat.
- Social and cultural activities for families and groups, such as picnicking, weddings and community events.

E. INTERPRETATION AND EDUCATION.

Community input and discussions with agency partners indicate a demand for interpretation and education services. Primary audiences include local and regional school children engaged in standards-based learning, local and Central Valley families and adults learning about their cultural and natural resources heritage, Northern California visitors engaging in wildlife observation and adult boaters exploring the Sacramento River. Providing these services in Spanish and American English would better serve the region's diverse population.

Natural resources themes to be considered include the dynamic characteristics of the Sacramento River, as well as riparian habitat and riverine systems education. Cultural interpretation themes may include native people's lifestyles, the impact of early settlers on the Sacramento Valley, and traditional family camping, hunting, fishing and farming. Central Valley water management history, water conservation, water safety and current water resources management themes should also be considered.

Interpretation and education can be provided by fixed facilities such as interpretive signage, group activities such as campfire programs and docent-led hikes, living history re-enactments such as the current Trapper Days program, electronic media and other means. Trapper Days utilizes the entire SOUTHEAST PARCEL, and Boy Scouts also tent camp in this area. Providing a primitive group camp in a more natural area of the Park should be considered.

A visitor center was considered as part of the general plan process. Because predominately local visitors are expected at the Park, projected attendance is low, the nearby Sacramento National Wildlife Refuge already provides a visitor center, and there is little suitable space for an onsite interpretive building protected from flooding, alternatives to a traditional visitor center were considered, as recommended below.

Recommendation. The Plan shall provide goals and guidelines for the following interpretive facilities and activities:

- A flexible open-air event center in the SOUTHEAST PARCEL for educational fairs, local food exhibitions and sales, health and fitness activities, family and community celebrations, and other social and educational events consistent with the Park Vision. The boat trailer parking area is used at capacity only seasonally, so events should utilize excess parking off-season, as well as nearby lawns. The facility should provide environmental and safety information, as well as Base Camp information services such as regional recreation opportunity maps and fishing/hunting/touring guide services.
- Large primitive group camps for living history, environmental education and recreation programs.

F. NATURAL RESOURCES MANAGEMENT.

In Chapter 2, natural resources are categorized into Physical Resources (topography, climate, air quality, geology, soils, and hydrology and water resources; and Biotic Resources (Dynamic riparian ecosystem, vegetation and habitat communities, sensitive natural communities, habitat restoration, habitat corridors, special status plant species, non-native invasive plant species, and special status wildlife). The Park supports various forest types (Valley oak riparian, mixed riparian, cottonwood riparian, willow scrub), grasslands and wetlands. These vegetation types benefit local resident wildlife, wildlife ranging throughout the watershed and migratory birds that traverse the Pacific Flyway. This section focuses on natural resources issues which require further analysis in order to develop goals and guidelines.

HABITAT RESTORATION AND RECREATIONAL USES.

Increasing riparian and riverine habitat size and quality along this stretch of the Sacramento River supports recovery and sustainable biological integrity of the many sensitive wildlife species associated with these habitats, a long-standing State and Federal goal. The RESTORATION PROJECT and SOUTHWEST PARCEL currently host habitat restoration projects with specific habitat goals. Integrating recreational uses into these areas requires careful planning and sensitive design.

RESTORATION PROJECT. DWR began planting 137 acres of the Ward Tract in the fall of 2009, with maintenance goals and guidelines outlined in a restoration plan and Interagency Agreement (Appendix C). DWR retained responsibility to meet habitat restoration goals for ten years or until the success criteria are met. After that milestone was reached, California State Parks agreed to accept management responsibility of the forest while DWR's Division of Flood Management maintains the grassland in perpetuity. Provision G of the agreement states:

PARKS [the Department] will not undertake or authorize any use of the Mitigation Lands that is inconsistent with the terms and purposes of this Agreement, provided, however,

PARKS shall have the right to otherwise use the Mitigation Lands in any manner, including for the following activities:

- 1. The development and maintenance of picnic and primitive camping sites (including table and fire ring);*
- 2. The installation and maintenance of primitive toilet facilities;*
- 3. Public and PARKS access to picnic, camping and toilet facilities via an unpaved road and parking areas;*
- 4. Trails with interpretive signs that loop around the perimeter and through the Mitigation Lands for public recreation and access to the Sacramento River.*

Recommendation: Recreation development must be aligned with DWR's restoration project goals that were described in the agreement. Maintaining the restoration goals and recreational access in the dynamic riverine environment over time will require on-going consultation with DWR as conditions change.

SOUTHWEST PARCEL. Of the 6 acre Southwest Parcel, remnant riparian forest occurs on about one acre, and 4.5 acres were planted with native plants in 2001 by the department. The restored vegetation currently exhibits no recruitment; however it still provides some habitat for native wildlife. Refer to Chapter 2 Habitat Restoration and Appendix N for more information.

The SOUTHWEST PARCEL is the only Park land protected from frequent flooding by the Sacramento River levee, and is within 100 yards of two state highways. In the absence of land acquisition, it would be the most desirable place for a campground with RV hookups. However, development of a campground here may require significant grading, subgrade preparation and utilities, due to the uneven topography and presence of unconsolidated fill in the former borrow pit. This is likely to require removal of many of the native plants in both the remnant and the revegetation area.

Department Operations Manual (DOM) policies direct that a balance be struck between habitat protection and recreational uses, as follows:

- DOM 0306.6 clarifies that an RV campground outside the floodplain (and presumably outside the floodway) is preferable, *"Avoid...direct and indirect development and actions in floodplains that could adversely affect the natural resources and functions of floodplains or increase flood risks."*
- DOM 0306.7 describes how the Department endeavors to meet its mission of balancing natural resource protection while providing high quality recreation, *"It is the policy of the Department to prevent the destruction, loss, or degradation of wetlands by ...avoiding direct and indirect construction and actions in wetlands unless the benefits of the facility or activity clearly outweigh the potential adverse impacts, there are no practicable alternatives, and the proposed action includes all practicable measures to minimize harm to wetlands."*
- DOM 0310.6.1 clarifies that, while the Department endeavors to protect native plants, *"It may be necessary at times to remove trees from units of the State Park System for purposes such as forest restoration, facility development or hazard fuel reduction."*

Additional analysis is provided in Chapter 3 Overnight Accommodations section below.

Recommendation: This Plan prioritizes the acquisition of land outside the floodway to provide all season camping; however, if land acquisition is infeasible when the existing campground is impacted by boat ramp parking expansion, a campground shall be allowed in the Southwest Parcel. Protect existing elderberry shrubs. Minimize impacts on restored habitats and retain native vegetation to the extent feasible. To compensate for removal of native vegetation on the site, exotic plant species will be removed from riparian habitat within the park unit and replaced with native species at a ratio determined by the US Army Corps of Engineers. If this is not possible, replace native vegetation at an appropriate off-site location or some combination, if only partial native vegetation enhancement can be achieved within the park boundaries.

If sufficient land is acquired for an RV campground, a lower intensity of campground or cabin development will be considered for the Southwest Parcel, in order to preserve as much native vegetation as possible.

FLOODWAY MANAGEMENT AND RIVER MEANDER.

One of the most important ecological functions the Park can serve is to reestablish dynamic river processes that improve riparian and aquatic habitat complexity and biodiversity. Among the many benefits of river meandering is:

- Increasing bank swallow habitat on eroded banks
- Increasing fish habitat by introducing woody debris into the channel
- Creating sandbars and beaches
- Creating space along the riverbank for willows and other pioneer plant species
- Increasing topographic and substrate diversity through erosion and deposition
- Increasing microclimatic, structural, functional and biological diversity

However, flooding, sedimentation and erosion have the potential to reduce recreational resources by:

- Steepening the river bank, making access to the water more difficult
- Toppling mature trees that provide shade at favored fishing holes and camping sites
- Reducing the Park's land mass, as it is determined by riverbank location
- Reducing navigability of waterways
- Damaging or destroying facilities and infrastructure such as roads and utilities
- Limiting activities that can be accommodated
- Leading to seasonal closures during and after flood events
- Increasing capital improvement and maintenance costs
- Reducing accessibility by persons with mobility difficulties



Figure 3.3. Picnic area during December 13, 2014 flood.

Careful siting and design of facilities and infrastructure can reduce, but not eliminate, these challenges.



Figure 3.4. RIPARIAN AREA during December 13, 2014 flood.

The Department Operations Manual, DOM section 0306.1, states, *"It is the policy of the Department to make an early determination of a park unit's water resources values and to avoid establishment of improper use patterns that may be damaging to the quality, quantity, or biological integrity of water features, or their interrelationship with other park system values."*

Title 23 of the California Code of Regulations governs floodway management. Public and private recreation areas are a permitted use (see Article 5, Section 107 for restrictions). Article 8 describes design and construction

standards for encroachments which affect the floodway. Article 8 Section 120 describes levee construction standards for the levee section and the area at least 10 feet in width adjacent to the landward levee toe. Any changes to the levee must conform to these standards.

Recommendation: The Department shall encourage river meander in the floodway as a dynamic process critical to natural functioning of the River ecosystem, as described in the Sacramento River Conservation Area guidelines. The Plan shall identify critical Park property and facilities to be protected or restored when feasible, and clarify when and how protection measures will be implemented or maintained. All facilities within the Sacramento River floodway should be portable, flood resistant or designed to tolerate regular flooding and siltation.

THE CHANNEL.

The CHANNEL (commonly called Roberts Ditch) was formerly the bed of the Sacramento River. It is under State Lands Commission sovereign ownership outside the Park boundary. Since this land is outside the Park boundary, the Department must request approval from the State Lands Commission for any facility or site modifications.

The channel serves as navigation passage between the boat ramp and the river when water levels allow. Roberts Ditch Irrigation Company owns a pumping plant along Roberts Road east of the levee that pumps water out of the channel, through the levee, and on to local farmland. The company dredged the channel until 2005, when this practice was halted to comply with a USACE order. The Department frequently shared the dredging costs in order to maintain navigability. Currently, the channel is often non-navigable and/or unable to transport irrigation water. The irrigation company has indicated continued interest in dredging to maintain access to river water, but they have been hampered by rising dredging and regulatory costs.

The Department Operations Manual (DOM) 0306.7 states, *"It is the policy of the Department to prevent the destruction, loss, or degradation of wetlands by ...avoiding direct and indirect construction and actions in wetlands unless the benefits of the facility or activity clearly outweigh the potential adverse impacts, there are no practicable alternatives, and the proposed action includes all practicable measures to minimize harm to wetlands."*

The proposed boat ramp in Colusa Levee Scenic Park is a practicable alternative to dredging the channel for navigation. Without dredging, the channel would likely continue siltation and natural succession would take place. Natural siltation of the channel is acceptable to the Department; however, if Roberts Ditch Irrigation Company were to resume dredging for irrigation, the existing boat ramp could potentially be used for shallow draft boats at times.

Recommendation: Goals and guidelines for channel management shall be flexible enough to allow the Department to respond to future scenarios beyond its control, such as the actions of the City of Colusa, State Lands Commission and Roberts Ditch Irrigation Company. The Department will not take actions to stop siltation or halt natural successional processes along the channel for the following reasons: the cost outweighs the public benefit, there are alternative locations for boating facilities, and natural processes should be re-established in the riparian corridor where feasible. The goals and guidelines shall provide guidance for negotiating access to State Park land to conduct dredging activities.

CLIMATE CHANGE.

Projected changes in precipitation and temperature over the next 40 years may affect natural resources in the Sacramento River watershed, according to [Our Changing Climate 2012.Vulnerability and Adaptation to the Increasing Risks from Climate Change in California](#) by the California Climate Change Center. For instance, temperatures statewide are projected to warm about 2.7°F, with more frequent, hotter and longer heat waves. The risk of wildfires may increase. A study by the California Climate Change Center in 2009 titled, [A Projection of the Cold Season Hydroclimate in California in Mid-Twenty-First Century Under the SRES-A1B Emission Scenario](#), projected the Northern Sierra to have 14% less precipitation by the middle of the 21st century, with 49% less snowfall. This suggests that more precipitation in the Sacramento River watershed may be falling as rain rather than snow.

These changes may affect the Park's natural resources in ways that are poorly understood and difficult to measure during the General Plan's 20 year planning horizon. For example:

- With less snowpack in the watershed, existing upstream reservoirs may store less water. Droughts may become longer and more severe. Demand for water supply to farms and cities may become more difficult to meet. State and federal agencies are considering several projects and strategies to increase water storage capacity in the system, which would drive changes in water delivery timing and quantity via the river channel.
- With increasing temperatures, many native plants and animals may no longer survive in their historic range. A re-sorting of habitat communities may occur as historic physical and biological alliances and associations are disrupted. For instance, cold water fish species such as salmon are threatened by warmer water in the Sacramento River. Marine-derived nutrients brought by returning salmon are an important component of the riverine food web, nourishing plants and wildlife along the riparian corridor, so reductions in salmon may mean reductions in riparian forest health and vitality. Interconnected habitat will become more important as species strive to adapt by moving their range. Plants and animals that are more adaptable may colonize ecological niches opened by declining species.
- With less snow and more rain, the Sacramento Valley may experience greater winter floods and smaller summer flows. Geomorphic river processes may be different than historic baseline data, leading to changes in erosion, sedimentation and consequently the habitats that depend either on stable geomorphology or periodic disturbance. Groundwater tables may drop enough to stress riparian trees such as willows, valley oak and cottonwoods.
- A greater risk of wildfire in the Park and in the larger watershed may threaten public safety more often and damage habitat. Erosion after fires may introduce more sediment into waterways, changing habitat for keystone aquatic species such as salmonids.
- With sea level rise reducing the size of public beaches, and reduced snowpack reducing snow-covered mountains and reservoir levels, recreational activities that now occur in these popular areas may be reduced or entirely displaced. Recreation areas along California's rivers may absorb a larger share of recreational activity that may negatively impact the natural resources.

All the examples above illustrate potential impacts, although there is a great deal of uncertainty associated with predicting specific impacts to this complex ecosystem at a particular future time.

Recommendation: The Plan shall provide both climate change adaptation and design strategies. Adaptation strategies are those which accommodate changes, such as preserving habitat linkages that allow species to adjust their range. Design strategies are those which reduce the impact of Park operations that contribute to climate change, such as encouraging human-powered boating and improving pedestrian access to reduce greenhouse gas production.

G. FACILITIES AND INFRASTRUCTURE DEVELOPMENT.

The scope of facilities and infrastructure planning will be at a program level for the purposes of the general planning and environmental review process. Most existing facilities were constructed in the 1960s-70s and are in need of upgrade and/or replacement. This section focuses on facilities for boating, entrance control, circulation, overnight accommodations, picnicking and river access; as well as utilities infrastructure.

BOATING FACILITY.

According to input gathered during the Master Plan and the DBW Local Assistance Grant application, there is strong demand, and robust business and local agency support, for a new boating facility that accommodates motor boats. Paid attendance at the Park drops significantly when the existing boat ramp is unusable, and local chambers of commerce report reduced business income, which reduces City of Colusa and City of Williams sales tax revenues. This input suggests that the boating facility is a primary generator of Park visitation. In a 2002 letter, the Colusa County Sheriff's office indicated that, *"a boat ramp must remain open at the City of Colusa to provide adequate emergency response for the Sacramento River"*, so public safety is perceived to be compromised by the limited availability of the existing ramp.

According to the Colusa Subreach Background Report, DWR geologists analyzed the hydraulic and geomorphic characteristics of the area and concluded that the best location for a boat ramp is at the CHANNEL mouth. The City of Colusa owns the adjacent Colusa Levee Scenic Park where a new two-lane boat ramp and small entrance station are now planned; however, there is insufficient space in the city park for support facilities. The City and the Department are discussing design options for new parking, a restroom and fish cleaning station on State Park property close to the boat ramp. A Construction Operating Agreement between the City and the Department, approved in 2006 and amended in 2008, describes the partnership responsibilities (Appendix G).

The total project cost and parking lot size are important factors used to determine project feasibility under DBW Local Assistance grant rules. The total cost of the facility is not yet known, so early designs included a large parking lot to meet peak demand, which occurs on several weekends during spring striper and fall salmon runs. This early design used more than half of the available land in the SOUTHEAST PARCEL and required demolition of the existing Entrance Station, campground, the group picnic site and restrooms. Paving so much of this core area to accommodate a short season would reduce the area's usability and desirability for other recreation activities the rest of the year.

In addition to the City's boating facility, small human-powered boat launches should be considered for kayaks, canoes, rafts, etc. A northern put-in would best serve boaters who prefer the slower, more scenic Colusa Subreach and points north. The river becomes faster, narrower and deeper just south of the Park, so a southern pull-out would improve safety. According to DBW research, higher visitor use is correlated with ease of vehicle access to deliver boats. Providing boat rental services in the Park may also increase use.

Recommendation: The Plan shall include sufficient nearby parking and restroom facilities to support operation of the proposed City boat ramp; however, parking shall not be designed to accommodate peak boating demand. The parking design should provide for multiple functions such as en-route camping, and outdoor educational and community events. The City's proposed entrance station may be constructed at 10th and the levee (see discussion below). The Plan shall include human-powered boat launching and landing access in the RIPARIAN AREA and/or CHANNEL. Provide nearby parking, restrooms, Sacramento River Boating Trail information, boat rentals and camping, if feasible.

PARK ENTRANCE

Existing Conditions. 10th Street is the current vehicle entrance to the SOUTHEAST PARCEL with the entrance station in the floodway. The existing entrance station doesn't serve the rest of the park. Colusa County's Roberts Road is located on the levee crown bisecting the SOUTHEAST and SOUTHWEST PARCELS, connecting 12th Street on the south and Highway 45 on the north. The levee crown roads are narrow, but protected from flooding. Access to the RIPARIAN AREA, RESTORATION PROJECT and SOUTHWEST PARCEL is from Roberts Road, but these areas are currently gated to restrict vehicles. There is a signalized intersection at 10th and Market Street (Hwy 20 and 45), two blocks south of the existing vehicle entry, which facilitates vehicle access to the SOUTHEAST PARCEL. Because of this signalized highway crossing, the best pedestrian connection between the Park and city neighborhoods, schools and parks is along 10th Street.

Reasons to change. Relocating the existing vehicle entrance is being considered for the following reasons:

1. Funneling all traffic through one entrance point will increase visitor contact, security, safety and fee collection while minimizing staffing costs. Appropriate fees should be collected fairly from all visitors, and having one location for payment reduces staffing costs. Increasing revenue while reducing labor cost makes operating the park more economically feasible.
2. Making contact with all visitors provides an opportunity to share information and rules of conduct. The safety of Park visitors, and security of Park facilities and sensitive natural resources, especially in the northern reaches of the Park, is enhanced by controlling vehicle access.
3. Relocating the entrance station outside the floodway will allow year-round use and eliminate maintenance after flood events. The facility could serve more administrative functions with the installation of a permanent office.
4. Controlled vehicle access to the RIPARIAN AREA, RESTORATION PROJECT and SOUTHWEST PARCEL must be improved for visitor activities and facilities to be expanded. Because of regular flooding in the SOUTHEAST PARCEL, the entrance road must bypass this

area or be raised above flood level. Controlling vehicle traffic will reduce speeds and potential accidents on Roberts Road, improving safety for visitors in the SOUTHWEST and SOUTHEAST PARCELS.

5. Access to the SOUTHWEST PARCEL's maintenance yard must be available year-round, and not subject to flooding.
6. The County of Colusa plans to install a long distance bikeway along the full length of the levee that connects to the City of Colusa's Levee Scenic Park. Controlling vehicle traffic will reduce speeds and potential accidents, making this bikeway safer.
7. The proposed City boat launching facility will increase truck/ boat trailer traffic in the southeast area of the park, with boat loading/unloading and inspections, backing up and other maneuvering tactics. The City has proposed a new entrance station adjacent to the levee at 10th to serve the City's planned boat ramp, which should be adequate to serve this use. As the Park develops further, however, relocating entry traffic away from this facility will minimize conflicts with this intense use, and minimize traffic stacking on city streets, especially during peak periods.
8. The City of Colusa Economic Development Plan calls for mixed use 2-3 story buildings in the Downtown Gateway, Riverfront District and Downtown General adjacent to the park. Redevelopment will affect vehicle and pedestrian access routes, and traffic levels. The City has proposed a pedestrian-friendly festival marketplace at 10th and Main Street which would increase pedestrian traffic in this area. Minimizing through vehicle traffic on 10th between Main Street and the park will minimize pedestrian/vehicle conflict, improve safety and give the city more opportunities to create a continuous Riverfront District.
9. Separated pedestrian and bike access from the signalized intersection of 10th and Market Streets to park facilities will improve safety, especially during peak boating season, large events and as the City's economic development plans are implemented. There may be insufficient room at 10th Street because of the proposed boat launching facility, historic bridge artifact, existing buildings and Highstreet Trailer Court driveway access.

Design goals. Relocation of the Park entrance shall be designed to:

- increase visitor contact and fee collection at one entrance station protected from flooding
- serve the City's planned boat launch facility
- improve access to the northern area of the park
- be cost effective to permit, construct and maintain
- minimize large vehicle traffic on narrow levee crown roads and/or levee widening
- provide year-round access to the SOUTHWEST PARCEL
- improve pedestrian connections between the park and the town
- enhance visitor safety, security and resource protection
- allow efficient staffing and enhance fiscal sustainability
- maintain access for levee maintenance, flood fighting, irrigation pump maintenance, emergency vehicles and farm equipment
- consider the City's transportation system, land use and redevelopment plans
- accommodate the City and County's long-distance bikeway
- comply with DWR, CVFPP and USACE's detailed guidelines and restrictions regarding facilities and roadways on and near the levee, and in the floodway

Entrance options. Due to regular flooding in most of the Park, all entrance station options that have been considered are located outside the Park boundary, as follows:

12th Street: Construct a new entrance station on 12th Street near Levee Street with access from 12th Street.

- Direct access to the existing maintenance yard and proposed RV campground would be provided that is not subject to flooding. More of the levee crown could be used for an off-road bicycle path. RVs and truck/boat trailers could be routed off the levee right after the entrance station, so levee traffic would be minimized. The levee portion of Robert's Road north of the core area could become a park road with Class III bike route, providing controlled access to the RIPARIAN AREA and RESTORATION PROJECT.
- Raising this intersection to the top of the levee would provide a level area for the entrance station. Levee crown road widening could be as little as about 200 linear feet, which would be less costly than other options. Because this corner section of the levee is already more reinforced by additional levee fill and is a current levee access point, this may provide the best opportunity in terms of regulatory permitting.
- This is the best location for entrance station staff to observe all core park facilities and the levee access road, greatly improving security, safety and efficiency.
- This option could potentially be implemented within the existing road rights-of-way (12th is 100' wide and Levee is 110' wide) without land acquisition. This reduces project cost and complexity. Levee Street could potentially become a one block long street that ends at 12th or it could potentially be used as an exit.
- Signage can direct visitors from the intersection of Hwy 45 and 20, as this is the best location for Hwy 45 southbound visitors to turn left and the most visible intersection in town for tourists.
- There are two homes on mixed use parcels (per the City's General Plan) along 12th Street between Main and Levee Street, and one home on the industrial parcel at Hwy 45 and Levee Road. The increased traffic is projected to remain well below the City's residential street standards, according to the traffic analysis in Appendix K.

Levee Street: Construct a new entrance station within the 12th and Levee Street intersection right-of-way with access from Levee Street.

- This option provides most of the benefits of the 12th Street option above.
- Because the street is only one block long, it could cause a backup of waiting trailered boats on Highway 45 during peak times. Left turns for Hwy 45 southbound visitors would likely require a long left turn lane. These visitors would not need to enter town.

Roberts Road north: Construct a new entrance station where Robert's Road approaches the levee from the north.

- Hwy 45 southbound traffic doesn't need to enter town and can turn left at the existing left turn lane. Hwy 20 and Hwy 45 northbound traffic must make a sharp right turn. Traffic visibility is excellent, as is queuing space for vehicles awaiting entry.
- All park traffic, including truck/boat trailer and RVs, must travel on the levee crown road. Widening about 1,500 linear feet of the levee to accommodate this traffic would be costly.

- The County's proposed off-street bicycle path would need to be located off the busy levee crown, possibly becoming a natural surface trail at the riverside levee toe.

Other options along Highway 45: A new entrance road with entrance station between Levee Street and Roberts Road along Highway 45 may be feasible.

- This option will require acquisition of industrial or agricultural land from willing sellers. Funding for California State Parks' acquisition program is limited and may take many years, which may delay construction of some recreational facilities.
- A left turn lane off Highway 45 would be necessary.
- If access was acquired through the industrial parcel, all park traffic would be routed through the proposed RV campground, reducing the potential size of this facility. If access was acquired through the walnut orchard, the levee would need to be widened for 800 to 1,000 linear feet to accommodate all park traffic.

Exit/ Secondary Entrance Options. Consider secondary access/egress points to provide maintenance and emergency access for fire/police/ambulance and improve traffic flow during peak periods. These access/egress points are unlikely to be regularly staffed:

- Northbound Roberts Road.
- 10th Street. This may relieve congestion at the City's boat launching facility during peak periods and reduce boating traffic in other areas of the park.

Phasing. The General Plan provides long-term guidance for development and management of the Park. The City's proposed 10th Street entrance station can adequately serve the SOUTHEAST PARCEL and proposed boat ramp in the short term. Other facility development is likely to occur over many years, depending on priorities and funding. Factors that are likely to compel entrance relocation in the future might include:

- Construction of visitor facilities in the SOUTHWEST PARCEL or on land acquired for RV camping.
- Traffic congestion at the 10th Street entrance, due to implementation of the City's boat launching facility, further development of visitor facilities in the SOUTHEAST PARCEL and/or implementation of the City's Economic Development Plan
- Opening the RIPARIAN AREA and RESTORATION PROJECT to vehicles
- Colusa County or City's implementation of their bicycle path plans

Recommendation. Collaborate with the City and County of Colusa, DWR and CalTrans to relocate the Park entry. A new 12th and Levee Street entrance station with access from 12th Street seems to be the most cost-effective and feasible solution to allow further development of the Park. The Plan shall provide guidance on phasing, traffic management, and measures to avoid or reduce significant impacts. Work with the City to improve pedestrian and bike access from the signalized intersection of 10th and Market Streets to Park facilities.

PARK CIRCULATION.

Reconfiguration of the Park's roadways and trails could better serve the City's planned boating facility, support local planning efforts, increase revenue collection and security, and improve access to the RESTORATION PROJECT and RIPARIAN AREA. This analysis is closely linked to the Park

Entrance analysis above, as solutions to both issues must be planned together. The following factors are being considered:

- The City and County of Colusa plan a long distance bikeway along the levee, including the area within, and adjacent to, the Park. Park trails could connect to this proposed bikeway, potentially forming several nature observation and recreation loops that provide access to the river and Park facilities.
- The portion of Roberts Road on the Sacramento River levee is currently the only all-weather vehicle route that connects the Park property together. An exit-only road or gated maintenance road connecting to the northern segment of Roberts Road may help improve traffic flow.
- The northerly channel bank has been regularly disturbed by dredging; a road or trail there could provide the most direct river access from the Park's core area.
- Connecting the planned Farms and Forest Heritage/Cross-California Ecological Corridor along Highway 20 to the Park will support the California Recreational Trails System by improving bicycle tourism facilities.
- Public or park roads should not cut through a campground.
- Roads, trails and parking areas should avoid vegetation planted in the RESTORATION PROJECT. The popularity of the Sacramento National Wildlife Refuge driving tour suggests that a loop road through this area may encourage more visitation.
- The CVFPP and USACE have detailed guidelines and restrictions regarding facilities and roadways on and near the levee, and in the floodway.
- Access for levee maintenance, flood fighting, irrigation pump maintenance and farm equipment movement must continue to be provided.
- Roadways north and east of the levee are subject to regular flooding.
- All-season access to the maintenance yard should continue.

Recommendation: Re-organize Park roadways and trails to separate pedestrians from vehicles, direct vehicles through one entrance station, accommodate planned bicycle infrastructure and provide convenient access to recreational activities, while maintaining all-weather access to the SOUTHWEST PARCEL.

OVERNIGHT ACCOMMODATIONS.

There are indications that a greater number and diversity of camping and overnight lodging facilities are needed than the 12 small campsites that exist. Some of these indications are as follows:

- DWR's 1980 Sacramento River Recreation Survey reported that about half of visitors to the Sacramento River area stayed overnight an average of 3.6 days. Between Chico Landing and the Meridian Bridge, 48% of visitors participated in camping and 63% in power boating. This suggests that campsites or other overnight lodging near a boat launch may be particularly popular.
- By 1999, the Sacramento River Conservation Area Memorandum of Agreement was endorsed by eleven agencies, including the USACE, DWR, CDFW, California State Parks and Colusa County. The agencies endorsed the goals of the 1989 Upper Sacramento River

Fisheries and Riparian Habitat Management Plan. The 1989 document includes this excerpt on page 29:

3. Public Access

Limit and control access onto public lands. The Riparian Conservation Area is primarily for the preservation of riparian habitat for wildlife. Human activities must be directed to those areas where they will incur the least environmental impact. Trespass could be minimized by:

- a) Providing adequate law enforcement personnel to patrol public lands*
- b) Public education*
- c) Developing a recreation plan for the Sacramento River*

- Agency signatories to the above-mentioned 1999 MOA also agreed to the goals and principles of the SRCA and the 2003 SRCA Handbook. Public education and outreach is one of the recommended actions in the Handbook, including providing workshops and interpretive programs, and highlighting the importance of providing adequate river access opportunities.
- The 2002 Sacramento River Public Recreation Access Study recommends more developed and primitive campgrounds be provided in the area. The study notes that the Sacramento River National Wildlife Refuge (71,514 visitors in 2011) and Sacramento River Wildlife Area (12,000 estimated visitors annually) hold the majority of public land along the river, yet are unlikely to provide camping facilities.
- The 2004 Sacramento River National Wildlife Refuge and Wildlife Area MOU was endorsed by USFWS, CDFW, and California State Parks. Regarding public use, the agencies agreed to, among other things: “Coordinate to provide public use opportunities that are consistent with the goals and needs of the agencies and their respective public”, and “Promote mutual environmental education and special event opportunities.” Access to many of these public lands is by boat only, and the State Recreation Area has land acquired for recreational use, facilities to enable that access, and the mission to educate and create “opportunities for high quality recreation”.
- California State Parks statistical records show that the Park hosted between 5,775 and 9,153 camping nights annually from 1996 to 2008. The campground often reached capacity during the April through September peak camping season. Both camping and boat launching activity was reduced after 2008. According to these figures, camping attendance seems to be somewhat correlated with boat launching activity (Table 2.2).
- The 2009 California State Parks Central Valley Vision Implementation Plan calls for 40 campsites at the Park. A *Base Camp Strategy* was proposed to leverage the resources of various agencies, such CDFW and BLM, to increase access to public lands while minimizing services and facilities cost, as well as environmental impacts.
- The 2011 study Alternative Camping at California State Parks recommends that more alternative camping facilities such as a cabin, tent cabin, cottage, yurt or floating campsites be provided in the system.
- Available campsites in the State Park system do not come close to meeting the demand. California State Parks Statistical Report for the 2011/12 Fiscal Year indicates that there are 14,068 individual/family camp sites, 353 group camp sites and 709 other overnight facility structures statewide. According to the 2002 State Park System Report, anticipated 2020 demand is about 20,000 sites statewide.

- The 2012 Central Valley Flood Protection Plan adopted by the Central Valley Flood Protection Board recommends multi-benefit projects along rivers, including those that improve public access.
- The Department's 2013-14 Strategic Action Plan directs a consideration of ways to increase mission-consistent revenue that supports long-term fiscal sustainability, which more overnight accommodations would provide.
- With little nearby camping or lodging opportunities, City staff reported that the Colusa Fairgrounds parking lot accommodates many recreational vehicles overnight during duck hunting season.

There is a significant demand for camping with RV hookups to serve regional recreation users desiring or needing climate controlled accommodations and refrigeration. Waterfowl watching and hunting is primarily a wintertime activity in the region, and summertime temperatures often reach 100-110°, so refrigeration, heating and air conditioning are desirable amenities.

Based on the above information, input from the City of Colusa and the Department's experience with camping management, the following types of overnight accommodations should be considered at the Park:

- Individual developed campsites, for rigs up to 45 ft. long, inside and outside the floodway. Provide RV hookups outside the floodway for year-round use. Provide some joint facilities for extended families and groups.
- En-route RV parking with no utilities
- Developed tent camping sites
- Boat-in primitive tent camping on natural beaches and/or near developed boat landings
- Primitive group camping (no utilities or permanent facilities), to host outdoor interpretive and education events such as scouting programs
- Other types of overnight accommodations, such as cabins outside the floodway.

The City's proposed boating facility will increase demand for overnight accommodations at the same time as it will increase demand for nearby boat trailer parking (see Boating Facility discussion above). Because the existing campground is so popular, some camping should remain in the SOUTHEAST PARCEL, relocated away from the busy boat ramp. It may be necessary to acquire more land or place camping facilities in several locations to accommodate existing and future demand. Partnerships with the City and/or private businesses may also help to provide sufficient overnight accommodations for Park visitors.

Recommendation: The Plan shall provide for overnight accommodations in several locations to increase capacity, provide choices for overnight accommodations and improve the recreation experience of overnight visitors. Individual developed and enroute camping shall be provided in the SOUTHEAST PARCEL. Design clear separations to minimize conflicts between day users and overnight users. Primitive group tent camping shall be provided in the DWR RESTORATION PROJECT (as per agreement) and the RIPARIAN AREA. Management policies for individual camping on sand and gravel bars within the RIPARIAN AREA shall be made available to boaters. Individual developed camping with RV hookups shall be provided outside the floodway to accommodate visitors year round. Overnight facilities for hunters shall be provided, and policies shall be posted, such as those regarding firearm possession and fresh game handling.

SOUTHWEST PARCEL. There is a long history of planning for camping on this parcel, as follows:

- The SOUTHWEST PARCEL was transferred to the Department from the Reclamation Board (now CVFPB) in 1957; however the deed indicated that the Board reserved “*the right to excavate and remove material, the right of access and mineral rights.*” Most of the site was excavated as a borrow pit, leaving a small grove of trees near the center.
- An April 17, 1975 letter to the Reclamation Board from the Department’s Program Management and Special Services Branch (Appendix N) states,
Parks, at the request of the City of Colusa, is considering the development of an all-year campground within Parcel 1. This area, being on the city side of the levee, should not be affected by the high waters of the Sacramento River during the winter months as the existing park day-use and campgrounds are now affected. The development of the all-year campground would produce additional income for both the park and the merchants in the city from users of this campground. The concept of an all-year campground at this state park is also a recommendation of the Preliminary Sacramento River Boating Trail Report.
For the reasons stated above, Parks requests The Reclamation Board to release to Parks all its interests in Parcel 1.
- On July 22, 1975, The Reclamation Board relinquished all except mineral rights for this reason, per the deed amendment dated May 23, 1975 (Appendix N). Between 1982 and 1988, the site was used as a dirt and leaf landfill by the City of Colusa. In 1988, the California Waste Management Board asked the City to apply for a permit for the facility; however, the City decided instead to cease operations.
- The 2006 Fiscal and Economic Impact Analyses Colusa Subreach Final Report, 2007 Colusa Subreach Recreation Access Study and 2008 Colusa Subreach Planning Final Report indicate that this State Recreation Area is the best place in the Subreach for increased recreation access and education. Several describe a campground in the SOUTHWEST PARCEL.
- The 2007 Colusa-Sacramento River State Recreation Area Master Plan recommends that 34 full-service campsites be developed in the SOUTHWEST PARCEL.

Recommendation: This Plan shall prioritize the acquisition of land outside the floodway to provide all season camping; however, if land acquisition is infeasible when the existing campground is impacted by boat ramp parking expansion, an RV campground shall be allowed in the Southwest Parcel. Refer to Natural Resources Management section above for additional recommendations.

PICNICKING.

Picnic facilities shall be expanded, including into the RESTORATION PROJECT and RIPARIAN AREA. The following types of picnic facilities are appropriate:

- Individual picnic tables with a grill
- Individual picnic tables without a grill in high fire danger areas
- Double or triple picnic table sites with a jumbo grill for extended families or small groups
- Large picnic shelter suitable for large gatherings including weddings.
- Rustic group picnic site suitable for scout gatherings and heritage re-enactments. This could be combined with a primitive group camping site.

Recommendation: Provide diverse picnicking facilities suitable for families, small and large groups in both developed and natural settings.

RIVER ACCESS.

Access to the Sacramento River is currently limited in the Colusa Subreach and downstream. The existing access points require visitors to climb steep, unstable banks or levees reinforced with large rocks. This creates a safety hazard and barrier, especially for persons with mobility challenges, and children.

Recommendation: Provide several points of river access for fishing, wildlife observation and beach activities.

UTILITIES.

Development of utilities within a dynamic river floodway, such as water supply, wastewater and stormwater disposal, and electrical service infrastructure, face unique design, regulatory and maintenance issues. Properly designed utility systems will limit damage to park facilities, prevent floodway obstruction, tolerate inundation, accommodate some erosion and siltation, and minimize maintenance to allow public access in a timely manner when flood waters recede. These special considerations often increase complexity, cost and construction duration of the project. Construction periods within the floodway are restricted by regulated seasonal closure periods, often up to 6 months, therefore substantially increasing time to completion.

Due to the previous use of the SOUTHEAST PARCEL as a landfill, trenching, excavation and underground facility installation will most likely require alternate and/or additional equipment, material, labor and time for uncovering, testing, removing and disposing of debris.

The existing park contains utilities which did not include special consideration for flooding and/or have reached their life expectancy, which require extensive ongoing repairs:

- The domestic water system has exceeded its life expectancy, needs frequent repairs and does not comply with current health regulations.
- Wastewater is disposed of and treated on-site by conventional septic systems. In the floodway, this method presents the potential of flood water intrusion into tanks and /or saturation of leach fields causing failure and sewage overflow. The systems are in excess of 50 years old, well past life expectancy. Current regulatory requirements would most likely prevent a like-kind replacement.
- Stormwater disposal is currently accomplished by surface drainage into a channel with a single inlet/culvert draining a portion of the overnight camping area. Flooding deposits silt and debris, causing facilities such drainage inlets and culverts to become clogged.
- Electrical facilities in the park are currently supplied by underground service from the above ground service main. Although the current design and location of the electrical system complies with flood protection, the system is at maximum capacity for servicing

existing facilities. Most of the system included galvanized conduit and wiring that has exceeded its life expectancy and cannot be utilized for future development.

Recommendations: A new underground water distribution system shall be installed to support existing and new facilities within the park. The sewage system supporting new facilities shall include disposal into the City of Colusa sewer system, with treatment outside the levee. Surface drainage towards the river shall be improved through proper site grading design. Best management practices such as sedimentation basins shall be considered for intercepting silt, vehicle oils, and other contaminants before they enter wetlands. Site design shall also consider silt removal equipment and methods to accommodate efficient cleanup after flooding. A new above ground main electrical service and underground distribution system shall be designed and installed to support future planned development.

H. PARK REVENUES, OPERATIONS AND MAINTENANCE (O&M).

This section highlights several issues to consider that affect Park revenues and expenses, consistent with the Department's current focus on Park-based budgeting and increasing mission-compatible revenue-generating activities. The Department is currently striving to reduce the gap between the income generated at park units and their O&M costs.

Fees. Parking, camping and boat launching fees have been the primary revenue generating activities at the Park. With the existing boat ramp unusable most of the year, visitation and revenue since 2007 has been significantly curtailed. Attendance figures show that only about 20% of day use visitors paid a parking and/or boat launching fee. Visitors can easily find free parking along public streets next to the Park, or they bicycle or walk into the Park from adjacent neighborhoods and Colusa Levee Scenic Park. Camping revenues are relatively low because only 12 small campsites are available, there are only a few utility connections, and amenities are limited.

Staffing. Currently, the Department has no staff assigned exclusively to this unit, due to budget limitations. District and Sector staffs work out of the Oroville and Chico offices, respectively. The SOUTHEAST and SOUTHWEST PARCELS are currently operated by the City of Colusa through a five-year (2011-2016) Operating Agreement (OA). The City collects the revenue, and provides staff, camp hosts and equipment to maintain and manage visitor use in the core area of the park. Increased public use will require more active management and increased staffing.

Annexation. The City is considering annexing the Park property as it is currently outside, but adjacent to, the City limits. This would extend City police and fire service, and allow the Park to connect to City sewage. District personnel and the Department's Legal office may be supportive of the annexation concept if it improves services with less cost; however, details will need to be negotiated.

Operating Agreements. In addition to the OA, there is a Construction Operating Agreement (COA). Amendment No. 1 of the COA (see Appendix G) between the Department and the City, states, "WHEREAS, City must operate and maintain the boat launching facility for 20 years after Project construction is complete...the Parties shall enter into a 20-year operating agreement for operation and maintenance of the Boat Launch Ramp, Adjoining Road, and parking lot at the completion of the Project...". Boat launching fees are set based on O&M costs for the boating facilities and subject to the DBW grant manager's approval. The City's boat launching facility is expected to increase Park

visitation, which is likely to increase the State's operation and maintenance costs. New revenue sources may be necessary to offset this additional cost.

Since the Plan strives to guide sustainable operations, future operating agreements should consider how to best leverage revenues to increase public safety, improve visitor services, and enhance resource management throughout the Park. Potential management scenarios for the 20-year operating agreement include:

- A. The Department manages the entire Park, including operating the City's boating facility.
- B. The Department manages the entire Park, with a concessionaire providing visitor services.
- C. The City operates the boating facility while the Department manages the rest of the Park.
- D. The City manages the entire Park.

Camping. Campgrounds are relatively expensive to operate due to the need to provide daily housekeeping, maintenance, administration and public safety services. The numbers and amenities of campsites are used to determine the potential revenue, with more full-service sites having the potential to generate more revenue. A cost-benefit analysis would estimate whether camping fees would be sufficient to cover the O&M costs. However, camping may increase other revenues, such as increasing paid use of the boating facility, and is an important recreational activity that no other agency is currently providing in the region. Feasibility decisions should not rest solely on a camping cost-benefit analysis.

Concessions. A permanent facility that can house an activity center, such as an on-site food service, boat and bicycle rentals, visitor information and/or special event center, may generate mission-compatible revenue. The best locations for such a facility are protected from flooding, provide scenic views of the river, and are easily accessible by vehicle. Unfortunately, no such location exists in the Park. If Roberts Ditch Irrigation Company chooses to abandon the pumping station and sell the site, it may be suitable for a permanent activity center. Seasonal concession services may be feasible in the SOUTHEAST and SOUTHWEST PARCELS.

Partnerships. Expanding partnerships with other organizations for year-round overnight accommodations outside the Sacramento River floodway and/or interpretation facilities could help the Department meet its mission more cost-effectively. Agencies, schools, public benefit and tribal organizations, and the business community could lend information, funding, staffing, land and/or technical expertise to a collaborative process that utilizes each organization's strengths to benefit the public.

Recommendations: Complete a management and cost/benefit analysis that estimates the expected revenues and O&M costs of the Park after construction of a new boating facility, to assist the City of Colusa and the Department with setting appropriate fee levels, establishing responsibilities, and informing appropriate cost-sharing for the 20-year Operating Agreement. Complete a cost/benefit analysis for overnight accommodations. Mission-compatible concession opportunities shall be pursued. Explore more collaborative management structures, potentially involving multi-agency agreements and collective decision-making on facilities development, public use, land transfers, and easements, to maximize public benefits and reduce costs.

I. COMMUNITY CONCERNS AND INPUT.

The Colusa Subreach and General Plan public meetings and other outreach efforts inform the decision-making process. Community concerns and input to date are summarized below:

- The Park is the best place in the Colusa Subreach to increase recreational use.
- Increased public access to public lands and restoration of wildlife habitat is of concern to some adjacent property owners. SRCAF's "Good Neighbor Policy" was referenced. Litter, poaching, theft, vandalism, trespass, dust and stuck/abandoned vehicles may affect adjacent private landowners, including farm properties.
- Existing boat ramp is critically needed for river access, but must be dredged to be usable.
- Non-motorized boat access should be accommodated.
- Historic use of the channel for irrigation water should continue, but it needs regular dredging.
- Park operations and maintenance are minimal and apparently underfunded. Safety and proper maintenance are of primary concern. More lighting is needed along with updated payment systems.
- There is a desire for more amenities to draw visitors to town to positively affect economic conditions. Add signage on the highways to improve visibility.
- More access to the river's edge is needed; however, planning should address how the river changes over time. Children now scramble down the levee revetment to fish and play.
- High priority recreational activities are motor boating and human-powered boating, fishing and wildlife observation, outdoor education, picnicking and day use, and beach activities. There was general opposition to hunting. More camping should be accommodated, especially near the river.
- Vehicle access and more parking should be considered, however siltation may be a problem in flood prone areas. Use topographic contour lines to minimize flooding impacts and utilize moveable facilities.
- Engage Colusa's large Latino community in planning facilities and programs.
- Provide more active recreational facilities like a hiking/running trail, bike trail, dog-walk amenities, fitness and play equipment.
- The history of Colusa's native peoples and early Chinese residents should be told.
- There was general consensus on the Master Plan concepts and facilities, but concern that the Department wouldn't be able to adequately maintain or patrol the Ward Tract addition.

In June/July 2014 outreach efforts to discuss the three alternatives, high recreation use was the clear favorite of local agency staff, community leaders and the public. However, many concerns were expressed over the recommendation to relocate the main vehicle entrance and reconfigure traffic circulation, as follows:

- Moving the entrance from its current location is unnecessary and costly.
- Don't close the levee road (Roberts Road) as it is needed for fire/police/ambulance, irrigation pump and residential access.
- The levee road is too narrow to handle RVs, pedestrians and bicycles.
- Preserve and extend the very popular levee bicycle and pedestrian path.
- Don't add more traffic to 12th Street or close Levee Street. There isn't enough room and it will impact residents.

- The intersection of Hwy 20 & 45 is signalized and is the safest place for left turns.
- Pedestrian access into the park should be improved.
- Local residents prefer to maintain free access.

NOTE: Due to the concerns expressed by several members of the public, additional research and analysis was conducted. More information about the entrance relocation recommendation is provided in:

- Chapter 3 Facilities and Infrastructure Development provides existing conditions and analysis.
- Chapter 4 Parkwide Goals and Guidelines for Visitor Facility Planning provides guidelines for vehicle circulation and entrance reconfiguration.
- Chapter 5 Environmental Impacts and Mitigation for Transportation/Traffic analyzes the potential environmental effect.
- Appendix K includes a detailed traffic study.

CHAPTER

4



CHAPTER 4: THE PLAN

The General Plan establishes a unique long-range purpose and a vision for Colusa-Sacramento River State Recreation Area which supports the Department's mission, system-wide goals and the Park's classification. The goals and guidelines in this plan provide guidance on how to achieve the Department's approved purpose, vision and management intent for these zones and the Park as a whole. They were developed to address known planning issues while providing a strong foundation for resource protection, visitor management and interpretation of the Park. The goals and guidelines also provide a framework for subsequent planning and development for the Park's various elements. Specific management zones described in the plan are used to clarify the management intent and desired visitor experiences for various areas of the property. This section presents both Park-wide and Management Zone goals and guidelines.

The terms, "*goals*" and "*guidelines*" are defined in the California State Parks Planning Handbook:

Goals: 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 that are involved in the attainment of the goal.

Guidelines: General set of parameters that provide direction for accomplishing goals. These are strategies used to achieve the goal. There are many ways to meet the Plan Goals which are not included in the guidelines below, because they are required by law and policies, or are not currently foreseeable or feasible. These guidelines describe site-specific strategies which are expected to help meet the goals. Where application of the guidelines does not help meet the goals, they should be reconsidered. The goals take precedence over the guidelines.

Goals and guidelines are supplemented by, and must not conflict with, numerous policies and regulations which guide the management of every California State Park unit. Policies and laws take precedence over the Plan goals. Park management is guided by the State Constitution, state and federal laws and regulations, proclamations, executive orders, and the California Code of Regulations (CCR). The department has adopted a series of policies that are housed within the Department Operations Manual (DOM). Policies that are helpful for CEQA analysis of this Plan are listed in the relevant sections of the Plan.

Under CEQA, the department is a lead agency. Because the Department also has stewardship, or trustee, responsibilities, there are actions to protect both cultural and natural resources in this general plan, as well as projects that are allowable under this general plan.

The State Park and Recreation Commission has also adopted policies for promoting physical activity, managing primitive roads, undergrounding utilities and riding bicycles in park units (<http://www.parks.ca.gov/pages/843/files/CommissionPolicies10-21-11.pdf>).

A. PURPOSE AND VISION (PROPOSED)

The purpose and vision of a state park serve as the framework for future management decisions. They are related, yet distinct, planning concepts that provide a context and direction for future planning efforts. These concepts are described in more detail in Chapter 3.

DECLARATION OF PURPOSE. The purpose statement describes the unique role that the Park will play in meeting the California State Parks mission. The Declaration of Purpose for the Park is as follows:

The purpose of the Colusa-Sacramento River State Recreation Area is to make the passive and active recreational opportunities which are offered by the Sacramento River and its river bank available to all people; and to protect and enhance the riparian and riverine environment while accommodating changing hydrologic conditions and the successional processes which occur in the Colusa Subreach.

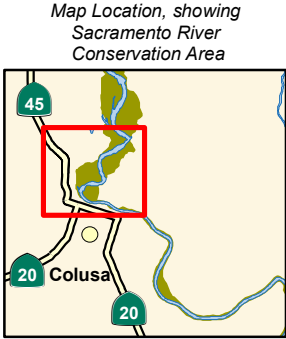
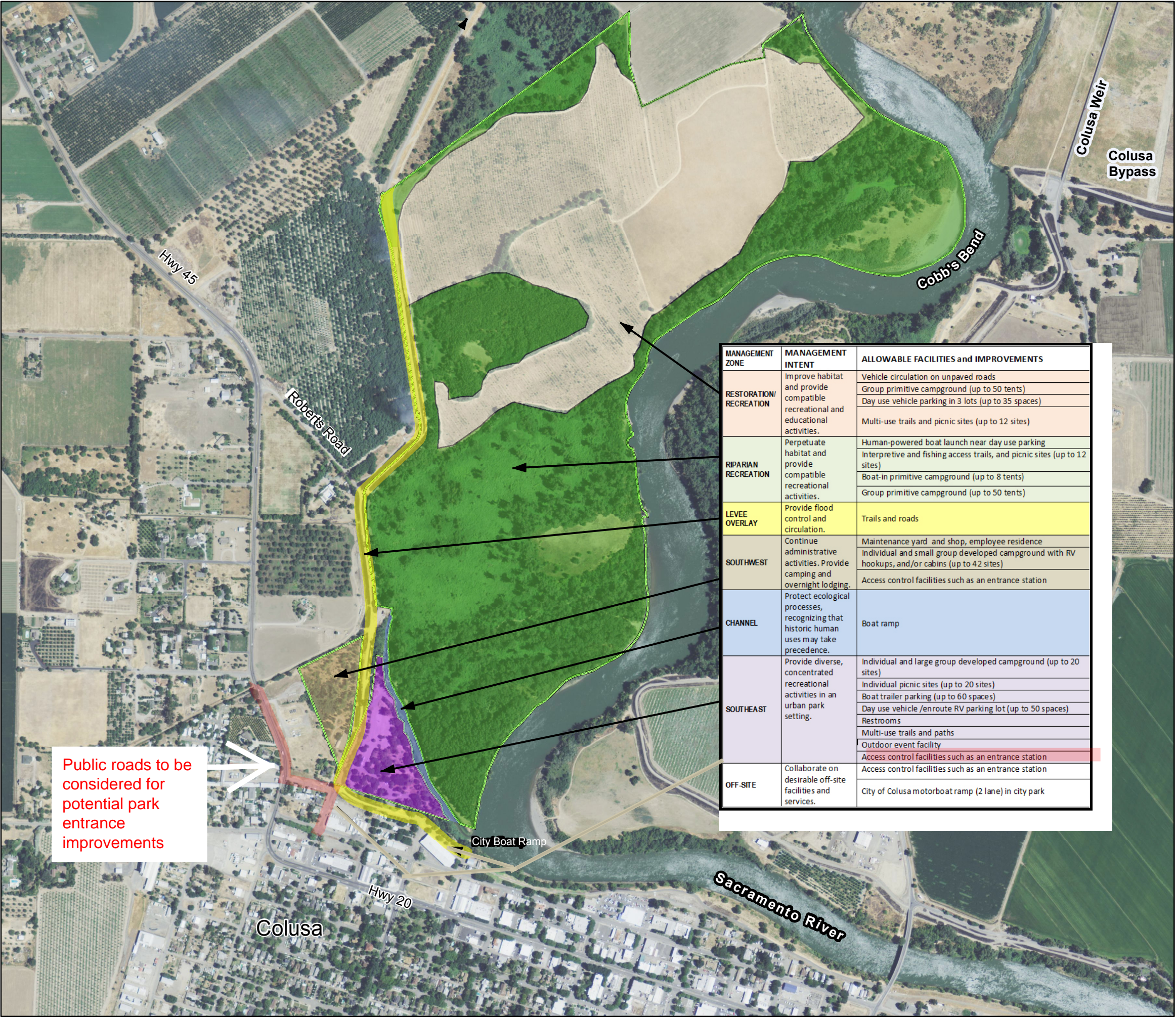
VISION STATEMENT. The Vision Statement for the Park is a description of what the Park should ultimately look like, and how it should function, in the future. The Vision Statement is as follows:

The Park provides high quality recreational experiences consistent with the dynamic riverine environment of the Colusa Subreach of the Sacramento River. River access is provided to all visitors who enjoy activities such as boating, floating, fishing and beach activities. The Park and its recreational facilities encourage active, healthy lifestyles by offering walking, biking and paddling opportunities and other outdoor activities. The Park also offers passive recreational opportunities such as picnicking, camping and wildlife viewing.

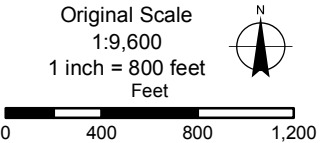
The Park holds precious remnants of the historically-extensive Great Valley Riparian Forest and wetlands which are ecologically important to the watershed, the state, and the international Pacific Flyway. The Park's floodway resources are protected and its biodiversity is enhanced over time. The river channel, riparian forest and grasslands are managed as a dynamic interconnected system driven by natural successional forces to the extent compatible with surrounding land uses and river flow management objectives. Park facilities accommodate flooding where prudent and minimize disturbance to habitat values.

Partnerships engage Californians in experiencing and learning about the dynamic nature of the Sacramento River watershed and the Great Valley landscape it nourishes, and the State's role in managing its abundant biodiversity, its water supply and its flooding potential. The Park's facilities and programs enhance regional recreational activities by offering year-round overnight accommodations, boat launching and landing facilities, event space, regional recreation information and long-distance bicycling infrastructure. The history and pre-history of the region are illustrated through living history programs, personal interpretation and various media, both on- and off-site.

COLUSA-
SACRAMENTO RIVER
STATE RECREATION AREA
DRAFT GENERAL PLAN
FIG 4.1: PREFERRED PLAN



Data Sources:
1) Levees - Sacramento River GIS.
2) Image: April, 2008, 1 ft. DWR Sacramento River Flood Control Project.



NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

NORTHERN
SERVICE
CENTER

GENERAL
PLAN
SECTION

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Calif. Dept. of Parks &
Recreation

DRAFT

B. MANAGEMENT ZONES

The purpose and vision statements above apply to the entire Park. This Plan also recognizes the diversity of resources within different areas of the Park unit. One tool that has been used to address area-specific management in other State Parks is establishment of management zones (MZs). The concept of management zones is used as a guide to categorize land use and resource management in areas of a Park unit that have common characteristics and would be managed similarly, differentiating them from areas where other management approaches are more appropriate. This section describes six MZs prepared for the Park, and a category for off-site facilities. More information, as well as MZ goals and guidelines are listed after the Parkwide Goals and Guidelines.

The location and extent of these Management Zones are illustrated on Figure 4.1.

RESTORATION/RECREATION MANAGEMENT ZONE (RESMZ)

Description: Encompasses DWR's restoration project planted in 2009.

Size: About 137 acres

Hydrology: Flooding averaging every 1-4 years up to 18 feet from river bed

Vegetation and Habitat Communities: Riparian Woodland Forest (Valley Oak Forest, Mixed Riparian Forest, Cottonwood Forest), Grassland Meadow

RIPARIAN / RECREATION MANAGEMENT ZONE (RIPMZ)

Description: Encompasses the mature, dynamic biotic communities north of the CHANNEL.

Size: About 205 acres

Hydrology: Flooding averaging every 1-4 years up to 28 feet from river bed

Vegetation and Habitat Communities: Barren/Gravel/Sand, Naturalized Riparian Wetland, Riparian Wash Scrub, Riparian Woodland Forest, Grassland Meadow

LEVEE OVERLAY MANAGEMENT ZONE (LOMZ)

Description: Encompasses the levee crown, slopes and toe buffer area.

Size: Defined by CCR Title 23.

Hydrology: Defines the floodway.

Vegetation and Habitat Communities: California Naturalized Annual/Perennial Grassland, Urban

SOUTHWEST MANAGEMENT ZONE (SWMZ)

Description: Encompasses the maintenance yard and former borrow pit outside the Sacramento River floodway.

Size: About 6 Acres

Hydrology: FEMA FIRM Zone X

Vegetation and Habitat Communities: Riparian Woodland Forest

CHANNEL MANAGEMENT ZONE (CHMZ)

Description: Encompasses the bed and banks of the former river channel.

Size: Defined by State Lands Commission.

Hydrology: Flooding almost every year up to 28 feet from channel bed

Vegetation and Habitat Communities: Water, Riparian Woodland Forest, Barren/Gravel/ Sand

SOUTHEAST MANAGEMENT ZONE (SEMZ)

Description: Encompasses the former City landfill and accreted land on the south bank of the former river channel.

Size: About 11 acres

Hydrology: Flooding averaging every 4 years up to 8 feet above land surface

Vegetation and Habitat Communities: Urban.

OFF-SITE FACILITIES (OFF)

Description: Potential City ROW, acquisitions and/or partnerships

Size: To be determined

Hydrology: FEMA Flood Insurance Rate Map Zone X (same as the City of Colusa)

Vegetation and Habitat Communities: Urban

C. PARK-WIDE GOALS AND GUIDELINES

The Park-wide goals and guidelines are organized into eight categories:

- Natural Resources Management (NRM)
- Cultural Resources Management (CRM)
- Recreational and Community Activities (RCA)
- Visitor Facility Planning (VF)
- Infrastructure (INF)
- Visitor Management (VM)
- Park Operations and Maintenance (O&M)
- Interpretation and Education (I&E)

The subjects are logically arranged to build on one another. Healthy natural resources (NRM) drew people (CRM) to the river's edge. The continuing desire to participate in activities (RCA) leads to development of suitable facilities (VF) and necessary infrastructure (INF). Proper management of these visitors (VM), as well as management of infrastructure and facilities (O&M), improve the visitor experience and protect the resources. Interpretation and education (I&E) helps people understand and interact appropriately with Park resources, as well as participate in resource conservation efforts. These subjects cannot be managed independently, as holistic management is necessary for successful implementation of the Park Vision.

NATURAL RESOURCES MANAGEMENT (NRM)

Wise stewardship of the Park's natural resources is crucial to retain and sustain its biological, historical, aesthetic, educational, and recreational values. Physical features and patterns form a dynamic natural resources system with complex, interdependent relationships. These relationships have been dramatically altered by human influences, so natural resources management attempts to reconcile human needs and desires with perpetuation of natural resource values. The river beyond the Park's borders is, and will continue to be, utilized for navigation, recreation, agricultural and urban water supply, as well as wildlife habitat.

The physical and hydrological patterns of the Sacramento River watershed are the most obvious influence on the Park's natural resources. For example, the natural dynamics of intermittent flooding, meander migration, erosion and sediment deposition help to maintain a healthy riparian ecosystem that provides crucial habitat for resident and migratory birds, fish and wildlife species. Water quality can be affected by every landowner, resident, visitor and business upstream. Fishery resources depend, in part, on society's commitment to ensuring healthy oceans and rivers, with adequate habitat and passage for anadromous species. Water levels, including the length and depth of flood inundation, depend in part, on agencies' water supply and flood management decisions, primarily driven by agricultural irrigation patterns throughout California. Invasive species can spread along the river from farmland, cities and public lands. Scenic resources can be disrupted by careless placement of structures and site modifications. All these human influences require that Department staff work closely with others to manage the watershed, monitor the Park for threats, and respond to changes.

Not only does the watershed affect the Park, but Park management affects the watershed. The health of the Park's vegetation and habitat communities can affect land use and habitat quality in the watershed. Park land is an important part of the Sacramento River floodway which protects valley communities and farms from inundation, so floodway capacity must be maintained. Recreation uses can degrade water and habitat quality without careful management.

Maintaining recreational facilities within the floodway and river meander belt presents constant challenges. Planners must find the appropriate balance between protecting resource values and providing recreational access and opportunities along the river. State and federal law, the State Park classification system (described in Chapter 3), and State Park policies provide guidance in this regard.

DOM Chapter 0300 Natural Resources includes the following policies relevant to management of this SRA. These policies may be found at:

<http://www.parks.ca.gov/pages/22374/files/dom%200300%20natural%20resources.pdf>

- 0304.4 Active Management
- 0304.5.2 Public Use of Motor Vehicles
- 0305 Air Resources
- 0306.1 Water Resources Planning and Management Policy
- 0306.2 Watershed Management Policy
- 0306.3 Stream Management Policy
- 0306.4 Watershed and Stream Protection Policy
- 0306.6 Flood Management Policy
- 0306.7 Wetlands Management Policy
- 0306.9.1 Water Quality and Quantity Policy
- 0307.1 General Geologic Policy
- 0307.3.1.1 Siting Facilities to Avoid Natural Hazards Policy
- 0308.1 Soil Protection Policy
- 0310.1.1 Plant Management Policy
- 0310.2.1 Natural Succession Policy
- 0310.3.1 Vegetation Management Planning for Developed Areas

- 0310.5.1 Protection of Rare, Threatened and Endangered Plants and Their Habitats Policy
- 0310.5.3 Park Projects and Plant Species of Concern Policy
- 0310.6 Plant Protection Policy
- 0310.6.1.1 Emergency Tree Felling Policy
- 0310.7.1 Exotic Plant Landscaping Policy
- 0310.7.2 Removal of Established Populations of Exotic Plants
- 0311.2 General Animal Management Policy
- 0311.4.1 General Habitat Management Policy
- 0311.5.1.1 General Animal Protection Policy
- 0311.5.2.1 Special Animal Policy
- 0311.5.2.3 Park Projects and Animals of Special Concern
- 0311.5.3.1 Animal Feeding Policy
- 0311.5.3.2.1 Animal-Proof Food Storage and Garbage Management Policy
- 0311.5.7.3 Cats
- 0311.5.7.4 Dogs
- 0311.6 Aquatic Resources and Fishery Management
- 0311.6.1.1 Anadromous Fish Policy
- 0312.2.1 Scenic Protection Policy
- 0312.3.1 Lightscape Protection Policy
- 0312.4.1 Soundscape Protection Policy
- 0312.5.1 Odor Policy
- 0319.1 General Natural Resources Interpretation and Education Policy
- 0320.1 Cooperation Policy

The Department's Standard Project Requirements (Appendix M) are discussed in Chapter 5. They require, that among many other things, Best Management Practices be implemented 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 dust or sediment-carrying runoff. The Department's Trails Manual provides guidance on trail construction and maintenance to eliminate or minimize environmental impacts.

Climate change is also affecting commonly recognized patterns in unexpected ways. The Department must use not only the best available scientific data about past and current conditions, but future climate projections to guide resources management. This primarily requires an acknowledgement that the Park's natural resources are subject to constant change, and that change may be desirable. Goals and guidelines will help park managers adapt to this change while managing physical and biotic resources in a way that preserves watershed resources values.

Overall NRM Goal: Perpetuate the Park's natural resource values as an integral and important part of the dynamic Sacramento River Conservation Area and its Colusa Subreach.

GOAL NRM 1. Promote natural watershed dynamics in the evolving hydrological and geomorphologic conditions of the Sacramento River floodway.

- GUIDELINE A. Encourage, design and implement projects to allow a more natural Sacramento River meander process, consistent with the CDFW/USFWS/CSP MOU (Appendix D). Limit installation of projects that would require bank revetment.

- GUIDELINE B. Document the effect of river course changes and erosion on bank swallow habitat. Participate in the Bank Swallow Technical Advisory Committee. With other agencies, implement recommendations in the Bank Swallow Conservation Strategy for the Sacramento River Watershed, California.

GOAL NRM 2. Protect the Sacramento River's water quality.

- GUIDELINE A. Establish, maintain, and preserve riparian vegetation buffers along waterways.
- GUIDELINE B. Assure that storm water run-off does not carry pollutants to the river by establishing and implementing procedures to manage chemical spills.
- GUIDELINE C. Remove trash and portable facilities such as toilets before expected flood events.
- GUIDELINE D. Design, maintain, and monitor condition of trails and roadways so as to minimize erosion.
- GUIDELINE E. Provide real-time water quality information that is useful and readily available to visitors. Post information about how visitors can help protect water quality such as boating regulations and best practices. Provide current fish consumption guidelines and water quality warnings.

GOAL NRM 3. Maintain, perpetuate and enhance the Park's native vegetation communities and habitat values, including wetland, valley oak woodland, and other successional riparian woodland plant communities within the floodway, consistent with the State Recreation Area classification.

- GUIDELINE A. Support the dynamic hydrological, physical, and biological processes and conditions in the floodway that enable continued succession of plant community types. For example, instead of attempting to protect large trees, allow erosion and deposition to prevail. Instead of attempting to preserve open wetlands, allow siltation and colonization by native plants. Instead of attempting to preserve open meadows, allow native tree species to spread.
- GUIDELINE B. Prioritize the use of locally native species in future plantings. "Locally native species" are those that are indigenous to the middle reach of the Sacramento River. Non-native, non-invasive plantings (such as lawn) are acceptable where they do not conflict with habitat values. Non-native plants that conflict with habitat values shall be removed.
- GUIDELINE C. Implement adaptive management strategies, as described in the Visitor Management Section, to recover habitat values, if it is determined that project impacts or human use is reducing biotic resource values.
- GUIDELINE D. Impacts to riparian habitat will be avoided. If not avoidable, impacts shall be minimized to the extent possible, then mitigated at a ratio approved by the regulatory agencies. Retain mature native trees where they shade waterways.

GOAL NRM 4. Collaborate with watershed stakeholders to identify and implement joint efforts to perpetuate natural resource values.

- GUIDELINE A. Inventory, monitor and share the condition of the Park's resources with signatories of the SRCA MOA (Appendix E). Conduct scientific research with the intent of gaining a better understanding of methods for conserving sensitive species and ecosystems.

GUIDELINE B. Preserve and enhance habitat corridors through the Park to maintain or increase their usage by native species. Consult with adjacent landowners to help guide preservation and enhancement of existing habitat corridors. When planning new facilities and uses, avoid placement in habitat corridors where they can be shown to impact established native animal movement patterns, unless no other option exists.

GUIDELINE C. Collaborate on appropriate methods to meet SRCA natural resources management goals.

GOAL NRM 5. Perpetuate special-status plant, terrestrial wildlife, and aquatic species.

GUIDELINE A. Monitor the distribution, extent, and condition of special-status species populations within the Park as visitor use increases.

GUIDELINE B. Implement adaptive management strategies if impacts to special status species are noted, as described in the Visitor Management section.

GUIDELINE C. Implement all measures necessary to avoid or minimize impacts to special-status species from maintenance activities, facility development, and visitor use, such as seasonal road closures or directing visitors away from rookeries.

GUIDELINE D. Educate Park visitors regarding special-status species protection and management activities.

GOAL NRM 6. Preserve the scenic natural landscape character of the Sacramento River and its riparian corridor for future generations.

GUIDELINE A. Limit artificial lighting to avoid brightening the dark night sky. Restrict night lighting to the more developed areas of the park (e.g. buildings and parking lots) and provide lighting fixtures that focus the light downward. Light levels should be as low as possible, while being consistent with public safety standards.

GUIDELINE B. Set facilities back from the river bank or screen them.

GUIDELINE C. Avoid or minimize negative aesthetic impacts of grading and bank protection measures through terracing, planting, using natural materials (e.g. aesthetically-pleasing rock), etc.

GUIDELINE D. Remove or screen existing elements that have negative aesthetic qualities. Visually screen parking lots, roads, operations facilities, and storage areas from primary public use areas. Use vegetation, rocks, elevation change, and other methods that either use or mimic natural elements to minimize negative visual impacts from these facilities.

GOAL NRM 7. Reduce the presence of invasive non-native plant species, and feral and other problematic non-native animals, particularly those that have a negative effect on the populations of special-status species.

GUIDELINE A. Control or eliminate federally listed noxious weeds, noxious weeds listed on California Invasive Plant Council's list, and other invasive weeds that can result in degradation of native vegetation communities and habitat values in the Park.

GUIDELINE B. Monitor the presence of feral and other potentially problematic, non-native animals such as domestic cats and rats. Develop and implement control methods to reduce the numbers of non-native and feral animals if they are expected to have a significant adverse effect on populations of sensitive species.

GUIDELINE C. Inform Park visitors about the negative effects of releasing and/or feeding animals in the Park. Include this information in interpretive programs at the Park.

GOAL NRM 8. Manage noise generating activities in the Park to minimize negative impacts to recreation users, native animals and adjacent properties.

GUIDELINE A. Design roadways and parking areas to minimize vehicle noise impacts in activity areas, through screening, separation of use areas, and other appropriate techniques.

GUIDELINE B. Post and distribute noise restrictions for Park visitors, contractors and event organizers. Include the appropriate levels of sound from radios and other human-made devices especially during night and early morning hours, recommended quiet zones, event guidelines and maintenance activities.

GOAL NRM 9. Minimize detrimental wildlife interactions with visitors and neighbors.

GUIDELINE A. Provide and/or post educational materials regarding potential wildlife hazards, such as ticks, raccoons and bears, and safe practices.

GUIDELINE B. Meet and confer with neighbors, upon request, to discuss the impact of resident wildlife on adjacent agricultural crops.

GUIDELINE C. Manage Park waste in a way that avoids changes in wildlife behavior, such as using animal-resistant waste containers.

GUIDELINE D. Allow leashed dogs in all campgrounds, in the SOUTHEAST MZ, in the parking areas and on primitive roads. If they can be shown to pose a threat to sensitive resources, establish limits such as seasonal restrictions, which eliminate impacts.

GOAL NRM 10. Balance natural resources protection with recreation demand on a regional basis, while acknowledging the dynamic nature of the river system.

GUIDELINE A. Concentrate facilities and programs in the Park in accordance with the Colusa Subreach Recreation Access Plan (2007), to reduce trespass or inappropriate activities (such as illegal encampments) that could impact natural resources on other riverside lands.

GUIDELINE B. Conduct or review recent hydrologic analyses before locating new facilities in the floodway. Construct new infrastructure and facilities in areas less likely to impact natural processes. Where facilities outside the SOUTHEAST MZ must be located in high flood hazard zones, such as for fishing and boating access, consider low-impact improvements such as natural surface trails and roads. Consider partnering with other landowners, such as the City of Colusa, to provide recreational facilities, such as a boat launching facility, outside the Park.

GUIDELINE C. When major erosion or deposition occurs, reassess the viability and potential impacts of facility design and locations on watershed resources, and relocate or redesign facilities as needed. Identify critical Park property and facilities to be protected or restored when feasible, and clarify when and how protection measures will be implemented or maintained.

CULTURAL RESOURCES MANAGEMENT (CRM)

The Sacramento River nourished human settlements over millennia, while re-sorting and burying evidence of ancient cultures under multiple layers of sediment. Recorded and unrecorded cultural resources within the Park and in the surrounding areas comprise the cultural heritage of the region. While evidence of ancient human occupation of the Park has not been recorded, there is significant evidence nearby. 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. The former Colusa city dump is the only cultural resource recorded in the Park today. Due to the region's well-documented history and pre-history, cultural resources interpretation within the Park's natural setting is appropriate.

Cultural resources will be managed according to state and federal law, as well as the department's Cultural Resource Management directives, including:

- Governor Executive Order B-10-11 Government-to-Government Consultation
- DN 2007-05 Native American Consultation Policy and Implementation Procedures
- DN 2004-02 Cultural Resource Review and Related Procedures
- DN 1994-13 Application and Permit to conduct Archeological Investigations/Collections
- DOM 0317.1.3.7 Materials Gathered by California Native Americans

Overall CRM Goal: Protect cultural resources while improving visitor appreciation of the past.

GOAL CRM 1. Protect physical paleontological, prehistoric and historic resources.

GUIDELINE A. Before modifying the maintenance shop, evaluate it for California Register eligibility.

GOAL CRM 2. Increase public knowledge and appreciation of native peoples, early settlement and other appropriate cultural resources topics and artifacts.

GUIDELINE A. See the Interpretation & Education Goals and Guidelines for more information.

RECREATIONAL AND COMMUNITY ACTIVITIES (RCA)

The Park is an important recreational and community resource for Colusa, the surrounding region and the State, as it provides public access to California's largest river. A variety of high quality recreational and community opportunities is needed to inspire Californians to engage in healthy outdoor activities. Because of the State Recreation Area classification, establishing or maintaining public access and high-quality use of the Park is one of the primary considerations in developing this Plan. The Park offers recreational opportunities which, at times, will attract a large number of visitors seeking boating, fishing, and other outdoor recreational pursuits.

Policies that guide recreational uses include:

- DOM 0317.1.1 Visitor Recreational Uses Policy
- DOM 0317.1.3.1 Fishing
- DOM 0317.1.3.2 Hunting

Appropriate activities (subject to management limitations) include, but are not limited to those described below.

River access and bank fishing. Popular activities along the Sacramento River include fishing and beach activities. Bank fishing occurs at a number of locations throughout the Park; however, river access is currently difficult due to erosion and siltation patterns. As fish spawning and rearing habitat is improved in the Sacramento River watershed, fish populations can be expected to rebound, creating more opportunities for fishing. For visitors without boat access, sufficient fishing access along the riverbank is crucial to encourage and enhance safe fishing activity for all visitors.

Boating. The Park is recognized for providing access to high-quality boating, including boat fishing and boat hunting along the Sacramento River. The Park currently has one boat ramp for both motorized and human-powered boat launching, as well as a number of undeveloped areas, such as gravel bars, that provide additional launching/landing opportunities. Due to a severe shortage of functional boat ramps in the area, recreational boating opportunities and law enforcement access to the river will be improved by new or expanded facilities at the Park.

Picnicking and informal play. Picnicking is one of the most popular recreation activities in California, and may be enjoyed by people of all ages and abilities. The Park's lawn area has been a popular place for family picnics, individuals eating lunch, childhood games such as hide-and-seek, social events such as weddings, and much more for over 60 years. Expanding and renovating picnic facilities, and adding other amenities, can better serve the public.

Overnight camping and lodging. High quality camping and overnight lodging opportunities are limited in the Park and in the region. Both developed and more primitive camping opportunities are needed, especially more developed campsites protected from flooding and more rustic group campsite capacity.

Wildlife and nature observation. Public interest in wildlife and nature observation, including bird watching and photography, is expected to increase substantially as the wildlife population increases in response to Colusa Subreach habitat improvements.

Community, educational and cultural activities. The Park is an important open space resource for the surrounding community, providing areas for recreation, community gatherings and special events since 1954. Recreational development of the Park supports Colusa's Riverfront and Downtown Gateway redevelopment goal of drawing visitors within the region, as well as Interstate 5 and Highway 20 travelers.

Trail-related activities. Popular trail-related activities that are suitable in the Park include, but are not limited to, hiking and walking, bicycling and running, wildlife and nature observation and dog walking. Opportunities for these activities should be expanded, while managing conflicts among users.

Overall RCA Goal: Provide opportunities for a wide variety of recreational and community activities associated and compatible with the unique resources of the Sacramento River and its riparian corridor.

GOAL RCA 1. Increase recreational access to the Sacramento River.

- GUIDELINE A. Work with local jurisdictions to identify, sign, and improve river access from the County's proposed long-distance bikeway.
- GUIDELINE B. Provide pedestrian and bicycle routes to the river bank and beaches.
- GUIDELINE C. Develop parking areas close to the river, where feasible and consistent with other goals.
- GUIDELINE D. Actively disseminate information regarding safe water-based recreation at appropriate river access points, including current water quality warnings.
- GUIDELINE E. Provide nature observation overlooks at viewpoints, especially where access to the water is infeasible.
- GUIDELINE F. Encourage responsible commercial fishing guide operations.

GOAL RCA 2. Expand and improve bank fishing access along the Sacramento River.

- GUIDELINE A. Provide a park map with fishing access points, and information on types of game fish available.
- GUIDELINE B. Provide current fishing regulations and guidelines for safe fish consumption.

GOAL RCA 3. Expand boat launching capacity along the river for motor- and human-powered boating activity.

- GUIDELINE A. Collaborate with the City of Colusa on development of a boat launching facility, including a boat ramp, parking, access control facilities, a restroom, fish cleaning area, and picnic sites.
- GUIDELINE B. Develop separate human-powered boat launch facilities at appropriate locations. Where feasible, provide convenient access to facilities such as restrooms, camping, drinking water and picnic sites.
- GUIDELINE C. Provide parking, including boat trailer parking, near new boat launching facilities, where feasible.
- GUIDELINE D. Consider providing boating support equipment and services, such as boat rentals, lifejacket loans, tours and training.
- GUIDELINE E. Post information for boat-in visitors regarding camping rules, available services and best practices for waste disposal.

GOAL RCA 4. Connect the Park to other public lands and private recreation facilities along the Sacramento River Boating Trail.

- GUIDELINE A. Coordinate with federal and state agencies, and local jurisdictions, to develop and promote the Sacramento River Boating Trail to better connect the Park to other public lands along the Sacramento River and its tributaries.
- GUIDELINE B. Provide informational and interpretive signage at the proposed boat launch areas, while preserving the aesthetic qualities of the river corridor. Public information may include safety guidelines, rules of use, and nearby boat landing opportunities. Information on the waterways and associated resources may also be included.
- GUIDELINE C. Confer with nearby property owners to determine the appropriate placement of signage and facilities (e.g., camping areas).
- GUIDELINE D. Explore opportunities for a concessionaire that would serve boating trail users.

GOAL RCA 5. Provide picnicking opportunities for individuals, families and groups. Include diverse opportunities for solitude and socializing, with informal play spaces where appropriate.

- GUIDELINE A. Design new and expanded picnic facilities to accommodate a range of users, including small and extended families, small and large groups.
- GUIDELINE B. Design diverse picnic facilities to suit a variety of recreational preferences, from primitive to highly-developed.
- GUIDELINE C. Select picnic areas based, in part, on environmental opportunities and constraints, such as views, shade, noise and flooding.
- GUIDELINE D. Develop sufficient support facilities such as restrooms and parking, to offer high quality recreation, minimize user conflicts, and reduce potential natural resources and neighborhood impacts.
- GUIDELINE E. Limit installation of non-native shade trees and lawn areas that provide for informal play to the Core Area.

GOAL RCA 6. Provide an expanded range of camping opportunities.

- GUIDELINE A. Replace camping facilities removed during boat launch facility development, with no net loss of camping opportunities.
- GUIDELINE B. Develop an RV campground which includes both family and small group campsites. Include tables and grill/stoves, utility hook-ups, and restrooms with showers where feasible.
- GUIDELINE C. Provide wintertime RV camping opportunities that will not be impacted by seasonal flood events, to serve regional hunting and wildlife observation visitors.
- GUIDELINE D. Develop an environmental boat-in campground.
- GUIDELINE E. Develop primitive campgrounds for group tent camping. Consider space for 20-50 tents, parking, and portable joint use facilities such as tables, grill/stoves and chemical toilets. This campground could also serve as a rustic group picnic and environmental education site.
- GUIDELINE F. Designate an en-route camping area for self-contained RVs.

GOAL RCA 7. Provide opportunities for more diverse overnight accommodations in, or near the Park, if feasible.

- GUIDELINE A. Partner with local, state and federal agencies to expand the quantity and diversity of lodging opportunities for regional recreation visitors.
- GUIDELINE B. Develop partnerships with nearby landowners and/or businesses, such as receiving a park pass when paying for nearby lodging.
- GUIDELINE C. Consider a concession contract to provide camping and overnight lodging, such as cabins or rental RVs, in or adjacent to the Park.

GOAL RCA 8. Provide high quality wildlife observation opportunities while protecting wildlife habitat values.

- GUIDELINE A. Locate and design trails to provide access to high-quality wildlife-viewing areas, at a distance that minimizes wildlife disturbance.
- GUIDELINE B. Facilitate high-quality wildlife viewing opportunities through the use of appurtenances, such as platforms.
- GUIDELINE C. Provide amenities, such as interpretive displays and published bird lists that enhance wildlife viewing opportunities. Include information on how to minimize disturbance to wildlife.

- GUIDELINE D. Collaborate with wildlife agencies to promote regional wildlife observation opportunities.
- GOAL RCA 9. Provide opportunities for community engagement and healthy outdoor activities.**
- GUIDELINE A. Provide group picnic and special event areas. Consider a range of amenities and provide adequate utilities to support diverse public uses.
- GUIDELINE B. Provide multi-purpose facilities that are adaptable to a range of events, such as campsites that can be used for group picnicking, parking or events depending on the demand.
- GUIDELINE C. Provide recreation programs that meet the Park Vision and engage young people in healthy outdoor activities.

VISITOR FACILITY PLANNING (VF)

Adequate facilities are necessary to provide safe, enjoyable and high quality recreational and educational experiences and activities as described above. The following facilities are allowable under this plan:

- Paved and unpaved roads, bicycle paths and trails
- Two primitive group campgrounds (up to 50 tents each)
- Unpaved day use parking (up to 35 spaces)
- Paved day use, boat trailer, and en-route parking (up to 110 spaces)
- Two boat launches
- Boat-in primitive campground (up to 8 tents)
- Maintenance yard and staff residence
- Individual and small group developed campground with RV hookups and/or cabins (up to 42 sites)
- Individual and large group developed campground (up to 20 sites)
- Picnic sites (up to 44 sites)
- Restrooms
- Outdoor event center
- Vehicle entrance improvements and entrance station (potentially off-site)
- Boat launching facility (off-site)

Conceptual studies (Appendix L) showing potential locations and sizes of facilities being considered within the Park are based on a range of factors including location of existing recreational uses, resource constraints, administrative and operational constraints, site access, etc. These studies illustrate one possible solution, which undergoes programmatic level environmental review with this Plan. Site-specific design and environmental review of topics not covered in Chapter 5 will be required at the time a particular project is proposed using the “tiered” environmental review process (refer to the California Environmental Quality Act section of Chapter 1). Other solutions may be considered that meet the General Plan goals and guidelines using the tiered process.

Facility planning involves numerous considerations. Some important considerations in visitor facility planning are discussed below.

Phasing. The General Plan provides long-term guidance for facility development in the Park. Phasing facility construction over many years is generally necessary due to funding limitations.

Funding may come from many sources, such as the Department’s Capital Outlay Program, various State and federal grants, and private sources. The schedule should remain flexible so the Department can take advantage of funding sources as they become available. Many factors are likely to arise which are currently unknown or difficult to anticipate. The following describes a potential development schedule; with foreseeable triggers or enablers to development.

Trigger: an event, condition, or action that prompts facility development

Enabler: an event or action that allows facility development

FACILITIES	PHASE	NON-FUNDING TRIGGERS (T) OR ENABLERS (E)	MGMT ZONE
<ul style="list-style-type: none"> • City boat ramp • entrance kiosk • Circulation improvements 	1	E: Obtain environmental permits	OFF, SEMZ
<ul style="list-style-type: none"> • boat ramp parking • restroom and fish cleaning facility • replacement campground 	2	E: Completion of city boat ramp	SEMZ
<ul style="list-style-type: none"> • outdoor event center • picnic sites 	3	E: Completion of city boat ramp	SEMZ
<ul style="list-style-type: none"> • entrance station • road and bikeway improvements 	4	T: Traffic congestion at the 10 th Street entrance T: Colusa County or City’s implementation of their bikeway plans T: visitor facilities in SWMZ, RESMZ or RIPMZ.	OFF, LEVEE
<ul style="list-style-type: none"> • primitive group campgrounds • day use parking • human-powered boat launch • boat-in campground 	5	E: Relocation of entrance station	RESMZ, RIPMZ
<ul style="list-style-type: none"> • RV campground and/or cabins 	6	E: Boat ramp parking expansion E: Relocation of entrance station E: Conversion of Robert’s Road on levee to a controlled access road.	SWMZ, OFF
<ul style="list-style-type: none"> • trails and picnic sites 	any	T: Increase in demand	parkwide

Floodway facility design. Much of the Park lies within a dynamic river floodway that frequently subjects facilities to natural river events and forces, including meandering, erosion, flooding and siltation. These phenomena cannot be avoided when planning for and designing new facilities, because the river is the key feature of the Park. The Management Zone section summarizes potential facilities and flood potential of each zone.

Sustainable design principles. The buildings and sites at which we live, work and play, protect us from nature's extremes: cold, heat, wind, rain, and snow. But these facilities and landscapes

affect and shape our environment too. Constructing and operating parks requires energy, water and materials, and creates waste. Where and how they are built affects the ecosystems around us in many ways. Projects create new micro-environments that present new opportunities and challenges. Thoughtful planning can help our parks and our world become more sustainable. The California Governor's office provides sustainable design policy guidance for all State projects.

A widely used definition of sustainable development is *"Development that meets the needs of the present without compromising the ability of future generations to meet their own needs"*.

Elements of sustainable facility design include:

- **Energy.** Designing and operating projects to use energy efficiently, and in some cases to generate power of their own using solar, wind, hydro, and biomass.
- **Water conservation.** Designing and operating projects that use water efficiently.
- **Materials.** Using materials that, in comparison to competing brands and other means of construction, have a reduced effect on the environment throughout their life cycle. Elements to consider include recycled content, low toxicity, energy efficiency, biodegradability, and durability.
- **Waste.** Reducing waste from construction, remodeling, and demolition activities and providing for efficient waste disposal, reuse and/or recycling.
- **Indoor environment.** Designing and operating buildings that are healthy for their occupants.

Noise and air pollution. The Department must consider potential effects of facilities development on the environment, including adverse impacts on local and regional air quality and the noise environment at the Park. Goals and guidelines for protection of other natural resources are provided under the Natural Resources Management section.

- During the project environmental review process, the department will 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.
- Conduct noise studies for facility development or improvements that may exceed state noise standards at nearby sensitive uses because of noise generated by construction activities, stationary sources, and traffic noise. Implement recommendations from applicable noise studies to reduce noise levels to within acceptable standards.

Road and trail circulation system.

External vehicle circulation. Existing community connectivity is inadequate, as discussed in Chapter 2, Transportation and Circulation Section. In addition, new recreational facilities, as well as redevelopment of both the neighborhood and the Park will require vehicle circulation changes. Cooperation from the City and County of Colusa and CalTrans is necessary to develop a user-friendly circulation network. A Transportation Study (Appendix K) clarifies that increased traffic due to proposed changes within the Park is not expected to exceed city road or CalTrans highway standards.

Access control. Controlling vehicle access to the Park increases public safety and security of Park assets and resources, as well as enhancing appropriate fee collection. The existing access control structures, such as gates and an entrance station, are insufficient. Increasing access will require

new roads and access control structures. See Chapter 3, Park Entrance Section, for a full discussion of the challenges, design goals and options.

Internal Vehicle circulation. Roads are linear facilities which form a circulation network providing recreational and maintenance access to a destination. Once visitors arrive at the Park, it is equally important to facilitate safe and efficient vehicular circulation between Park amenities. Roads also host popular activities such as bicycling, walking and sight-seeing. Circulation networks that serve multiple modes of transportation increase access and activities for a variety of user groups. Circulation networks should be designed for safety, convenience, and connectivity adequate for the expected volume.

Creating loop roads facilitates patrolling and may also bring nearby residents to the area more often, which can deter illegal and destructive behavior. Departmental Notice 2015-01 describes the process for designating existing transportation routes within the park.

Parking. The Park currently has sufficient day use parking to accommodate visitors except during peak boat fishing season. The SOUTHEAST MZ is expected to experience the most seasonal parking demand variation to accommodate regional boat fishing, due to the City's proposed boat launching facility (see Chapter 3 Facilities and Infrastructure Development section for more information). The boat launching facility is within easy walking distance to street parking outside the Park, to accommodate overflow parking.

With redevelopment and facility expansion, parking needs will change. The Plan allows:

- Unpaved vehicle parking (up to 35 spaces) in the RESTORATION RECREATION MZ. This parking would primarily serve day use visitors interested in nature observation, hiking, bicycling, fishing and non-motorized boating. Up to 10 spaces would occasionally serve the overnight primitive group camps.
- Paved regular vehicle and boat trailer parking (up to 110 spaces) in the SOUTHEAST MZ. This constitutes about a 30% increase. This parking would primarily serve day use visitors interested in picnicking, bicycling, fishing, motorized boating and participating in outdoor events. Up to 20 spaces would occasionally serve as en-route overnight parking for self-contained RVs.
- Paved regular vehicle parking (up to 20 spaces) in the SOUTHEAST MZ, one parking space within each campsite.
- Paved regular vehicle parking (up to 42 spaces) in the SOUTHWEST MZ, one parking space within each campsite or adjacent to each cabin.

Bicycle and pedestrian circulation. Walkways, paths and trails serve a wide range of recreational, fitness and transportation activities which contribute to community health. They provide paths to fishing and wildlife observation opportunities, accommodate dog walking activity and healthy exercise, and connect neighborhoods and towns. Thoughtfully designed trails can accommodate multiple modes of transportation, including walking, hiking, running, and cycling. As trail development in the region progresses and as population grows, it is anticipated that the Park will experience an increased demand for multi-use trails, particularly along the Sacramento River corridor. The riparian forest provides cooling shade and lower temperatures which draw health-conscious visitors interested in walking, hiking, running and cycling. Issues that must be considered include the types of trail systems proposed, impacts to vegetation and wildlife, and the need for directional signage and maps as appropriate. The Department's Trails Handbook will guide trail design, construction, management, and maintenance.

Universal Access. The Americans with Disabilities Act, as well as California Government Code § 4450-4461, and California Civil Code § 54-55.3 require that people with disabilities be afforded full and equal access to the programs, services and activities offered in California State Parks. In compliance with these laws the Department is obligated to remove physical and programmatic barriers that prevent people with disabilities from full and equal participation. Technical standards for providing access to recreational opportunities include the 2010 Americans with Disabilities Act (ADA) Standards for Accessible Design, the California Building Code, the California State Parks Accessibility Guidelines and the Department's policies, such as DOM 2600. Currently there are few access compliant facilities at the Park, since most facilities were constructed before these laws and policies were adopted.

Aesthetics. Landscapes are dynamic and have multi-dimensional characteristics. Light, visual patterns, textures, temperature, scent, sound, expanding vistas, and focused views blend together to create the park's distinctive aesthetic qualities. The Park's intrinsic natural features also contribute to its aesthetic values, and must be considered when planning facility changes and improvements.

Signage. By informing visitors of their location, directional signage and maps can orient Park visitors, increase their ability to find recreational activities, and assist them to avoid trespassing on private lands. Regulatory signs inform visitors of Park rules, while informational signage improves understanding of Park resources and available activities.

Overall VF Goal: *Develop safe, sustainable visitor facilities and convenient circulation within the Park and from nearby neighborhoods which are complementary to the Park's natural and physical environment, and accommodate all users.*

GOAL VF 1. Facilities and infrastructure located in the floodway shall be designed to embrace natural river processes.

- GUIDELINE A. Incorporate site and facility design features to minimize potential damage from flood events, such as post-and-beam or pole construction. Consider flood frequency and depth, expected speed of water currents and proximity to the river bank, erosive potential and siltation patterns, soil structure and saturation, and other factors.
- GUIDELINE B. Site facilities and infrastructure where they will not compromise natural river meander, except on the former city dump and proposed boat launching facility where protection measures are appropriate.

GOAL VF 2. Incorporate sustainability principles into the design, construction, operations, and maintenance of park facilities.

- GUIDELINE A. Use sustainable design strategies to minimize impacts of park development and operation. Use natural, renewable, indigenous, and recyclable materials when feasible. Design to facilitate maintenance and management practices that avoid the use of environmentally-damaging, waste-producing, or hazardous materials.
- GUIDELINE B. Consult the United States Green Building Council's Leadership in Energy and Environmental Design (LEED) standards for ways to reduce energy use and maximize the use of energy-efficient products and materials on new and existing buildings. These standards have been developed to promote environmentally healthy design, construction, and maintenance practices.

GOAL VF 3. Establish one all-weather vehicle access point to facilitate fee payment, information exchange and security.

- GUIDELINE A. Collaborate with the City and County of Colusa to construct a new entrance station to control vehicle access to all Park property. Establishment of the new entrance will be triggered by one or more of the following:
1. When traffic congestion at the existing 10th Street entrance substantially impacts safe and efficient access
 2. When visitor facilities are opened in the SOUTHWEST MZ
 3. When regular vehicle access to the RIPARIAN RECREATION and RESTORATION/RECREATION MZs is allowed
 4. When the City and County of Colusa implement their planned long-distance bicycle route through the Park.
- GUIDELINE B. Use the 12th and Levee Street intersection right-of-way for this facility, or other locations outside the floodway and potentially outside the Park boundary. Design a new Park entrance to:
1. increase visitor contact and fee collection at one entrance station protected from flooding
 2. better serve the City's planned boat launching facility
 3. improve access to the northern area of the park
 4. be cost effective to permit, construct and maintain
 5. minimize large vehicle traffic on narrow levee crown roads, and minimize levee widening to accommodate traffic
 6. accommodate year-round access to facilities in the SOUTHWEST MZ
 7. improve pedestrian connections between the park and town
 8. enhance visitor safety, security and resource protection
 9. allow efficient staffing and enhance fiscal sustainability
 10. maintain access for levee maintenance, flood fighting, irrigation pump maintenance, emergency vehicles and farm equipment
 11. consider the City's transportation system, land use and redevelopment plans
 12. accommodate the City and County's long-distance bikeway
 13. comply with DWR, CVFPP and USACE's detailed guidelines and restrictions regarding facilities and roadways on and near the levee, and in the floodway
- GUIDELINE C. Before visitor facilities are opened in the SOUTHWEST MZ, collaborate with the City and County of Colusa, and DWR, to convert the Roberts Road right-of-way on the levee to a Park road and bicycle route. Install vehicle control structures, such as gates, where needed to restrict vehicles.

GOAL VF 4. Increase the visibility of Park entrances.

- GUIDELINE A. Install Park entrance signs at all entrance points consistent with Departmental design standards and Park design guidelines. Collaborate with the City and County of Colusa to install park entrance signage for visitors arriving in vehicles, by bicycle and on foot.
- GUIDELINE B. Work with CalTrans to install directional signage along highways that direct visitors to Park entrances. Investigate more visible locations, such as along Highways 45 and 20, Main Street, and major bikeways.

GOAL VF 5. Provide for safe, convenient and adequate multi-modal access to and from the Park and the proposed boat launching facility.

- GUIDELINE A. Coordinate with the City and County of Colusa, and CalTrans, to improve roadways serving the Park, including providing input on development projects that could affect visitor access to the Park.
- GUIDELINE B. Coordinate traffic management with the City and County of Colusa, and CalTrans, when high traffic levels are expected, such as special events.
- GUIDELINE C. Encourage alternate modes of transportation to the Park, such as the use of bicycles and walking. Coordinate with the City and County of Colusa to provide safe and convenient pedestrian access to the Park.
- GUIDELINE D. Accommodate bus access to serve events and organized groups. Provide bus parking, with appropriately sized turnarounds, where needed to support group activities.

GOAL VF 6. Provide for convenient and adequate vehicular access within the Park.

- GUIDELINE A. Provide exit-only roadways for use during peak traffic times in the Park, such as north on Roberts Road and/or south to 10th Street if congestion in excess of local traffic standards is expected.

GOAL VF 7. Provide for the safety of Park visitors while circulating within the Park.

- GUIDELINE A. Install gates and signage to deter visitors from entering flooded areas, areas in imminent danger of flooding, and areas with soils too saturated to allow traffic.
- GUIDELINE B. Design roadways, intersections, walkways and trail crossings to minimize conflicts between vehicles, pedestrians, and cyclists. Separate vehicular and pedestrian traffic in high-use areas such as the SOUTHEAST MZ.

GOAL VF 8. Provide a sustainable Park road system in the Sacramento River floodway.

- GUIDELINE A. Design roadways to minimize potential damage from flood events. Consider flood frequency and depth, expected speed of water currents and proximity to the river bank, erosive potential and siltation patterns, soil structure and saturation.
- GUIDELINE B. Install paved roadways in areas subject to longer than a 3 year recurrence flooding interval, and unpaved roads in areas subject to flood intervals of, or more frequent than, 3 years.

GOAL VF 9. Provide automobile and boat trailer parking spaces near points of interest.

- GUIDELINE A. Incorporate sufficient parking capacity serving a range of vehicle types, into proposed facility development plans, particularly at boat launch areas.

GOAL VF 10. Provide an interconnected trail network.

- GUIDELINE A. Construct new and expand existing trails and trailheads. Link existing and proposed day-use areas and other facilities together.
- GUIDELINE B. Evaluate the suitability of existing trails for multiple uses, considering public safety and environmental factors.
- GUIDELINE C. Coordinate with the City and County of Colusa and interested organizations to connect Park trails, public roads and the planned regional bicycle trails system, where appropriate. Install signage to connect the Park to the Highway 20 Farms and Forest Heritage/Cross-California Ecological Corridor.
- GUIDELINE D. Locate trails to minimize impacts on sensitive resources, both during construction and use.

GOAL VF 11. Minimize potential conflicts between fitness trail activities, other trail users and natural resource values.

- GUIDELINE A. Separate multi-use and interpretive trails (e.g. the Nature Trail).

- GUIDELINE B. Provide signage, maps and other cues to clearly identify appropriate trail uses, rules, and etiquette.

GOAL VF 12. Remove existing barriers to provide unobstructed access for persons with sight or mobility challenges.

- GUIDELINE A. Set priorities based on the department's Transition Plan for Accessibility.
- GUIDELINE B. Remove barriers from facilities that are not scheduled to be replaced in the foreseeable future, with priority given to those facilities that have the greatest effect on accessibility to the programs of camping, picnicking, fishing, boating and hiking as funding allows.
- GUIDELINE C. Relocate facilities if site conditions make barrier removal costly, unsafe or impact the visual character of the Park.
- GUIDELINE D. Collaborate with partners such as the City and County of Colusa to improve barrier-free access from off-site sidewalks, trails, and parking to Park facilities.

GOAL VF 13. Design structures and sites to complement the Park's riverine and agricultural setting.

- GUIDELINE A. Develop and implement design guidelines for park facilities and signage to share similarities in style and/or materials, to create "a sense of place" and visual continuity, and to reflect and preserve positive aesthetic values. The design style should reinforce the colors, shapes, scale, and materials of the surrounding riverine and agricultural landscape and complement the park's natural setting.
- GUIDELINE B. Integrate positive aesthetic features into the design of new park facilities. Preserve and showcase scenic views, use locally-prevalent building materials and colors. Take advantage of (or screen) ephemeral conditions (e.g. weather, wind, sunlight and shade, etc.), as appropriate.
- GUIDELINE C. Redesign, organize, consolidate, screen, or remove unnecessary, repetitive, or unsightly elements at park entrances.

GOAL VF 14. Develop a system of signage that directs, orients, and educates visitors within the Park.

- GUIDELINE A. Install flood-resistant Park maps, including "you are here" identifiers. Integrate information regarding Park rules and public safety, including the risk of wildfire and flood, into directional and informational signage at trailheads and restrooms.
- GUIDELINE B. Clearly delineate Park boundaries, through the use of signage and/or fencing, to direct visitors, where allowed by the CVFPB.
- GUIDELINE C. Install river view/access signs that direct visitors to appropriate locations for safe access and high-quality views along the Sacramento River. Implement uniform design standards if they are developed for the Sacramento River corridor.
- GUIDELINE D. Identify all Park entrances with California State Parks signage. Consider the information needs of visitors who arrive by vehicle, bicycle, on foot and by boat.

INFRASTRUCTURE (INF)

Infrastructure consists of utility, administrative and maintenance systems that serve Park facilities and activities. Issues include:

Site utilities. Irrigation systems, site lighting, wastewater and storm water infrastructure, waste and recycling collection, and green waste management systems are generally managed by Park maintenance staff.

Utility and service providers. Utilities and services provided by other agencies or businesses deliver potable water, electricity, telephone, gas and internet connections to a Park service connection, where Park infrastructure delivers it to facilities where it is needed. The park contracts with service providers to dispose of solid and hazardous waste that is collected by Park maintenance staff.

Facilities. Adequate administrative and maintenance facilities for Park staff are essential to providing high-quality visitor experiences. These facilities provide places to store equipment and supplies, perform recordkeeping tasks, and communicate with others. The current maintenance yard is not proposed for relocation. Administrative functions now occur in the entrance station.

Overall INF Goal: Provide sustainable Park infrastructure, including utilities, and administrative and maintenance facilities.

GOAL INF 1. Ensure long-term sustainable, environmentally compatible and energy-efficient utilities that reduce waste, pollution and environmental degradation of land, air and water resources.

- GUIDELINE A. Upgrade existing sewage treatment systems when replacing or expanding facilities in the SOUTHEAST MZ, to protect water quality.
- GUIDELINE B. Coordinate with the City of Colusa to extend water, sewage and electrical utilities, and road infrastructure, to the Park when needed for facility expansion.
- GUIDELINE C. When renovating facilities in the SOUTHEAST MZ, renovate the existing domestic water distribution system to meet current health and safety codes, including the use of backflow prevention devices.
- GUIDELINE D. Install or upgrade irrigation systems to more efficiently water plants that require irrigation, such as active play lawn areas.
- GUIDELINE E. Design surface drainage with infiltration or detention swales where feasible, to reduce sedimentation in underground drainage systems.

GOAL INF 2. Provide solid waste management systems that protect the environment.

- GUIDELINE A. Provide convenient recycling containers at trailheads, campgrounds and picnic areas to minimize landfill waste.
- GUIDELINE B. Provide visitor information about waste management topics, including the Park history as the town's landfill, and proper disposal of dog waste in the floodway.
- GUIDELINE C. Provide animal-resistant waste receptacles to minimize negative wildlife interactions.
- GUIDELINE D. Remove or secure waste receptacles when floods threaten the Park, to reduce trash and pollution in the river.

GOAL INF 3. Minimize damage to flood-prone infrastructure.

GUIDELINE A. Conduct or review recent hydrologic and soils analyses before locating infrastructure in the floodway, endeavoring to construct new infrastructure in areas less likely to be damaged by natural processes.

GUIDELINE B. Design infrastructure to minimize potential damage from flood events. Consider flood frequency and depth, expected speed of water currents and proximity to the river bank, erosive potential and siltation patterns, soil structure and saturation.

GOAL INF 4. Minimize visual impacts of existing and new infrastructure.

GUIDELINE A. Place electrical utilities underground when renovating, expanding or constructing new facilities, where allowed by the CVFPB and building codes.

GOAL INF 5. Establish a centralized location for administrative facilities that promotes efficient management of the Park's resources.

GUIDELINE A. Relocate administrative functions outside the floodway to minimize flood evacuation and potential damage. This could occur at a new entrance station or in a remodeled maintenance facility.

VISITOR MANAGEMENT (VM)

The Park has a small land base, with regular flooding and sensitive habitat on much of the property. Comprehensive management is necessary to maximize recreational, community and educational opportunities while avoiding conflicts that damage resources and detract from the high quality experience that visitors expect. Visitor management strategies can help maximize opportunities for high quality experiences all year, especially in a small park. Topics include:

Hunting and Firearms. Hunting is a popular recreation activity in the region and there are many public and private hunting grounds. Access to some hunting grounds is only available by boat, and some hunting is performed from a boat. While hunting in the Park is not permitted, in accordance with Public Resources Code Section 5003, the Park can serve as a base camp for hunters. Base camps can provide accommodations, information, access, services and supplies that assist hunters desiring to recreate in the region.

Visitor Capacity. General plan goals and guidelines for Natural Resources Management present the desired future conditions against which park managers can measure visitor use and take the appropriate actions to avoid or reduce negative impacts. California State Parks' methodology to analyze visitor capacity issues is intended to satisfy the requirements of the PRC Section 5019.5, which states:

"Before any park or recreational area development plan is made, the department shall cause to be made a land carrying capacity survey of the proposed park or recreational area, including in such survey such factors as soil, moisture, and natural cover."

In terms of park and recreation planning, carrying capacity means that cumulative net losses will not be permitted to occur in any of the Park's resource values (natural, cultural, recreational or aesthetic) because of human use (facilities or activities). However, seemingly insignificant effects can permanently impact resource values over time. The great variety of factors involved in natural resource damage, and the complexity of interactions among the factors makes establishing a

definitive carrying capacity number difficult. Visitation quantities, individual or group usage, time, and types and patterns of recreational use may all contribute to resource system impacts. To aid in minimizing impacts, adaptive management strategies may be used to monitor resources health, establish capacity limits and land use, implement actions, and inform program elements and project design.

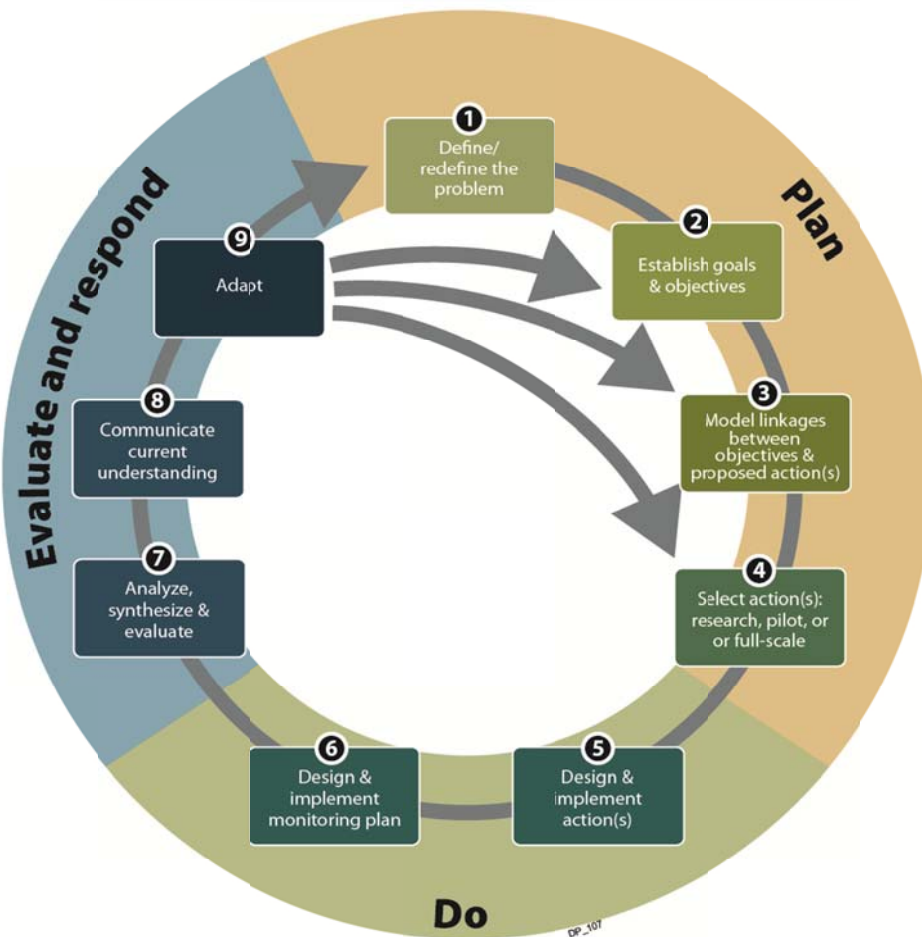


Figure 4.2. Adaptive Management Process. Source: Delta Stewardship Council

Adaptive management improves management in a changing and uncertain world. Figure 4.2 identifies the important steps of the adaptive management process.

- Step 1 has been fulfilled in Chapters 1 and 2 of this Plan
- Steps 2-4 has been fulfilled in Chapter 4
- Step 5 is implementation of the Plan, which begins upon adoption by the State Park and Recreation Commission
- Step 6 is managed by park staff to measure progress of the Plan goals. Table 4.1 lists Potential Indicators which can be used or adapted over time to measure conditions in the Park against Plan goals.
- Steps 7 and 8 are undertaken by park staff to evaluate the conditions being measured.

- In Step 9, a change in management actions is implemented to meet the Plan goals. Potential Actions are described in Table 4.1, however these are only examples. The adaptive management process means actions are formulated based on the evaluation performed in Steps 7 and 8.
- The adaptive management steps are repeated as conditions change to bring the Park closer to meeting the goals, and ultimately the Vision, in this Plan.

Management actions could include, but are not limited to, the following:

- Site management such as, but not limited to, facility design, barriers, site hardening, area/facility closures, redirection of visitors to suitable sites
- Regulation such as, but not limited to, the number of people, the location or time of visits, permitted activities or allowable equipment
- Enforcement of regulations such as, but not limited to, patrols, notification, citation
- Interpretation such as, but not limited to, information signs and exhibits, interpretive programs, brochures and fliers, public meetings, meetings with user groups
- Altering access such as, but not limited to, parking away from sensitive resources

Following the implementation of management actions, monitoring would again 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 formulated and carried out until the desired outcome is achieved.

The desired outcome described in the goals can be measured using environmental quality and visitor experience indicators. Indicators that are observable by staff during day-to-day Park operations are preferred because they can occur continuously with minimal administrative burden. Qualitative standards are also preferred if quantitative monitoring and analyses are time- and resource-consuming, but may not produce actionable information. In all cases, however, the indicators should be good predictors of the desired outcome. Thus, for some desired outcomes, such as sustainable populations of special-status species, the indicator monitoring processes may require field surveys, undertaken by trained staff using methods prescribed or recommended by regulatory agencies. Table 4.2 illustrates some of the indicators and potential actions the department may take to meet the General Plan goals. In accordance with adaptive management principles, these indicators and actions will be updated by Park staff based on field observations, new scientific knowledge and collaboration with Park partners.

Table 4.2. Potential Adaptive Management Strategies for Visitor Use.

Recreational and Community Activities and Visitor Management Overall Goals: Provide opportunities for a wide variety of recreational and community activities associated and compatible with the unique resources of the Sacramento River and its riparian corridor. Manage visitor use to provide an enjoyable, safe and high-quality experience now and for future generations.		
TOPIC	POTENTIAL INDICATORS	POTENTIAL ACTIONS
Visitor Facilities	Visitors complain about lack of necessary facilities or overcrowding. Visitors are turned away.	Collaborate with City of Colusa and others to provide facilities. Improve facilities to alleviate overcrowding. Limit access during peak times.
Trails	Conflicts such as accidents occur between users on multi-use paths.	Encourage formation of trail user groups. Limit use of certain trails during peak times, such as implementing even-day/odd-day use.
Neighborhood Impacts	Neighbors complain about noise, dust, trespass or other nuisances caused by Park visitors.	Establish time and decibel limits for amplified sound. Manage natural surface and gravel roads to reduce dust, such as watering, speed limits and gravel replenishment. Increase signage, fencing and vehicle control.
Increased Opportunities	General Plan cannot be fully implemented with existing staff and budgetary constraints.	Seek additional funding. Supplement Park operations with seasonal and/or temporary assistance from concessionaires and/or operating partners.
Natural Resource Management Overall Goal: Perpetuate the Park's natural resource values as an integral and important part of the dynamic Sacramento River Conservation Area and its Colusa Subreach.		
TOPIC	POTENTIAL INDICATORS	POTENTIAL ACTIONS
Scenic and Aesthetic	Trash is often evident on beaches.	Increase visitor contact, visitor education and trash collection.
Geology and Soils	Erosion is occurring along existing trails or adjacent areas as evidenced by exposed tree roots and ruts.	If erosion is caused by visitor use, limit intensity, duration, or type of use accordingly. Consider trail closure, relocation and/or removal.
Hydrology	Sediment is evident in wetlands. Pollutants are evident in wetlands, such as oil slicks and toilet paper.	If sedimentation is caused by visitor use, limit type of use and/or relocate facilities. Direct drainage from vehicle parking and roads through capture and treatment infrastructure such as biofiltration swales, infiltration basins and/or filters. Identify and cite noncompliant vessel operators. Install portable toilets in heavily used locations.
Vegetation	Damage to native plants, such as broken trunks, fire damage or tire tracks in unauthorized areas, is evident. Reduced occurrences of special- status species are documented.	Construct vehicle barriers such as gates, rock boundaries and seasonal fences along roads. Increase visitor contact and control by constructing a new entrance station. Consider visitor limits on intensity, duration, or type of use. Restrict campfires to particular locations, equipment and/or low fire danger periods.
Wildlife	Wildlife is disturbed. Reduced occurrences of special-status species are documented.	Close group camps, roads and/or trails during sensitive wildlife breeding/ nesting seasons. Consider other visitor limits on intensity, duration, or type of use.
Cultural Resource Management Overall Goal:		

Protect cultural resources while improving visitor appreciation of the past.		
TOPIC	POTENTIAL INDICATORS	POTENTIAL ACTIONS
Archaeology	Cultural resources are exposed by visitors.	Limit visitor use or activities in sensitive areas. Commence data recovery efforts or cover the resources.
Interpretation and Education Overall Goal: Connect visitors to the natural and cultural resources of the park and adjacent lands, and inspire them to protect those resources and recreate safely.		
TOPIC	POTENTIAL INDICATORS	POTENTIAL ACTIONS
Resource Protection	Natural and cultural resources are damaged or degraded by visitor activities. Visitors display disrespect toward Park resources.	Increase interpretive opportunities and public education to assist with protection of resources. Increase interpretive materials and programs in the Park and in local schools. Provide multi-lingual materials and programs.
Information	Visitors complain about lack of Park information.	Increase interpretive materials, signage and programs in the Park and on the internet. Provide multi-lingual materials and programs.
Visitor Facility Planning and Infrastructure Overall Goals: Develop safe, sustainable visitor facilities and convenient circulation within the Park and from nearby neighborhoods for all users that are complementary to the Park's natural and physical environment. Provide sustainable Park infrastructure, including utilities, and administrative and maintenance facilities.		
TOPIC	POTENTIAL INDICATORS	POTENTIAL ACTIONS
Water and Energy Conservation	Water and energy usage increases. Lights and faucets are left on.	Install motion-sensing lighting and low-flow fixtures. Increase controls on shower facilities.
Park Access and Circulation	Traffic accidents occur within or adjacent to the Park.	Improve the Park road and trail system. Prepare and implement a traffic management plan. Work with appropriate transportation agencies (City and County of Colusa, Caltrans) to improve circulation on nearby highways and streets.
Operations and Maintenance Overall Goal: Operate and maintain the Park to efficiently meet visitor needs, perpetuate the physical and biotic resources, and minimize negative impacts beyond the Park's border.		
TOPIC	POTENTIAL INDICATORS	POTENTIAL ACTIONS
Visitor Safety	Muddy or rutted roads snare visitors. Existing staff cannot respond adequately to safety issues and overcrowded conditions.	Close muddy or rutted roads temporarily. Re-grade or relocate roads. Add staff housing on site. Increase staff as appropriate.
Agreements	Recreation activities managed by others do not conform to the Park vision and goals.	Renegotiate or terminate agreements.

Overall VM Goal: Manage visitor use to provide an enjoyable, safe and high-quality experience now and for future generations.

GOAL VM 1. Provide an enjoyable and safe experience for all visitors.

- GUIDELINE A. Provide prospective visitors with current road conditions in the floodway.
- GUIDELINE B. Close flooded areas until floodwaters recede, roads and trails become passable and hazards are mitigated.
- GUIDELINE C. Provide timely trail access barrier information as conditions change in the floodway.
- GUIDELINE D. Maintain a trailhead and/or web-based system to notify visitors of access barriers.

GOAL VM 2. Establish and maintain visitor use patterns that are compatible with available resources.

- GUIDELINE A. Establish and implement an adaptive management process for managing visitor capacity in support of the General Plan's purpose, vision, management intent and goals. The adaptive management process should be tailored to address visitor capacity within each planning zone.

GOAL VM 3. Promote and encourage diverse trail activities while minimizing potential conflicts.

- GUIDELINE A. Promote "share-the-trail" guidelines among trail users if conflicts regularly occur.
- GUIDELINE B. Collaborate with local schools and fitness clubs, City and County of Colusa, retailers and employers to promote and publicize trail activities and events.
- GUIDELINE C. Allow the current school fitness programs that occur in the Park to continue. Designate a running route from 10th Street and the levee into the RIPARIAN RECREATION and RESTORATION/RECREATION MZs.

GOAL VM 4. Promote and manage the Park as a base camp for hunters, while providing a safe and comfortable environment for all visitors.

- GUIDELINE A. Prepare and distribute management guidelines for firearms and dogs in camp, at boat launches and in parking lots.
- GUIDELINE B. Establish and enforce game management policies if hunting creates unattractive nuisances in the Park, such as objectionable odors or excessive flies. Consult with CDFW on best management practices.
- GUIDELINE C. Provide visitor education on hunting practices to minimize visitor conflicts and concerns.

GOAL VM 5. Promote large and small special events that provide resource-related education, and celebrate the region's diverse cultural heritage and tourism resources, and meet the purpose and Vision of the Park.

- GUIDELINE A. Collaborate with the City and County of Colusa to host events such as farmers' markets and health fairs to improve public health.
- GUIDELINE B. Collaborate with state and federal wildlife and water resources agencies to provide resource-related educational events such as watershed and birding festivals.
- GUIDELINE C. Collaborate with local businesses, tribal organizations, and state and federal wildlife agencies to provide cultural events such as hunting and fishing tournaments and fairs, local art and food festivals, Native American cultural celebrations, boat shows, and cycling tours.

- GUIDELINE D. Schedule, monitor and manage site and visitor activities to minimize adverse impacts from special events, including disturbance to natural resources.
- GUIDELINE E. Work cooperatively with the City and County of Colusa and CalTrans to provide safe access to and from the Park during special events.
- GOAL VM 6. Ensure that Park programs and events organized by others and open to the public meet the department's accessibility policies.**
 - GUIDELINE A. Collaborate with partners to provide barrier-free programming in the Park. Share the department's latest Accessibility Guidelines with program and event planners and managers.
- GOAL VM 7. Manage facilities to minimize smoke, dust and other emissions that affect air quality.**
 - GUIDELINE A. Establish appropriate campfire and grilling restrictions, through coordination with the local APCD/AQMD, if air quality impacts are identified.
 - GUIDELINE B. Maintain a vegetation buffer between adjacent residences and activities that may emit aerial pollutants, such cooking and generating electricity. Organize events to avoid localized, off-site air quality impacts.

PARK OPERATIONS AND MAINTENANCE (O&M)

The proposed General Plan entails major changes to Park facilities. As a result, there is the need to reconsider existing Park operations. This component of the plan characterizes broad-level goals and guidelines for day-to-day operations of the Park. It does not address specific changes to staffing and organization, which should be adjusted as necessary for successful implementation of the Plan. DOM 1400 Park Operations and regular Departmental Notices provide extensive guidance to field personnel. Park-specific topics include:

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. Relevant Department policies include: DOM 0700 Pest Control, DOM 0800 Hazardous Materials Management and DOM 1600 Facilities Maintenance.

Energy, water and waste management. Wise use of energy and water, and minimizing waste conserves valuable resources that impact the environment outside the Park's border.

Emergency services and visitor safety. Providing emergency services to the Park, its visitors and this stretch of the Sacramento River requires careful consideration. Fire, flood, injury and boat stranding are some of the more common events that will require emergency intervention by trained personnel. Department policy DOM 1100 Emergency Medical Services provides general guidance.

Regional collaboration and coordination. The Park represents one component of an extensive network of public lands in the region. The network of public lands in the vicinity of the Park includes properties that are part of the Sacramento River National Wildlife Refuge and the Sacramento River Wildlife Area. The public will benefit by coordination of efforts to create easy access to and from the Park on roadways and pathways, including two state highways. A regional approach to resource protection, traffic circulation and recreation opportunities will result in efficient management of all public lands and circulation corridors in the area. Planning and implementation efforts must consider the planning processes currently being undertaken by other public agencies.

Agreements, easements, concessions and acquisition. Successful land management will require consideration of existing, and thoughtful execution of future, agreements that can help meet the Plan's purpose, vision, management intent and goals. For example, the City of Colusa is currently operating part of the Park under a 2011-2016 operating agreement. There are currently no concession services at the Park. Concession services could improve recreational opportunities at the Park by providing supplies and services that facilitate high-quality recreational experiences. Relevant Department policies include: DOM 1900 Concessions and Reservations, and DOM 2100 Real Property Acquisition and Management.

Volunteer involvement. Despite its history as a community-developed recreation resource, the Park currently appears to underutilize potential volunteers. Fostering a stronger relationship between the Park and the community can allow more people to experience its unique natural and recreational resources, increase public health and improve land stewardship.

Overall O&M Goal: Operate and maintain the Park to efficiently meet visitor needs, perpetuate the physical and biotic resources, and minimize negative impacts beyond the Park's border.

GOAL O&M 1. Provide unimpeded access to authorized personnel for flood maintenance activities.

- GUIDELINE A. Notify the public when floodway maintenance activities are expected to block public access.
- GUIDELINE B. Coordinate with DWR's Sutter Maintenance Yard staff when planning changes that may affect access, such as required width and height of maintenance equipment that must pass through gates and the entrance station.
- GUIDELINE C. Coordinate with DWR's Sutter Maintenance Yard staff and the City and County of Colusa on scheduling maintenance such as roadwork, mowing and levee burning.

GOAL O&M 2. Provide adequate staffing at the Park, Sector and District level to serve the public and achieve the Park purpose and vision. Ensure sufficient staffing to maintain the safety and security of Park employees and resources.

- GUIDELINE A. Maintain a regular patrol schedule for all areas of the Park.
- GUIDELINE B. Coordinate with local law enforcement agencies and emergency response providers in promoting the safety of Park visitors.
- GUIDELINE C. Maintain access for emergency vehicles and vessels, including emergency access during peak recreation periods and events.

GOAL O&M 3. Actively cooperate with local landowners, communities, and public agencies to foster coordinated public lands management through the Sacramento River Conservation Area Forum and other venues, as described in the Memorandum of Agreement Regarding the Sacramento River Conservation Area, the 2004 Memorandum of Understanding between CDFW, USFWS and the Department (subject to update every 5 years), and the SRCAF Good Neighbor Policy.

GUIDELINE A. Participate in a task force consisting of representatives from USFWS, CDFW, The Nature Conservancy and others to coordinate recreation planning, habitat management and resource protection efforts, to maximize resource values throughout the Sacramento River corridor.

GUIDELINE B. Explore opportunities for joint-use facilities and cost-sharing agreements to increase public benefits and services such as environmental education and regional recreation opportunities.

GOAL O&M 4. Improve the recognition of Park resources, as well as recreational and interpretive opportunities in the local and regional community.

GUIDELINE A. Encourage local community members and leaders to provide input into Park planning and environmental review processes.

GUIDELINE B. Implement visitor survey programs to solicit suggestions on techniques to improve management of the Park.

GUIDELINE C. Develop a public outreach program that focuses on dissemination of information regarding the Park, including maps and special events.

GOAL O&M 5. Provide opportunities for volunteers to participate in Park-wide programs.

GUIDELINE A. Develop a Volunteer-in-Parks program for interpretive program involvement, as well as park improvement opportunities.

GUIDELINE B. Establish regularly scheduled Park clean-up days where the public can participate, especially after peak-period special events.

GOAL O&M 6. Ensure that all proposed operating agreements or other legal arrangements are consistent with the General Plan. Incorporate concession services at the Park when and where they can increase visitor services that encourage healthy, active lifestyles; appreciation of natural and cultural resources; and/or sustainable resources management.

GUIDELINE A. Review all existing agreements to assess consistency with the General Plan and guide decisions on whether to renew, modify or let agreements expire.

GUIDELINE B. Prepare and monitor measurable objectives for existing and future operating and concession agreements.

GUIDELINE C. Explore opportunities for concession services as part of facility development proposals.

GUIDELINE D. Consider use of short-term concession services during peak recreation periods and special events.

GOAL O&M 7. Expand recreational and educational opportunities, resolve conflicts, improve access and protect natural resources through acquisition of properties or easements, if offered by willing sellers.

GUIDELINE A. Consider acquiring the Roberts Ditch Irrigation Company pumping station parcel for facility expansion, if offered.

GUIDELINE B. Assess adjacent properties for their capability to contribute to implementation of the Plan's Purpose and Vision.

GOAL O&M 8. Consider opportunities for mission-appropriate revenue generation when planning new facilities and operating agreements.

- GUIDELINE A. Planning for major facilities and agreements shall include preparation of a draft operating budget.
- GUIDELINE B. Investigate new paid parking technologies, such as pay-by-phone and automated payment machines, to improve efficient and convenient fee payment.

INTERPRETATION AND EDUCATION (I&E)

The elements of Interpretive Significance, Mission and Vision represent the broadest level of interpretation planning. Interpretive Significance gives the “what:” it documents the park resources and features that have been identified as important to interpret. Interpretation Mission gives the “who,” “where,” and “why:” the area being interpreted, who it is interpreted for, and why it is being interpreted. The Interpretation Vision presents the desired scenario to be created.

Park Interpretive Significance. The Park is a popular destination for water recreation, particularly boating and fishing. It is also home to a remnant of the once-widespread riparian corridor along the river. Important recreation topics for interpretation at Colusa-Sacramento River SRA include information on regulations and recommendations for hunting, fishing and boating in and near the park, area fish and game, and safety and resource protection messages for boaters, anglers, and other river recreationists. Natural history topics include the importance of riparian areas, especially riparian woodlands, plant and animal species in and around the river—including migrating species, the dynamic characteristics of the Sacramento River, water quality issues and what is being done to address them, and the riverine system in the Colusa area. Important cultural resource topics include the heritage of camping, hunting, fishing and boating in the area, flood control measures, the farming heritage, Native California Indians in the area, both past and present (Colus/ Cachil DeHe Band of Southern Wintun); the impact of early settlers on the Sacramento Valley in the Colusa area, and the history of how the land became a state park.

Park Interpretation Mission. The mission of interpretation at Colusa-Sacramento River State Recreation Area is to connect visitors to the natural and cultural resources of the park and adjacent lands, and inspire them to protect those resources and recreate safely.

Park Interpretation Vision. High-quality interpretation at the Park inspires visitors to appreciate, protect and enhance the park natural resources, and enjoy recreation in a safe manner.

Themes. Themes are critical for establishing the overall interpretive direction and tone, and they imply desired outcomes for visitors’ attitudes and perspectives. The unifying theme provides overall focus to the unit’s interpretive development. It must relate to the resources, the mission, and visitors’ interests. The most significant park resources and history are presented through the development of primary interpretive themes. Secondary themes offer valuable concepts that are significant to the unit and/or to department-wide interpretation goals, like sidebars or footnotes in a book, but do not necessarily relate to the overall unifying and primary themes.

Supporting themes (also known as subthemes) provide a more detailed perspective on a primary or secondary theme. Supporting/sub themes are too specific to be included in a general plan. They are developed in more detailed planning documents, such as an interpretation master plan or project

plan. For each primary and secondary theme below, topics covered by the theme are given. These may be used to develop supporting themes.

Unifying Theme: Colusa-Sacramento River State Recreation Area is a place shaped by the Sacramento River.

Primary Themes

- Recreation: Enjoy the river and surrounding resources as people have for generations, with consideration for safety and protecting resources.
 - Popular recreation activities, e.g. fishing, boating, bird watching, camping
 - The Park's popularity as a basecamp and launching point for hunting from boats
 - Boating safety
 - River safety, including fishing and swimming
 - Respect park resources while recreating.
 - Proper etiquette and safety for transporting and storing hunting weapons and take in the park, to minimize accidents and conflict with other park visitors
 - Following rules for dogs in the park, to minimize effects on wildlife and other visitors
 - Colusa County Boat Club, and Water Festival
 - Fishing, boating, and hunting heritage
- The riverine system: Flooding, sedimentation and river meanders impact and shape the park in both the short and long term.
 - The effects—positive and negative—of flooding, sedimentation and river meanders on the park
 - Gain and loss of land
 - Silting in of recreational resources
 - Flooding's positive effects for riparian areas and wildlife.
- Riparian areas: Riparian habitats, especially riparian woodlands, are important islands of species diversity that have almost vanished along the Sacramento River.
 - Important habitat
 - Diverse plant species
 - Importance to anadromous fish
 - Importance to birds, including migrating birds
 - Diverse mammalian and insect species
 - Sacramento River Conservation Area efforts
 - Negative effects of dogs and feral cats on wildlife
- Water quality: Past and current uses of the Sacramento River watershed have affected the quality of water at Colusa-Sacramento River SRA.
 - Water quality issues
 - Efforts to improve water quality
 - Safe eating guidelines for fish caught in the Sacramento River.
- Native California Indians: The important Colus Indian village of Coru was near the future park site, and today the Cachil DeHe Band of Wintun, descendants of the Colus and their neighbors, work to preserve their culture and language at the nearby Colusa Rancheria.

Background information—The Colus Indians, prominent along the Sacramento River, had their main village site, Coru, where the town of Colusa now stands. A satellite village of

Coru, Kats'il, is the site of a modern Rancheria occupied by the Cachil DeHe Band of Wintun. The band is working to preserve their culture and language.

- Pre-contact Native California Indian lifestyles, including the people who preceded the Colus
- Contact history
- Modern descendants of the Colus, especially the Cachil DeHe Band of Wintun's work to preserve their culture and language

Secondary Themes

- Anadromous fish: Migrating fish face challenges in the Sacramento River.
 - Warming water (related to global climate change)
 - Water quality issues
 - Barriers
 - Water levels (partially related to global climate change)
 - Water diversion
 - Predators
 - Disappearing shelter
 - Decreased gravel bars
- Park history: From city dump to recreation area and wildlife habitat, Colusa-Sacramento River State Recreation Area has grown and changed since 1955.
 - Previous use as city dump
 - Founding of the park as a State Recreation Area
 - Additions to the park and changing uses
- Agricultural heritage: Though the leading crops have changed since its inception in the mid-1800s, agriculture remains the most important industry in the Colusa area.
 - Previous agricultural use of restoration/recreation zone
 - Neighboring agriculture
 - Area agricultural heritage
- Flood control: Measures to control flooding affect the river and surrounding land.
 - History and effects of the Central Valley Project's flood control efforts
 - The Sacramento River Flood Control Project and its system of levees, bypasses and weirs—especially those in and around the park.
- Settlers: Founded at a good location to support land and river transport from Sacramento to the northern mines, the town of Colusa quickly grew.
 - Early Euro-American settlers in the area
 - Founding of the town of Colusa
 - Historic Chinese district next to the current park, and anti-Chinese sentiment
- Irrigation: The Sacramento River is an important source of water for agriculture and municipal water supplies.
 - The Central Valley Project's harnessing of the river for agricultural and municipal water supply
 - Roberts Ditch and the Roberts Ditch Irrigation Company
 - The environmental effects on the Colusa Subreach of water diversion for agriculture and municipal water supplies
- Global climate change: The global problem of climate change is causing local effects at Colusa-Sacramento River SRA.
 - Warming water and its negative effect on cold-water fish populations, such as salmon, striped bass and trout

- Potential of more drought years
- Decreased water levels and negative effect on fish populations and recreation opportunities
- Potential of more severe flooding events
- Sustainability: Sustainable design elements at Colusa-Sacramento River SRA help protect the cultural and natural environment within and outside of the park.
 - Measures to conserve energy
 - Measures to protect resources, and how they protect the resources
 - Things visitors also can do both during and after their visit to conserve energy and reduce negative impacts on the environment

Interpretive Periods. An interpretive period focuses interpretation on a specific time period. Interpretive periods are only designated for parks with significant historic resources, or very rarely for natural resources with a very specific period of importance (for example, fossils from a certain geologic age, or natural disasters such as an earthquake or major flood).

As with themes, there can be primary and secondary interpretive periods. A primary interpretive period covers the years of greatest significance for the park’s cultural resources. If there is more than one important period of equal significance, each will have an associated primary interpretive period. Secondary interpretive periods identify historical sidebars—periods of history that are interesting, but not as important to the park as the primary period.

- Primary Interpretive Periods
 - 1955-present: Park history
 - c. 16,000 BP – present Native CA Indian period.
- Secondary Interpretive Periods
 - 1843 (Bidwell and Lassen visit area)-1868 (Incorporation of Colusa): Early settler period
 - 1954 (first annual Water Show of Colusa County Boat Club) to present: Recreation heritage period.

Interpretive Collections. There are currently no interpretive collections. At the time of the writing of this plan there is no onsite storage for interpretive collections, and no interpretive staff or docents to use them. If a storage location is developed and staff members or docents are available to use them in interpretive presentations, then appropriate items might be life vests, animal pelts and bird mounts, reproduction Native California Indian non-sacred items, and vintage fishing tackle.

Recommendations for Future Interpretation Planning Efforts. Because of the park’s small size and lack of resources of major statewide significance, an Interpretation Master Plan and Interpretation Action Plan are not necessary. See the [California State Parks Interpretation Planning Workbook](#) for more information on the department’s interpretation planning structure and plan content.

Interpretation is a special form of communication that helps people understand, appreciate, and emotionally connect with the rich natural and cultural heritage preserved in parks. It is also used to acquaint and inform people about recreation opportunities, good health and safety practices in the parks, and the reasons behind park rules. Where school-specific opportunities are being discussed, “*education*” is used.

Overall I&E Goal: Connect visitors to the natural and cultural resources of the park and adjacent lands, and inspire them to protect those resources and recreate safely.

GOAL I&E 1. Protect park resources through interpretation.

GUIDELINE A. Interpret the importance of the riparian area and wetlands.

GUIDELINE B. Provide interpretation near areas with sensitive natural resources.

GOAL I&E 2. Increase visitor safety through interpretation.

GUIDELINE A. Interpret boating and swimming safety.

GUIDELINE B. Provide boating and swimming safety interpretation near river access areas, as well as at other key locations in the park.

GUIDELINE C. Interpret safe practices and etiquette of transporting and storing hunting weapons and game in the park.

GOAL I&E 3. Expand self-guided interpretation opportunities.

GUIDELINE A. Place wayside exhibits at strategic points where visitors can immediately connect with significant park resources.

GUIDELINE B. Consider self-guided interpretation along the trail now labeled Nature Trail on park brochure map.

GUIDELINE C. Add wayside exhibits in the riparian area as it is developed for recreation.

GUIDELINE D. Provide boating and swimming safety interpretation at river access points.

GUIDELINE E. Coordinate any new interpretive panels with the park signage system as that is developed and implemented. (See Facilities goals and guidelines for more information.)

GOAL I&E 4. Create educational opportunities for local schools.

GUIDELINE A. Explore service learning and citizen science projects with Colusa Unified School District, especially high school.

GUIDELINE B. Provide lesson plans and/or electronic media for the Nature Trail, at different levels tied to different content standards for different grades.

GUIDELINE C. If personal interpretation is viable, offer guided natural history school programs at the park, aligned with appropriate K-12 content standards.

GUIDELINE D. Ask teachers to periodically review and advise the park on its interpretive programming.

GOAL I&E 5. Attract non-traditional park users and address the demographics of the local community.

GUIDELINE A. Offer bilingual (Spanish/English) interpretation as much as possible.

GUIDELINE B. Use images to convey ideas and keep text to a minimum on wayside exhibits.

GUIDELINE C. Provide intergenerational interpretive opportunities that meet the different needs of children, senior citizens and families.

GOAL I&E 6. Meet the needs and interests of the local community with Park interpretation.

GUIDELINE A. Host interpretive special events that will interest and involve the local community as well as visitors from outside the area.

GUIDELINE B. Collaborate with local schools, tribes, fitness clubs, local agencies, retailers and employers to provide culturally-appropriate interpretive and educational events.

GUIDELINE C. Publicize Park interpretive activities in the local community.

GOAL I&E 7. Use interpretation to provide a broader context for the park and its resources.

- GUIDELINE A. Interpret how different cultures have used or developed technologies to shape and exploit area resources, resulting in changes to the environment.
 - GUIDELINE B. Interpret how the river environment has shaped the cultures of the people who lived in the vicinity of the park.
 - GUIDELINE C. Interpret specific ways that global climate change may affect park resources (such as declines in some fish populations as waters warm, drought, and more severe flooding events) and measures that visitors can take to reduce climate change.
 - GUIDELINE D. Interpret sustainable design elements in the park to encourage a sense of connection to the surrounding natural and cultural resources and inspire personal behavior that reduces negative impacts to the environment and promotes energy conservation.
- GOAL I&E 8. Work with partners to enhance Park interpretation and education.**
- GUIDELINE A. Develop interagency interpretive efforts, especially with the U.S. Fish and Wildlife Service’s nearby interpretation, in accordance with the Memorandum of Understanding with that agency and California Department of Fish and Wildlife; and with the other signers of the Sacramento River Conservation Area Memorandum of Agreement.
 - GUIDELINE B. Consider participating in area cultural and natural history events, such as the California Swan Festival, either by hosting activities at the Park or providing interpretation and Park information at other event venues.
 - GUIDELINE C. Host hunter safety and etiquette interpretation and/or training by outside entities such as the California Department of Fish and Wildlife and nearby sporting goods stores.
- GOAL I&E 9. Create strategies to sustain park interpretation and education.**
- GUIDELINE A. Build on the general plan’s goals and guidelines to define and prioritize objectives, strategies and tasks needed to improve and sustain Park interpretation.
 - GUIDELINE B. Designate a staff person as volunteer coordinator and create a Volunteers in Parks program to provide volunteer interpreters for school programs, public tours, roving interpretation and community outreach. Coordinate interpretive volunteers with park operations and maintenance volunteers (see O&M Goal 6, Guideline A).
 - GUIDELINE C. Provide some Park interpretation staffing—for special events at a minimum, and ideally for regular school and public programs. Interpretive staff positions could be shared between Colusa-Sacramento River SRA and other district parks.
 - GUIDELINE D. Add additional facilities to support interpretation. These could potentially include a flexible open-air event center for interpretive special events, school program staging, campfire programs and other interpretive programming, and a large primitive group camp for living history and environmental education overnight programs.

D. MANAGEMENT ZONE GOALS AND GUIDELINES

Previous sections of this chapter provide guidance on issues or topics common to the management of the entire Park. In addition to this, management zones (MZs) for appropriate recreation activities and facilities have been proposed, with zone-specific goals and guidelines. Analysis of the site opportunities and constraints considered the Park's physical, biotic, aesthetic, recreational and cultural resources; as well as existing circulation patterns, surrounding land uses, regional planning influences, and operational factors. This analysis led to designation of six management zones and consideration of off-site facilities to meet needs that are infeasible to be accommodated in the Park.

This section provides management guidance exclusive to the particular resources, issues and facilities of each MZ. The table at the beginning of each MZ section below describes its purpose, special significance, its unique contribution to the overall unit vision, allowable facilities, and management partners. Figure 4.1 illustrates the location of each zone.

RESTORATION/RECREATION MANAGEMENT ZONE (RESMZ)

Management Intent	Improve habitat for regionally-native plants and animals, improve biological integrity and function, and provide floodway-compatible recreational and educational activities.
Resource Management	Manage for riparian forest and grassland meadow habitat. Encourage dynamic riverine processes consistent with floodway management.
Visitor Experiences	Visitors will have the opportunity to enjoy active and passive recreational activities, experience scenic vistas in a natural environment and learn about native habitat and local history. The area will accommodate periods of low level use with opportunities for wildlife observation, quiet and solitude, as well as periods of higher use during scheduled events.
Time of Use	Day and overnight use, closed when flooded
Typical Visitor Activities/ Uses	Enjoying scenic views and nature observation, hiking and other designated trail uses, primitive camping and learning, picnicking
Allowable Facilities	Unpaved trails and roads, primitive group campground for up to 50 tents, portable toilets, up to 12 picnic sites, up to 35 parking spaces. Use only existing unpaved roads until erosion or deposition requires re-routing.
Management Partners	Department of Water Resources (DWR)
GOAL RESMZ 1.	Perpetuate and improve the dynamic, native vegetation and habitat communities described in the <u>Management Plan for Wetland Habitat at Colusa-Sacramento River State Recreation Area</u> as accepted by the USACE, and the acquisition grant. Meet the department's responsibilities as expressed in the <u>Cooperative Interagency Agreement between the Department of Parks and Recreation and the Department of Water Resources for Mitigation at the Colusa State Recreation Area, 2008.</u> (Appendix C).
GUIDELINE A.	Actively manage the restoration project, including regular weed control such as spraying, mowing, grazing or prescribed burning to meet restoration goals and create a self-sustaining ecosystem.

GOAL RESMZ 2. Avoid significant facility and activity impacts to the restoration project and its goals.

- GUIDELINE A. Vegetation management such as mowing in campsites, parking areas, trails and roadways is allowed to minimize fire hazard and maintain public access. Felling and moving hazardous or downed trees and limbs is allowed to minimize public safety hazards, and maintain public access.
- GUIDELINE B. Sediment removal and erosion repair activities are allowed to maintain facilities, such as re-grading and/or realigning roads and trails, as well as cleaning off campsites and picnic areas.
- GUIDELINE C. Utilize portable restrooms instead of constructed restrooms to minimize the need for utility infrastructure.
- GUIDELINE D. Retain all healthy planted vegetation.
- GUIDELINE E. Open this zone to vehicle traffic only when facilities such as vehicle barriers and an entrance station, or programs such as regular patrols or security cameras, are in place to protect the natural resources.
- GUIDELINE F. Consult with DWR when planning facilities.

RIPARIAN RECREATION MANAGEMENT ZONE (RIPMZ)

Management Intent	Perpetuate habitat for regionally-native plants and animals, allow ecological processes to nourish and sculpt the landscape, and provide floodway-compatible recreational activities.
Resource Management	Manage for riparian forest and grassland meadow habitat. Encourage dynamic riverine processes consistent with floodway management.
Visitor Experiences	Visitors will have the opportunity to enjoy active and passive recreational activities, experience scenic vistas in a natural environment and learn about native habitat and local history. The area will accommodate periods of low level use with opportunities for wildlife observation, quiet and solitude, as well as periods of higher use during scheduled events.
Time of Use	Day and overnight use, closed when flooded
Typical Visitor Activities/ Uses	Enjoying scenic views and nature observation, hiking and other designated trail uses, primitive camping, learning, human-powered boating, fishing, picnicking
Allowable Facilities	Trails, primitive beach camp for up to 8 tents, portable toilets, up to 12 picnic sites, human-powered boat ramp, primitive group campground for up to 50 tents
Management Partners	none

GOAL RIPMZ 1. Perpetuate the dynamic native vegetation and habitat communities.

- GUIDELINE A. Implement vegetation management techniques such as herbicide applications and/or vegetation removal to improve biodiversity and special status species habitat.

GOAL RIPMZ 2. Minimize facilities and activities impacts to the native vegetation and habitat communities.

- GUIDELINE A. Design and site facilities to minimize removal of native vegetation. Removal of healthy native trees above 12" DBH will require environmental review.
- GUIDELINE B. Felling and moving hazardous or downed trees and limbs are allowed to minimize public safety hazards, and maintain public access.
- GUIDELINE C. Sediment removal and erosion repair activities are allowed to maintain facilities, such as re-grading and/or realigning roads and trails, as well as sediment removal on boat launch/landing and picnic areas.
- GUIDELINE D. Infrastructure or facility construction and protection should not compromise natural river meander. Support any DWR efforts to remove, or cease maintenance of, existing bank reinforcement that prevents erosion or river meander.
- GUIDELINE E. Utilize portable restrooms instead of constructed restrooms to minimize the need for utility infrastructure.
- GOAL RIPMZ 3. Protect public access and sensitive natural resources adjacent to the CHANNEL MZ.**
- GUIDELINE A. Maintain the existing dredge access to the Sacramento River for bicycles and pedestrians.
- GUIDELINE B. The Department may allow dredging project proponents use of the existing dredge access and spoils area for dredging equipment, spoil management, or maintenance. Upon request, the Department may consider negotiating an access agreement and/or easement with dredging project proponents which include, but are not limited to, provisions for protecting sensitive resources and improving public access to the Sacramento River.
- GUIDELINE C. Dredging project proponents desiring access on State Park property shall be responsible for completing all environmental reviews and meeting all permit requirements.

LEVEE OVERLAY MANAGEMENT ZONE (LOMZ)

Management Intent	Provide for flood control, as well as vehicle, pedestrian and bicycle circulation.
Resource Management	Manage per DWR Urban Levee Design Criteria
Visitor Experiences	Visitors will have the opportunity to drive, walk and bicycle to many destinations along the river.
Time of Use	Normally open
Typical Visitor Activities/ Uses	Enjoying scenic views and wildlife watching, walking, bicycling and other designated trail uses
Allowable Facilities	Trails and roadways
Management Partners	USACE, CVFPB, DWR, City and County of Colusa

GOAL LOMZ 1. Maintain high-quality flood control, in collaboration with the Central Valley Flood Protection Board and DWR Sutter Maintenance Yard, and in accordance with Title 23 CCR.

GUIDELINE A. When considering construction of new landscape improvements, refer to the latest edition of the USACE's Engineering and Design: Guidelines for Landscape Planting and Vegetation Management at Levees, Floodwalls, Embankment Dams, and Appurtenant Structures.

GUIDELINE B. Coordinate with DWR Sutter Maintenance Yard on facility and infrastructure improvements.

GOAL LOMZ 2. Integrate the Park's main circulation system into the levee system, while not degrading flood fighting capability and other emergency access.

GUIDELINE A. Coordinate with flood control agencies and other emergency service providers on circulation improvements. Maintain access for large equipment.

GUIDELINE B. Support the City and County of Colusa's plans to install a bikeway on or adjacent to the Park and the levee.

SOUTHWEST MANAGEMENT ZONE (SWMZ)

Management Intent	Continue administrative and maintenance functions. Provide for camping and overnight lodging.
Resource Management	Maintain per DOM 0310.3 Developed Areas guidelines.
Visitor Experiences	Visitors will have the opportunity to stay overnight in RVs and/or cabins. This area may be open year-round and will offer minimal opportunities for quiet and solitude.
Time of Use	Day and overnight use
Typical Visitor Activities/ Uses	Camping and other overnight lodging, maintenance and other park operations.
Allowable Facilities	Access control facilities, maintenance yard and shop, employee residence. Individual and small group developed campground, with or without RV hookups and/or overnight lodging such as cabins (up to 42 sites).
Management Partners	none

GOAL SWMZ 1. This Plan prioritizes the acquisition of land outside the floodway to provide all season camping; however, if land acquisition is infeasible when the existing campground is impacted by boat ramp parking expansion, a campground shall be allowed in the SWMZ.

GUIDELINE A. If sufficient land is acquired for an RV campground, a lower intensity of campground or cabin development shall be considered, in order to preserve as much native vegetation as possible.

GUIDELINE B. Perform soils investigations while planning new facilities and infrastructure in the former borrow pit, to assure proper subgrade conditions and guide subgrade preparation.

GUIDELINE C. Improve roadway access for RVs, which is protected from flooding, before opening this area to vehicles. Include access control facilities with fee-collection capability, such as an entrance station.

GOAL SWMZ 2. Preserve and enhance the most significant habitat values.

GUIDELINE A. Preserve and protect existing elderberry shrubs.

GUIDELINE B. Minimize impacts on restored habitats and retain native vegetation to the extent feasible. To compensate for removal of native vegetation, exotic plant species will be removed from riparian habitat within the park unit and replaced with native species at a ratio determined by the US Army Corps of Engineers. If this is not possible, replace native vegetation at an appropriate off-site location or some combination, if only partial native vegetation enhancement can be achieved within the park boundaries.

GUIDELINE C. Utilize native plants for vegetation buffers to increase habitat values.

GOAL SWMZ 3. Improve and expand maintenance and administrative facilities as needed to efficiently serve new or expanded Park facilities and programs.

GUIDELINE A. Retain and/or improve the existing maintenance shop, carport, hazardous materials building and storage building.

GUIDELINE B. Consider providing a caretaker residence and park administration facility.

GOAL SWMZ 4. When installing facilities, eliminate potentially-significant impacts to neighbors, including noise, glare and trespass.

GUIDELINE A. Install electrical connections and restrict the use of generators to reduce noise.

GUIDELINE B. Design the lighting system to minimize off-site glare.

GUIDELINE C. Securely fence the site along private property lines.

CHANNEL MANAGEMENT ZONE (CHMZ)

Management Intent	Protect ecological processes that nourish and sculpt the landscape while recognizing that historic human uses may take precedence.
Resource Management	The channel is under the jurisdiction of the State Lands Commission and the USACE. Their management and regulatory decisions, especially regarding regular dredging proposed by Roberts Ditch Irrigation Company, will affect natural resources management and recreational opportunities in this zone.
Visitor Experiences	Visitors will have the opportunity to enjoy active and passive recreational activities and experience scenic vistas. This area offers moderate opportunities for quiet and solitude within walking distance of downtown.
Time of Use	Day use
Typical Visitor Activities/ Uses	Enjoying scenic views and nature observation, human-powered boating, learning, fishing
Allowable Facilities	Boat ramp
Management Partners	State Lands Commission, Roberts Ditch Irrigation Company

GOAL CHMZ 1. Encourage preservation of natural resource values.

- GUIDELINE A. Avoid channel dredging for navigation only, as the City of Colusa's Boat Launching Facility provides a "practicable alternative" to the existing boat ramp (see DOM 0306.7). Dredging of the current channel to retain access to historic water rights will not be actively opposed by the department.
- GUIDELINE B. Coordinate with Roberts Ditch Irrigation Company, the SLC and the USACE regarding dredging options that may affect State Park property. (See RIPMZ 3).

GOAL CHMZ 2. Minimize potential conflicts between day and overnight uses.

- GUIDELINE A. When a campground is developed adjacent to the existing boat ramp, restrict the existing ramp to human-powered boats only.

SOUTHEAST MANAGEMENT ZONE (SEMZ)

Management Intent	Provide diverse, concentrated recreational activities in a flexibly managed urban park setting.
Resource Management	Maintain per DOM 0310.3 Developed Areas guidelines.
Visitor Experiences	Visitors will have access to a wide variety of active recreational and interpretive experiences in an urban park setting. This zone will serve a high level of diverse social, interpretive, and recreational uses with few opportunities for quiet and solitude.
Time of Use	Day and overnight use, closed when flooded
Typical Visitor Activities/ Uses	Enjoying scenic views and nature observation, walking, motor- and human-powered boating, fishing, camping, picnicking, learning and socializing. Events such as weddings and family reunions, fishing tournaments and boat shows, bicycle tour and fun run staging, educational and health fairs.
Allowable Facilities	Trails and roadways, access control facilities, up to 20 individual developed camp sites, restrooms and a fish cleaning station, up to 20 individual picnic sites, and an outdoor event facility. Up to 110 parking spaces, which accommodate at least 50 auto/boat trailers and about 30 regular vehicles to support the proposed City of Colusa boat ramp, and up to 20 en-route RVs.
Management Partners	City of Colusa

GOAL SEMZ 1. Protect permanent facilities and infrastructure in the SOUTHEAST MZ from damage caused by erosion and river meander.

- GUIDELINE A. Maintain existing bank reinforcement. Install new bank reinforcement where necessary.

GOAL SEMZ 2. Over time, improve the urban park landscape to be more suited to the climate and soil conditions, while incorporating native plants.

- GUIDELINE A. When replacing plants that die or fail to thrive, install more drought-tolerant lawn, tree and other plant species.

GUIDELINE B. Improve irrigation system efficiency through installation of water-efficient spray and drip emitter equipment, and weather-sensitive controllers.

GOAL SEMZ 3. Design and manage for flexible day use and camping for large and small groups, and individuals.

GUIDELINE A. Prepare one comprehensive site plan to guide phased development.

GUIDELINE B. Design the campground to accommodate boat trailer parking during peak boating/fishing season.

GUIDELINE C. Reserve DBW grant-funded boat trailer parking for boaters during peak boating/fishing periods. At other times, sufficient parking shall be reserved to accommodate the anticipated number of boaters, and the balance may be utilized for other purposes.

GUIDELINE D. Design to accommodate special events such as bicycle tour camping and RV groups that would utilize both camping and the planned outdoor event facility.

GUIDELINE E. Provide vegetative buffers and/or fences between day and overnight uses.

GUIDELINE F. Notify the City of Colusa when events or visitor use is expected to be greater than parking capacity.

GOAL SEMZ 4. Protect natural and cultural resources during excavation of the former landfill.

GUIDELINE A. Perform soils investigations while planning new facilities and infrastructure in the former landfill to assure proper subgrade conditions and guide subgrade preparation.

GUIDELINE B. Monitor excavations for potentially hazardous materials. If suspect materials are discovered, consult a hazardous materials specialist to analyze and provide treatment recommendations.

GUIDELINE C. If landfill materials are uncovered during excavation, consult a cultural resources specialist to document and provide preservation and/or treatment recommendations.

OFF-SITE FACILITIES (OFF)

Management Intent	Collaborate with partners to provide desirable off-site facilities and services. Consider land acquisition.
Resource Management	Joint management or management by others
Visitor Experiences	Visitors enjoy a seamless experience with coordinated access to facilities managed by various partners.
Time of Use	As needed
Typical Visitor Activities/ Uses	Obtaining information, camping, paying fees, launching boats
Allowable Facilities	Access control facilities such as an entrance station, boat ramp, overnight accommodations
Management Partners	City and County of Colusa

Appropriate Future Acquisitions. Chapter 2 Planning Influences and Chapter 3 Overnight Accommodations sections discuss the recreation demand assessment and planning that has identified a significant need for camp sites and other rustic overnight accommodations in this region. The 2009 Central Valley Vision Implementation Plan recommended that 13 acres be added to the Park. This would allow additional camping facilities to be built and operated outside the Sacramento River floodway.

The Department Acquisition and Review Team had investigated the purchase of two parcels in 2006, just west of the Park's core area. According to Real Estate Assessment Documents (READ), the "Zumwalt Family Trust" (ID 4124) and the "Zwald Triangle" (ID 4110) parcels were appropriate for facility development to expand outdoor recreation opportunities. Both property owners were willing to sell these to the State in 2006-2008. Since that time, the Department's acquisition program has been curtailed by limited funding, so these acquisitions have never been completed.

The Zwald Triangle parcel (Assessor's Parcel Number 015-310-017) is located outside the city limits and is designated "Agricultural Transition" in the Colusa County General Plan. The Zumwalt Family Trust parcel (Assessor's Parcel Number 015-080-020) is being considered by the City of Colusa for annexation and is designated Industrial. Because of the land use designation and potential for utilizing city utilities, the Zumwalt parcel is more desirable for overnight accommodations.

Another potential acquisition would be the current site of the Roberts Ditch Irrigation Company pump station (Assessor's Parcel Number 015-070-040). This small parcel is situated on the river side of the levee, so hydrologic analysis would be required to see if it would be suitable for a seasonal equipment rental, trailhead, and/or interpretive facility. State land surrounds this parcel almost entirely.

The state would only acquire these parcels from willing sellers.

GOAL OFF 1. Collaborate with the City of Colusa on boat ramp facilities and services that increase visitor use, health, safety and satisfaction.

GUIDELINE A. Upon completion of the City's boat ramp, negotiate terms of a 20-year operating agreement in accordance with the DBW Boat Launching Facility grant requirements and the General Plan goals and guidelines.

GOAL OFF 2. Seek to acquire property outside the floodway for all season camping.

- GUIDELINE A. Prepare an overnight accommodation feasibility study to answer, at a minimum, the following questions:
- How many campsites and/or rooms are needed, considering existing and future demand?
 - What parcels might be available from willing sellers, at what cost?
 - What operational structure(s) are most feasible?
 - What development cost would be necessary?
 - At what size is revenue-positive operation feasible?

CHAPTER

5



CHAPTER 5: ENVIRONMENTAL ANALYSIS

A. INTRODUCTION

The Colusa-Sacramento River State Recreation Area General Plan (or “the Plan”), with all its elements, constitutes an Environmental Impact Report (EIR), as required by Public Resources Code Sections 5002.2 and 21000 et. seq. This EIR is for the approval of the Colusa-Sacramento River State Recreation Area General Plan and the discussion of impacts is commensurate with the level of specificity of the General Plan. Site specific development and resource management projects at the Park will be subject to subsequent project-level CEQA compliance and to the permitting requirements and approval of other agencies, such as the CDFW, State Water Resources Control Board (RWQCB), and others as specific projects are proposed.

The General Plan and EIR constitute the first tier of environmental review. “Tiering” in an EIR prepared as part of a General Plan allows agencies to address broad environmental issues at the general planning stage, followed by more detailed examination of actual development projects (that are consistent with the Plan) in subsequent EIRs or negative declarations. Later EIRs incorporate, by reference, the general discussions from the broader EIR (the General Plan) and concentrate solely on the issues specific to the later projects (Public Resources Code Section 21093; CEQA Guidelines Section 15152). This General Plan does not approve or commit the Department to specific projects, sites, or management plans. These items are subject to consideration and approval at a later date by Department management.

Under CEQA, the Department is a Lead agency. Since the Department also has stewardship, or Trustee, responsibilities, there are actions to protect both cultural and natural resources in this General Plan, as well as projects that are allowable under this General Plan.

B. EIR SUMMARY

ISSUES IDENTIFIED BY THE PUBLIC AND OTHER STAKEHOLDERS

As described in Chapter 1, Stakeholder Involvement, park planning requires close coordination with a variety of stakeholders, including agencies, stakeholder groups, Native American parties, and individual members of the public. The Department obtained stakeholder input through the environmental review scoping process, informal meetings and in public workshops in Colusa. In addition, stakeholder input that was received during the Colusa Subreach process led by The Nature Conservancy and SRCAF was considered. Please refer to that section for the detailed list.

In addition, a range of methods were used to gather public input for this Plan, including newsletters distribution, press releases, newspaper articles, emails, and public workshops held on February 28, 2013 and June 19, 2014. A formal Notice of Preparation scoping period was held from mid-June through mid-July 2014. Through these comment opportunities, agencies and members of the public voiced opinions and desires regarding the Plan. The main environmental issues and concerns raised are detailed in Chapter 1, Stakeholder Involvement, and are summarized below:

- Potential land use compatibility impacts
- Provision of adequate recreational opportunities
- Provision of adequate public services
- Appropriate access points
- Potential for traffic congestion and parking availability
- Appropriate cultural interpretive themes
- Relocation of the main entrance station
- Levee road access
- Adequate pedestrian and bicycle paths
- Adequate natural resources protection

Information and input from public meetings, comment letters, and survey submitted by agencies and the public influenced the development of the General Plan.

The General Plan sets the overall goals for park management and provisions for public use. It does not define project-level development specifics or the exact methods for attaining resource protection goals, such as the layout and design of facilities or specific resource management plans and processes.

The objectives of the Environmental Analysis section are to identify any significant environmental impacts of implementing the General Plan and to define actions appropriate to a General Plan level to minimize impacts and policy-level alternatives. Once the General Plan is approved and adopted, the Department can prepare management and facility development plans as required and as staff and funding allow. These would address such issues as vegetation treatment and site development. The management and facility development plans will provide specific information on resources and design considerations, including layout, facilities configuration, capacities, and level of use within designated areas of the Park.

At each level (whether a management or facility development plan), the plan or project will be subject to subsequent environmental review to determine if the discretionary action is consistent with the General Plan and to identify any significant environmental impacts and actions to minimize impacts that would be specific to the project. Actions to minimize impacts generally require resource specialists to evaluate the scope of work, identify the cause of the impacts, and specify measures to avoid or reduce the impacts to a less than significant level.

SUMMARY OF ENVIRONMENTAL EFFECTS AND ACTIONS TO MINIMIZE IMPACTS

Implementation of the General Plan applies management goals and guidelines to the Park that allows the addition of new and improved facilities and increased public use of the Park. If new and improved facilities and increased public uses were to be implemented, the construction, operation, maintenance, and increased public use could be associated with potential environmental impacts.

Under CEQA, in general, DPR has the distinction of being considered a Lead Agency, a Responsible Agency, and a Trustee Agency. A Lead Agency is a public agency that has the primary responsibility for carrying out or approving a project and for implementing CEQA, and a Responsible Agency is a public agency other than the Lead Agency that has responsibility for carrying out or approving a project and for complying with CEQA. A Trustee Agency is a state agency having jurisdiction by law

over natural resources affected by a project that are held in trust for the people of the State of California. With this distinction comes the responsibility to ensure that actions that protect sensitive resources are always implemented on every project. Therefore, DPR maintains a list of Standard Project Requirements (Appendix M) that are included in project design to reduce impacts to sensitive resources.

Implementation of the goals and guidelines described in Chapter 4, along with the Department's Operation Manual (DOM) policies and Standard Project Requirements (Appendix M), ensures that potential significant impacts remain less than significant or maintains them at a less than significant level.

C. PROJECT DESCRIPTION

The Introduction, Existing Conditions, Issues and Analyses, and The Plan sections of the General Plan includes proposed park development and operations, and designate appropriate land uses and resource management. Those sections include a project location map, site map, statement of plan objectives, and a description of the plan's technical, economic, and environmental characteristics. The sections constitute the project description. As described above, the Department will use this EIR in its decision-making process regarding General Plan approval and in the approval and development of subsequent project specific proposals. At full implementation, the General Plan will include the following proposals:

- Park-Wide Management Goals and Guidelines. A consistent set of goals and guidelines to be applied to uniform, orderly, and continuous park maintenance, operations, and facility development to maximize program efficiency and effectiveness throughout the Park.
- Management Zones. The General Plan applies management zones to the Park to provide readily identifiable boundaries for specific types of activities, programs, and developments, reducing the potential for the introduction of inappropriate activities into prime resource areas.
- Management Zone Goals and Guidelines. Goals and guidelines to be applied to uniform, orderly, and continuous park maintenance, operations, and facility development to maximize program efficiency and effectiveness within specific portions of the Park.
- Carrying Capacity. The General Plan establishes an adaptive management program to ensure that activities within the Park do not exceed the carrying capacity of the Park. Adaptive management is an on-going, iterative 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.

D. ENVIRONMENTAL SETTING

Chapter Two of this Plan entitled "Existing Conditions" describes the existing Park and adjacent land uses, recreation, topography, climate and air quality, geology and soils, hydrology, plants, animals, ecology, paleontology, cultural resources, noise environment, utilities and services, transportation and circulation, and social resources.

E. ENVIRONMENTAL IMPACTS AND ACTIONS TO MINIMIZE IMPACTS

AESTHETICS

THRESHOLDS

A project would normally result in a significant aesthetic resources impact if it would:

- 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.

IMPACTS AND ACTIONS TO MINIMIZE IMPACTS

Impact Aes-1. Potential Aesthetic Quality Impacts from New and Renovated Facilities

Implementation of the proposed General Plan allows a number of new facilities and the renovation of existing facilities at the Park, primarily to enhance and support public use of the Park. Potential new and renovated facilities could include campgrounds, picnic sites, restrooms, group interpretive/event facility, entrance station, parking areas, trails, etc. (see Chapter 4, The Plan). Installation of all the potential facilities allowed by The Plan may constitute a potentially significant aesthetic change, with the degree of change dependent on project-specific details to be determined at the time projects were proposed. The aesthetic change would be significant if the site selection, facility scale, or facility design caused substantial degradation of the scenic quality of the Park. Further, if lighting associated with facilities created substantial glare or construction required significant vegetation removal, the impact would be significant.

Areas that are most sensitive to scenic quality degradation are those that would represent a scenic vista or those visible from long-distance and near-distance views, such as those areas visible from the levee (e.g., views of the RIPARIAN/RECREATION MANAGEMENT ZONE within the Park, downtown Colusa, and nearby orchards), areas visible from beyond park boundaries, and areas with river views, which are visible from long-distance and near-distance views. For instance, a very minor structure such as a picnic area located in an environmentally non-sensitive area may not result in the same level of impact or require the action to minimize impacts as a structure such as a parking lot placed along the river in the RIPARIAN/RECREATION MANAGEMENT ZONE, which is visible from numerous points within the park and from the river.

The General Plan requires implementation of the following guidelines to protect and enhance aesthetic resources:

- NRM-6A through D (limit artificial lighting, restrict to more developed areas of the park, and direct downward, setbacks from the river bank, minimize negative aesthetic impacts of bank protection measures, remove or screen existing elements);
- RCA-1E (provide nature observation overlooks at viewpoints, especially where access to the water is infeasible);
- RCA-4B (provide informational and interpretive signage at the proposed boat launch areas, while preserving the aesthetic qualities of the river corridor);
- RCA-5C (select picnic areas based, in part, on environmental opportunities and constraints, such as views, shade, noise and flooding);

- VF-13A through C (develop and implement design guidelines, integrate positive aesthetic features into design of new park facilities, resign, organize, consolidate, screen or remove unnecessary, repetitive, or unsightly elements of park entrances);
- INF-4A (place electrical utilities underground when renovating, expanding or constructing new facilities, where allowed by the CVFPB and building codes);
- RIPMZ-2A (design and site facilities to minimize removal of native vegetation); and
- SWMZ-4B (design the lighting system to minimize off-site glare).

The implementation of the following policies from the DOM Chapter 0300 Natural Resources will also be required:

- 0310.3.1 Vegetation Management Planning for Developed Areas
- 0312.2.1 Scenic Protection Policy
- 0312.3.1 Lightscape Protection Policy

In addition, implementation of the Standard Project Requirements for Aesthetics (Appendix M) will be required in future projects. The implementation of these actions will reduce potential aesthetic quality impacts from new and renovated facilities to less than significant.

Significance After Action Implementation: Less than Significant

Impact Aes-2. Potential Aesthetic Quality Impacts from Increased Public Use

The implementation of the proposed General Plan would likely result in an increase in public visitation of the Park, if the following were implemented: new trails and bike paths, new public activity destinations, such as campgrounds, picnicking areas, and event center, and more information regarding public activities available at the Park (such as public use area maps and brochures) were disseminated. In addition, the provision of universal access improvements could result in an increase in public use of the Park. Public use would not necessarily result in adverse impacts to aesthetic resources. However, improper use of public access areas could lead to excess trash, disturbed vegetation, and damage to facilities and resources, detracting from the aesthetic quality of the Park. Excess trash, disturbed vegetation, and damage to facilities and resources may constitute a significant effect, if the degradation of aesthetic quality were substantial.

The General Plan requires implementation of the following guidelines to protect and enhance aesthetic resources: excess

- VF-4A (install Park entrance signs at all entrance points consistent with design standards);
- VF-14A through D (install Park maps and integrate information regarding Park rules and public safety, delineate park boundaries, through use of signage, to direct visitors to allowed areas, install river view/access signs that direct visitors to appropriate locations for safe access and high-quality views along the Sacramento River, identify all Park entrances with California State Parks signage);
- O&M-2A (maintain regular patrol schedule for all areas of the Park);
- O&M-5B (establish regularly schedule clean-up days with public);
- I&E-1A (interpret the importance of riparian areas and wetlands);
- I&E-1B and 2B (provide interpretation near sensitive areas and river access areas); and
- RESMZ-2D (retain all healthy planted vegetation).

The implementation of the following policy from the DOM Chapter 0300 Natural Resources will also be required:

- 0312.2.1 Scenic Protection Policy

In addition, implementation of the Standard Project Requirements for Aesthetics (Appendix M) will be required in future projects. The implementation of these actions will reduce potential aesthetic quality impacts from increased public use to less than significant.

Significance After Action Implementation: Less than Significant

AIR QUALITY

THRESHOLDS

A project would normally result in a significant air quality impact if it would:

- Conflict with or obstruct implementation of the applicable air quality plan;
- Violate any air quality standard 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.

IMPACTS AND ACTIONS TO MINIMIZE IMPACTS

Impact Air-1. Conflict with or Obstruct Implementation of Air Quality Plan

The Park is located within the jurisdiction of the Colusa County Air Pollution Control District (CCAPCD), which administers local, state, and federal air quality management programs for Colusa County. Colusa County is located in the Sacramento Valley Air Basin (SVAB), specifically the Northern Sacramento Valley Air Basin (NSVAB). The Colusa County has a national designation for either Unclassified or Attainment for all criteria pollutants. The County has a state designation as “moderately” non-attainment for ozone and non-attainment for PM10. The County is designated either attainment or unclassified for the remaining state standards.

Implementation of the proposed General Plan would increase public use opportunities and related facilities. Facilities that could be constructed under the General Plan include, but are not limited to, a new entrance station, restrooms, roads, trails, picnic areas, and campgrounds. In addition, some structures might be renovated or demolished if not adaptively reused.

Additional traffic associated with an increase of use generally may cause increased emissions of ozone precursors which could conflict or obstruct implementation of the NSVAB’s Air Quality Attainment Plan. However, as discussed in the traffic section below, the increase in traffic volume resulting from implementation of the proposed General Plan would not result in a significant impact to the local road network. Therefore, traffic emissions associated with implementation of the proposed General Plan are not expected to be substantial.

Construction activities related to proposed facilities could temporarily exacerbate non-attainment status for ozone and PM10. However, future construction activities will be required to comply with CCAPCD regulations and implement standard construction Best Management Practices (BMPs) to reduce potential air quality impacts to less than significant (see Impact Air-2 below).

Policies within DOM Chapter 0305 regarding Air Resources are also relevant to the management of this SRA and implementation of these policies will be required. In addition, implementation of Standard Project Requirements (Appendix M) for Air Quality will be required. The implementation of these actions will reduce any potential conflicts with or obstruction of implementation of an air quality plan.

Significance After Action Implementation: Less than Significant

Impact Air-2. Short-Term Increases in Regional Emissions

Emissions produced during site preparation and construction are “short-term” because they occur only during the construction phase. Dust generation is normally the primary concern during initial site preparation. Construction and demolition conducted under the General Plan could generate substantial amounts of fugitive dust. Dust emissions would vary from day to day, depending on the level and type of activity, silt content of the soil, and the prevailing weather. Primary sources of fugitive dust during construction would include excavation, earth movement, grading, and wind erosion from exposed surfaces. While most of the dust associated with the construction of various facilities would occur during the first stages of site preparation, dust would also be generated during installation of infrastructure and heavy vehicle movement over unpaved surfaces. Particularly during the initial stages of a construction project, in the absence of implementing actions to minimize impacts, construction activities may result in significant quantities of dust (more than 82 lbs/day) that results in adverse impacts to local visibility and PM10 concentrations on a temporary and intermittent basis.

Construction activities related to the proposed facilities could temporarily exacerbate non-attainment status for PM10. However, future construction activities will be required to comply with CCAPCD regulations and implement standard construction BMPs, including, but not limited to:

- Water all active construction areas at least twice daily;
- Cover all trucks hauling soil, sand, and other loose materials, or require all truck to maintain at least two feet of freeboard (i.e., the minimum required space between the top of the load and the top of the trailer);
- Pave, apply water two times daily, or apply non-toxic soil stabilizers to all unpaved access roads, parking areas, and construction staging areas;
- Sweep daily with water sweepers any unpaved access roads, parking areas, and staging areas at construction sites;
- Sweep streets daily with water sweepers if visible soil material is carried onto adjacent public streets;
- Suspend excavation and grading activity when winds (instantaneous gusts) exceed 25 miles per hour;
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas previously graded areas inactive for ten days or more;

- Enclose, cover, water twice daily, or apply (non-toxic) soil stabilizers to exposed stockpiles (dirt, sand, etc.);
- Limit traffic speeds on unpaved roads to 15 miles per hour;
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways; and
- Replant vegetation in disturbed areas as quickly as possible.

Policies within DOM Chapter 0305 regarding Air Resources are also relevant to the management of this SRA and implementation of these policies will be required. In addition, implementation of Standard Project Requirements (Appendix M) for Air Quality will be required. The implementation of these actions will reduce any potential short-term air quality impacts to less than significant.

Significance After Action Implementation: Less than Significant

Impact Air-3. Long-Term Increases in Regional Emissions

Long-term increases in regional emissions of criteria pollutants would be associated primarily with motor vehicles trips following implementation of the proposed General Plan. “Criteria” pollutants are those pollutants (or their precursors) for which the U.S. Environmental Protection Agency (EPA) has established national ambient air quality standards (NAAQS). California has established its own ambient air quality standards, which are at least as stringent as the NAAQS. Although the proposed General Plan focuses on improved recreational facilities and habitat restoration, the implementation of the proposed General Plan would potentially result in additional vehicle trips in the area, resulting in the generation of mobile source emissions, including CO, ROG, and NOX. However, the long-term operation of the Park is not expected to result in a substantial increase in traffic relative to the existing traffic load and capacity or exceed, individually or cumulatively, a level of service standard. Thus, the operation of the project would also not result in a net increase in long-term local CO emissions associated with increase in mobile sources. Furthermore, construction of the project is not anticipated to result in the operation of any major stationary emissions source, so implementation of the proposed General Plan would not violate any air quality standard or contribute significantly to an existing or projected air quality violation. As a result, a long-term operational impact from implementation of the proposed General Plan is considered less than significant.

Policies within DOM Chapter 0305 regarding Air Resources are also relevant to the management of this SRA and implementation of these policies will be required. In addition, implementation of Standard Project Requirements (Appendix M) for Air Quality will be required. The implementation of these actions will further reduce any potential long-term air quality impacts.

Impact Air-4. Potential Exposure of Sensitive Receptors to Air Quality Impacts

One of the primary reasons for air quality regulations and standards is the protection of those members of the population who are the most sensitive to adverse health effects of air pollution, or “sensitive receptors.” The term “sensitive receptors” refers both to specific population groups and to the land uses where they could be located for long periods. Commonly identified sensitive population groups are children, the elderly, the acutely ill, and the chronically ill. Commonly identified sensitive land uses are residences, schools, playgrounds, child care centers, retirement or convalescent homes, hospitals, and clinics.

The Park is located in a rural environment, surrounded by open space, agriculture, and light industrial, but is also located immediately adjacent to downtown Colusa. However, the prevailing wind blows east, minimizing any exposure to the City. While implementation of the proposed General Plan is not expected to result in long-term increases in mobile, stationary, and area source emissions, construction activities could result in short-term increases in pollutant concentrations at nearby sensitive receptors. Future construction activities will be required to comply with CCAPCD regulations and implement standard construction BMPs.

Policies within DOM Chapter 0305 regarding Air Resources are relevant to the management of this SRA and implementation of these policies will be required. In addition, implementation of Standard Project Requirements (Appendix M) for Air Quality will be required. The implementation of these actions will reduce any potential exposure of sensitive receptors to air quality impacts from construction to less than significant.

Significance After Action Implementation: Less than Significant

Impact Air-5. Potential Odor Impacts

The occurrence and severity of odor impacts depend on numerous factors, including the nature, frequency, and intensity of the source, wind speed, and direction, and the sensitivity of the receptors. Although offensive odors rarely cause any physical harm, they can still lead to considerable distress among the public and often generate complaints to local government and regulatory agencies.

Construction activities could potentially include the application of architectural coating and asphalt paving materials that could generate localized temporary odors. The use of diesel-powered construction equipment could also generate localized temporary odors. However, no heavy industrial features, wastewater treatment facilities, or other large odor emitters are proposed under the General Plan. In addition, prevailing winds blow to the east away from the City of Colusa. Therefore, the proposed General Plan would not be expected to create objectionable odors affecting a substantial number of people and this impact is considered less than significant.

BIOLOGICAL RESOURCES

THRESHOLDS

A project would normally result in a significant biological resources impact 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 Wildlife 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 Wildlife or US 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; or

- 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.

IMPACTS AND ACTIONS TO MINIMIZE IMPACTS

Impact Bio-1. Potential Effects to Native Habitats and Species

Implementation of the proposed General Plan allows new land uses, new facilities and improvements to existing facilities, which could result in an effect on native habitats and species.

Minor, short-term, temporary effects on native habitats and species could occur from construction activities associated with proposed facilities (e.g., trails, parking areas, campgrounds, boat launch, and other facilities). Construction effects would be related to heavy equipment and construction activities that could result in soil compaction, dust, vegetation removal, wildlife harassment or mortality, root damage, noise, erosion, and introduction and spread of non-native species. These construction effects could also result in long-term, permanent negative effects on native species and habitats if actions are not taken to reduce impacts. Operational impacts to native habitats and species could include nighttime lighting, trampling, habitat disturbance, and mortality. However, a majority of the proposed facilities are planned within the SOUTHEAST and SOUTHWEST PARCELS, which total only 4% of the Park area, or 17-acres of the 359-acre Park.

A potential long-term impact on native habitats and species could occur from the presence of dogs on roads/trails and in campgrounds, if actions are not taken to reduce impacts. Disturbances by dogs can range from trampling of sensitive habitat, improper disposal of dog waste, spread of non-native species and disease, and harassing or mortality of wildlife. In addition, other users, such as children or bird watchers, may not be comfortable with unfamiliar dogs. Dogs on State Park property are regulated in the Public Resources Code (§ 5008.1, and §5008.2) and the California Code of Regulations (Title 14, § 4312). Leashed dogs are only permitted within the limits of campgrounds, picnic areas, parking areas, roads, structures or other areas posted open to dogs.

Although implementation of the Plan would increase visitor use, the goals and guidelines within the RESTORATION/RECREATION and RIPARIAN/RECREATION MANAGEMENT ZONES include perpetuating and improving the native communities, primarily by protecting natural processes and functions.

Approximately 4.5 acres of riparian forest species were planted in the reclaimed borrow pit in 2001 within the SOUTHWEST MANAGEMENT ZONE. The restoration within the SOUTHWEST MANAGEMENT ZONE was for habitat enhancement, not required mitigation for impacts in other areas. The funding for this restoration project did not impose special requirements for long-term protection of this habitat restoration. In addition, the lack of recruitment (natural establishment of new native plants) indicates that native habitat in this area may not be sustainable in the long term. Destruction, loss, or degradation of sensitive wetland habitats, such as the one acre wetland identified in the SOUTHWEST MANAGEMENT ZONE (see Appendix N), will be avoided in accordance with the measures defined in DOM 0306.7 Wetlands Management Policy. Implementation of the Plan in the SOUTHWEST MANAGEMENT ZONE allows for a new RV campground in this area, which may result in impacts to the re-vegetated area at the restoration site, if impacts are not minimized.

Possible future facilities that could occur under the proposed General Plan would be subject to the goals and guidelines of The Plan, which would guide how the actions would be implemented. The General Plan requires implementation of the following guidelines to protect and enhance biological resources:

- NRM-1A (encourage more natural river meander process, limit projects requiring bank revetment);
- NRM-2A through D (establish, maintain, and preserve riparian buffers along waterways, stormwater runoff control and chemical spill procedures, remove trash and portable facilities before expected flood events, minimize trail and road erosion);
- NRM-3A through D (support hydrological, physical and biological processes and conditions in the floodway that enable continued succession of plant community types, prioritize the use of locally native species in future planting, implement adaptive management strategies to recover habitat values, avoid impacts to riparian habitat and mitigate if necessary, retain mature native trees);
- NRM-4B (preserve and enhance habitat corridors through the Park to maintain and increase their usage by native species, when planning new facilities avoid placement in habitat corridors);
- NRM-7A through C (reducing presence of invasive non-native plant species, and feral and other problematic non-native animals, control or eliminate noxious weeds, monitor the presence of feral and other problematic animals, and inform Park visitors about releasing and feeding animals);
- NRM-10A (concentrate Park facilities and programs in accordance with the Colusa Subreach Recreation Access Plan to reduce impacts on natural resources);
- INF-2B through D (provide visitor information about waste management and proper disposal of dog waste in the floodway, provide animal-resistant waste receptacles to minimize negative wildlife interactions, remove or secure waste receptacles when floods threaten the Park, to reduce trash and pollution in the river);
- O&M-3A (participate in a task force consisting of representatives from USFWS, CDFW, The Nature Conservancy and others to coordinate recreation planning, habitat management and resource protection efforts, to maximize resource values throughout the Sacramento River corridor);
- I&E-1A(interpret the importance of riparian areas and wetlands);
- RESMZ-1A (actively manage the restoration project, including regular weed control such as spraying, mowing, grazing or burning to meet restoration goals and create a self-sustaining ecosystem);
- RESMZ-2D (retain all healthy planted vegetation);
- RESMZ-2E (open this zone to vehicle traffic only when facilities or programs are in place to protect the natural resources);
- RIPMZ-2A (design and site facilities to minimize removal of native vegetation);
- CHMZ-1A (avoid channel dredging for navigation only, as "practicable alternatives" to the existing boat ramp are available);
- SWMZ 1A (if sufficient land is acquired for an RV campground, a lower intensity of campground or cabin development shall be considered, in order to preserve as much native vegetation as possible);

- SWMZ-2A through C (preserve elderberry shrubs, minimize impacts on restored habitats, retain native vegetation, compensate for removal of native vegetation by removing exotic plant species from riparian habitat and replace with native vegetation, and utilize native plants for vegetation buffers); and
- SEMZ-2A (when replacing plants that die or fail to thrive, install more drought-tolerant lawn, tree and other plant species).

The implementation of the following policies from the DOM Chapter 0300 Natural Resources will also be required:

- 0310.1 Plant Management Goals
- 0310.1.1 Plant Management Policy
- 0310.2 Natural Succession
- 0310.2.1 Natural Succession Policy
- 0310.3 Vegetation Management in Developed Areas
- 0310.3.1 Vegetation Management Planning for Developed Areas
- 0310.4 Revegetation
- 0310.4.1 Genetic Integrity Policy
- 0310.6 Plant Protection Policy
- 0310.6.1 Tree Protection
- 0310.6.1.1 Emergency Tree Felling Policy
- 0310.8 Disposition of Woody Plant Materials and Debris
- 0310.8.1 Woody Plant Materials and Debris Removal Policy
- 0310.8.2 Wood Removal Resource Protection Policy
- 0310.9 Monitoring
- 0311.1 Animal Management Goal
- 0311.2 General Animal Management Policy
- 0311.3 Genetic Diversity Preservation Policy
- 0311.4 Terrestrial Habitat Management
- 0311.4.1 General Habitat Management Policy
- 0311.4.3 Habitat Restoration
- 0311.4.3.1 Habitat Restoration Policy
- 0311.4.4 Habitat Enhancement and Maintaining Human-Created Habitats
- 0311.4.4.1 Habitat Enhancement Policy
- 0311.5.1.1 General Animal Protection Policy
- 0311.5.3.3 Supplemental Feeding
- 0311.5.3.3.1 Supplemental Feeding Policy
- 0311.5.4 Injured, Sick or Dead Animals
- 0311.5.4.1 Injured, Sick, or Dead Animal Policy
- 0311.5.5 Animal Release
- 0311.5.5.1 Animal Reintroduction Policy
- 0311.5.5.2 Augmentation of Diminished Populations Policy
- 0311.5.5.3 Rehabilitated Animal Release Policy
- 0311.5.6 Native Animal Control
- 0311.5.6.1 Native Animal Control Policy
- 0311.6 Aquatic Resources and Fishery Management

- 0311.6.1 Aquatic Habitat and Animal Protection
- 0311.6.1.1 Anadromous Fish Policy
- 0311.6.2 Aquatic Habitat and Animal Restoration
- 0311.6.3 Aquatic Animal Releases-Fish Stocking
- 0311.6.4 Aquatic Animal Control
- 0315.3.1 Habitat Conservation Plan Approval Policy
- 0316.1.1 Off-Site Mitigation Policy

In addition, implementation of the Standard Project Requirements for General and Natural Resources (Appendix M) will be required in future projects. The implementation of these actions will reduce potential impacts to native habitats and species to less than significant.

Significance After Action Implementation: Less than Significant

Impact Bio-2. Potential Effects on Special-Status Species and Sensitive Habitats

Implementation of the proposed General Plan allows new land uses, new facilities and improvements to existing facilities, which could result in effects on special-status plant species (i.e., Ferris's milk-vetch, brittlescale, palmate-bracted bird's beak, rose-mallow, and Coulter's goldfields), special-status wildlife species (i.e., valley elderberry longhorn beetle, Swainson's hawk, western-yellow billed cuckoo, bank swallow, nesting birds, western red bat, hoary bat, western small-footed myotis, Chinook salmon-Central Valley winter run, Chinook salmon-Central Valley spring run, Chinook salmon-Central Valley fall/late fall run, Central Valley steelhead, and green sturgeon), and sensitive habitats (i.e., barren/gravel/sand, naturalized riparian wetland, riparian woodland forest, riparian wash scrub, water, and designated critical habitat). It is important to limit impacts to sensitive habitats as they are critical for the viability of special-status species.

Minor, short-term, temporary effects on special-status species and sensitive habitats could occur from construction activities associated with proposed facilities (e.g., trails, parking areas, campgrounds, boat launch, and other facilities). Construction effects would be related to heavy equipment and construction activities that could result in dust, vegetation removal, wildlife harassment or mortality, root damage, erosion, noise, and introduction and spread of non-native species. However, these construction effects could also result in long-term, permanent negative effects on special-status species and sensitive habitats, if actions are not taken to minimize impacts. Operational impacts to native habitats and species could include nighttime lighting, trampling, habitat disturbance, and mortality. However, a majority of the proposed facilities are planned within the SOUTHEAST and SOUTHWEST PARCELS, which total only 4% of the Park area, or 17-acres of the 359-acre Park. The SOUTHEAST MZ contains the least amount of sensitive habitat.

A potential long-term impact on native habitats and species could occur from the presence of dogs on roads/trails and in campgrounds, if actions are not taken to reduce impacts. Disturbances by dogs can range from trampling of sensitive habitat, improper disposal of dog waste, spread of non-native species and disease, and harassing or mortality of wildlife. In addition, other users, such as children or bird watchers, may not be comfortable with dogs that are unknown. Dogs on State Park property are regulated in the Public Resources Code (§ 5008.1, and §5008.2) and the California Code of Regulations (Title 14, § 4312). Leashed dogs are only permitted within the limits of campgrounds, picnic areas, parking areas, roads, structures or other areas posted open to dogs.

Implementation of the Plan would increase visitor use while protecting natural resources. Implementation of the goals and guidelines within the RESTORATION/RECREATION and RIPARIAN/RECREATION MANAGEMENT ZONES includes perpetuating and improving the native communities, primarily by protecting natural processes and functions.

Future facilities that could occur under the proposed General Plan would be subject to the goals and guidelines of the Plan, which would guide how the actions would be implemented. Within RESTORATION/RECREATION and RIPARIAN/RECREATION MANAGEMENT ZONES, habitat for special-status species would be enhanced. Destruction, loss, or degradation of sensitive wetland habitats, such as the one acre wetland identified in the SOUTHWEST MANAGEMENT ZONE, will be avoided in accordance with the measures defined in DOM 0306.7 Wetlands Management Policy. In addition, the use of locally native species in future plantings would be prioritized Park-wide.

The General Plan requires implementation of the following guidelines to protect and enhance biological resources:

- NRM-1B (document the effects of river course changes and erosion on bank swallow habitat);
- NRM-4A (Inventory, monitor and share the conditions of the Park's resources, conduct scientific research for conserving sensitive species and ecosystems);
- NRM-5A through D (monitor distribution, extent, and condition of special-status species, implement adaptive management strategies as impacts to special status species are noted, avoid or minimize impacts to special-status species, educate park visitors regarding protection and management activities);
- NRM-9D (allow leashed dogs in certain areas, if they can be shown to pose a threat to sensitive resources, establish limits such as seasonal restrictions, which can eliminate impacts);
- VF-10D (locate trails to minimize impacts on sensitive resources, both during construction and use);
- I&E-1B (provide interpretation near sensitive areas and river access areas);
- RIPMZ-1A (vegetation management to improve biodiversity and special-status species habitat); and
- SWMZ-2A through C (preserve elderberry shrubs, minimize impacts on restored habitats, retain native vegetation to the extent feasible, compensate for removal of native vegetation by removing exotic plant species from riparian habitat and replace with native vegetation, and utilize native plants for vegetation buffers).

The implementation of the following policies from the DOM Chapter 0300 Natural Resources will also be required:

- 0310.5 Plant Species of Concern Including Rare, Threatened and Endangered (RTE) Plants
- 0310.5.1 Protection of Rare, Threatened and Endangered Plants and Their Habitats Policy
- 0310.5.2 Knowledge of Rare, Threatened, Endangered, and Other Sensitive Plant Localities
- 0310.5.3 Park Projects and Plant Species of Concern Policy
- 0310.5.4 Restoration of Listed Plant Populations
- 0310.5.3.1 Use of Plant Species of Concern Policy
- 0311.5.2 Special Animal Protection and Management
- 0311.5.2.1 Special Animal Policy

- 0311.5.2.2 Knowledge of Special Animal Localities
- 0311.5.2.3 Park Projects and Animals of Special Concern

In addition, implementation of the Standard Project Requirements for General and Natural Resources (Appendix M) will be required in future projects. The implementation of these actions will reduce potential impacts to special-status species and sensitive habitats to less than significant.

Significance After Action Implementation: Less than Significant

Impact Bio-3. Potential Increase in Public Access and Use

Implementation of the proposed General Plan would allow new public uses, facilities and improvements to existing facilities, and would result in increased public access and use of the park. With increased activity associated with public use of the park, non-native invasive species could be transported by visitors onto park land at a greater rate than occurs at present. Seeds of invasive species are likely to be dispersed by such vectors as the boots of hikers and the tires of cars. Invasive plant species can cause: 1) a decline in distribution and density of native plant and wildlife habitats; 2) a decrease in native plant diversity; and 3) a direct modification of the environment, such as transforming a sensitive plant community to a non-native habitat.

Establishment of a viable, non-native species population in ecologically sensitive areas can also lead to alterations in the abundance, diversity, and distribution of wildlife species populations. The potential for increased density and distribution of invasive species is proportionate to the increase in the number of visitors to the park and could constitute a significant impact.

Potentially significant loss of vegetation and wildlife due to recreational activities may be caused by:

- Excessive noise, trampling, or rapid movements by joggers resulting in harassment to wildlife;
- Increased garbage and road-kills that attract predators, resulting in mortality and loss of species diversity;
- Off-trail activity resulting in habitat destruction and/or fragmentation and spread of invasive species; and
- Disturbance by dogs on sensitive species and wildlife.

The General Plan requires implementation of the following guidelines to protect and enhance biological resources:

- NRM-7A through C (reducing presence of invasive non-native plant species, and feral and other problematic non-native animals, control or eliminate noxious weeds, monitor the presence of feral and other problematic animals, and inform Park visitors about releasing and feeding animals);
- NRM-9C and D (manage park waste in a way that avoids changes in wildlife behavior, allow leashed dogs in certain areas, if they can be shown to pose a threat to sensitive resources, establish limits such as seasonal restrictions, which can eliminate impacts);

- RCA-5D (develop sufficient support facilities such as restrooms and parking, to offer high quality recreation, minimize user conflicts, and reduce potential natural resources and neighborhood impacts);
- RCA-8A (locate and design trails to provide access to high-quality wildlife-viewing areas, at a distance that minimizes wildlife disturbance);
- INF-2B through C (Provide visitor information about waste management topics, provide animal-resistant waste receptacles to minimize negative wildlife interactions);
- VM-2A (establish and implement an adaptive management process for managing visitor capacity in support of the General Plan's purpose, vision, management intent and goals. The adaptive management process should be tailored to address visitor capacity within each planning zone);
- VM-5D (schedule, monitor and manage site and visitor activities to minimize adverse impacts from special events, including disturbance to natural resources);
- O&M-2A (maintain regular patrol of the Park);
- O&M-5B (establish regularly scheduled Park clean-up days where the public can participate, especially after peak-period special events);
- I&E-1A through B (interpret the importance of the riparian area and wetlands, provide interpretation near areas with sensitive natural resources);
- I&E-3A through C (place wayside exhibits at strategic points where visitors can immediately connect with significant park resources, consider self-guided interpretation along the trail, add wayside exhibits in the riparian area as it is developed for recreation);
- I&E-8A through B (develop interagency interpretive efforts, consider participating in area cultural and natural history events); and
- SWMZ-2A through C (preserve elderberry shrubs, minimize impacts on restored habitats, retain native vegetation, compensate for removal of native vegetation by removing exotic plant species from riparian habitat and replace with native vegetation, and utilize native plants for vegetation buffers).

The implementation of the following policies from the DOM Chapter 0300 Natural Resources will also be required:

- 0310.7 Exotic Plant Control
- 0310.7.1 Exotic Plant Landscaping Policy
- 0310.7.2 Removal of Established Populations of Exotic Plants
- 0310.8.3 Transport of Wood Infested With Exotic Pests
- 0311.5.3 Animal Feeding and Human Sources of Food
- 0311.5.3.1 Animal Feeding Policy
- 0311.5.3.2 Animal-Proof Food Storage and Garbage Management
- 0311.5.3.2.1 Animal-Proof Food Storage and Garbage Management Policy
- 0311.5.5.4 Non-native Animal Releases
- 0311.5.5.4 Non-Native Animal Release Policy
- 0311.5.7.1 Non-Native Animal Control Policy
- 0311.5.7.2 Wild Pigs
- 0311.5.7.3 Cats
- 0311.5.7.4 Dogs
- 0311.5.8 Animal Pests/Nuisance Animals
- 0317.1.1 Visitor Recreational Uses Policy

- 0319.1 General Natural Resources Interpretation and Education Policy

In addition, implementation of the Standard Project Requirements for General and Natural Resources (Appendix M) will be required in future projects. The implementation of these actions will reduce potential impacts to biological resources from increased public access and use to less than significant.

Significance After Action Implementation: Less than Significant

CULTURAL RESOURCES

THRESHOLDS

A project would normally result in a significant cultural resources impact if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in § 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to § 15064.5;
- 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.

IMPACTS AND ACTIONS TO MINIMIZE IMPACTS

Impact Cul-1. Impacts to Cultural and Historic Resources

The Sacramento River nourished human settlements over millennia, while re-sorting and burying evidence of ancient cultures under multiple layers of sediment. Recorded and unrecorded cultural resources within the Park and in the surrounding areas comprise the cultural heritage of the region. While evidence of ancient human occupation of the Park has not been recorded, there is significant evidence nearby.

One archaeological resource, the Colusa City Dump, CA-COL-286H is recorded as a result of archaeological inventory (White, 2015). Targeted Phase 1.5 extended inventory was completed on the dump site in 2014. This archaeological testing of the dump site indicates that surface deposits to three feet deep were thoroughly crushed and reworked in advance of campground construction. Excavation of a trench on the south margin of the campground found that archaeological evidence of the dump extends to a depth greater than nine feet. Moreover, these trench observations also indicated that the deposits greater than three feet in depth are likely to contain event-specific features representing individual dump actions or temporal palimpsest representing specific sets of events. These dump events may retain sufficient integrity of source and treatment to yield information pertinent to analysis and interpretation of City of Colusa domestic economy and social change during the early 20th century, Depression era, World War II, and post-War eras. Future development at the site that disturbs the deposits to a depth greater than three feet will require additional archaeological investigation.

The lack of cultural resources on or within 6" of the surface does not preclude buried deposits within the park. During a 2012 interview with Dr. Greg White, the acknowledged cultural resource

expert for this area of the Sacramento River, he indicated that this portion of the river has a very active flood history which is well documented and that the park is highly culturally sensitive.

There are no investigations of potential submerged resources in the department's records.

In 2001, Past Forward, Inc. undertook a statewide inventory of potentially historic post-war structures in DPR properties. The subsequent report, Recordation and Evaluation of Buildings and Structures Constructed Between 1942-1965 In and By California State Parks and Beaches (2002), found the buildings in the Park Unit's core area, which include the entrance station/office, restroom, maintenance shop, and landscape not eligible for listing on the California Register of Historic Places for their historic or architectural significance. As part of the general plan process, DPR conducted a new survey and re-evaluation of the core area in February 2015, including associate landscape features. The research/analysis team confirmed that, due to alterations and post-1976 additions, the core area is not eligible as a historic district; nor does it contain individually significant structures. The team recommended further research of the 1961-1966-built maintenance shop complex be completed in order to confirm its eligibility.

Implementation of the General Plan could result in the addition of new facilities, renovation of existing facilities, maintenance, and other activities requiring ground disturbance. Unidentified or subsurface cultural resources may be affected by proposed facilities construction and maintenance operations. Further, the Park contains potentially significant historic resources, such as the maintenance shop, which may be considered eligible for listing under the NHPA.

The General Plan requires implementation of the following guidelines to protect and enhance cultural resources:

- CRM-1A (before modifying the maintenance shop, evaluate it for California Register eligibility);
- CRM-2A (increase public knowledge and appreciation of native peoples, early settlement and other appropriate cultural resources topics and artifacts);
- I&E-6B (collaborate with local tribes and organizations to provide culturally appropriate interpretive and educational events); and
- SEMZ-4A (if landfill materials are uncovered during excavation, consult a cultural resources specialist to document and provide preservation and/or treatment recommendations).

The implementation of the following policy from the DOM Chapter 0300 Natural Resources will also be required:

- 0317.1.3.7 Materials Gathered by California Native Americans

In addition, implementation of the Standard Project Requirements for Cultural Resources (Appendix M) will be required in future projects. The implementation of these actions will reduce potential impacts to cultural and historic resources to less than significant.

Significance After Action Implementation: Less than Significant

Impact Cul-2. Paleontological Impacts

No paleontological sites have been recorded within the Park boundaries.

Nevertheless, significant assemblages of fossil remains are possible even in areas designated as having low potential for resources. Therefore, potential impacts to unidentified paleontological resources can be mitigated to less than significant at the program level with the implementation of guidelines.

The General Plan requires implementation of the following guideline to protect and enhance cultural resources:

- CRM-1 (protect physical paleontological, prehistoric, and historic resources))

The implementation of the following policies from the DOM Chapter 0300 Natural Resources will be required:

- 0309.1 Site Development Policy
- 0309.2 Paleontological Resources Protection Policy
- 0313.4.1.1 Scientific Investigation and Collection Policy
- 0313.4.1.2 Authorization for Collection
- 0313.4.1.3 General Limitations and Conditions on Scientific Collecting

In addition, implementation of the Standard Project Requirements for Cultural Resources (Appendix M) will be required in future projects in future projects. The implementation of these actions will reduce potential impacts to paleontological resources to less than significant.

Significance After Action Implementation: Less than Significant

Impact Cul-3. Disturbance of Human Remains

Human remains or funereal goods are not anticipated to occur within the Park. However, this does not preclude the existence of burials of any kind from being identified in the Park during construction or maintenance activities should development occur as a result of General Plan implementation.

The General Plan does not have any applicable guidelines related to the discovery or disturbance of human remains. However, implementation of the Standard Project Requirements for Cultural Resources (Appendix M) identifies the requirements if human remains are discovered. The implementation of these requirements will reduce potential impacts to human remains to less than significant.

Significance After Action Implementation: Less than Significant

GEOLOGY AND SOILS

THRESHOLDS

A project would normally result in a significant geology and soils impact 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. Refer to Division of Mines and Geology Special Publication 42
- Strong seismic ground shaking
- Seismic-related ground failure, including liquefaction
- 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.

IMPACTS AND ACTIONS TO MINIMIZE IMPACTS

Impact Geo-1. Expose to Geologic Hazards

The Colusa-Sacramento River SRA General Plan area is not located near a fault delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map. The area is not subject to many seismic hazards. Future facilities will be subject to conformance with the California Building Code. Therefore, potential seismic impacts are considered less than significant.

Impact Geo-2. Potential Erosion and Unstable Soil Impacts

Implementation of the proposed General Plan allows the addition of new facilities and increased public use. Construction activities associated with site development involving the removal of vegetation cover, such as excavating, grading, and filling, could temporarily subject bare soils to erosion from rain and wind during construction activities. These construction activities could cause accelerated soil erosion resulting in local impacts such as facilities damages, water quality degradation, or loss of habitat. Over-use by park visitors and the creation of unauthorized trails by park visitors could increase erosion potential.

The General Plan requires implementation of the following guidelines to avoid and reduce erosion and unstable soil impacts:

- NRM-2A (establish, maintain, and preserve riparian buffers along waterways);
- NRM-2D (design, maintain, and monitor conditions of trails and roadways to minimize erosion);
- INF-3A (conduct or review recent hydrologic and soils analyses before locating infrastructure in the floodway, endeavoring to construct new infrastructure in areas less likely to be damaged by natural processes);
- VM-1B (close flooded areas until they become passable);
- I&E-2A and B (increase visitor safety through interpretation, boating and river access);
- RESMZ-2B and RIPMZ-2C (sediment removal and erosion repair activities are allowed to maintain facilities);

- SWMZ-1B (perform soils investigations while planning new facilities and infrastructure in the former borrow pit, to assure proper subgrade conditions and guide subgrade preparation);
- SEMZ-1A (maintain existing bank reinforcement, install new bank reinforcement where necessary); and
- SEMZ-4A (perform soils investigations while planning new facilities and infrastructure in the former landfill to assure proper subgrade conditions and guide subgrade preparation).

The implementation of the following policies from the DOM Chapter 0300 Natural Resources will also be required:

- 0307.1 General Geologic Policy
- 0307.2 Geologic Monitoring
- 0307.3 Geologic Hazards
- 0307.3.1 Siting Facilities in Geologically Hazardous Areas
- 0307.3.1.1 Siting Facilities to Avoid Natural Hazards Policy
- 0308.1 Soil Protection Policy
- 0317.2.4.1 Mineral Exploitation Within Parks Policy

In addition, implementation of the Standard Project Requirements for Geology and Soils (erosion) (Appendix M) will be required in future projects. The implementation of these actions will reduce potential erosion and unstable soil impacts to less than significant.

Significance After Action Implementation: Less than Significant

Impact Geo-3. Potential Soils Impacts Related to Septic Systems

Wastewater is currently collected in septic tanks and directed to several leach fields: one in the Maintenance Yard and three in the SOUTHEAST PARCEL. Implementation of the proposed General Plan allows the addition of new facilities, renovation of existing facilities, and increased public use that may generate additional wastewater. Because most of the Park is within the Sacramento River floodway, wastewater may need to be directed off-site in the future to comply with CVFPB guidelines.

In May 2014, the City of Colusa began the process to annex the Park property into the incorporated City limits. In the Planning Commission Staff Report for the annexation approval, City staff determined that the City of Colusa has adequate water, wastewater, and sewer capacity to serve the property. The Park will likely connect to the City's systems in the future; however, if connections do not occur, future facilities will be required to be in compliance all applicable federal, state, and local regulations.

The General Plan requires implementation of the following guidelines to avoid and reduce impacts related to septic systems:

- NRM-10B (conduct or review recent hydrologic analyses before locating new facilities in the floodway);

- VF-1A through B (incorporate site and facility design features to minimize potential flood damage, facilities and infrastructure construction or protection should not compromise natural river meander);
- VF-2A (use sustainable design strategies to minimize impacts); and
- INF-1A through B (upgrade existing sewage treatment systems when replacing or expanding facilities in the SOUTHEAST MZ, coordinate with City of Colusa to extend water, sewage, and electrical utilities, and road infrastructure, to the Park when needed for facility expansion).

The implementation of the following policy from the DOM Chapter 0300 Natural Resources will also be required:

- 0308.1 Soil Protection Policy

In addition, implementation of the Standard Project Requirements for Geology and Soils (erosion) (Appendix M) will be required in future projects. The implementation of these actions will reduce potential soils impacts from septic systems to less than significant.

Significance After Action Implementation: Less than Significant

GREENHOUSE GAS EMISSIONS

THRESHOLDS

A project would normally result in a significant greenhouse gas emissions impact if it would:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

IMPACTS AND ACTIONS TO MINIMIZE IMPACTS

Climate change refers to any significant change in the measures of climate, such as average temperature, precipitation, or wind patterns over a period of time. Significant changes in global climate patterns have recently been associated with global warming attributed to accumulation of greenhouse gas (GHG) emissions in the atmosphere. Various gases in the Earth's atmosphere, classified as atmospheric GHGs, play a critical role in determining the Earth's surface temperature. Solar radiation enters Earth's atmosphere from space, and a portion of the radiation is absorbed by the Earth's surface. The Earth emits this radiation back toward space, but the properties of the radiation change from high-frequency solar radiation to lower-frequency infrared radiation.

GHGs, which are transparent to solar radiation, are effective in absorbing infrared radiation. As a result, absorption within the atmosphere of this infrared radiation that otherwise would have escaped the Earth's atmosphere results in atmospheric warming. This phenomenon is known as the greenhouse effect. Among the prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO₂), methane (CH₄), ozone (O₃), water vapor, nitrous oxide (N₂O), and chlorofluorocarbons (CFCs).

Human-caused emissions of these GHGs, in excess of natural ambient concentrations, are responsible for enhancing the greenhouse effect. Emissions of GHGs contributing to global climate change are attributable in large part to human activities associated with the

industrial/manufacturing, utility, transportation, residential, and agricultural sectors. In California, the transportation sector is the largest emitter of GHGs, followed by electricity generation. A byproduct of fossil fuel combustion is CO₂. Emissions of CO₂ are largely by-products of fossil fuel combustion, whereas methane primarily results from off-gassing associated with agricultural practices and landfills. The most common GHG generated by human activities is CO₂, followed by methane and nitrous oxide.

As the name implies, global climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern, respectively. California is the 12th to 16th largest emitter of CO₂ in the world and produced 492 million gross metric tons of carbon dioxide equivalents in 2004.

Carbon dioxide equivalents are a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is also dependent on the lifetime, or persistence, of the gas molecule in the atmosphere. Expressing GHG emissions in carbon dioxide equivalents takes the contribution of all GHG emissions to the greenhouse effect and converts them to a single unit equivalent to the effect that would occur if only CO₂ were being emitted.

Neither CARB nor the CCAPCD has formally adopted a recommended methodology for evaluating GHG emissions under CEQA. The CCAPCD has not adopted any plans or regulations that address climate change or GHG reduction strategies.

Impact GHG-1. Potential GHG Emissions Impacts

Implementation of the proposed General Plan would allow construction projects for the provision of public use opportunities and related facilities. The Introduction, Existing Conditions, Issues and Analyses, and The Plan sections of the General Plan includes proposed park development and operations, and designate appropriate land uses and resource management. Those sections include a project location map, site map, statement of plan objectives, and a description of the plan's technical, economic, and environmental characteristics. Facilities that are proposed to be constructed under the General Plan include, but are not limited to, a new entrance station, restrooms, roads, trails, picnic areas, and campgrounds. In addition, some structures might be renovated or demolished if not adaptively reused.

The implementation of the proposed General Plan would result in short-term and long-term emissions from construction, stationary sources, and mobile sources. During the initial stages of a construction project, in the absence of actions to minimize impacts, construction activities may result in significant quantities of dust (more than 82 lbs/day) that results in adverse impacts to local visibility and PM₁₀ concentrations on a temporary and intermittent basis. The long-term operation of the Park is not expected to result in increases in traffic relative to the existing traffic load and capacity or exceed, individually or cumulatively, a level of service standard. Thus, the operation of the project would also not result in a net increase in long-term local CO emissions associated with increase in mobile sources. Furthermore, construction of the project is not anticipated to result in the operation of any major stationary emissions source, so implementation of the proposed General Plan would not violate any air quality standard or contribute significantly

to an existing or projected air quality violation. As a result, a long-term operational impact from implementation of the proposed General Plan is considered less than significant.

The General Plan requires implementation of the following guideline to protect and enhance air quality and reduce greenhouse gas emissions:

- VM-7B (maintain a vegetation buffer between adjacent residences and activities that may emit aerial pollutants))

The required policies presented in the DOM Chapter 0305 regarding Air Resources are also relevant to the management of this SRA and implementation of these policies will be required. In addition, implementation of the Standard Project Requirements for Air Quality (Appendix M) would be required in future projects. The implementation of these actions will reduce potential greenhouse gas emissions to less than significant.

Significance After Action Implementation: Less than Significant

HAZARDS AND HAZARDOUS MATERIALS

THRESHOLDS

A project would normally result in significant hazards and hazardous materials impact 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; 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.

IMPACTS AND ACTIONS TO MINIMIZE IMPACTS

Impact Haz-1. Potential Impacts Associated with Hazardous Sites

Implementation of the proposed General Plan allows the addition of new facilities and renovation of existing facilities in the SOUTHEAST PARCEL where the former City Dump is located. The *Phase One Environmental Site Assessment* identified potential contamination to soil and groundwater due to historic use of the property as a landfill and due to the long-term industrial nature of surrounding properties and known impacts to surrounding properties, warranting further investigation.

Construction activities in this area could include excavation, grading, and other ground disturbing activities, along with operational uses that may include public use and maintenance activities, which could result in hazardous materials impacts. As previously discussed, soil samples collected in the landfill area contained lead and common dry cleaning solvent tetrachloroethene (PCE). Additional sampling and testing would be required in this area to determine whether thresholds exceed the Permissible Exposure Limits (PEL) established by EPA and levels established by the California Department of Health Services guidelines and California Code of Regulations requirements.

The General Plan requires implementation of the following guidelines to avoid and reduce potential hazardous materials impacts:

- SEMZ-4A (perform soils investigations when planning new facilities and infrastructure); and
- SEMZ-4B (monitor excavations for potentially hazardous materials).

The implementation of the following policy from the DOM Chapter 0300 Natural Resources will also be required:

- 0308.1 Soil Protection Policy

In addition, implementation of the Standard Project Requirements for Hazards (Appendix M) will be required in future projects. The implementation of these actions will reduce potential hazards impacts to less than significant.

Significance After Action Implementation: Less than Significant

Impact Haz-2. Potential Construction Phase and Operational Hazardous Materials Release Impacts

Implementation of the proposed General Plan allows the addition of new facilities or renovation of existing facilities and public use. Potential construction activities would require the use of certain potentially hazardous materials such as fuels, oils, paints, and solvents. These materials would generally be used for excavation equipment, generators, and other construction equipment and would be contained within vessels engineered for safe storage. Spills during on-site fueling of equipment or upset conditions (i.e., puncture of a fuel tank through operator error or slope instability) could result in a release of hazardous materials into the environment. Storage of large quantities of these materials at construction sites is not anticipated. However, potential release of these materials would be a potentially significant impact.

The General Plan requires implementation of the following guidelines to avoid and reduce potential hazardous materials impacts:

- NRM-2B (assure that stormwater runoff does not carry pollutants to the river by establishing and implementing procedures to manage chemical spills);
- SEMZ-4A (perform soils investigations when planning new facilities and infrastructure); and
- SEMZ-4B (monitor excavations for potentially hazardous materials).

The implementation of the following policies from the DOM Chapter 0300 Natural Resources will also be required:

- 0314.3 Oil Spills
- 0314.3.1 Oil Spill Response Planning Policy
- 0314.3.2 Reporting Requirements for Oiled Animals
- 0314.3.3 Oil Spill Natural Resource Damage Assessment Policy

In addition, implementation of the Standard Project Requirements for Hazards (Appendix M) will be required in future projects. The implementation of these actions will reduce potential construction phase and operational hazardous materials impacts to less than significant.

Significance After Action Implementation: Less than Significant

Impact Haz-3. Potential Fire Hazard Impacts

Implementation of the proposed General Plan allows new and renovated park facilities and public use. Sparks from potential construction and maintenance activities, such as welding and cutting, could ignite dry brush and wood structures. If such a fire occurred and it spread to adjacent areas, damage to Department property and wildlife habitat, and public health and safety risk could occur. Further, unregulated public use activities, such as use of campfires or matches, could result in fire hazards.

The General Plan requires implementation of the following guidelines to avoid and reduce potential fire hazards:

- O&M-2A through C (maintain regular patrol, coordinate with local law enforcement agencies and emergency providers in promoting safety, maintain access for emergency vehicles and vessels); and
- I&E-1 through 10(advocating public education regarding appropriate visitor use activities).

The implementation of the following policies from the DOM Chapter 0300 Natural Resources will also be required:

- 0313.1.1 Natural Resources Maintenance
- 0313.1.1.1.4 Resource Maintenance Activities and Schedules
- 0313.1.1.1.5 Annual Inspection of Resources
- 0313.2 Fire Management
- 0313.2.1 Wildfire Management
- 0313.2.1.1 Wildfire Management Planning
- 0313.2.1.1.1 Wildlife Management Planning Policy
- 0313.2.1.2 Vegetation Management and Fuel Modification
- 0313.2.1.2.1 Flammable Vegetation/Fuel Modification Policy
- 0313.2.1.3 Closure of Fire-Damaged Areas
- 0313.2.1.4 Reporting
- 0313.2.2 Prescribed Fire Management
- 0313.2.2.1 Prescribed Fire Management Policy
- 0313.2.2.2 Organization and Responsibilities
- 0313.2.2.3 Qualification and Training
- 0313.2.2.4 Prescribed Fire Burn Boss
- 0313.2.2.5 Health and Safety
- 0313.2.2.6 Planning
- 0313.2.2.7 Unit Prescribed Fire Management Plan
- 0313.2.2.8 Project Burn Plan
- 0313.2.2.8.1 Project Burn Plan Preparation Policy
- 0313.2.2.8.2 Project Burn Plan Review, Approval, and Filing

- 0313.2.2.8.3 Adherence to Project Burn Plan
- 0313.2.2.8.4 Alteration of an Approved Project Burn Plan
- 0313.2.2.9 Implementation
- 0313.2.2.9.1 Incident Action Plans

In addition, implementation of the Standard Project Requirements for Hazards (Appendix M) will be required in future projects. The implementation of these actions will reduce potential fire hazard impacts to less than significant.

Significance After Action Implementation: Less than Significant

Impact Haz-4. Potential Demolition and Renovation Phase Hazardous Materials Impacts

Implementation of the proposed General Plan allows reuse and renovation of existing facilities or demolition of existing structures. Assessments for the presence of lead-based paint or asbestos in these structures have not occurred. Based on the age and nature of these structures, existing buildings may contain these substances. Asbestos is a naturally-occurring, fibrous material used as a fireproofing and insulating agent in building construction before such uses were banned by the Environmental Protection Agency (EPA) in the 1970s. Similarly, lead-based paint was commonly applied on interior and exterior structural surfaces prior to being banned by the EPA in 1978.

Asbestos is regulated both as a hazardous air pollutant under the Clean Air Act and as a potential worker safety hazard under the authority of Cal-OSHA. Lead-based paint is classified as a hazardous waste if the lead content exceeds 1,000 part per million. Additionally, lead-based paint chips can pose a hazard to workers and adjacent sensitive land uses. Demolition or renovation activities may therefore expose the public and construction workers to these substances.

The General Plan requires implementation of the following guideline to avoid and reduce exposure to hazardous materials:

- VF-2A (use sustainable design strategies to minimize impacts of park development and operation. Use natural, renewable, indigenous, and recyclable materials when feasible. Design to facilitate maintenance and management practices that avoid the use of environmentally-damaging, waste-producing, or hazardous materials)

In addition, implementation of the Standard Project Requirements for Hazards (Appendix M) will be required in future projects. The implementation of these actions will reduce potential demolition and renovation hazardous materials impacts to less than significant.

Significance After Action Implementation: Less than Significant

HYDROLOGY AND WATER QUALITY

THRESHOLDS

A project would normally result in a significant hydrology and water quality impact 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.

IMPACTS AND ACTIONS TO MINIMIZE IMPACTS

Impact Hyd-1. Potential Water Quality Impacts

The implementation of the proposed General Plan would require excavation and filling to construct the new facilities, including campgrounds, roads, parking and associated utilities. In addition, some renovation activities may also require excavation and filling. Minor grading may also be required to implement proposed restoration activities. Without restrictions, soil disturbance associated with project development construction activities could cause accelerated soil erosion and sedimentation or the release of other construction-related pollutants (e.g., fuels, oils, lubricants, paints, concrete, etc.) to adjacent ditches and subsequent downstream waterways and/or wetlands. Urban contaminants such as oil, grease, heavy metals, and pesticides and herbicides from the project could also be present in runoff. Sediments and other contaminants could be discharged to the Sacramento River or migrate into groundwater through infiltration, which could violate water quality standards or waste discharge requirements. However, the Department would prepare a Storm Water Pollution Prevention Plan (SWPPP) prior to project construction and would require its contractors to apply all Best Management Practices (BMPs) included in the SWPPP during construction, in accordance with RWQCB requirements under Section 401 of the Clean Water Act.

The General Plan requires implementation of the following guidelines to protect and enhance water quality:

- NRM-2A through E (establish, maintain, and preserve riparian vegetation buffers along waterways, stormwater runoff control and chemical spill procedures, remove trash and portable facilities before expected flood events, minimize trail and road erosion); and
- INF-2D (remove or secure waste receptacles when flood threaten the Park, to reduce trash and pollution in the river).

The implementation of the following policies from the DOM Chapter 0300 Natural Resources will also be required:

- 0306.1 Water Resources Planning and Management Policy
- 0306.9 Water Quality and Quantity
- 0306.9.1 Water Quality and Quantity Policy
- 0313.5 Inventory, Monitoring and Assessment Program (IMAP)
- 0314.2 Natural Resources Damage Resulting From Non-Emergency Activities

In addition, implementation of the Standard Project Requirements for Hazards and Hydrology (Appendix M) will be required in future projects. In addition, the Department will be required to comply with RWQCB requirements. The implementation of these actions will reduce potential water quality impacts to less than significant.

Significance After Action Implementation: Less than Significant

Impact Hyd-2. Potential Groundwater Impacts

Implementation of the proposed General Plan allows for new and renovated facilities, including campground, roads, parking areas, and other facilities, which may result in a slight increase in impervious surface area. As a site for recreation use, increases to impervious surface area is not expected to be substantial. Much of the 359-acre Park is undeveloped, including the RESTORATION/RECREATION and RIPARIAN/RECREATION AREAS, totaling approximately 342 acres, or 96% of the Park. Most of the proposed facilities are proposed within the SOUTHEAST and SOUTHWEST PARCELS, totaling approximately 17 acres, or 4% of the Park area. Further, 11 acres in the SOUTHEAST PARCEL are already primarily developed with existing campgrounds, parking, and the entrance station. Therefore, there is not a significant amount of impervious surface area proposed that would significantly alter groundwater recharge. The proposed General Plan does not include any groundwater pumping or installation of a well to access the water table.

The General Plan requires implementation of the following guidelines to avoid and reduce potential impacts to groundwater:

- INF-1C (renovate the existing potable water distribution systems to meet current health and safety codes, including use of backflow prevention devices); and
- INF-1D (install or upgrade irrigation systems to efficiently water plants that require irrigation, such as lawn areas).

The implementation of the following policies from the DOM Chapter 0300 Natural Resources will also be required:

- 0306.1 Water Resources Planning and Management Policy
- 0306.7 Wetlands Management Policy
- 0306.9 Water Quality and Quantity
- 0306.9.1 Water Quality and Quantity Policy
- 0308.1 Soil Protection Policy

In addition, implementation of the Standard Project Requirements for Hydrology (Appendix M) will be required in future projects. The implementation of these actions will reduce potential groundwater impacts to less than significant.

Significance After Action Implementation: Less than Significant

Implementation of the proposed General Plan would result in an increased demand for water due to the increase in facilities and associated increase in public use. As a site for recreation use, the increase in water demand is not expected to be substantial. The SRA is currently served by the City of Colusa. In May 2014, the City of Colusa began the process to annex the Park property into the incorporated City limits. In the Planning Commission Staff Report for the annexation approval, City staff determined that the City has adequate water supply to serve the property. Therefore, implementation of the proposed General Plan is expected to have a less than significant effect on groundwater supplies.

The General Plan requires implementation of the following guideline to avoid and reduce potential impacts resulting from increases in water demand:

- INF-1D (install or upgrade irrigation systems to efficiently water plants that require irrigation, such as lawn areas).

The implementation of the following policies from the DOM Chapter 0300 Natural Resources will also be required:

- 0306.1 Water Resources Planning and Management Policy
- 0306.9.1 Water Quality and Quantity Policy

In addition, implementation of the Standard Project Requirements for Hydrology (Appendix M) will be required in future projects. The implementation of these actions will reduce potential groundwater supply impacts to less than significant.

Significance After Action Implementation: Less than Significant

Impact Hyd-3. Potential Alteration of the Course of Stream or River Impacts

The Sacramento River floodway is managed by the Central Valley Flood Protection Board. The guidelines laid out in the proposed General Plan aim to allow natural river flow and meander which result in continual erosion, deposition, and re-sculpting of the park landscape. Implementation of the proposed General Plan would not result in the alteration of the course of a stream or river. However, the construction of proposed facilities would result in slight alterations of the existing drainage pattern due to the reconstruction and expansion of recreational facilities in the Park. Measures to control erosion and sedimentation would be implemented during construction and operation of the site. Typical measures include the preparation of a SWPPP in accordance with RWQCB requirements under Section 401 of the Clean Water Act.

The General Plan requires implementation of the following guidelines to avoid and reduce potential alteration impacts to the river:

- NRM-1A (encourage, design, and implement projects that allow a more natural Sacramento River meander; limit projects that would require bank revetment);

- NRM-1B (monitor river course changes and erosion);
- NRM-10B (conduct or review recent hydrologic analyses before locating new facilities in the floodway, construct new infrastructure and facilities in areas less likely to impact natural processes);
- VF-1B(facilities and infrastructure construction or protection should not compromise natural river meander); and
- RIPMZ-2D (Infrastructure or facility construction and protection should not compromise natural river meander).

The implementation of the following policies from the DOM Chapter 0300 Natural Resources will also be required:

- 0306.1 Water Resources Planning and Management Policy
- 0306.2 Watershed Management Policy
- 0306.3 Stream Management Policy
- 0306.4 Watershed and Stream Protection Policy
- 0306.5 Stream Restoration Policy
- 0306.6 Floodplain Management Policy
- 0306.7 Wetlands Management Policy

In addition, implementation of the Standard Project Requirements for Hydrology (Appendix M) will be required in future projects. The implementation of these actions will reduce potential river alteration impacts to less than significant.

Significance After Action Implementation: Less than Significant

Impact Hyd-4. Potential Stormwater Runoff Impacts

Implementation of the proposed General Plan allows the addition of new facilities, renovation of existing facilities, maintenance activities, and public use. If implemented, proposed facilities would result in slightly increased impervious surface areas that would increase the amount of stormwater runoff. Stormwater runoff is influenced by rainfall intensity, ground surface permeability, watershed size and shape, and physical barriers. The introduction of impermeable surfaces greatly reduces natural infiltration, allowing for a greater volume of runoff. In addition, paved surfaces and drainage conduits can accelerate the velocity of runoff, concentrating peak flows in downstream areas faster than under natural conditions. Significant increases to runoff and peak flow can overwhelm drainage systems and alter flood elevations in downstream locations. Finally, increased runoff velocity can promote scouring of existing drainage facilities, reducing system reliability and safety.

The construction and operation of the proposed facilities do not generate a significant increase in runoff. Many of the proposed facilities would not be paved (e.g., primitive campgrounds and associated parking, as well as most trails) or would be located in already developed areas. In addition, restoration efforts would generally result in an improvement to water quality. Existing drainage facilities on the site and throughout the area have sufficient capacity to accommodate stormwater drainage and this capacity would not be exceeded by development of the proposed General Plan. Because potential project-related increases in runoff water would be small and would

not exceed the capacity of the existing drainage systems or provide substantial additional sources of polluted runoff, the impact on the drainage system and on water quality is considered less than significant.

Impact Hyd-5. Potential Exposure of People or Structures to Significant Risk due to Flooding

Most of the Park is subject to regular flooding and the implementation of the proposed General Plan would result in additional recreational facilities that could expose people and structures to risks associated with flooding. However, as is the case now, the site would be closed to visitors in anticipation of and during flood events and, therefore, is not expected to increase the risk of exposure to visitors when compared with existing conditions.

Implementation of the proposed General Plan allows new and renovated facilities, including campgrounds, picnic areas, restrooms, roads, trails and bike paths, and parking areas, as well as public use in these areas. All of these facilities, with the exception of those proposed west of the levee, would be subject to flooding. However, as with the existing facilities, the expanded and upgraded facilities located within the levee would be subject to seasonal closures and would be constructed in a manner that is compatible with occasional flooding, and would not impede or redirect flows. New facilities and infrastructure are subject to the issuance of an encroachment permit by the Central Valley Flood Protection Board to ensure that the project would not compromise the integrity of the Sacramento River flood control system.

The General Plan requires implementation of the following guidelines to avoid and reduce potential impacts associated with flooding:

- VF-1A (incorporate site and facility design features to minimize potential flood damage);
- VF-7A (install gates and signage to deter visitors from entering flooded areas);
- INF-3A through B (conduct or review hydrologic and soils analyses before locating infrastructure in floodway, design infrastructure to minimize potential damage from flood events);
- INF-5A (relocate administrative functions outside the floodway to minimize flood evacuation and potential damage);
- VM-1A through D (provide visitors with current road conditions in the floodway, close flooded areas until waters recede, roads and trails become passable, and hazards mitigated, provide timely trail access barrier information as conditions change in the floodway, maintain a trailhead and/or web-based system to notify visitors of access barriers);
- O&M-1A through B (notify the public when floodway maintenance activities are expected to block public access, coordinate with DWR's Sutter Maintenance Yard staff when planning changes that may affect access);
- LOMZ-1A and B (maintain high quality flood control, when considering construction of new landscape improvements, refer to the latest edition of the USACE's, coordinate with DWR Sutter Maintenance Yard on facility and infrastructure improvements);
- SWMZ-1C (improve roadway access for RVs, which is protected from flooding, before opening this area to vehicles); and
- SEMZ-1A (protect permanent facilities and infrastructure in the SOUTHEAST MZ from flood damage).

The implementation of the following policies from the DOM Chapter 0300 Natural Resources will also be required:

- 0306.6 Floodplain Management Policy
- 0307.3.1.1 Siting Facilities to Avoid Natural Hazards Policy
- 0314.1 Natural Resource Damage Resulting from Emergencies
- 0314.1.1 Emergency Preparation

In addition, implementation of the Standard Project Requirements for Hazards and Hydrology (Appendix M) will be required. The implementation of these actions and compliance with permit requirements will reduce potential flooding to less than significant.

Significance After Action Implementation: Less than Significant

Impact Hyd-6. Inundation by seiche, tsunami, or mudflow

The Park is not located near a surface water body in which a tsunami could directly or indirectly affect the area. The Park is located on relatively flat topography, has a low risk of seismic ground shaking, and does not contain slopes that could pose hazards associated with mudflows. Therefore, exposure of people or structures to a significant risk involving seiche, tsunami, or mudflow is considered less than significant.

NOISE

THRESHOLDS

An Environmental Noise Assessment was prepared by Illingworth & Rodkin, Inc. to study the potential noise impacts that may result from implementation of the proposed General Plan (Appendix J). The State of California has established plans and policies designed to limit noise exposure at noise sensitive land uses. These plans and policies are contained in the CEQA Guidelines, Appendix G and the California State Parks Planning Handbook. A project would normally result in a significant noise impact if it would:

- Expose persons to or generate noise levels that would exceed applicable noise standards presented conflicting with the California State Parks Planning Handbook. The Planning Handbook requires the description of natural and man-made sounds in the General Plan. An appropriate goal for the noise level in a State Recreation Area is 60 dBA L_{dn} . Impacts resulting from the generation of noise levels are assessed under the third bullet;
- Expose persons to excessive vibration levels. Groundborne vibration levels due to project construction activities exceeding 0.3 in/sec PPV would have the potential to result in cosmetic damage to normal buildings;
- Substantially permanently increase noise levels at existing sensitive receptors resulting from traffic and on-site operational noise; or
- Result in temporary construction-related noise that would occur outside the allowable hours.

IMPACTS AND ACTIONS TO MINIMIZE IMPACTS

Impact Noi-1. Potential Noise Exposure and Generation Impacts

Implementation of the proposed General Plan would result in temporary, intermittent (e.g. construction, maintenance activities) and permanent increases (e.g., traffic and park activity noise) in ambient noise levels.

Temporary Construction Noise

Noise impacts resulting from construction depend upon the noise generated by various pieces of construction equipment, the timing and duration of noise-generating activities, and the distance between construction noise sources and noise sensitive areas. Construction noise impacts primarily result when construction activities occur during noise-sensitive times of the day (e.g., early morning, evening, or nighttime hours), the construction occurs in areas immediately adjoining noise sensitive land uses, or when construction lasts over extended periods of time. However, many of the proposed facilities would not take extended periods of time to construct (e.g., primitive campgrounds and associated parking, trails).

Construction activities generate considerable amounts of noise, especially during earth moving activities when heavy equipment is used. The highest maximum noise levels generated by project construction would typically range from about 90 to 95 dBA L_{max} at a distance of 50 feet from the noise source. Typical hourly average construction-generated noise levels are about 81 to 88 dBA L_{eq} measured at a distance of 50 feet from the center of the site during busy construction periods (e.g., earth moving equipment, impact tools, etc.). Hourly average noise levels generated by the construction of new park features would range from about 65 to 88 dBA L_{eq} measured at a distance of 50 feet, depending upon the amount of activity at the site. Construction-generated noise levels drop off at a rate of about 6 dBA per doubling of the distance between the source and receptor. Shielding by buildings or terrain often result in lower construction noise levels at distant receptors.

The total duration of construction will vary per specific project that is implemented as part of future park enhancements. Construction phases would include demolition, grading, trail construction, and paving. Noise generated by construction activities would temporarily elevate noise levels at adjacent noise sensitive receptors; however, there are not many sensitive receptors near the Park, primarily residences. Noise-generating construction activities will adhere to the Municipal Code, which restricts noise generating activities during specific hours. Construction activities will also be required to implement standard construction BMPs related to noise. These may include, but are not limited to:

- Ensure all DPR Standard Project Requirements are met (Appendix M).
- Equip all internal combustion engine driven equipment with intake and exhaust mufflers that are in good condition and appropriate for the equipment.
- Unnecessary idling of internal combustion engines should be strictly prohibited.
- Utilize “quiet” air compressors and other stationary noise sources where technology exists.
- Route all construction traffic to and from the project site via designated truck routes, specifically to Roberts Road and Market Street/SR 20 & 45 which are the primary commercial corridors in the City of Colusa, where possible.
- Designate a “disturbance coordinator” who would be responsible for responding to any local complaints about construction noise. The disturbance coordinator will determine the

cause of the noise complaint (e.g., starting too early, bad muffler, etc.) and will require that reasonable measures warranted to correct the problem be implemented. Conspicuously post a telephone number for the disturbance coordinator at the construction site and include in it the notice sent to neighbors regarding the construction schedule.

The Colusa-Sacramento River SRA General Plan requires implementation of the following guidelines to reduce potential noise impacts:

- NRM-8A (manage noise generating activities in the Park, design roadways and parking to minimize vehicle noise in activity areas, through screening, separation of use areas, and other appropriate techniques)

The implementation of the following policies from the DOM Chapter 0300 Natural Resources will also be required:

- 0312.4 Soundscape
- 0312.4.1 Soundscape Protection Policy

In addition, as stated above, implementation of the Standard Project Requirements for Noise (Appendix M) will be required. The implementation of these actions and adherence to standard construction BMPs will reduce potential construction noise impacts to less than significant.

Significance After Action Implementation: Less than Significant

Operations

On-site stationary and area noise sources such as RVs with generators, landscaping equipment, parking lot noise associated with vehicles, and noise from park-users, as well as increases in vehicle traffic on area roadways attributable to the proposed project, could result in a slight long-term, permanent increase in the ambient noise levels. Noise sensitive receptors in the vicinity of the Park include residents of the City of Colusa living near the intersection of 12th Street and Levee Street and in the Highstreet Trailer Court, a mobile home community located south of Levee Street between 10th Street and 11th Street; and, several residents of Colusa County living along Roberts Road between Levee Street and Princeton Road (SR 45).

The measured noise levels at the Park perimeter ranged from 50 dBA L_{dn} to 53 dBA L_{dn} . The noise survey did not identify the presence of any intrusive noises that would have a significant adverse effect upon visitors to the Park. The primarily natural soundscape is a benefit to this Park. The noise environment is compatible with the existing and planned uses. This is considered a less than significant impact.

Traffic data provided by *Fehr and Peers* in the Transportation Study (Appendix K) for the proposed project were reviewed to calculate potential project-related traffic noise level increases along roadways serving the Park. The Plan proposes to relocate the entrance to the Park from its current location at 10th Street, potentially to 12th Street, two blocks to the west. Other potential locations are off Levee Street or off Highway 45 between the Levee Street intersection and Roberts Ditch. The most affected receptors are residences located near the intersection of 12th and Levee Streets. The existing noise level at these residences is 52 dBA L_{dn} . With the implementation of the plan, the

weekday noise level at these residences is calculated to increase to 53 to 54 dBA L_{dn} and the weekend noise level is calculated to increase to 54 to 55 dBA L_{dn} . The increase would be less than 5 dBA, and noise levels would remain within the range compatible with residences. Noise levels along other area roadways serving the project are anticipated to increase by less than 1 dBA L_{dn} as a result of the implementation of the proposed General Plan. Therefore, the implementation of the proposed General Plan would not result in a substantial increase in ambient traffic noise at sensitive receptors in the vicinity of the Park. The impact is considered less than significant.

In addition, this less than significant impact will further be reduced with the implementation of the following General Plan guidelines:

- NRM-8A (manage noise generating activities in the Park, design roadways and parking to minimize vehicle noise in activity areas, through screening, separation of use areas, and other appropriate techniques); and
- NRM-8B (post and distribute noise restrictions, including appropriate levels of radios and other human-made devices, recommended quiet zones, event guidelines, and maintenance activities).

Planned improvements in the RESTORATION/RECREATION MANAGEMENT ZONE and RIPARIAN/RECREATION MANAGEMENT ZONE located in the northern portion of the Park include vehicular circulation on unpaved roads, two primitive group campsites, parking, new multi-use trails, 3 – 8 boat-in campsites, restrooms, picnic sites, and human-powered boat launch. The nearest sensitive receptor is a single residence along Roberts Road near the western edge of the RIPARIAN/RECREATION MANAGEMENT ZONE where Roberts Road turns northwest towards its intersection with SR 45. Noise from vehicle circulation and campers in the Park will be buffered by distance and the acoustical shielding provided by the levee. The Park has established Quiet Hours from 10 p.m. to 6 a.m. While intermittently audible, activities in these Park areas that would be implemented by the new General Plan would not cause a measurable change in noise levels in the vicinity.

The General Plan proposes converting the public road on the levee to a park road and bikeway. These activities are not expected to cause a quantitative or qualitative change to the soundscape in the area.

In the SOUTHWEST MANAGEMENT ZONE, located on the west side of Roberts Road, the Park Maintenance Yard would remain at its current location. A new individual and small group developed campground with full RV hookups, and/or cabins is planned with up to 40 sites and 2 host sites. Because electrical connections will be provided, no generators will be necessary in the SOUTHWEST MANAGEMENT ZONE. The nearest sensitive receptors are two rural residences located in the County about 350 feet northwest of the boundary of the SOUTHWEST MANAGEMENT ZONE, and a residence located on an industrial parcel about 250 feet to the south of the nearest location where new facilities could be constructed. Noise sources associated with new camp sites include campsite activities including conversations and music. As noted above, the Park Quiet Hours are from 10 p.m. to 6 a.m., and no generators will be necessary in this area. Therefore, camping-related noises would be low and intermittent, and would, therefore, not measurably contribute to project generated noise in the SOUTHWEST MANAGEMENT ZONE. Existing restrictions on noise would minimize noise effects resulting in a less than significant impact.

In addition, this less than significant impact will further be reduced with the implementation of General Plan guideline:

- SWMZ-4A (install electrical connections and restrict the use of generators)

The SOUTHEAST MANAGEMENT ZONE would also include new individual picnic sites, new multi-use trails and paths, and a new group interpretive/event facility. These facilities, as well as the new motorboat ramp proposed by the City where the channel meets the Sacramento River in the City Park, are located behind the levee that separates the Park from the surrounding area. The nearest sensitive receptors are City of Colusa residents of the Highstreet Trailer Court located between 10th Street and 11th Street, about 50 feet from the Park's southern boundary. Other nearby sensitive receptors include City of Colusa residents located near the intersection of 12th and Levee Streets, about 175 feet from the proposed Park entrance. Uses in this area currently include the Park Headquarters, group and individual camping (14 sites), the picnic area, and parking and circulation. As discussed above, individual RV generators in the enroute parking lot would generate noise levels of up to 60 dBA L_{eq} at a distance of 23 feet. The noise resulting from a single generator at the nearest potential receptors located behind the levee at a distance of 50 feet would be approximately 44 dBA L_{eq} . If multiple generators are operating the noise level could be up to 54 dBA, exceeding the City of Colusa daytime noise limit of 50 dBA L_{eq} . Because generators are used in the existing campground, it is not expected that enroute camping will substantially increase noise levels behind the levee. Other activities in this area of the Park are not anticipated to measurably increase noise levels above existing levels at sensitive receptors due to the attenuation of noise provided by distance and the levee.

The General Plan requires implementation of the following guidelines to reduce potential noise impacts:

- NRM-8A (manage noise generating activities in the Park, design roadways and parking to minimize vehicle noise in activity areas, through screening, separation of use areas, and other appropriate techniques); and
- NRM-8B (post and distribute noise restriction, including appropriate levels of radios and other human-made devices, recommended quiet zones, event guidelines, and maintenance activities).

The implementation of the following policies from the DOM Chapter 0300 Natural Resources will also be required:

- 0312.4 Soundscape
- 0312.4.1 Soundscape Protection Policy

The implementation of these actions will reduce potential operational noise impacts to less than significant.

Significance After Action Implementation: Less than Significant

Impact Noi-2. Potential Groundborne Vibration Impacts

The construction of the proposed facilities may generate perceptible groundborne vibration when heavy equipment or impact tools (e.g., jackhammers, etc.) are used in areas adjoining developed properties. For structural damage, the California Department of Transportation recommends a vibration limit of: 0.5 in/sec peak particle velocity (PPV) for buildings structurally sound and designed to modern engineering standards; 0.3 in/sec PPV for buildings that are found to be structurally sound but where structural damage is a major concern; and a conservative limit of 0.08 in/sec PPV for ancient buildings or buildings that are documented to be structurally weakened. No ancient buildings or buildings that are documented to be structurally weakened adjoin the project site. Therefore, groundborne vibration levels exceeding 0.3 in/sec PPV would have the potential to result in a significant vibration impact.

Construction activities would include demolition of existing structures, grading, site preparation work, paving of new roads and parking lots, and new building framing and finishing. Pile driving would not occur as a result of the implementation of the proposed General Plan. Project construction activities such as drilling, the use of jackhammers, rock drills and other high-power or vibratory tools, and rolling stock equipment (e.g., tracked vehicles, compactors, etc.) may generate substantial vibration in the immediate vicinity of the work area. Vibratory rollers typically generate vibration levels of 0.210 in/sec PPV and jackhammers typically generate vibration levels of 0.035 in/sec PPV at a distance of 25 feet. Vibration levels would be below the 0.3 in/sec PPV threshold, ranging from 0.008 to 0.050 in/sec PPV at the nearest receptors 115 feet west of the proposed new vehicle entrance. Vibration generated by construction activities near the common property line of the site would at times be perceptible; however, groundborne vibration from short-term project construction would cause a less than significant impact upon structures and residents in the project vicinity. This is considered a less than significant impact.

In addition, this less than significant impact will further be reduced with the implementation of General Plan guidelines:

- NRM-8A (manage noise generating activities in the Park, design roadways and parking to minimize vehicle noise in activity areas, through screening, separation of use areas, and other appropriate techniques); and
- NRM-8B (post and distribute noise restriction, including appropriate levels of radios and other human-made devices, recommended quiet zones, event guidelines, and maintenance activities).

The implementation of the following policies from the DOM Chapter 0300 Natural Resources will also be required:

- 0312.4 Soundscape
- 0312.4.1 Soundscape Protection Policy

In addition, implementation of the Standard Project Requirements for Noise (Appendix M) will be required in future projects. The implementation of these actions will reduce potential ground vibration impacts to less than significant.

Significance After Action Implementation: Less than Significant

PUBLIC SERVICES

THRESHOLDS

A project would normally result in a significant public services impact 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 any of the public services:
 - Fire protection
 - Police protection

IMPACTS AND ACTIONS TO MINIMIZE IMPACTS

Impact Pub-1. Potential Fire and Police Protection Services Impacts

Implementation of the proposed General Plan may increase visitation to the park, which, in turn, would result in increased demand for fire and police protection services and increase the possible need for emergency services. Potential protection services impacts could occur if new facilities are not designed properly, and adequate emergency access and fire flow is not provided.

Currently, park security in the core area (i.e., SOUTHEAST and SOUTHWEST PARCELS) is provided by a City of Colusa caretaker/host under a 2011-2016 Operating agreement. Law enforcement in the core area is provided by the Colusa County Sheriff's office. State Park rangers are responsible for the other areas of the Park, although the nearest regular duty station is 60 minutes away. Fire protection is provided by the Sacramento River Fire District. Medical aid is provided by Sierra Sac-Valley Emergency Services Agency. The Colusa Regional Medical Center is two miles away, providing 24/7 emergency services and serving as Colusa County's communication base station for the Sierra Sac-Valley Emergency Medical Services Agency. Existing fire and police protection facilities would be sufficient to serve the Park under the proposed General Plan and no additional facilities would need to be constructed.

The County 2030 General Plan includes policies and actions to ensure that public services are provided at acceptable levels and to ensure that development and growth does not outpace the provision of public services. In addition, this proposed General Plan includes guidelines for providing adequate staffing at the Park, including:

- O&M-1B (coordinate with DWR's Sutter Yard staff when planning changes that may affect access);
- O&M-2A through C (maintain regular patrol, coordinate with local law enforcement agencies and emergency response providers in promoting safety of the Park, maintain access for emergency vehicles and vessels);
- O&M-6A (review all existing agreements to assess constancy with the General Plan and guide decision on whether to renew, modify, or let agreements expire);
- O&M-7B (prepare and monitor measureable objectives for existing and future operating and concessions agreements);

- RESMZ-2A (vegetation management such as mowing in campsites, parking areas, trails and roadways is allowed to minimize fire hazard and maintain public access); and
- RIPMZ-2B (felling and moving hazardous or downed trees and limbs are allowed to minimize public safety hazards, and maintain public access).

The implementation of the following policies from the DOM Chapter 0300 Natural Resources will also be required:

- 0313.2 Fire Management
- 0313.2.1 Wildfire Management
- 0313.2.1.1.1 Wildfire Management Planning Policy
- 0313.2.2.8.1 Project Burn Plan Preparation Policy
- 0314.1.1 Emergency Preparation
- 0320.1 Cooperation Policy

In addition, implementation of the Standard Project Requirements for Hazards and Hydrology (Appendix M) will be required. The implementation of these will reduce potential public services impacts to less than significant.

Significance After Action Implementation: Less than Significant

RECREATION

THRESHOLDS

A project would normally result in a significant recreation impact if it would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

IMPACTS AND ACTIONS TO MINIMIZE IMPACTS

Impact Rec-1. Potential Impacts to Recreational Facilities

The Park would continue to provide outdoor recreational opportunities to the public. The proposed General Plan would allow new and upgraded facilities at the Park, which may increase camping, parking, picnicking, biking, and hiking opportunities in the area. Enhanced facilities proposed under the General Plan would potentially alleviate impacts to existing neighborhood and regional parks.

In addition, the General Plan requires implementation of the following guidelines to protect and enhance recreational resources:

- RCA-1 A through D (increase recreational access to the Sacramento River, work with local jurisdictions to improve river access from bikeway, provide pedestrian and bicycle routes, develop parking areas, disseminate information regarding safe water-based recreation);
- RCA-5 D (develop sufficient support facilities such as restrooms and parking, to offer high quality recreation, minimize user conflicts, and reduce potential natural resources and neighborhood impacts);

- RCA-7 A through D (provide opportunities for more diverse overnight accommodations, partner with agencies to expand lodging opportunities, develop partnerships with nearby landowners);
- RCA-9A through C (provide opportunities for community engagement and healthy outdoor activities, provide group picnic, special event, multi-purpose facilities, and recreation programs);
- O&M-3B (explore opportunities for joint-use facilities and cost-sharing agreements to increase public benefits and services); and
- O&M-4 C (improve the recognition of Park resources, develop a public outreach program that focuses on dissemination of information regarding the Park).

The implementation of the following policies from the DOM Chapter 0300 Natural Resources will also be required:

- DOM 0317.1.1 Visitor Recreational Uses Policy
- DOM 0317.1.3.1 Fishing
- DOM 0317.1.3.2 Hunting

In addition, implementation of the Standard Project Requirements for Aesthetics (Appendix M) will be required in future projects. The implementation of these actions will reduce potential recreational impacts to less than significant.

Significance After Action Implementation: Less than Significant

TRANSPORTATION/TRAFFIC

THRESHOLDS

A project would normally result in a significant traffic/transportation impact if it would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county 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); or
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

IMPACTS AND ACTIONS TO MINIMIZE IMPACTS

A Transportation Study for the proposed General Plan was prepared by Fehr & Peers (November 2014, Appendix K). In accordance with CEQA, the lead agency evaluates the effects of a proposed project to determine if they could result in significant adverse impacts on the environment. The

standards of significance in this analysis are based upon the current practices of the City of Colusa, documented within the City of Colusa General Plan (2007). Under CEQA, the City of Colusa, County of Colusa, and Caltrans are the local responsible agencies.

Policy CIR-1.1 of the City of Colusa General Plan specifies that the City will strive to achieve at least a LOS C throughout the City. This policy provides exemptions for downtown intersections along SR 20/45 where LOS D is established as the minimum acceptable LOS. The Caltrans Transportation Concept Corridor Reports for SR 20 and SR 45 identify a concept of LOS for the segments located within the study area. Therefore, all four study intersections are located along the SR 20 or SR 45, and LOS D is acceptable at these locations. For the purposes of this analysis, an impact is considered significant if implementation of the project would result in any of the following:

1. Cause an intersection along SR 20/45 that currently operates (or is projected to operate) at LOS D or better to degrade to LOS E or worse;
2. Increase the average delay by five percent or more at an intersection in Colusa that currently operates (or is projected to operate) at an unacceptable LOS E or F; or
3. Eliminate or adversely affect an existing bikeway, pedestrian facility, or transit facility in a way that would discourage use.

Impact Tra-1. Potential Traffic Circulation Impacts

All study intersections operate on average at LOS A during both peak hours, with the exception of Market Street/10th Street, which operates at an average LOS B during both peak hours. Overall, the existing roadway system within the area that provides access to the Park can be characterized as operating efficiently with low levels of delay. Motorists do not experience substantial vehicle queues, and conditions are generally free-flow during peak hours. Delays experienced by motorists waiting to turn from side streets onto SR 45 are modest, with motorists making left turns from 12th Street onto SR 45 experiencing the highest delay within the study area (16 seconds during the AM and PM peak hours).

Implementation of the proposed General Plan would increase the visitation capacity of the Park and improve accommodation of the existing levels of use by allowing new and upgraded facilities. The increased public use would generate additional motor vehicle trips to the Park. The transportation study estimated that the implementation of the proposed project could generate 51 trips during AM peak hour and 58 trips during PM peak hour on a typical weekday.¹ The study determined that all study intersections would continue to operate at an average of LOS B or better and would experience no degradation in level of service from existing conditions. Therefore, impacts to all the study intersections associated with implementation of the proposed General Plan are considered less than significant.

In addition, these less than significant impacts will further be reduced with the implementation of the following General Plan guidelines:

¹ Although the number of trips associated with the proposed project will likely be higher on the weekend, the higher levels of available transportation system capacity on weekends reduce the likelihood of impacts associated with the proposed project during this time period. Therefore, the trip generation estimates presented in this section are for the weekday AM and PM peak hours.

- VF-4B (work with CalTrans to install directional signage along highways that direct Park visitors to Park entrances);
- VF-5A through D (coordinate with the City and County of Colusa, and CalTrans to improve roadways serving the Park, coordinate time traffic management with the City and County of Colusa, and CalTrans, when high traffic levels are expected, encourage alternate modes of transportation to the Park, accommodate bus access to serve events and organized groups);
- VF-6A (provide exit-only roadways for use during peak traffic times);
- VF-8A through B (design roadways to minimize potential damage from flood events, install paved roadways in areas subject to longer than a 3 year recurrence flooding interval);
- VM-1A through B (provide prospective visitors with current road conditions in the floodway, close flooded areas until floodwaters recede, roads and trails become passable and hazards are mitigated);
- VM-5E (work cooperatively with the City and County of Colusa and CalTrans to provide safe access to and from the Park during special events);
- O&M-1A through B (notify the public when floodway maintenance activities are expected to block public access, coordinate with DWR's Sutter Maintenance Yard staff when planning changes that may affect access);
- RESMZ-2A (vegetation management such as mowing and felling or moving hazardous or downed trees is allowed to maintain public access);
- RIPMZ-2B (felling and moving hazardous or downed trees and limbs are allowed to minimize public safety hazards, and maintain public access); and
- SWMZ-1C (improve roadway access for RVs, which is protected from flooding, before opening this area to vehicles).

The implementation of the Standard Project Requirements for Traffic (Appendix M) and the following policies from the DOM Chapter 0300 Natural Resources will be required, even further reducing the less than significant impact:

- 0304.5.2 Public Use of Motor Vehicles
- 0320.1 Cooperation Policy

Impact Tra-2. Potential Pedestrian and Bicycle Safety Impacts

Implementation of the proposed General Plan would allow access points to the park and internal roads that would serve both motorized and non-motorized traffic. In addition, the potential development of trails adjacent to the existing Roberts Road may adversely affect pedestrian/bicyclist safety. The location and design of the potential secondary pedestrian/bicyclist access points to the park may result in safety hazards for both motorists and pedestrians.

Implementation of the proposed General Plan would not eliminate or adversely affect existing bicycle or pedestrian facilities. The proposed facilities include various improvements to bicycle and pedestrian facilities, including the construction of new multi-use trails, construction of an off-street Class I bicycle facility, and implementation of an on-street bicycle route. Conversion of Roberts Road from a public roadway to a park roadway, a proposed project component, would also facilitate the implementation of the planned bikeway along this roadway, which is included in the *City of Colusa Bikeway Master Plan* and *Colusa County Bicycle Plan*. Therefore, impacts to bicycle and

pedestrian facilities associated with the implementation of the proposed General Plan are considered less than significant.

Implementation of the proposed General Plan would not eliminate or adversely affect existing transit operations or facilities. Therefore, impacts to transit facilities associated with implementation of the proposed General Plan are considered less than significant.

In addition, these less than significant impacts will further be reduced with the implementation of guidelines:

- RCA-1A (work with local jurisdictions to identify, sign, and improve river access from the County's proposed bikeway);
- RCA-1B (provide pedestrian and bicycle trails to the river bank and beaches);
- VF-5D (accommodate bus access to serve events and organized groups);
- VF-7B (design roadways, intersections, sidewalks, and trail crossings to minimize conflicts);
- VF-10A through C (construct new and expand existing trails and trailheads, evaluate the suitability of existing trails for multiple uses, considering public safety and environmental factors, coordinate with City and County of Colusa and organizations to incorporate connections between Park trails, public road, and the planned regional bicycle trails);
- VF-11A through B (separate multi-use and interpretive trails, provide signage, maps and other cues to clearly identify appropriate trail uses, rules, and etiquette);
- VM-1C through D (provide timely trail access barrier information as conditions change in the floodway, Maintain a trailhead and/or web-based system to notify visitors of access barriers); and
- RIPMZ-3A (maintain the existing dredge access road as an unpaved road to the Sacramento River, open to bicycles and pedestrians).

The implementation of the Standard Project Requirements for Traffic (Appendix M) and the following policies from the DOM Chapter 0300 Natural Resources will be required, even further reducing the less than significant impact:

- 0317.1 Visitor Recreational Uses
- 0317.1.1 Visitor Recreational Uses Policy

Impact Tra-3. Potential Design Feature Impacts

The Plan proposes to relocate the entrance to the Park from its current location at 10th Street, potentially to 12th Street, two blocks to the west. Other potential locations are off Levee Street or off Highway 45 between the Levee Street intersection and Roberts Ditch. DPR would also make entry road improvements. The redesign of the vehicular entry to the Park is intended to improve circulation and facilitate access. Implementation of the proposed General Plan is, therefore, not expected to result in an increase in traffic hazards and this impact is considered less than significant.

In addition, this less than significant impact will further be reduced with the implementation of the following General Plan guidelines:

- VF-3A (Collaborate with the City and County of Colusa to construct a new entrance station);
- VF-3B (Design a new Park entrance to:

- better serve the City of Colusa’s planned boat launch facility
- minimize large vehicle traffic on narrow levee crown roads and/or levee widening
- improve pedestrian connections between the park and the town
- enhance visitor safety, security and resource protection
- maintain access for levee maintenance, flood fighting, irrigation pump maintenance, emergency vehicles and farm equipment
- consider the City of Colusa’s transportation system, land use and redevelopment plans
- accommodate the City and County of Colusa’s long-distance bikeway); and
- VF-3C (Collaborate with the City and County of Colusa and DWR to convert all or part of the Roberts Road right-of-way to a Park road).

The implementation of the Standard Project Requirements for Traffic (Appendix M) and the following policy from the DOM Chapter 0300 Natural Resources will be required, even further reducing the less than significant impact:

- 0320 Cooperation Policy

UTILITIES AND SERVICE SYSTEMS

THRESHOLDS

A project would normally result in a significant utilities and service systems impact if it would:

- 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 insufficient water supplies available to serve the project from existing entitlements and resources, or new or expanded entitlements are needed;
- Result in a determination by the wastewater treatment provider which serves or may serve the project that it has inadequate capacity to serve the project’s projected demand in addition to the provider’s existing commitments;
- Be served by a landfill with insufficient permitted capacity to accommodate the project’s solid waste disposal needs; or
- Not comply with federal, state, and local statutes and regulations related to solid waste.

IMPACTS AND ACTIONS TO MINIMIZE IMPACTS

Impact Util-1. Potential Impacts to Utilities and Service Systems

Implementation of the proposed General Plan may increase visitation to the park, which, in turn, would increase the demand for wastewater treatment, water supply, sewer, solid waste, and stormwater service systems. Full implementation of the General Plan would result in a minimal increase in demand for these services and is not expected that wastewater treatment requirements, treatment provider capacity, landfill capacity, or water supply entitlements would be exceeded.

The proposed facilities in the General Plan would not be implemented until sufficient wastewater treatment capacity and landfill has been secured in conformance with applicable state and local regulations.

The SRA is currently served by the City of Colusa. In May 2014, the City of Colusa began the process to annex the Park property into the incorporated City limits. In the Planning Commission Staff Report for the annexation approval, City staff determined that the City of Colusa has adequate water, wastewater, and sewer capacity to serve the property. Therefore, implementation of the proposed General Plan is expected to have a less than significant effect on wastewater treatments, water supply, sewer, solid waste and stormwater management.

In addition, the General Plan includes guidelines for sewer, wastewater, water supply, solid waste and stormwater management, which would further reduce associated impacts to less than significant:

- VF-2A through B (use sustainable design strategies to minimize impacts of park development and operation, consult the LEED standards for ways to reduce energy use and maximize the use of energy-efficient products and materials on new and existing buildings);
- INF-1A through 1E (upgrade existing sewage treatment systems when replacing or expanding facilities in the SOUTHEAST MZ; coordinate with the City of Colusa to extend water, sewage and electrical utilities, and road infrastructure, to the Park when needed for facility expansion; when renovating facilities in the SOUTHEAST MZ, renovate the existing domestic water distribution system to meet current health and safety codes, including the use of backflow prevention devices; install or upgrade irrigation systems to more efficiently water plants that require irrigation; design surface drainage with infiltration or detention swales where feasible);
- INF-2A (provide convenient recycling containers to minimize landfill waste); and
- I&E-7D (interpret sustainable design elements in the park to encourage a sense of connection to the surrounding natural and cultural resources and inspire personal behavior that reduces negative impacts to the environment and promotes energy conservation).

The implementation of the following policy from the DOM Chapter 0300 Natural Resources will be required, even further reducing the less than significant impact:

- 0306.1 Water Resource Planning and Management Policy

F. ENVIRONMENTAL EFFECTS ELIMINATED FROM FURTHER ANALYSIS

AESTHETICS

THRESHOLDS

A project would normally result in a significant aesthetic impact if it would:

- Have a substantial adverse effect on scenic vista; or
- Substantially damage scenic resources, including but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.

Neither the California Department of Transportation nor Colusa County have designated scenic highways or roadways within sight of the Park. Similarly, no roadways in the region are classified as a National Scenic Byway. The Sacramento River is not designated as a wild and scenic river under the federal and state Wild and Scenic Rivers Acts.

AGRICULTURAL RESOURCES

THRESHOLDS

A project would normally result in a significant agriculture and forest resources impact if it would:

- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use
- Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g));
- Result in the loss of forest land or conversion of forest land to non-forest use; or
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use.

A portion of the Park, the RESTORATION PROJECT, is designated as Unique Farmland according to the California Department of Conservation's Farmland Mapping and Monitoring Program (2012). However, 137 acres of the 238 acre-former Ward Tract were revegetated in 2009 and now include 35 acres of native grassland and 102 acres of riparian forest, with three acres set aside for access and parking. Therefore, facilities proposed in the RESTORATION PROJECT would occur in the set-aside acreage as described in The Plan and would not result in the conversion of Unique Farmland. The project lands are not zoned for agricultural use or forest land and are not held under a Williamson Act contract. Potential impacts to riparian forest are discussed in Biological Resources. The General Plan does not involve any land development activities (i.e., residential subdivision, or commercial or industrial land uses) that would directly or indirectly induce changes in the use of surrounding agricultural land. The implementation of the General Plan would not introduce a new type of land use, but rather would be consistent with the existing rural area, which is comprised primarily of agriculture, open space, and recreational uses.

BIOLOGICAL RESOURCES

THRESHOLDS

A project would normally result in a significant biological resources impact if it would:

- 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.

The Colusa-Sacramento River SRA is not located within a designated HCP or NCCP plan areas. The goals and guidelines identified in the proposed General Plan are consistent with State policies protecting biological resources and do not conflict with any local policies or ordinances.

GREENHOUSE GAS EMISSIONS

THRESHOLDS

A project would normally result in a significant greenhouse gas impact if it would:

- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases

Implementation of the proposed General Plan would allow construction projects for the provision of public use opportunities and related facilities. Facilities that could be constructed under the General Plan include, but are not limited to, a new entrance station, restrooms, roads, trails, picnic areas, and campgrounds. In addition, some structures might be renovated or demolished if not adaptively reused.

Assembly Bill (AB) 32, signed in September 2006, requires the State's global warming emissions to be reduced to 1990 levels by 2020. After completing a comprehensive review and update process, the ARB approved a 1990 statewide GHG level and 202 limit of 427 MMT CO₂E (ARB, 2007).

Senate Bill (SB) 97, signed in August 2007, acknowledges that global climate change (GCC) requires analysis under CEQA. In March 2010, the California Resources Agency (Resources Agency) adopted amendment to the State CEQA Guidelines for the feasible mitigation of GHG emissions or the effects of GHG emissions. The adopted amendments give lead agencies the discretion to set quantitative or qualitative thresholds for the assessment and mitigation of GHG and GCC impacts.

SB 375, signed in August 2008, requires the inclusion of sustainable communities' strategies (SCS) in regional transportation plans (RTPs) for the purpose of reducing GHG emissions. The bill requires the ARB to set regional targets for the purpose of reducing GHG from passenger vehicles for 2020 and 2035.

None of these statewide regulations include requirements that apply specifically to recreational and restoration projects and no local or regional plans to reduce GHG emission are currently in place. Therefore, the project does not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHG and no impacts will occur.

HAZARDS AND HAZARDOUS MATERIALS

THRESHOLDS

A project would normally result in significant hazards and hazardous materials impact if it would:

- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area;
- 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; or
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, the Cortese or Superfund List. The closest airport is the Colusa County Airport, located approximately 2.5 miles south of the project site. Therefore, no impact would occur. Implementation of the proposed General Plan would not block any adopted emergency response or evacuation plan routes.

LAND USE AND PLANNING

THRESHOLDS

A project would normally result in a significant land use and planning impact if it would:

- Physically divide an established community;
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

The project site is located in Colusa County, adjacent to the City of Colusa, outside the city limits but within the City's sphere of influence (LAFCO, 2012). There are no established communities or housing developments within the Park. The Park would continue the existing on-site land uses while making provisions for new and upgraded facilities. The project would not develop any new roadways, freeways, or arterials, would not develop any lengthy walls or fences, and would not include other physical impediments for the public. Therefore, no impact would occur.

The Park site is designated "Parks and Recreation" and "Designated Floodway" in the Colusa County General Plan (2011) and zoned "Open Space/Public Facilities." Although the Park is located in Colusa County, the site is under the jurisdiction of the State of California, which is exempt from complying with local or county plans, policies, or zoning regulations. The implementation of the General Plan would be compatible with local planning and no impact would occur.

As described in the proposed General Plan, Chapter 2, Existing Conditions, System-Wide Planning, several studies and plans have been prepared for actions in the vicinity of the Park.

The purpose of the proposed General Plan is to develop a general plan for public access and recreation that is compatible with adjacent land uses and with wildlife habitat conservation. The proposed General Plan is part of the *Colusa Subreach Planning*, which is a partnership between TNC and the SRCAF. *Colusa Subreach Planning* developed a strategy for restoration of the riparian ecosystem along the Sacramento River between Princeton and Colusa. The program, funded by the California Bay Delta Authority, is focused on addressing questions and concerns of landowners in the Colusa Subreach regarding wildlife conservation.

There is no habitat conservation plan or natural community conservation plan applicable to the project area.

MINERAL RESOURCES

THRESHOLDS

A project would normally result in a significant impact to mineral resources if it would:

- Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state; or
- Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan.

In compliance with the California Surface Mining and Reclamation Act (SMARA), the California Geological Survey (CGS) (formerly the California Department of Conservation – Division of Mines and Geology) is the agency responsible for designating the location and significance of key extractable mineral resources. While the Sacramento River and its tributaries represent potentially commercial sand and gravel resources, no key extractive resources have been designated in the immediate project vicinity. The SOUTHWEST PARCEL contains a former borrow pit which was filled over many years under an agreement with the City of Colusa and replanted. Furthermore, the Park would remain mostly undeveloped and would not inhibit the future extraction of mineral resources, if present. Therefore, the project would not result in the loss of availability of a known mineral resource or otherwise affect mineral resources and no impact would occur.

NOISE

THRESHOLDS

A project would normally result in a significant noise impact if it would:

- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels; or
- For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

The Park is not located within an airport land use plan or within two miles of a public or private airport. The closest airport is the Colusa County Airport, which is located approximately 2.5 miles south of the project site. Therefore, the implementation of the proposed General Plan would not result in the exposure of people working or residing to excessive airport noise levels.

POPULATION AND HOUSING

THRESHOLDS

A project would normally result in a significant population and housing impact if it would:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

The proposed General Plan would not result in the removal or the construction of homes or businesses. The project would not displace existing homes or people and would not require the construction of replacement housing. The proposed recreational facility improvements and expansion and habitat restoration would provide additional recreation opportunities, but would not directly induce population growth because no new homes or businesses would result from the implementation of the proposed General Plan. The extension of infrastructure (e.g., utilities, bike paths, access roads, etc.) would not indirectly induce population growth as these extensions would allow for recreational use of the Park and not support residential or commercial uses. Therefore, no population and housing impacts would occur as a result of the proposed General Plan.

PUBLIC SERVICES

THRESHOLDS

A project would normally result in a significant public services impact 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 any of the public services:
 - Schools
 - Other public facilities

Implementation of the proposed General Plan would not increase the number of students entering local schools as no new housing is proposed. Therefore, no impact to schools would occur with General Plan implementation. Implementation of the proposed General Plan is not anticipated to affect other public facilities beyond those already addressed in this Environmental Analysis.

TRANSPORTATION/TRAFFIC

THRESHOLDS

A project would normally result in a significant transportation/traffic impact if it would:

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks; or
- Result in inadequate emergency access.

The closest airport is the Colusa County Airport, located approximately 2.5 miles south of the project site. Because the Park is not located within an airport land use plan or within two miles of an airport, the implementation of the proposed General Plan would not have the potential to affect air traffic patterns or result in potential safety hazards associated with airports. In addition, the proposed General Plan does not include a level or type of development that would result in a substantial increase in air traffic levels. Therefore, no impact would occur.

Implementation of the proposed General Plan allows construction and maintenance activities within the Park. Vehicles and equipment would be staged in designated on-site staging areas. These activities would not require the partial blockage or closure of any roadways providing access to and from the site. The implementation of the proposed General Plan would not result in inadequate emergency access.

G. ALTERNATIVES TO THE PROPOSED PLAN

OVERVIEW

The purpose of the alternatives analysis in an EIR is to describe a range of reasonable alternatives to the project or project location that could feasibly attain the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and to evaluate the comparative merits of the alternatives (CEQA Guidelines Section 15126.6[a]).

Additionally, Section 15125.6(b) of the CEQA Guidelines requires consideration of alternatives that could avoid or substantially lessen any significant adverse environmental effects of the proposed project, including alternatives that may be more costly or could otherwise impede the project's objectives. The range of alternatives considered must include those that offer substantial environmental advantages over the proposed project and may be feasibly accomplished in a successful manner considering economic, environmental, social, technological, and legal factors.

FACTORS IN SELECTION OF ALTERNATIVES

The CEQA Guidelines recommend that an EIR should briefly describe the rationale for selecting the alternatives to be discussed, identify any alternatives that were considered by the lead agency but were rejected as infeasible, and briefly explain the reasons underlying the lead agency's determination (CEQA Guidelines Section 15126.6[c]).

The alternatives addressed in this EIR were selected in consideration of one or more of the following factors:

- The extent to which the alternative would accomplish most of the basic goals and objectives of the project;
- The extent to which the alternative would avoid or lessen any of the identified significant environmental effects of the project;
- The feasibility of the alternative, taking into account site suitability, economic viability, availability of infrastructure, General Plan consistency, and consistency with other applicable plans and regulatory limitations;
- The appropriateness of the alternative in contributing to a "reasonable range" of alternatives necessary to permit a reasoned choice; and
- The requirement of the CEQA Guidelines to consider a "no project" alternative (CEQA Guidelines Section 15126.6[b]).

Alternatives to the proposed project include:

- No Project
- Minor Recreation/Habitat Focus Alternative
- Moderate Recreation Use Alternative

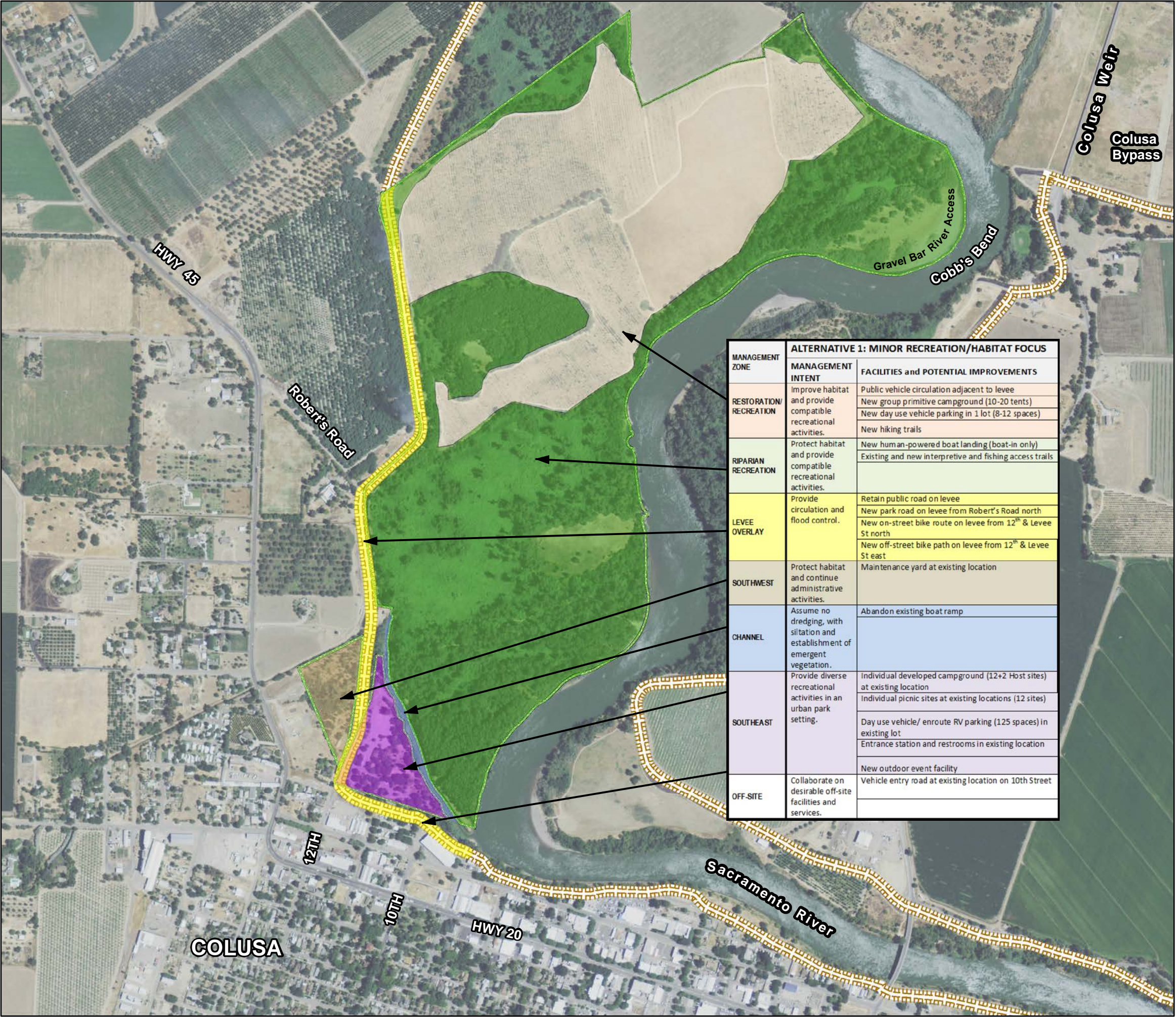
Please refer to Table 5.1. and Figures 5.1 and 5.2 for a detailed description of the alternatives.

TABLE 5.1 ALTERNATIVES DESCRIPTION

Environmental Topic	Alternative #1: Minor Recreation/Habitat Focus	Alternative #2: Moderate Recreation Use	Preferred Plan
PLANNED FACILITIES Campgrounds	<ul style="list-style-type: none"> • New group primitive campground (10-20 tents) [Restoration Recreation] • Individual developed campground (12+2 Host sites) at existing location [Southeast] 	<ul style="list-style-type: none"> • Individual developed campground (12+2 Host sites) at existing location [Southeast] 	<ul style="list-style-type: none"> • New group primitive campground (up to-50 tents) [Restoration Recreation] • New boat-in primitive campground (up to 8 tents) [Restoration Recreation] • New group primitive campground (up to 50 tents) [Riparian Recreation] • New individual and small group developed campground with RV hookups, and/or cabins (up to 40+2 host sites) [Southwest] • New individual and large group developed campground (up to 20 tents) [Southeast]
Parking	<ul style="list-style-type: none"> • New day use vehicle parking in 1 lot (8-12 spaces) [Restoration Recreation] • Day use vehicle/ enroute RV parking (125 spaces) in existing lot [Southeast] 	<ul style="list-style-type: none"> • New day use vehicle parking in 2 lots (15-25 spaces) [Restoration Recreation] • Vehicle/boat trailer parking (45-55 spaces) in existing lot [Southeast] • Day use vehicle/enroute RV parking (20-30 spaces) in existing lot [Southeast] 	<ul style="list-style-type: none"> • New day use vehicle parking in 3 lots (up to 35 spaces) [Restoration Recreation] • New boat trailer parking (up to 60 spaces) [Southeast] • New day use vehicle /enroute RV parking lot (up to 50 spaces) [Southeast]
Trails	<ul style="list-style-type: none"> • New hiking trails [Restoration Recreation] • Existing and new interpretive and fishing access trails [Riparian Recreation] [Southeast] 	<ul style="list-style-type: none"> • New multi-use trails [Restoration Recreation] • Existing and new interpretive and fishing access trails [Riparian Recreation] • New unpaved off-street bicycle trail parallel to, and riverside of, levee from 12th & Levee St north [Levee Overlay] • New multi-use trails and paths connecting to existing parking lot [Southeast] 	<ul style="list-style-type: none"> • New multi-use trails [Restoration Recreation] • Existing and new interpretive and fishing access trails [Riparian Recreation] • New multi-use trail north of channel [Channel] • New multi-use trails and paths [Southeast]
Maintenance Yard	<ul style="list-style-type: none"> • Maintenance yard at existing location [Southwest] 	<ul style="list-style-type: none"> • Maintenance yard at existing location [Southwest] 	<ul style="list-style-type: none"> • Maintenance yard at existing location [Southwest]
Boat Ramp	<ul style="list-style-type: none"> • New human-powered boat landing (boat-in only) [Riparian Recreation] • Abandon existing boat ramp [Channel] 	<ul style="list-style-type: none"> • New human-powered boat launch near day use parking [Riparian Recreation] • Existing boat ramp serves human-powered boats only [Channel] • New City of Colusa motorboat ramp (2 lane) in city park [Off Site] 	<ul style="list-style-type: none"> • New human-powered boat launch near day use parking [Riparian Recreation] • Existing boat ramp serves human-powered boats only [Channel] • New City of Colusa motorboat ramp (2 lane) in city park [Off Site]

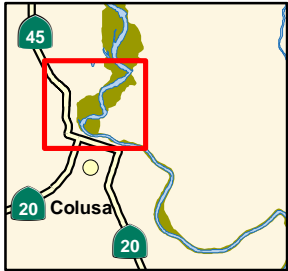
TABLE 5.1 ALTERNATIVES DESCRIPTION			
Environmental Topic	Alternative #1: Minor Recreation/Habitat Focus	Alternative #2: Moderate Recreation Use	Preferred Plan
Other Facilities	<ul style="list-style-type: none"> Public vehicle circulation adjacent to levee [Restoration Recreation] Retain public road on levee [Levee Overlay] New park road on levee from Robert's Road north [Levee Overlay] New on-street bike route on levee from 12th & Levee St north [Levee Overlay] New off-street bike path on levee from 12th & Levee St east [Levee Overlay] Individual picnic sites at existing locations (12 sites) [Southeast] Entrance station and restrooms in existing location [Southeast] New Interpretive/event facility [Southeast] Vehicle entry road at existing location on 10th Street [Off Site] 	<ul style="list-style-type: none"> Public vehicle circulation on existing unpaved road [Restoration Recreation] New group primitive picnic site/rustic interpretive area [Restoration Recreation] Close public road on levee [Levee Overlay] New park road on levee from 12th & Levee St north [Levee Overlay] New off-street bike path on levee from 12th & Levee St east [Levee Overlay] Individual picnic sites at existing locations (12 sites) [Southeast] Restrooms in existing location [Southeast] New vehicle entry and entrance station on 12th Street at levee [Off Site] Collaborative interpretive / event center off-site [Off Site] New caretaker residence [Southwest] 	<ul style="list-style-type: none"> Public vehicle circulation on existing unpaved roads [Restoration Recreation] Convert public road on levee to park road from 12th & Levee St north [Levee Overlay] New on-street bike route on levee from existing boat ramp north [Levee Overlay] New off-street bike path on levee from existing boat ramp south and east [Levee Overlay] New individual picnic sites (up to 20 sites) [Southeast] New restrooms [Southeast] New group interpretive/event facility [Southeast] New vehicle entry and entrance station, potentially at 12th and Levee St [Off Site]

COLUSA-
SACRAMENTO RIVER STATE
RECREATION AREA DRAFT
GENERAL PLAN FIGURE 5.1
MINOR RECREATION USE HABITAT
FOCUS ALTERNATIVE

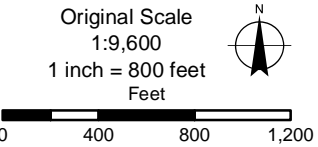


MANAGEMENT ZONE	ALTERNATIVE 1: MINOR RECREATION/HABITAT FOCUS	
	MANAGEMENT INTENT	FACILITIES and POTENTIAL IMPROVEMENTS
RESTORATION/ RECREATION	Improve habitat and provide compatible recreational activities.	Public vehicle circulation adjacent to levee
		New group primitive campground (10-20 tents)
		New day use vehicle parking in 1 lot (8-12 spaces)
		New hiking trails
RIPARIAN RECREATION	Protect habitat and provide compatible recreational activities.	New human-powered boat landing (boat-in only)
		Existing and new interpretive and fishing access trails
LEVEE OVERLAY	Provide circulation and flood control.	Retain public road on levee
		New park road on levee from Robert's Road north
		New on-street bike route on levee from 12 th & Levee St north
		New off-street bike path on levee from 12 th & Levee St east
SOUTHWEST	Protect habitat and continue administrative activities.	Maintenance yard at existing location
CHANNEL	Assume no dredging, with siltation and establishment of emergent vegetation.	Abandon existing boat ramp
SOUTHEAST	Provide diverse recreational activities in an urban park setting.	Individual developed campground (12+2 Host sites) at existing location
		Individual picnic sites at existing locations (12 sites)
		Day use vehicle/ enroute RV parking (125 spaces) in existing lot
		Entrance station and restrooms in existing location
OFF-SITE	Collaborate on desirable off-site facilities and services.	New outdoor event facility
		Vehicle entry road at existing location on 10th Street

Map Location, showing Sacramento River Conservation Area



Data Sources:
1) Levees - Sacramento River GIS.
2) Image: NAIP, 2012.



NOTES:

Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

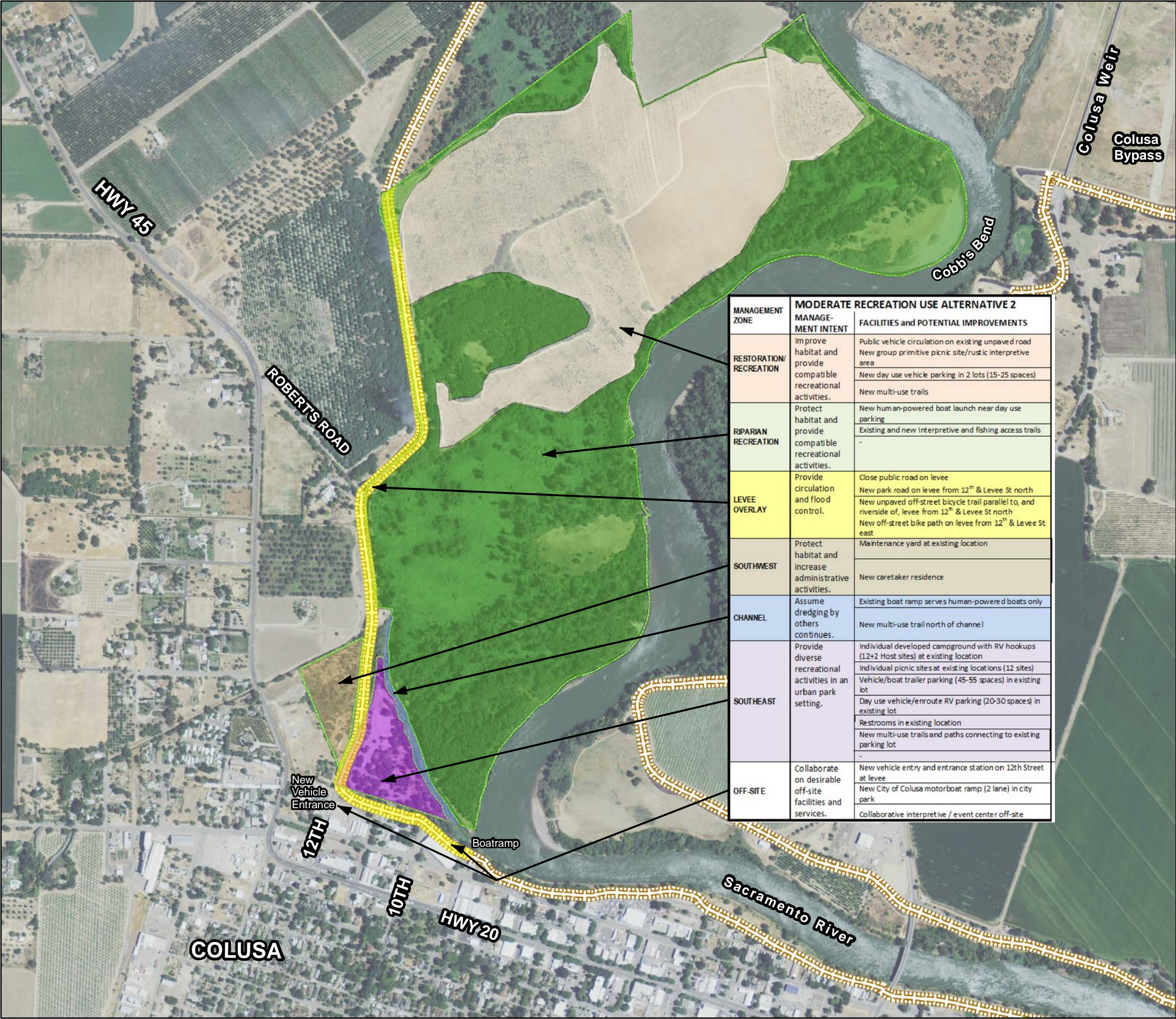
NORTHERN
SERVICE
CENTER

GENERAL
PLAN
SECTION

Date: 6/2/2014
Calif. Dept. of Parks &
Recreation

DRAFT

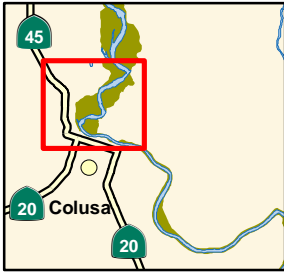




**COLUSA -
SACRAMENTO RIVER
STATE RECREATION AREA
DRAFT GENERAL PLAN
FIGURE 5.2 MODERATE
RECREATION USE ALTERNATIVE**

MANAGEMENT ZONE	MANAGEMENT INTENT	FACILITIES and POTENTIAL IMPROVEMENTS
RESTORATION/ RECREATION	Improve habitat and provide compatible recreational activities.	Public vehicle circulation on existing unpaved road New group primitive picnic site/rustic interpretive area New day use vehicle parking in 2 lots (15-25 spaces) New multi-use trails
RIPARIAN RECREATION	Protect habitat and provide compatible recreational activities.	New human-powered boat launch near day use parking Existing and new Interpretive and fishing access trails -
LEVEE OVERLAY	Provide circulation and flood control.	Close public road on levee New park road on levee from 12 th & Levee St north New unpaved off-street bicycle trail parallel to, and riverside of, levee from 12 th & Levee St north New off-street bike path on levee from 12 th & Levee St east
SOUTHWEST	Protect habitat and increase administrative activities.	Maintenance yard at existing location New caretaker residence
CHANNEL	Assume dredging by others continues.	Existing boat ramp serves human-powered boats only New multi-use trail north of channel
SOUTHEAST	Provide diverse recreational activities in an urban park setting.	Individual developed campground with RV hookups (12+2 Host sites) at existing location Individual picnic sites at existing locations (12 sites) Vehicle/boat trailer parking (45-55 spaces) in existing lot Day use vehicle/enroute RV parking (20-30 spaces) in existing lot Restrooms in existing location New multi-use trails and paths connecting to existing parking lot -
OFF-SITE	Collaborate on desirable off-site facilities and services.	New vehicle entry and entrance station on 12th Street at levee New City of Colusa motorboat ramp (2 lane) in city park Collaborative interpretive / event center off-site

Map Location, showing Sacramento River Conservation Area



Data Sources:
1) Levees - Sacramento River GIS.
2) Image: NAIP, 2012.

Scale
1:9,600
1 inch = 800 feet



NOTES:
Parcel boundaries are approximate and should not be considered legal descriptions. Maps are intended for study purposes only.

NORTHERN
SERVICE
CENTER

GENERAL
PLAN
SECTION

Date: 6/2/2014

California Department
of Parks & Recreation

DRAFT

Fig 5.2

NO PROJECT ALTERNATIVE

Description of alternative

The No Project Alternative assumes that the existing conditions would continue, as well as what would reasonably be expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. In this case, the No Project Alternative assumes that the General Plan and its policies would not be implemented at the Colusa-Sacramento River State Recreation Area. That is, no new facilities (e.g., campgrounds, restrooms, picnic and parking areas, multi-use trails, human-powered boat launch, interpretive displays, etc.) would be constructed at the Park. The property would continue to provide the existing facilities, recreational activities, and public access. This alternative would result in a continued regional deficiency of public access to the river and camping and boat launch opportunities.

Impacts and reasons for rejection

The No Project Alternative would eliminate the potential of creating expanded recreational activities and increased public access along the river in an area where public access is limited to abundant natural and recreational resources. The No Project Alternative would avoid potential impacts related to construction and operation of the potential future park uses and facilities, such as aesthetic resources impacts, potential effects to native habitats and species, potential erosion and water quality effects, and potential increase in vehicular emissions, traffic, and noise. However, as discussed above, the potential impacts of the implementation of the Plan can be reduced to less than significant at the program level with implementation of the guidelines identified in this EIR. Under the No Project Alternative, informal public access to the more remote areas of the Park would continue, potentially resulting in impacts to biological resources and water quality due to the creation of volunteer trails and lack of guidance to visitors. This alternative would not respond to the Department's Mission Statement or the Purpose and Vision set forth for this Unit, related to providing passive and active recreational opportunities and to protect and enhance the riparian and riverine environment. Therefore, this alternative was rejected.

MINOR RECREATION/HABITAT FOCUS ALTERNATIVE

Description of alternative

The Minor Recreation/Habitat Focus Alternative would focus more on habitat protection than providing recreational opportunities. This alternative would allow minimal camping opportunities in the RESTORATION/RECREATION MANAGEMENT ZONE and SOUTHEAST MANAGEMENT ZONE, limited new trails in the RESTORATION/RECREATION MANAGEMENT ZONE and RIPARIAN/RECREATION MANAGEMENT ZONES, and the existing boat ramp would be abandoned and a new human-powered boat landing would be allowed in the RIPARIAN/RECREATION MANAGEMENT ZONE. An outdoor event center and parking would be allowed in the existing lot in the SOUTHEAST MANAGEMENT ZONE, and 8-12 additional spaces would be allowed in the RESTORATION/RECREATION MANAGEMENT ZONE. New bike routes would be allowed within the

LEVEE OVERLAY MANAGEMENT ZONE, and the entrance station, restrooms, and picnic areas would remain as existing.

The goals of this alternative would be to provide minimal public access to the Park, and protect and enhance the riparian and riverine habitats. This alternative would include the minimum park administration and operations activities required to support resource protection and restoration activities, and the low level of public use that would be included within the alternative.

Impacts and reasons for rejection

The Minor Recreation/Habitat Focus Alternative would respond to a portion of the Department's Mission Statement by providing for the preservation of the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, but would not address the portion of the mission regarding creation of opportunities for high-quality outdoor recreation. As discussed in Chapter 3, Unit Classification, this Unit was classified a State Recreation Area in order to provide "multiple recreational opportunities to meet other than purely local needs", however this alternative would not allow for the increased campground, picnicking, boating, and fishing opportunities this region needs. Similarly, the alternative would respond to the Unit Purpose and Vision regarding resource protection and enhancement of the Park, but would not fully respond to the Purpose and Vision regarding available public use and diversity of visitor experiences. Further, this alternative would not respond to the statewide and regional recreation demand for uses not regionally available, such as increased boat launch facilities and camping along the river.

The Minor Recreation/Habitat Focus Alternative would avoid some of the potential impacts related to construction and operation of potential future park uses and facilities, such as aesthetic resources impacts, potential effects to native habitats and species, potential erosion and water quality effects, and potential increase in vehicular emissions, traffic, and noise. However, as discussed above, the potential impacts of the implementation of the Plan can be reduced to less than significant at the program level with implementation of the guidelines identified in this EIR.

Under this alternative, the State Recreation Area Classification objectives would not be met as the goals would be focused on habitat preservation and restoration instead of enhancing regional recreational opportunities. Therefore, this alternative was rejected.

MODERATE RECREATION ALTERNATIVE

Description of alternative

The Moderate Recreation Alternative would include similar uses and facilities as those described in Chapter 4, The Plan. However, the overall scope of allowable facilities and development would be greatly reduced and the overall acreage dedicated to expanding recreational opportunities would be reduced as well. Under this alternative, no additional camping would be allowed, only 15-25 new parking spaces would be allowed, the public road on the levee would be closed, and existing picnic areas and restrooms would remain. However, one additional group picnic area, a new vehicle entry and entrance station would be allowed.

The goals of this alternative would be to provide a wide range of public use types, while minimizing the number of facilities within the Park, thereby reducing the potential for incompatibility with sensitive species and habitat and also reducing the management and operational need for the Park.

While similar types of facilities would be included under this alternative as under the Plan, it is expected that this alternative would result in a lower number of park visitors, given the reduced number of public use facilities included. This alternative would include the minimum park administration and operations activities required to support resource protection and restoration activities, and the public use facilities that would be included within the alternative.

Impacts and reasons for rejection

The Moderate Recreation Alternative would respond to the Department's Mission Statement by providing for the preservation of the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating high-quality outdoor recreation opportunities. Similarly, the alternative would respond to State Recreation Area classification, and the Unit Purpose and Vision regarding resource protection and enhancement of the Park and providing for public use and diversity of visitor experiences. This alternative would also respond to the statewide and regional recreation demand for uses not regionally available, such as increased boat launch facilities along the river. However, this alternative would not respond to the significant demand for more diverse camping and overnight lodging, especially in winter, and the need for group campsites.

The Moderate Recreation Alternative would avoid some of the potential impacts related to construction and operation of potential future park uses and facilities, such as aesthetic resources impacts, potential effects to native habitats and species, potential erosion and water quality effects, and potential increase in vehicular emissions, traffic, and noise. However, as discussed above, the potential impacts of the implementation of the Plan can be reduced to less than significant at the program level with implementation of the guidelines identified in this EIR. While the Moderate Use Alternative would respond to the basic goals and objectives of the project and would avoid or reduce some of the potential impacts of the Plan, the Plan would provide greater enhancement of recreational opportunities while avoiding significant resource impacts. Therefore, this alternative was rejected.

H. OTHER CEQA CONSIDERATIONS

UNAVOIDABLE SIGNIFICANT ENVIRONMENTAL EFFECTS

Implementation of the General Plan would apply management goals and guidelines to the Park that allows the addition of new and improved facilities and new public use of the Park. New and improved facilities and public uses are to be implemented based on the park purpose and vision as well as management zones and park-wide goals and guidelines outlined in this General Plan. Implementation of the goals and guidelines described in Chapter 4, along with the Department's Operation Manual (DOM) and Standard Project Requirements (Appendix M), ensures that potential significant impacts remain less than significant or maintains them at a less than significant level. Therefore, no unavoidable significant impacts will occur as a result of implementing the proposed General Plan.

SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL EFFECTS

Implementation of the proposed General Plan would allow construction of new facilities that in turn could result in short-term construction-related impacts, impacts from increased operations and maintenance activities, and impacts associated with public access and use. These potential impacts are identified in the section above entitled “Environmental Impacts and Actions to Minimize Impacts.” If the guidelines identified are approved and implemented, the implementation of the General Plan would not result in significant irreversible environmental impacts or commitment of resources. However, commitment of land, resources, and energy for maintenance of the project facilities would be a long-term commitment. Once the project has been developed, it is unlikely that circumstances would arise that could justify the return of the land occupied by the General Plan facilities to its original condition.

Though significant cultural resources have a low probability to occur within the Park, in the event cultural resources are encountered on the park and are physically damaged or materially altered to the degree that the resource no longer conveys any scientific value for which the resource was determined significant (i.e., demolition of a significant historic resource), the loss would be considered an irreversible environmental change.

GROWTH INDUCING IMPACTS

Growth-inducing effects are defined as those effects that could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Growth-inducing effects could result from projects that would remove obstacles to population growth. Increases in population could tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. The CEQA Guidelines require analysis of the characteristics of projects that may encourage and facilities other activities that could significant affect the environment, either individually or cumulatively. The CEQA Guidelines also encourage analysis of housing impact, including the displacement of substantial numbers of existing housing or people, necessitating the construction of replacement housing elsewhere.

The purpose of the Colusa-Sacramento River State Recreation Area General Plan is to portray the desired resource conditions of the park and desired visitor experience, and to provide goals and guidelines that will direct future management efforts toward achieving those desires. An important component of this purpose is to protect the natural resources of the park. This purpose and the goals, policies, guidelines, and management zones of the Plan have no potential to directly foster population growth, or result in the construction of additional housing.

Implementation of the General Plan may indirectly foster minimal economic and population growth in the region. By providing increased recreational opportunities, park visitation may create additional tourism and the need for tourist services in the adjacent communities and surrounding region. The proposals in the General Plan may potentially foster economic growth in the region by encouraging an increase in supporting recreation and tourist services, such as recreation equipment, supplies, food, and related facilities. The increase in visitor use may be considered an economic benefit to surrounding communities. The proposed facilities and uses may result in the need for a minimal increase in permanent and seasonal staff, which may necessitate staff housing outside the Park boundaries. These proposals may result in a very small minimal growth impact to the area. However, land use decisions are made by the local City and County government and as such, are not within the jurisdiction of DPR.

CUMULATIVE IMPACTS

Cumulative environmental effects are multiple individual effects that, when considered together are considerable or compound or increase other environmental impacts. The individual effects may result from a single project or a number of separate projects and may occur at the same place and point in time or at different locations and over extended periods of time. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time (CEQA Guidelines Section 15355(b)). The purpose of this cumulative analysis is to determine whether potentially significant cumulative environmental impacts would occur from implementation of the Colusa-Sacramento River State Recreation Area General Plan in combination with other projects or conditions, and to indicate the severity of the impacts and their likelihood of occurrence. The CEQA Guidelines require that EIRs discuss the cumulative impacts of a project when the project's incremental effect is "cumulatively considerable," meaning that the project's incremental effects are considerable when viewed in connection with the effects of the past, present, and reasonable foreseeable probable future projects. Cumulative impact analysis may be less detailed than the analysis of the project's individual effects (CEQA Guidelines 15130(b)). The discussions of cumulative impacts should include:

1. Either:
 - (A) a list of past, present, and probable future project producing related or cumulative impacts; or
 - (B) summary of projections contained in an adopted General Plan or similar document, or in an adopted or certified environmental document, which described or evaluated conditions contributing to cumulative impacts;
2. A discussion of the geographic scope of the area affected by the cumulative effect;
3. A summary of expected environmental effects to be produced by these projects;
4. Reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.

Where a lead agency is examining a project with an incremental effect that is not "cumulatively considerable," a lead agency need not consider that effect significant, but shall briefly describe its basis for concluding that the incremental effect is not cumulative considerable (CEQA Guidelines, Section 15130[a]).

The proposed General Plan would apply management zones to the Park that allows new or improved facilities. The project-level implementation schedule for envisioned facilities at the Park is not known at this time; therefore, a definitive list of specific cumulative projects cannot be prepared.

Generally, cumulative projects would include construction and operation of projects within the City of Colusa and County. This cumulative analysis considered the analyses contained in the certified City of Colusa General Plan Master Environmental Impact Report (2007) and the Colusa County General Plan Environmental Impact Report (2011). Because specific plans and timelines for implementation of facilities that could be developed under the proposed General Plan are not known and many of the projects within the adjacent jurisdictions and County are not fully developed or designed, assessing the expected environmental effects that these projects would produce is speculative.

However, there are two general categories of effects that could be expected. The first and most widespread would be general construction impacts, such as temporary air quality degradation, potential increased erosion resulting from earth movement, noise, and traffic. However, construction impacts would be temporary and local in nature and, thus, unlikely to constitute cumulatively considerable contributions to cumulative significant impacts.

The second category of impacts is related to operational effects to regional air quality and traffic, greenhouse gas emissions, biological resources, aesthetics, cultural resources, hydrology/water quality, hazardous materials, geology and soils, noise, public services, recreation, and utilities and service system.

Implementation of the proposed General Plan, in conjunction with other regional projects and ongoing regular park maintenance activities, could adversely affect resources within the Park. However, implementation of the Plan guidelines described in this Environmental Analysis would reduce any impacts, including cumulative impacts, to less than significant.

Further, the proposed General Plan calls for extensive regional coordination and planning, to ensure that development within the Park is consistent with the guidelines and plans of regional agencies, as appropriate, and is consistent with development anticipated within adjacent jurisdictions and vice versa (see System-Wide Planning within Chapter 2). The Department would require examination of any specific facilities and management plans allowed under the General Plan at the time they are proposed for implementation to determine if further environmental review at a more detailed, project-specific and site-specific level is necessary, including the analysis of potential cumulative effects.

Therefore, the Plan's contribution to regional cumulative impacts are considered less than significant.

CHAPTER

6



CHAPTER 6. REFERENCES, CONTRIBUTORS AND GLOSSARY

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D. GLOSSARY OF TERMS

Adaptive Use: use of a historic structure for a purpose other than for which it was originally intended.

Aesthetics: refer to the visual, audible, and other sensory factors within the park setting and its surrounding landscapes that, taken together, establish character or sense of place.

Active Fault: a fault that has moved recently and which is likely to move again. For planning purposes, an “active fault” is usually defined as one that shows movement within the last 11,000 years and can be expected to move within the next 100 years.

Alluvium: a general term for all detrital deposits resulting from the operations of modern rivers, thus including the sediments laid down in riverbeds, flood plains, lakes, fans at foot of mountain slopes and estuaries.

Ambient Air Quality: the atmospheric concentration (amount in specified volume of air) of a specific compound as actually experienced at a particular geographic location that may be some distance from the source of the relevant pollutant emissions.

Ambient Noise Level: the composite of noise from all sources near and far.

Archaeological: pertaining to the material remains of past human life, culture, or activities.

Aquifer: the underground layer of water-bearing rock, sand, or gravel through which water can seep or be held in natural storage. Such water holding rock layers hold sufficient water to be used as a water supply.

Bedrock: the solid rock underlying unconsolidated surface materials.

Best Available Control Technology (BACT): the most stringent emission limit or control technique that has been achieved in practice that is applicable to a particular emission source.

Bikeways: bicycle travel way, encompasses bicycle lanes, bicycle paths, and bicycle routes.

Best Management Practices (BMP): the most current methods, treatments, or actions in regards to environmental mitigation responses.

Biodiversity: biological diversity in an environment as indicated by numbers of different species of plants and animals, as well as the relative abundance of all the species within a given area.

Buffer: land that protects natural and/or cultural values of a resource or park from adverse effects arising outside the buffer.

California State Parks and Recreation Commission: established in 1927 to advise the Director of Parks and Recreation on the recreational needs of the people of California. In 1928 it gathered support for the first state park bond issue. The Commission schedules public hearings to consider classification or reclassification and the approval of State Parks’ general plan (and amendments) for each park unit.

California Environmental Quality Act (CEQA): a state law (PRC §21000 et al.) requiring state and local agencies to take actions on projects with consideration for environmental protection. If a proposed activity may result in a significant adverse effect on the environment, an EIR must be prepared. General Plans require a “program EIR” and park development projects require a project environmental document.

Classification: official designation of units of the State Park System. Classification are established by the State Parks and Recreation Commission at the recommendation of Department staff and are based on the sensitivity and kind of unit’s most important resources and what types of use the unit will receive from the public.

Clean Water Act (CWA): enacted in 1972 to create a basic framework for current programs to control water pollution; provide statutory authority for the National Pollutant Discharge Elimination System (NPDES).

Concession: a contract with persons, corporations, partnerships, or associations for the provision of products, facilities, programs, and management and visitor services that will provide for the enhancement of park visitor use, enjoyment, safety, and convenience. Concession developments, programs, and services must be compatible with a park unit's classification and general plan provisions.

Conservation Easement: acquisition of rights and interests to a property to protect identified conservation or resource values using a reserved interest deed. Easements may apply to entire parcels of land or to specific parts of the property. Most are permanent, although term easements pose restrictions for a limited number of years. Land protected by a conservation easement remains on the tax rolls and is privately owned and managed; landowners who donate conservation easements are generally entitled to tax benefits.

Constraints: (1) the state of being restricted or confined within prescribed bounds (2) one that restricts, limits, or regulates; a check.

Cultural Landscape: a geographic area (including both the cultural and natural resources) associated with a historic event, activity, or person or exhibiting cultural or aesthetic values. This type is a landscape that evolved through use by people whose activities or occupancy shaped it.

Cultural Resource: a resource that exists because of human activities. Cultural resources can be prehistoric (dating from before European settlement) or historic (post-European contact).

Cultural Preserve: the sub-classification protects areas of outstanding historic interest in state parks, including such features as sites, buildings, or zones where significant events in the flow of history in California occurred. They need to be large enough to protect resources from potential damage and to permit effective management and interpretation and must also have complete integrity of the resources; no conflicting improvements, such as roads, are permitted. Natural resources values are secondary to historical values in cultural preserves.

Culvert: a drain, ditch, or conduit not incorporated in a closed system that carries drainage water under driveway, roadway, railroad, pedestrian walk or public way. Culverts are often built to channelize streams and as part of flood control systems.

Cumulative Impact: as defined by the state CEQA Guidelines (§15355) two or more individual effects which, when considered together are considerable or which compound or increase other environmental impacts.

Degradation: the reduction of environmental quality in an area through a lessening of diversity, the creation of growth anomalies, or the supplanting of native species by nonnative plant and animal species.

Demographic: having to do with a particular characteristic of a segment of the public at large; may be connected to the group's age, the region where the group resides, a particular recreational interest, economic status, etc.

Ecology: the study of the interrelationship of living things to one another and their environment.

Ecosystem: a community consisting of all biological organisms (plant, animals, insects, etc.) in a given area interacting with the physical environment (soil, water, air) to function together as a unit of nature.

Ecotone: a transition area between two adjacent ecological communities, usually exhibiting competition between organisms common to both; often a rich biological area.

Effect/Impact: an environmental change; as defined by State CEQA Guidelines §15358: (1) Direct or primary effects are caused by the project and occur at the same time and place (2) Indirect or secondary effects that are caused by the project and are late in time or farther removed in distance,

but still reasonably foreseeable. Indirect or secondary effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density, or growth rate, and related effects on air and water quality and other natural systems including ecosystems.

Endangered Species: a species of animal or plant is considered to be endangered when its prospects for survival and reproduction are in immediate jeopardy from one or more causes. The U.S. Fish and Wildlife Service and/or the California Department of Fish and Wildlife make this designation.

Endemic: indigenous to, and restricted to, a particular area.

Enroute camping: camping for a single night on the way to a destination, generally using self-contained recreational vehicles as few services are offered.

Environment: as defined in State CEQA Guidelines §15360, “the physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, mineral, flora, fauna, noise, and objects of historical and aesthetic significance.”

Environmental Impact Report (EIR): a report required by CEQA that assesses all the environmental characteristics of an area and determines what effects of impacts will result if the area is altered or disturbed by a proposed action. If a proposed activity may result in a significant adverse effect on the environment, an EIR must be prepared. General plans require the preparation of a “program” EIR appropriate to its level of specificity.

Environmentally Sensitive: an area in which plant or animal life or their habitats are either rare or especially valuable because of their role in an ecosystem. Such areas can be easily disturbed or degraded by human activities and developments.

Ethnographic: a multi-format group of materials gathered and organized by an anthropologist, folklorist, or other cultural researcher to document human life and traditions.

Exotic Species: a species occurring in an area outside of its historically known natural range that has been intentionally introduced to, or have inadvertently infiltrated into, the system. Also known as non-native, ornamental, or introduced species. Exotic animals may prey upon native species and compete with them for food and habitat. Exotic plant species can convert native ecosystems into a non-native dominated system that provides little benefit to other species in the ecosystem.

Floodplain: a lowland or relatively flat area adjoining inland or coastal waters that is subject to a one percent or greater chance of flooding in any given year (i.e., 100-year flood).

Floodway: the channel of a natural stream or river and portions of the flood plain adjoining the channel, which are necessary to carry and discharge the reasonably-expected floodwater or flood flow of any natural stream or river. Floodways may also be designated by flood control agencies.

Forbs: any herbaceous (non-woody) plant having broad leaves, and therefore excluding grasses and grass-like plants.

Geology: the scientific study of the origin, history, and structure of the earth.

General Plan (GP): a general plan is a legal planning document that provides guidelines for the development, management, and operation of a unit of the state park system. A general plan evaluates and defines land uses, resource management, facilities, interpretation, concessions, and operations of a park unit as well as addressing environmental impacts in a programmatic manner. A park unit must have an approved general plan prior to implementing any major development project.

Grade: the degree of rise or descent of a sloping surface.

Habitat: the physical location or type of environment, in which an organism or biological population lives or occurs. It involves an environment of a particular kind, defined by

characteristics such as climate, terrain, elevation, soil type, and vegetation. Habitat typically includes shelter and/or sustenance.

Hazardous Material: any substance that, because of its quantity, concentration, physical or chemical characteristics, poses a significant presence or potential hazard to human health and safety or to the environment. Lead-based paint is an example of a hazardous material.

Historic Character: the sum of all visual aspects, features, materials, and species associated with a structure or cultural landscape's history, i.e., the original configuration together with losses and later changes. These qualities are often referred to as "character defining".

Hydrology: pertaining to the study of water on the surface of the land, in the soil and underlying geology, and in the air.

Impervious surface: any material, which reduces or prevents absorption of water into land.

Infrastructure: public services and facilities, such as sewage-disposal systems, water supply systems, and other utility systems. Often includes transportation systems.

Initial Study: as defined by State CEQA Guidelines §15365, an analysis of a project's potential environmental effects and their relative significance. An initial study is preliminary to deciding whether to prepare a negative declaration or an EIR.

Interpretation: In this planning document, it refers to a communication process, designed to reveal meanings and relationships of our cultural and natural heritage, through involvement with objects, artifacts, landscapes, sites, and oral histories.

Kilowatt: A measure of the rate of electrical flow equal to one thousand watts.

Kilowatt – Hour: A measure of quantity of electrical consumption equal to the power of one kilowatt acting for one hour.

Landform: Configuration of land surface (topography).

Mean Sea Level (MSL): The average altitude of sea surface for all tidal stages.

Mitigation Measure: A measure proposed that would eliminate, avoid, rectify, compensate for, or reduce significant environmental effects (see State CEQA Guidelines §15370).

Morphology: Form and structure of a plant that is typical.

Mycology: The study of fungi.

National Register of Historic Places (NRHP): The official federal list of buildings, structures, objects, sites and districts worthy of historic preservation. The register recognizes resources of local, state, and national significance. The register lists only those properties that have retained enough physical integrity to accurately convey their appearance during their period of significance. For example, Crystal Cove was listed on the NRHP as a Historic District on June 15, 1976.

Native species: A plant or animal that is historically indigenous to a specific site area.

Negative Declaration: When a project is not exempt from CEQA and will not have a significant effect upon the environment a negative declaration must be written (see State CEQA Guidelines §15371).

Natural Preserve: A sub-classification within a unit of the State Park System that requires California State Park and Recreation Commission approval. Its main purpose is to maintain such features as rare and endangered plants and animals and their supporting ecosystems in perpetuity.

Office of Historic Preservation (OHP): The governmental agency primarily responsible for the statewide administration of the historic preservation program in California. Its responsibilities include identifying, evaluating, and registering historic properties and ensuring compliance with federal and state regulatory obligations.

Open Space: An area with few or no paved surfaces or buildings, which may be primarily in its natural state or improved for use as a park.

Project: As defined by the State CEQA Guidelines §15378, a project can be one of the following a) activities undertaken by any public agency; b) activities undertaken by a person which are supported in whole or in part through contracts, grants, subsidies, loans or other forms of assistance from one or more public agencies; c) activities involving the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.

Public Resources Code (PRC): In addition to the State Constitution and Statutes, California Law consists of 29 codes covering various subject areas. The PRC addresses natural, cultural, aesthetic, and recreation resources of the State.

Riprap: A loose assemblage of broken rock or concrete often used to prevent erosion. A type of bank reinforcement.

Riparian: Riparian habitat represents the vegetative and wildlife areas adjacent to perennial and intermittent streams. They are delineated by the existence of plant species normally found growing near fresh water.

Runoff: That portion of rainfall or surplus water that does not percolate into the ground and flows overland and is discharged into surface drainages or bodies of water.

Scenic Route: a segment of roadway that has been officially designated by the Director of California Department of Transportation as a scenic corridor.

Septic System: An on-site sewage treatment system that includes a settling tank through which liquid sewage flows and in which solid sewage settles and is decomposed by bacteria in the absence of oxygen. Septic systems are often used where a municipal sewer system is not available.

Significant Effect on the Environment: As defined by State CEQA Guidelines §15382, substantial or potentially substantial, adverse change on any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to physical change may be considered in determining whether the physical change is significant.

Shoulder Season: The months of the year immediately before and after a park's busy recreation season. This term generally refers to April and October, but could also shade into late March and early November, depending upon activities under discussion.

Siltation: The process of silt deposition. Silt is a loose sedimentary material composed of finely divided particles of soil or rock, often carried in cloudy suspension in water.

Solid Waste: Term used to describe a mixture of items discarded by agricultural, residential and non-residential activities.

Special-Status Species: Plant or animal species that are typically listed (State and Federal) as endangered, rare and threatened, plus those species considered by the scientific community to be deserving of such listing.

State Historic Preservation Officer (SHPO): The chief administrative officer for the OHP and is also the executive secretary of the State Historic Resources Commission.

Sub-classification: A separate classification for a portion or unit of the State Park System. The California State Park and Recreation Commission establish these at the recommendation of Department staff. For example, Cultural Preserves and Wilderness are sub-classifications.

Subsidence: The gradual sinking of land as a result of natural or man-made causes.

Threatened Species: An animal or plant species that is considered likely to become endangered throughout a significant portion of its range within the foreseeable future, because its prospects for

survival and reproduction are in jeopardy from one or more causes. The U.S. Fish and Wildlife Service and/or the California Department of Fish and Wildlife make this designation.

Topography: Graphic representation of the surface features of a place or region on a map, indicating their relative positions and elevations.

Trailhead: The beginning of a trail, usually marked by information signs.

Viewshed: The area that can be seen from a specified location.

Watershed: The total area above a given point on a watercourse that contributes water to the flow of the watercourse; entire region drained by a watercourse.

Wetland: Includes the ecological categories of subtidal, mudflats, tidal salt marsh, periodically inundated or brackish marsh, diked marshland, associated upland, and freshwater marsh.

Wilderness: Within state park units, this is a sub-classification requiring approval by the California State Park and Recreation Commission. It provides protection for plants and animals and their supporting ecosystems while also encouraging recreational use. Its provision includes no permanent facilities other than “semi-improved campgrounds” and possible retention of structures existing when the land was designated. No mechanical equipment may be used in a wilderness (including bicycles), and there is a 2000-foot no-fly zone above.

E. ACRONYMS

AADT	average annual daily trip
ACSC	areas of critical state concern
ADA	Americans with Disabilities Act
ADT	average daily traffic
APCD	Air Pollution Control District
AQMD	Air Quality Management District
ARB	California Air Resource Board
BACT	best available control technology
BCAQMD	Butte County Air Quality Management District
BDCP	Bay Delta Conservation Plan
BLM	Bureau of Land Management
BMP	best management practices
BP	Before Present
C	Celsius
CAA	Clean Air Act
CAAA	Clean Air Act Amendments
CAAQS	California Ambient Air Quality Standards
CalIPC	California Invasive Species Council
CalTrans	California Department of Transportation
CBC	California Building Code
CCP	Comprehensive Conservation Plan
CCR	California Code of Regulations
CDF	California Department of Forestry and Fire Protection
CDFA	California Department of Food and Agriculture
CDFW or CDFG	California Department of Fish and Wildlife (formerly Fish and Game)
CDWR or DWR	California Department of Water Resources
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFP	California Fully Protected Species as designated by the California Fish and Game Code
CFR	Code of Federal Regulation
cfs	cubic feet per second
CHP	California Highway Patrol
CNEL	community noise equivalent level
CNPS	California Native Plant Society
CO	carbon monoxide
Commission or SPRC	California State Park and Recreation Commission
CORP	California Outdoor Recreation Plan
CUP	Conditional Use Permit

CUPA	Certified Unified Program Agency
CRHR	California Register of Historic Resources
CRMP	Cultural Resource Management Plan
CVFPP	Central Valley Flood Protection Plan
CVP	Central Valley Project
CWA	Clean Water Act
dB	decibel
dBA	A-weighted decibel
DBW	Division of Boating and Waterways, California State Parks
DEIR	draft environmental impact report
DFG or DFW	California Department of Fish and Game (now Fish and Wildlife)
DOC	Department of Conservation
DOE	Department of Energy (U.S.)
DOF	Department of Finance
DPR or Department	California Department of Parks and Recreation, California State Parks
du	dwelling units
DWR	California Department of Water Resources
EIR	environmental impact report
F	Fahrenheit
FCAA	Federal Clean Air Act
FEIR	final environmental impact report
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FIRM	Flood Insurance Rate Map
FIP	Federal Implementation Plan
gal	gallon
CCAPCD	Colusa County Air Pollution Control District
GIS	Geographic Information System
GP	General Plan
GPS	Global Positioning System
HAPs	Hazardous Air Pollutants
HC	hydrocarbons
HCP	Habitat Conservation Plan
I&E	Interpretation and Education
ISO	Insurance Services Offices (Rating)

kW	kilowatt
kWh	kilowatt-hour
LAFCO	Local Agency Formation Commission
L _{eq}	energy-equivalent noise level
L _{dn}	day-night average noise level
LMA	Levee maintaining agency
LOS	level of service
M	Richter Scale Magnitude
mgd	million gallons per day
ml	milliliters
mm	millimeter
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MRZ	Mineral Resource Zone
msl	mean sea level
MW	megawatts
MZ	Management Zone
N	nitrogen
N/A	not applicable
NAAQS	National Ambient Air Quality Standards
NCCP	Natural Communities Conservation Program
NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NOAA	National Oceanic and Atmospheric Administration
NO _x	nitrogen oxide(s)
NO ₂	nitrogen dioxide
NOP	Notice of Preparation
NPDES	National Pollutant Discharge Elimination System
NRCS	National Resource Conservation Service
NRHP	National Register of Historic Places
NSVAB	Northern Sacramento Valley Air Basin
NTHP	National Trust for Historic Preservation
O ₃	ozone
OHP	California Office of Historic Preservation
OHV	off-highway vehicle
PG&E	Pacific Gas and Electric Company
PM _{2.5}	fine particulate matter
PM ₁₀	Respirable (small enough to be inhaled) particulate matter

ppb	parts per billion
ppm	parts per million
PRC	Public Resources Code
RM	River Mile
RMS	Resource Management Strategy
ROG	reactive organic gasses
RV	recreational vehicle
RWQCB	Regional Water Quality Control Board
SB	State Beach
SHPO	State Historic Preservation Officer
SMARA	California Surface Mining and Reclamation Act of 1975
SO ₂	sulfur dioxide
SP	State Parks
SPFC	State Plan of Flood Control
SR	State Route
SRCA	Sacramento River Conservation Area
SRCAF	Sacramento River Conservation Area Forum
SRA	State Recreation Area
SRNWR	Sacramento River National Wildlife Refuge
SSC	Species of Special Concern
SVAB	Sacramento Valley Air Basin
SWP	State Water Project
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
THC	total hydro carbons
TCM	Transportation Control Management/Measures
TNC	The Nature Conservancy
TSM	Transportation Systems Management
UC	University of California
USACE	U.S. Army Corps of Engineers
USBR	U.S. Bureau of Reclamation
USDA	U.S. Department of Agriculture
USDI	U.S. Department of the Interior
USDOT	U.S. Department of Transportation
USEPA	U.S. Environmental Protection Agency
USFS	U.S. Forest Service
USFWS	U.S. Fish and Wildlife Service
USGS	U.S. Geological Survey

V	
Valley	volts
V/C	Sacramento Valley
	volume to capacity ration (of traffic volume to roadway capacity)

Colusa-Sacramento River

State Recreation Area



Sacramento River looking south toward Sutter Buttes. SOURCE: Courtesy of Dennis Dahlin

